

CHAPTER – 4

ANNUAL PERFORMANCE REVIEW FOR FY19

4.0 HESCOM's Application for APR for FY19:

The HESCOM had filed its application on 28th November, 2019, for Annual Performance Review (APR) for FY19, as per the audited account and the revision of Annual Revenue Requirement (ARR) and revision of Retail Supply Tariff for FY21, in terms of the MYT Regulations.

The Commission, in its letter dated 17th December, 2019, had communicated its preliminary observations on the application of HESCOM. In its letter dated 31st December, 2019, HESCOM has furnished the replies to the preliminary observations of the Commission.

The Commission, in its Tariff Order dated 14th May, 2018, had approved HESCOM's revised Annual Revenue Requirement (ARR) of Rs.7279.54 Crores along with the retail supply tariff for FY19.

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

4.1 HESCOM's Submission:

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

TABLE – 4.1
APR for FY19 – HESCOM's Submission

Sl. No.	Particulars	As Approved 14.05.2018	Amount in Rs. Crores
			FY19 As Filed on 28.11.2019
1	Energy at Gen Bus in MU (With HRECS & AEQUS)	13333.57	14592.28
2	Energy at Interface in MU	12576.27	13773.58
3	Distribution Losses in %	14.90%	14.62%

Sl. No.	Particulars	As Approved 14.05.2018	FY19
			As Filed on 28.11.2019
	Sales in MU:		
4	Sales to categories other than BJ/KJ	4750.18	4830.91
5	Sales to BJ/KJ installations	189.62	199.94
6	Sales to IP sets	5762.61	6729.14
	Total Sales	10702.41	11759.99
	Revenue from sale of power:		
7	Revenue from tariff and Misc. Charges	3676.99	3336.01
8	Tariff Subsidy for BJ/KJ	121.93	129.65
9	Tariff Subsidy for IP	3480.62	4218.59
	Total Existing Revenue	7279.54	7684.25
	Expenditure:		
10	Power Purchase Cost	4818.00	6265.50
11	Transmission charges of KPTCL	555.72	555.72
12	SLDC Charges	5.30	5.83
	Power Purchase Cost including cost of transmission:	5379.02	6827.05
13	Employee Cost		781.78
14	Repairs & Maintenance		62.37
15	Admin. & General Expenses	835.77	125.73
	Total O&M Expenses	835.77	969.88
16	Depreciation	156.53	194.58
	Interest & Finance charges:		
17	Interest on Loans	201.54	241.31
18	Interest on Working capital	140.69	148.28
19	Interest on belated payment on PP Cost	0.00	95.37
20	Interest on consumer deposits	48.33	50.95
21	Other Interest & Finance charges	0.00	3.23
22	Less interest capitalized	0.00	0.00
	Total Interest & Finance charges:	390.56	539.14
23	Other Debits	0.00	105.03
24	Net Prior Period Debit/Credit	0.00	-38.39
25	Extraordinary Items	0.00	102.90
26	Return on Equity	0.00	0.00
27	Provision for taxation	0.00	0.00

Sl. No.	Particulars	As Approved 14.05.2018	FY19
			As Filed on 28.11.2019
28	Funds towards Consumer Relations/Consumer Education	0.50	0.16
29	Less: Other Income	-224.02	-256.61
30	Deficit for FY17 carried forward	741.17	0.00
	ARR	7279.54	8443.74

Considering the revenue of Rs.7684.25 Crores against the net ARR of Rs.8443.74 Crores, HESCOM has reported a gap in revenue of Rs.759.49 Crores for FY19.

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

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

TABLE – 4.2
Financial Performance of HESCOM for FY19

Amount in Rs. Crores		
Sl. No.	Particulars	FY19
	Revenue	
1	Revenue from Operations	7764.562
2	Other Income	95.044
3	Total Revenue (1+2)	7859.62
4	Expenditure	
	(a) Purchase of Power	6665.49
	(b) Employee benefits expenses	781.80
	(c) Finance Costs	539.14
	(d) Depreciation & amortization expenses	194.59
	(e) Administrative and other expenses	210.56
	Total Expenditure	8391.58
5	Exceptional items	102.90
	Prior Period Income	-121.13
	Prior Period expenses	82.74
6	Less: Regulatory Income	-1286.47
7	Total expenditure	7169.63
8	Profit for the year	689.99

As per the Audited Accounts, HESCOM has earned revenue surplus of Rs.689.99 Crores by accounting Rs.1286.47 Crores as Regulatory Income for FY19.

The profits / losses reported by HESCOM in its audited accounts in the previous years and the net accumulated profit / deficit as at the end of FY19 is as follows:

TABLE – 4.3
HESCOM's Accumulated Profit / Losses

Particulars	Amount in Rs. Crores
Accumulated losses upto FY15	-1189.33
Losses incurred in FY16	-372.73
Losses incurred in FY17	-943.41
Losses incurred in FY18	-140.28
Profit earned for FY19	689.99
Accumulated Loss up to end of FY19	-1955.76

As seen from the above table, the HESCOM has accumulated losses of Rs.1955.76 Crores as at the end of FY19.

Commission's analysis and decisions on APR FY19:

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

4.2.1 Sales for FY19:

A. Sales -other than IP Sets:

1. Data inconsistency:

The Commission had noted that:

- a. The energy sales indicated for FY20 at page117, did not tally with D-2 Format data. It was observed that FY21 sales figures are reproduced for FY20 also. Thus, the Commission directed HESCOM to rectify the same.

HESCOM Replies:

HESCOM in its replies has furnished the revised data.

- b. At page-113, the sales to LT4c(ii) for FY21 is indicated as 0.88 MU, whereas at page 117, it is shown as 0.18 MU. The data shall be reconciled.

HESCOM Replies:

HESCOM has requested to consider LT 4(c) (ii) sales as 0.18 MU.

- c. The total number of installations as per d-21 Format should be 5516598 (LT: 5512420+HT:4178) and not 551600 numbers. This shall be rectified.

HESCOM Replies:

HESCOM in its replies has furnished the revised D-21 Format.

The Commission has noted the above replies furnished by HESCOM.

2. Energy Sales for FY19:

- a. The Commission, in its Tariff Order, 2018 dated 14.05.2018, had approved total sales to various consumer categories at 10,702.41 MU as against the HESCOM's proposal of 11,187.02 MU, excluding sales to HRECS & SEZ. The actual sales of HESCOM as per the current APR filing, is 11760.01 MU, indicating an increase in sales to the extent of 1057.60 MU as compared with the approved sales. The increase in sales is 257.35 MU in HT-categories and 800.25 MU in sales to LT-categories. The Commission noted that, as against approved sales [excluding HRECS sales and supply to SEZ] of 4750.18 MU to categories other than BJ/KJ and IP sets, the actual sales achieved by HESCOM is 4830.93 MU, resulting in the increase in sales to these categories by 80.75 MU. Further, HESCOM has sold 6929.08 MU to BJ/KJ and IP category as against approved sales of 5952.23 MU resulting in increased sales to these categories by 976.85 MU.
- b. The category-wise sales approved by Commission and the actuals for FY19 are indicated in the table below:

TABLE-4.4**Comparison of approved Sales and actuals as per current Tariff filing**

Tariff Category	Consumer Category	Sales in MU		
		Approved	Actuals	Difference (Actuals-Approved)
LT-2a*	Domestic / AEH	1601.86	1487.80	-114.06
LT-2b	Pvt. Educational Institutions	21.42	19.33	-2.09
LT-3	Commercial	481.88	464.86	-17.02
LT-4b	IP >10 HP	16.55	16.27	-0.28
LT-4c	Pvt. Nurseries, Coffee & Tea	1.24	0.72	-0.52
LT-5	LT Industries	327.49	328.55	1.06
LT-6	Water Supply	343.07	311.69	-31.38
LT-6	Public Lighting	161.76	149.79	-11.97
LT-7	Temporary Supply	33.07	32.74	-0.33
HT-1	Water Supply & Sewerage	237.40	270.96	33.56
HT-2a	Industrial	892.61	1160.05	267.44
HT-2b	Commercial	130.02	129.88	-0.14
HT-2c	Govt./Aided Hospital & Edu.	97.62	77.94	-19.68
HT-3a & b	Lift Irrigation & Agriculture	350.35	336.90	-13.45
HT-4	Residential Apartment, Colonies	15.39	14.43	-0.96
HT-5	Temporary Supply	38.44	29.02	-9.42
Sub total		4750.18	4830.93	80.75
BJ/KJ		189.62	199.94	10.32
IP		5762.61	6729.14	966.53
Sub total		5952.23	6929.08	976.85
Grand total**		10702.41	11760.01	1057.60

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

**Excludes sale to HRECS and SEZ.

The Commission had noted that the major categories contributing to the increase in sales as compared with the estimates, are HT-2a and IP sets and the reduction in sales is mainly in LT-2a category.

HESCOM has stated that the variance in sales cannot be explained, in view of diversified geographical nature of area under HESCOM.

The Commission, in its preliminary observations had directed HESCOM to analyze the impact of special incentive scheme and to quantify the corresponding increase in HT-2a sales.

HESCOM in its replies has stated that in FY19, 174 installations were added to HT-2a category and 22 consumers opted for special incentive scheme, including 7 number of open access consumers. Hence, HT-2a sales has increased partially due to increase in number of installations and partially due to special incentive scheme.

The Commission notes that HESCOM has not quantified the impact of special incentive scheme.

Further, the Commission had observed that, the HESCOM had not furnished any details to explain the reduction in sales to LT-2a category. Therefore, HESCOM was directed to analyze the same and furnish the reasons for reduction in sales to LT-2a category.

HESCOM Replies:

In case of LT-2a, HESCOM, furnishing the details, has stated that 48.75 MU is saved due to 3,83,129 LED bulbs, 0.752 MU due to 9759 LED tube-lights and 0.147 MU due to energy efficient fans.

The Commission notes that against the reduction of 114 MU in LT2a category, about 50 MU is attributed to DSM measures.

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

HESCOM Replies:

HESCOM has furnished the data.

B. Sales to IP sets – APR for FY19:

1. In its Tariff Order dated 14th May, 2018, the Commission had approved 8,244 units per IP set per annum, as specific consumption for the FY19. Whereas, the specific consumption as reported by the HESCOM, in its Tariff filing for APR for FY19, works out to 8,271 units / IP set / annum, which indicates an

increase in the specific consumption by 27 units / IP set / annum amounting to 0.33%.

2. Total sales to IP sets as approved by the Commission for FY19 is 5,762.61 MU. As reported by HESCOM in the D-2 Format of tariff filing, the actual consumption is 6,729.14 MU, indicating an increase of 966.53 MU, accounting for an increase in the sales by 16.77%.
3. As reported by HESCOM, the number of IP set installations in service, at the end of FY19, is 9,30,551 as against the approved numbers of 7,15,686, which accounts for an increase by 2,14,865 i.e., indicating an increase in the number of installations by 30.02%.

The details of sales to IP sets for FY19 as approved by the Commission, in its Tariff Order dated 14th May, 2018 and the actual sales as furnished by HESCOM, in its APR filing for FY19, are as follows;

Particulars	As approved by the Commission in ARR for FY19	As submitted by HESCOM for APR of FY19
Number of installations	7,15,686	9,30,551
Mid-year number of installations	6,99,007	8,13,599
Specific consumption in units / installation / annum	8,244	8,270.83
Sales in MU	5,762.61	6,729.14

4. HESCOM was directed to furnish the reasons for abnormal increase in number of installations i.e., increase by 2,14,865 numbers accounting for 30.02% increase as compared to the approved figures for FY19 and increase by 2,33,904 numbers accounting for 33.60% increase as compared with the actual numbers for FY18. In its replies to the preliminary observations, HESCOM has informed that, as per the resolutions of the meeting of the Board of Directors, HESCOM took up the drive to regularize unauthorized IP sets which were connected to the distribution network starting from October 2018, which resulted in addition of huge number of IP installations during FY19. **As regards the increase of 233904 nos. of IP set installations during FY19, including unauthorized IP sets, the Commission notes that, as the regularization of unauthorized IP sets involve the payment of tariff subsidy**

from the GoK, the Commission directs HESCOM to obtain the consent in this regard, from the GoK.

5. As per the detailed calculations of sales to IP sets, feeder-wise, month-wise data submitted by HESCOM for FY19, vide e-mail dated 20.08.2019, the total sales were computed as 6630.86 MU with a difference of 98.28 MU. In its replies to preliminary observations, HESCOM informed that the feeder-wise, month-wise computation sheet consists of the assessment of un-metered IP installations which didn't include the metered IP sales of Uttara Kannada District in its jurisdiction. Subsequently, HESCOM submitted the detailed calculation sheet of assessment of sales to IP installations for FY19 vide e-mail dated 04.01.2020, substantiating the sales as 6729.63 MU. The Commission again observed a difference of 0.49 MU (6729.63 – 6729.14) as compared to the data submitted in D-2 Format of Tariff Filing.
6. The HESCOM has submitted the data of consumption of IP sets by considering different values of distribution losses for all agricultural feeders in its submission in feeder wise, month-wise calculations. HESCOM was directed to substantiate its claims for different values of distribution losses for all agricultural feeders and different percentage for each month, while assessing the sales to IP sets and was directed to furnish the distribution losses considered and the consumption by other loads separately. As the replies to the preliminary observations furnished by HESCOM are not acceptable, the Commission, directs HESCOM to consider the losses for the year of assessment as directed by the Commission in its earlier Orders, while assessing sales to IP sets, in future, by providing the distribution loss component and the consumption by other loads separately.
7. The Commission, in its preliminary observations had directed HESCOM 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 statement figures. Whereas, HESCOM, has failed to submit the precise details of actual number of IP installations existing in the field, working IP sets, permanently disconnected IP sets for both the authorized and unauthorized categories,

action taken to regularize the unauthorized IP sets etc., and the action taken to match the data of the GPS survey with the DCB statement figures.

8. The Commission, finally directs HESCOM to complete the pending survey work, if any, at the earliest and submit the details without any ambiguity in data of total number of IP sets existing, defunct / dried up etc., within 3 months from the date of this Order, failing which, the Commission would restrict the sales to IP sets for FY20, on the data as per GPS survey received during the Tariff Filing for APR FY19 and ARR for FY20 and pass necessary orders thereon.

9. Based on the actual per annum specific consumption of IP sets for FY19, as reported by HESCOM i.e., 8,271 units per IP set per annum, the monthly consumption works out to 689.23 units per IP per month. However, in some of the Subdivisions, namely Raibhagh, Hanagal and in some other feeders, the specific consumption per IP set per month is as high as 1.62 lakh units, 1.15 lakh units which appears to be erratic. HESCOM was directed to furnish the reasons for such a high specific consumption. HESCOM has stated that the specific consumption depends on various parameters viz., agricultural activity, types of crop, ground water availability etc., Power supply is also extended beyond 7 hours on certain occasions as per the instructions of SLDC in order to maintain Grid stability in view of shooting up of RE generation viz., wind, solar etc., which has led to an increase in specific consumption. The other reasons for abnormal specific consumption is said to be the improper mapping of IP installations. In view of the above, HESCOM was directed to submit the calculation of sales to IP sets considering all the relevant facts. Considering the facts explained in its replies to preliminary observations and considering the above facts, HESCOM has re-submitted the IP sets sales data, feeder-wise, month-wise, in the prescribed formats, vide e-mail dated 04.02.2020. On reviewing the data, it is found that the average consumption per IP per month is within the acceptable range.

10. The details of sales to IP installations for FY19 as per the revised submissions are as follows:

Particulars	As submitted by HESCOM for APR of FY19	As per the revised submissions by HESCOM for FY19	As approved by the Commission for FY19
Number of installations	9,30,551	9,30,551	9,30,551
Mid-year number of installations	8,13,599	8,13,599	8,13,599
Specific consumption in units / installation / annum	8,271	8,268	8,268
Sales in MU	6,729.14	6,726.87	6,726.87

Based on the above computations, the Commission has disallowed 2.27 MU of energy in the sales to IP sets for F19.

In the light of the above discussion, the Commission decides to approve 6726.87 MU towards sales to IP-sets on the basis of the submissions by the HESCOM.

Keeping in view the above facts, the Commission, based on audited accounts of HESCOM, approves total sales for FY19, excluding sales to HRECS as indicated in the following table:

TABLE - 4.5
Approved category-wise Sales under APR for FY19

Tariff Category	Consumer Category	Energy in MU FY-19 Actual Sales
LT-2a*	Domestic / AEH	1487.80
LT-2b	Pvt. Educational Institutions	19.33
LT-3	Commercial	464.86
LT-4b	IP > 10 HP	16.27
LT-4c	Pvt. Nurseries, Coffee & Tea	0.72
LT-5	LT Industries	328.55
LT-6	Water Supply	311.69
LT-6	Public Lighting	149.79
LT-7	Temporary Supply	32.74
HT-1	Water Supply & Sewerage	270.96
HT-2a	Industrial	1160.05
HT-2b	Commercial	129.88
HT-2c	Govt./Aided Hospital & Edu.	77.94
HT-3a & b	Lift Irrigation & Agriculture	336.90
HT-4	Residential Apartment, Colonies	14.43
HT-5	Temporary Supply	29.02
Sub total		4830.92
LT-1	BJ/KJ consuming less than or equal to 40 units / month / installation	199.94
LT4 (a)	IP Sets of 10 HP & below	6726.87
Sub total		6926.81
Grand total**		11757.73

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

**Excludes sale to HRECS.

4.2.2 Distribution Loss for FY19:

HESCOM's Submission:

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

Range	FY19
Upper limit	15.40
Average	14.90
Lower Limit	14.40

The HESCOM, in its annual accounts, has reported the distribution loss at 14.62% for FY19:

1	Energy at Interface Points in MU	13773.58
2	Total sales in MU	11759.99
3	Distribution loss as a percentage of input energy at IF points in percentage	14.62%

Commission's analysis and decisions:

The Commission notes that, HESCOM, in its application filed for the approval of Annual Performance Review for FY19, had indicated 14.62% as the actual distribution losses for FY19 as against the approved distribution losses of 14.90%. Thus, there is a reduction of 0.28% over the approved distribution losses for FY19.

The distribution loss of 14.62% reported by the HESCOM as per the audited accounts, is based on the total sale of 11759.99 MU for FY19. However, the Commission, based on the analysis of IP set consumption for FY19, has disallowed sales of 2.26 MU to IP sets. Thus, the total sales approved by the Commission works out to 11757.73 MU. Considering the above sales, the distribution losses works out to 14.64%. **Since, the actual loss of 14.64% lies within the approved band loss level, HESCOM is not entitled for any incentive or penalty.**

4.2.3 Power Purchase for FY19:

HESCOM's Submission:

HESCOM, in its application for Annual Performance Review (APR) for FY19, has submitted the details of power purchase made during FY19. As per these

details, HESCOM has purchased 14592.28 MU at a cost of Rs.6827.04 Crores for FY19.

The following table indicates the source wise variation statement as per D-1 Format:

TABLE – 4.6
Power Purchase for FY19 – As per filing - HESCOM's Submission

Sl. No.	Source	As per filing		
		Energy in MU	Amount in Cr	Avg. cost in Rs
1	2	6	7	8
1	KPCL-Hydro	3150.47	227.56	0.72
2	KPCL-Thermal	2330.01	1452.49	6.23
3	Central Projects	3683.12	1665.42	4.52
4	IPPs-Major	689.84	428.39	6.21
5	RE Projects	4120.74	1792.91	4.35
6	Bundled power	744.31	322.45	3.61
7	Other Hydro	17.59	15.25	8.67
8	short term purchases/ power purchase from co-gen Medium term	458.30	212.72	4.64
9	KPTCL transmission charges	0	555.72	0
10	SLDC charges	0	5.83	0
11	TANGEDCO, POSOCO ETC.	0	0.04	0
12	PGCIL charges	0	384.83	0
13	Inter Escom energy charges	-434.52	-176.63	0
14	LC Charges/TANTRANS CO		2.53	0
15	open access UI and SW Railways	-10.62	7.46	0
16	IEX	-156.94	-66.16	0
17	Rebate from Power generators		-3.78	0
	Grand total	14592.28	6827.05	4.68

Commission's analysis and decisions:

1. The Commission, in its Tariff Order dated 14th May,2018 had approved power purchase quantum of 13333.57 MU at a cost of Rs.5379.02 Crores, for FY19 against which, the actual power purchase for FY19, as submitted by HESCOM is 14592.28 MU at a cost of Rs.6827.05 Crores.

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

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

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 (8-5)
1	2	3	4	5	6	7	8	9	10	11
1	KPCL-Hydro	2823.36	229.53	0.81	3157.35	227.56	0.72	333.99	-1.97	-0.09
2	KPCL-Thermal	3082.85	1325.57	4.30	2330.01	1452.49	6.23	-752.84	126.92	1.93
3	Central Projects (including Bundled power)	4311.25	1580.19	3.67	4150.82	1857.09	4.47	-160.43	276.90	0.81
4	IPPs-Major	948.07	451.28	4.76	689.84	428.39	6.21	-258.23	-22.89	1.45
5	RE Projects including power purchase from co-gen Medium term, KPCL solar, banked /infirm energy	1855.61	797.23	4.30	4734.99	2109.82	4.46	2879.38	1312.59	0.16
6	short term purchases	312.45	141.54	4.53	120.73	49.31	4.08	-191.72	-92.23	-0.45
7	KPTCL transmission charges	0	555.73	0	0	555.72	0	0	-0.01	0.00
8	SLDC charges	0	5.3	0	0	4.45	0	0	-0.85	0.00
9	Tangedco, POSOCO etc.	0	0.44	0	0	0.01	0	0	-0.43	0.00
10	PGCIL charges	0	292.22	0	0	384.83	0	0	92.61	0.00
11	Inter Escom energy charges	0	0	0	-434.52	-176.63	0	-434.52	-176.63	0.00
12	LC Charges/TANTRANSCO	0	0	0	0	2.52	0	0	2.52	0.00
13	open access	0	0	0	0	1.38	0	0	1.38	0.00
14	PCKL Charges	0	0	0	0	0.04	0	0	0.04	0.00
15	IEX	0	0	0	-156.94	-66.16	0	-156.94	-66.16	0.00
16	Rebate from Power generators	0	0	0	0	-3.78	0	0	-3.78	0.00
	Grand total	13333.57	5379.02	4.03	14592.28	6827.05	4.68	1258.71	1448.02	0.65

(+) indicate excess over approved values.

- As per the actuals for FY19 vis-à-vis the approved figures, there is increase in the quantum of power purchased to an extent of 1258.71 MU and the cost has increased by Rs.1448.02 Crores.
- The analysis of the source-wise approved and actual power purchases as per D1 statement is indicated in the following Table:

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	2823.36	229.53	0.81	3157.35	227.56	0.72	333.99	-1.97	-0.09
2	KPCL-Thermal	3082.85	1325.57	4.30	2330.01	1452.49	6.23	-752.84	126.92	1.93
3	Central Projects	4311.25	1580.19	3.67	4150.82	1857.09	4.47	-160.43	276.90	0.81
4	IPPs-Major	948.07	451.28	4.76	689.84	428.39	6.21	-258.23	-22.89	1.45
5	RE Projects	1855.61	797.23	4.31	4734.99	2109.82	4.46	2879.38	1312.59	0.16

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

4. The short fall from KPCL Thermal projects, CGS and UPCL, has been made good by procuring more power from 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, YTPS were 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 of these thermal plants during FY19 and consequent to payment of fixed charges;

b) Increase in power purchase quantum, change in the source-wise mix of supply and the energy balancing during reconciliation of energy and its cost among ESCOMs;

c) HESCOM has purchased more RE power than the approved.

d) Payment of additional PGCIL transmission charges of Rs.92.61 Crores from the HESCOM 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 HESCOM 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 HESCOM 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 increase to Rs.4.68 per kWh, as against the approved rate of Rs.4.03 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 quantum of 14245.65 MU at a cost of Rs.6665.49 Crores, after excluding of 346.63 MU at the cost of Rs.161.56 Crores related to Hukeri RECS' power purchase quantum and cost, for the purpose of Annual Performance Review for FY19.

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

HESCOM in their petition, filing the details of RPO compliance for solar and non-solar RPO for 2018-19, has submitted that they have complied with both solar & Non-solar RPO.

Commission's analysis and decisions:

The Commission in its preliminary observations had noted that:

- a. Excluding, hydro the input energy as per D1-format should be 11,431.87 MU FY19 [14581.54 - 3150.47 (KPCL hydro) +18.39 (Shimsha)- 7.03 MU(TBHE)-10.56 MU (Jurala)], whereas, HESCOM has indicated the same as 11470.19 MU at page 79 for RPO calculations. Also, TB dam share is indicated as 7.03 MU at page 71 and as zero in D-1format. Further, as per D-1 Format, the energy purchased is 14245.65 against 14581.54 MU indicated at page-78. Thus, HESCOM was directed to reconcile the data and also, to indicate the hydro energy accounted in energy balancing separately.

HESCOM, in its replies has submitted that, as per D-1 format, the total energy purchased is 15026.80 MU which includes 10.74 MU energy purchased from solar rooftop and that 388.55 MU of hydro energy purchased from other ESCOMs is deducted. The energy of 7.03 MU as shown in D-1 Format against TBHE is correct.

Thus, HESCOM has submitted that total energy purchased excluding Hydro for FY19 is 11470.19 MU, which is indicated as follows:

SL. No.	Particular	Consumption in MU
1	Total energy purchased	15016.06
2	Add Solar Roof top	10.74
	Total Energy purchased	15026.80
3	Less KPCL Hydel	3150.47
4	Less TBHE	7.03
5	Less Priyadrashini Jurala Hydro Project	10.56
6	Less energy purchase from other ESCOMs as per SLDC	388.55
	Total power purchase considered for RPO	11470.19 MU

- b. As per the power purchase details furnished for FY19, it is noted that the total solar energy purchased including NTPC VVNL is 1367.78 MU [KPCL:2.66 MU, W & B 17.84 MU, total solar including NTPC VVNL & farmers scheme:1347.28 MU], whereas HESCOM has indicated it as 1407.15 MU for RPO. Also, as per D-1 Format, the solar energy purchased is 1360.68 MU. HESCOM shall reconcile the figures with audited data and resubmit the RPO statement.

The HESCOM in its replies has submitted that the solar energy purchased for FY19 is 1407.15 MU, and the same is considered for RPO. Energy towards solar under W&B is 17.84 MU and the infirm solar energy is 28.63 MU.

- c. Similarly, the Non-solar RE energy purchased would be 3219.87 MU [Wind energy 2234.39 MU, banked energy 141.78 MU, infirm energy 43.23, mini-hydel 32.65 MU, co-gen 767.82 MU], whereas HESCOM has indicated it as 3173.41 MU for RPO. Also, as per D-1 format the non-solar energy purchased is 3381.21 MU. HESCOM shall reconcile the figures with audited data and resubmit the RPO statement.

HESCOM has submitted that the banked wind energy under W&B as per SLDC of 123.94 MU and wind Infirm energy of 14.60 MU are shown separately in Revised T1D1 statement and that the Non-Solar energy purchased for FY19 is 3173.41 MU. However, as per D-1 format the Non-Solar energy purchased by HESCOM is 3374.18 MU which excludes 7.03 MU purchased from TBHE and includes Co-gen 762.82 MU, Mini HYDEL 32.65 Mu and Wind 2573.71 MU.

Further, HESCOM based on audited accounts has furnished the data for FY19 as follows:

TABLE - 4.8
Non-Solar RPO Compliance by HESCOM

Sl. No.	Particulars	Quantum in MU	Cost- Rs. Crores
1	Total Power Purchase Quantum excluding Hydro Energy	11470.19	6755.50
2	Non- Solar Renewable Energy Purchased under PPA route at Generic Tariff including Non-Solar RE purchased from KPCL	2697.30	1114.03
3	Non- Solar Short-Term purchase from RE sources only excluding Section-11 purchase	337.57	163.41
4	Non –solar Short-Term purchase from RE sources under Section-11	0.00	0.00
5	Non - Solar RE purchase under APPPC	154.29	59.35
6	Non - Solar RE purchase 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
9	Non - Solar RE purchased from any other source (Banked energy & Infirm energy)	138.54	13.81
10	Total Non-Solar RE Energy Purchased [No.2+ No.3+No.4+No.5+No.7+No.9]	3327.70	1350.60
11	Non-Solar RE accounted for the purpose of RPO including Excess solar [No.10-No.5-No.6-No.8]	3173.41	1291.25
12	Non-Solar RPO complied in % [No 11/No 1] *100	27.67	19.11

TABLE - 4.9
Solar RPO Compliance by HESCOM

Sl. No	Particulars	Quantum in MU	Cost- Rs. Crores.
1	Total Power Purchase Quantum from all sources	11470.19	6755.50
2	Solar Energy Purchased under PPA route at Generic Tariff including Solar Energy purchased from KPCL	1084.13	561.96
3	Solar energy purchased under Short-Term, excluding Section-11 purchase	0.00	0.00
4	Solar Short-Term purchase from RE under sec-11 of EA, 2003	0.00	0.00
5	Solar Energy Purchased under APPPC	0.00	0.00
6	Solar Energy pertaining to green energy sold to consumers under green tariff	0.00	0.00
7	Solar Energy purchase from other ESCOMs	0.00	0.00
8	Solar Energy sold to other ESCOMs	0.00	0.00
9	Solar Energy purchased from NTPC as bundled power	276.55	153.49
10	Solar energy purchased from any other source like banked energy purchased at 85% of Generic tariff	46.47	15.21
11	Total Solar Energy Purchased	1407.15	730.66
12	Solar Energy accounted for the purpose of RPO [2+9+10]	1407.15	730.66
13	Non-Solar RPO complied in % [No 12/No 1] *100	12.27	10.82

The Commission notes that HESCOM, while arriving at the power purchase quantum net of hydro, has deducted 388.55 MU under energy balancing, instead of adding the same. Hence, while arriving at the power purchase quantum net of hydro, the Commission has added 388.85 MU of hydro considered under energy balance. 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. Further, the Commission has considered the quantum of banked/infirm energy and its costs, as per the revised D-1 Format furnished in the replies to the preliminary observations. The Commission has approved power purchase quantum of 11831.16 MU [14592.28(Total power purchase)- 3150.47 (KPCL Hydro)-17.59 (Other Hydro) +18.39(Shimsha)+388.55 (energy balance)], excluding procurement from hydro sources, based on the audited accounts. The details of Non-solar energy procured are indicated as follows:

Source	Energy in MU
Co-generation (Power Purchase) including medium term purchase	767.82
Mini Hydel	32.65
Wind power projects incl. KPCL	2388.69
Bio mass	0.00
Shimsha	18.39
Less Previous year FY18 adjustment as per T.O. 2019	0
Banked energy purchased*	138.55
Less energy under APPC	-154.29
Less Green Energy sold to consumers	0.00
Non-solar Energy- Total	3191.81

***As per break up furnished in revised D-1 Format submitted in replies to preliminary observations**

Regarding the Non-Solar RPO, considering the input energy (excluding procurement from hydro sources) of 11831.16 MU, the Non-solar RPO target at 9.50% works out to 1123.960 MU (1123960 MWh after rounding off). HESCOM has purchased 3191.81 MU (3191810 MWh) of Non-solar energy. Thus, HESCOM has purchased 2067.850 MU (2067850 MWh) excess non-solar energy beyond the target specified. Thus, the Commission holds that HESCOM has met its Non-Solar RPO target of 9.50% for FY19, in terms of the prevailing Regulations.

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

Energy in Million Units	
Solar PPA Route	1081.47
Solar Rooftop	0
Solar KPCL	2.66
Solar Bundled Power	276.55
Solar New Park	0.00
Solar Short /medium term purchase	0.00
Less Previous year FY18 adjustment as per TO 2019	0.00
*Banked energy purchased	46.47
Sold to consumers as green energy	0.00
Solar Total	1407.15

***As per break up furnished in revised D-1 Format submitted in replies to preliminary observations**

Regarding the Solar RPO, considering the input energy (excluding procurement from hydro sources) of 11831.16 MU, the Solar RPO target at

6.00% works out to 709.870 MU (709870 MWh after rounding off). HESCOM has purchased 1407.15 MU (1407150 MWh) of Solar energy. Thus, HESCOM has purchased 697.280 MU (697280 MWh) excess Solar energy beyond the target specified. Thus, the Commission holds that HESCOM has met its Solar RPO target of 6% for FY19, in terms of the prevailing Regulations.

4.2.5 Operation and Maintenance Expenses:

HESCOM's Submission:

HESCOM, in its application has sought the approval of O&M expenditure of Rs.969.88 Crores for FY19. The break-up of O&M expenses are as follows:

TABLE – 4.10

O & M Expenses – HESCOM's submission

Particulars	Amount in Rs. Crores
	FY19
Employee cost	781.78
Administrative & General Expenses	125.73
Repairs and Maintenance	62.37
Total O & M Expenses	969.88

Commission's analysis and decisions:

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

TABLE – 4.11

Approved O&M Expenses as per Tariff Order dated 14.05.2018

Particulars	FY19
No. of installations as per actuals as per Audited Accts	4772242
Weighted Inflation Index	8.1059%
CGI based on 3 Year CAGR	3.96%
Total approved O&M Expenses for FY19 – in Rs. Crores.	835.77

The Commission in its preliminary observation had observed that:

- HESCOM in its filings, had projected the total O&M expenses of Rs.969.88 Crores for FY19, as against the approved O&M expenditure of Rs.835.77 Crores. This amount comprises of Rs.62.37 Crores towards R&M expenses, Rs.781.78 Crores towards Employees cost and Rs.125.73 Crores towards A&G expenses, which are the actual expenses as per the audited accounts for

FY19. The actual employees cost also included the terminal benefits of Rs.174.96 Crores, which is considered as an additional employees cost. Further, the Commission, in its Tariff Order 2019, while undertaking the APR for FY18, had allowed the provision of Rs.91.98 Crores towards the arrears of revision of pay scale to the employees from 01.04.2017 to 31.03.2018, as an additional employees cost. Hence, HESCOM was directed to furnish the actual payment of arrears amount to its employees on account of pay revision for FY18 during FY19 and the additional contribution made to P&G Trust thereon. In addition, HESCOM was also directed to furnish the actual employees cost incurred during FY19 by excluding the arrears of pay revision and contribution to P&G Trust thereon for FY18.

HESCOM in its replies has submitted that it has incurred Rs.91.98 Crores towards payment of arrears on account of pay revision for FY18 during FY19. HESCOM has also furnished the break up details for actual employees cost of Rs.781.78 Crores.

- b. The Commission notes the reply submitted by HESCOM to the preliminary observations on the amount of Rs.37.13 Crores claimed as an additional employee cost towards pay revision arrears of Physically Challenged Revenue Assistants/Junior Assistants, whose services were regularized with effect from 29.12.2010 as per KPTCL Order No. KPTCL/B16/4682 (III)/2006-07 dated 14.01.2019.
- c. The Commission also notes the computation sheet submitted by HESCOM for claiming the terminal benefits of Rs.174.96 Crores for FY19, with clear bifurcation of amounts between employees recruited prior to 31.03.2006 and after 31.03.2006.

HESCOM in its replies has furnished the above details.

The Commission notes the reply / details submitted by HESCOM for having incurred huge A&G expenses under other professional charges, conveyance and travelling charges and remuneration to contract agencies for FY19. In this regard the Commission directs that, the O&M expenses are controllable

expenditure in nature and that the HESCOM in future should take necessary action to minimize these expenses to avoid burden on the end consumers.

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

TABLE – 4.12
Computation of Rate of Inflation

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
As per CERC Notification No. Eco T I / 2018-CERC dated 02.04.2019 with weightage of 80% on CPI and 20% on WPI							

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

- a) The actual O & M expenses as per the audited accounts for FY16 as the base year expenses and the approved normative O & M expenses for FY17 and FY18, excluding contribution to Pension and Gratuity Trust.
- b) The three-year compounded annual growth rate (CAGR) of the number of installations considering the actual number of installations as per the audited accounts up to FY19 of 5.80%.
- c) The weighted inflation index (WII) at 8.2604% as computed above.
- d) Efficiency factor at 2% as considered in the earlier control periods.

Thus, the normative O & M expenses for FY19 are computed as shown in the following Table:

TABLE - 4.13
Allowable Normative O & M Expenses for FY19

Particular	FY19
No of installations as per actuals as per Audited Accts	5029700
CGI based on 3 Year CAGR (Using actuals of FY16 to FY19)	5.80%
Inflation index	8.2604%
Base year O&M cost (FY16 as per audited accounts) Rs. in Crores	533.15
Approved O&M expenses with P&G contribution for FY17 (Rs.in Crores)	586.23
Approved O&M expenses with P&G contribution for FY18 (Rs.in Crores) + Pay revision arrears for FY18 (646.68 + 91.98) Rs.in Crores	738.66
Normative O&M Expenses for FY19 (t-1) x (1+WII+CGI-X) (Rs.in Crores)	827.75

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

- i. The Commission notes the reply submitted by HESCOM on the payment of additional employees cost of Rs.91.98 Crores towards pay revision arrears from 01.04.2017 to 31.03.2018, against the provision made during FY18 and approved by the Commission in the approved APR for FY18.

ii. The Commission notes the details submitted by HESCOM, for claiming the additional employee cost of Rs.174.96 Crores of terminal benefit for FY19. Accordingly, the Commission notes that the payment made under Provident Fund Compensation to legal heirs of employees appointed after 01.04.2006, Family Benefit Fund, contribution made on behalf of employees on deputation of Rs.1.53 Crores is included as an additional employee cost under terminal benefit. The Commission has considered these items of payment under normal O&M expenses. Thus, the Commission as per the provisions of the MYT Regulations, decides to treat employee costs on account of Contribution to P&G Trust as uncontrollable O&M expenses and allowed Rs.173.43 Crores as an additional employee cost in addition to the normative O&M expenses to enable HESCOM to meet its actual employee costs.

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

TABLE – 4.14
Allowable O & M Expenses for FY19

Sl. No.	Particulars	Amount in Rs. Crores
		FY19
1	Normative O & M expenses	827.75
2	Additional employee cost contribution to P&G Trust (Terminal Benefit) and pay revision	173.43
4	Allowable O & M expenses for FY19	1001.18

Thus, the Commission notes that as per MYT norms HESCOM's O & M expenses will be Rs.1001.18 Crores. However, the actual O & M expenditure incurred, as per audited accounts, is Rs.971.20 Crores. The Commission in its earlier Orders has been stressing the need to control the controllable O&M expenses to reduce the burden on the end consumers. The Commission notes that actual O&M expenses as per the audited account is less than the allowable total O&M expenses. Therefore, in order to reduce the tariff burden on the consumers, the Commission decides to limit the O & M expenses as per actuals and allows an amount of Rs.971.20 Crores as O&M expenses for FY19.

4.2.6 Depreciation:**HESCOM's Submission:**

HESCOM in its application as per the audited accounts has claimed an amount of Rs.194.58 Crores as net depreciation after considering the deductions of Rs.88.20 Crores, of depreciation amount on account of assets created out of consumers' contributions / grants as per Accounting Standards (AS) – 12.

HESCOM in its filing as per the audited accounts has claimed the asset-wise net depreciation as follows:

TABLE – 4.15
Depreciation for FY19 – HESCOM's Submission

Particulars	Opening Balance of Asset as on 01.04.2018	Amount in Rs. Crores	
		FY19	
		Depreciation	Closing Balance of Asset as on 31.03.2019
Buildings	93.64	3.77	133.82
Hydraulic works	3.61	0.22	4.77
Other Civil	3.61	0.16	5.35
Plant & M/c	1032.06	58.75	1155.80
Line, Cable Network	4251.10	216.86	4867.43
Vehicles	7.99	0.31	8.79
Furniture	7.25	0.37	7.38
Office Equipment	5.54	0.17	5.08
Intangible Assets – software		2.14	
Land and lease land	13.51	0.04	16.36
Total	5418.35	282.79	6204.78
Depreciation on Assets created out of consumer contribution / grant	1539.94	(-)88.20	1738.60
Net Gross Fixed Asset	3878.41	194.59	4466.18

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 the audited accounts. Accordingly, the weighted average rate of depreciation works out to 4.87%.

The Commission notes the HESCOM's noting as per the audited account under Note-12, that the depreciation on assets created out of consumer contribution/grants of Rs.88.20 Crores has been considered and deducted at the respective divisional accounting unit level, as per the Accounting Standard AS-12 while accounting the net depreciation of Rs.194.58 Crores for FY19. The Commission notes that, the opening and closing balance of gross fixed asset and asset created out of consumer contribution / grant and the amount of depreciation there on as per the audited accounts and as filed by HESCOM for FY19. Accordingly, the Commission considers the same in allowing the depreciation for FY19.

Based on the above, the Commission decides to allow the net depreciation of Rs.194.58 Crores for FY19.

4.2.7 Capital Expenditure – APR for FY19:

The HESCOM, in its application for APR for FY19, has indicated a capital expenditure of Rs.977.86 Crores against the Commission approved capex of Rs.1298.16 Crores for the FY19. The HESCOM has furnished the breakup of category-wise expenditure of Rs.977.86 Crores for FY19 as shown below:

TABLE - 4.16
Capital expenditure of the HESCOM for FY19

Amount in Rs. Crores

Sl. No	Scheme	As approved in T.O. 2018	Actual Expenditure	% of Budget utilized
1	Mandatory works, Social obligation and other works			
a	Gangakalyan IP sets	50.00	80.10	160.20%
b	Special Development Plan for backward talukas under Nanjundappa scheme (SDP)	20.00	17.62	88.10%
c	Electrification of Hamlets (Not covered under RGGVY)	10.00	0.12	1.20%
d	Electrification of HB/DB/JC/AC (Habitations) under SCP (Not covered under RGGVY)	20.00	10.49	52.45%
e	Electrification of TC(Habitations) under TSP (Not covered under RGGVY)	10.00	2.24	22.40%
f	Electrification of BPL Households (Not covered under RGGVY)	2.00		0.00%
g	Water works	25.00	0.55	2.20%
h	RGGVY	6.00	0.43	7.17%
i	DDUGJY	100.00	62.29	62.29%
j	Maadari Grama	65.00		0.00%

	Sub-Total	308.00	173.84	56.44%
2	Expansion of network and system improvement works.			
a	E & I work.	85.00	62.39	73.40%
b	Energization of IP sets under general.	8.00		
c	Energization of IP sets as per GOK	100.00	119.13	119.13%
d	Service connections other than IP/BJ/KJ/Water works.	20.00	9.17	45.85%
e	Construction of new 33 KV stations and lines.	30.00	38.47	128.23%
f	Augmentation of 33 KV stations.	20.00	7.82	39.10%
g	Construction of 11 KV lines for 33 KV / 110 KV sub-stations.	25.00	9.00	36.00%
h	Niranthara Jyoti Yojana.	10.00	51.68	64.60%
		70.00		
i	Providing prepaid meters to temporary installations	5.40	0.52	9.63%
j	Providing numerical relays to provide power supply to farm houses	7.30		0.00%
k	providing 16kVA Transformers for A/P/S to farm houses in Chikkodi Division	6.20		0.00%
l	R- APDRP.	5.00	3.69	73.80%
m	R-APDRP exclusively for Modem and meters	2.00		0.00%
n	IPDS IT imitative phase II	10.00		0.00%
o	IPDS	60.01	61.65	102.73%
p	Soubhagya Yojane		1.66	
q	The work of supply of hardware, supervisory Manpower (for Technical support) and Development of Software (End to End Solution including Google Map subscription for 2 years, if applicable) to Support Enumeration of IP Sets in HESCOM Jurisdiction (except Bailhongal O&M Division) though GIS application and Maintenance for 2 years			
	Sub-Total	463.91	365.18	78.72%
3	Reduction of T & D and ATC loss			
a	Providing meters to un-metered IP sets.	0.25	0.01	4.00%
b	Providing meters to un-metered BJ/KJ installations.	2.00	0.06	
c	Replacement of faulty / MNR energy meters by static meters.	10.00	3.83	38.30%
d	Replacement of more than 10-year-old electromechanical energy meters by static meters.	25.00		0.00%
e	Fixing boxes to Single Phase Meters	25.00		
f	DTC's metering (Other than APDRP)	35.00	17.28	49.37%
g	Replacement of 33 KV lines Rabbit conductor by Coyote conductor	15.00		0.00%
h	Replacement of 11 KV lines Weasel conductor by Rabbit conductor.	25.00	1.80	7.20%

i	Replacement of age old LT conductor by Rabbit conductor.	20.00	13.32	66.60%
j	HVDS (Pilot project for 1 district/year)	20.00		0.00%
k	NEF (REC) for replacing 11 KV OH feeders by UG Cables in Hubballi and Belgaum cities.	70.00	116.49	166.41%
l	Replacing 11 kV OH feeders by UG Cables in Dharwad and Vijayapura cities			
	Sub-Total	247.25	152.79	61.80%
4	New initiatives works			
a	IT initiatives, automation and call center	6.00	7.70	128.33%
b	Smart Grid	5.00		
c	Providing solar roof tops to HESCOM office buildings	20.00		0.00%
d	Establishing ALDC & SCADA.	3.00	-0.03	-1.00%
e	Thermal Imaging and GIS Mapping of DTCs			
f	Special pilot project for Strategic Business Centre Gadag Division	1.00		
g	Smart City/Smart Meters	50.00		
h	DSM Projects	1.00		
	Sub-Total	86.00	7.67	8.92%
5	Replacement and other miscellaneous works			
a	Replacement of failed distribution transformers.	10.00	135.45	1354.50%
b	Replacement of Power Transformers.	8.00	0.82	10.25%
c	Replacement of old and failed equipment and other works of existing 33 KV stations and lines.	10.00	12.23	122.30%
d	Preventive measures to reduce the accidents. (Providing intermediate poles replacement of deteriorated conductor, DTC earthing etc.)	25.00	27.57	110.28%
e	T&P materials.	5.00	0.60	12.00%
f	Creating infrastructure to UAIP Sets	15.00	56.22	374.80%
g	Civil Engineering works.	35.00	43.74	124.97%
h	Refurbishing works on HT/LT/DTC in O&M Divisions	85.00		0.00%
i	Corporate Office Reserve for Emergency			
j	Others		1.75	
	Sub-Total	193.00	278.38	
	Total	1298.16	977.86	75.33%

Commission's Analysis and Decision:

The Commission had communicated its observations on non-utilization of amount in respect of works related to replacement of more than 10-year-old electro-mechanical energy meters by static meters, replacement of 33kV lines Rabbit conductor by Coyote conductor, Smart City/Smart meters,

electrification of BPL households (Not covered under RGGVY), Maadari Grama (Model village) and under-utilization of the capex in respect of works related to DTC Metering, Electrification of Habitations, which are not covered under RGGVY, DDUGJY, RGGVY, Extension & Improvement, Nirantara Jyothi Yojana, R-APDRP.

HESCOM, in its response to the observations has replied as follows:

HESCOM has not utilized amounts in respect of following works in FY19 due to following reasons:

- a) **Replacement of more than 10-year-old electromechanical energy meters by static meters:** HESCOM has taken up replacement of existing Electro-mechanical /High precision meters to the extent of 5,19,088 Numbers static meters under a DDUGJY scheme - and -210843 Nos under IPDS scheme of the GOI, as per the sanctioned estimates under these schemes. During FY19 394735 no. of meters were installed under these schemes. Similar work of replacement of more than 10-year-old Electro-mechanical energy meters by static meters for the balance of 6,36,752 nos. of meters was awarded at a cost of 152.89 Crores on 09.03.2018 and 83635 nos. in FY19. However, the expenditure was not booked in FY19. The Project is likely to be completed in next two years.
- b) **Replacement of 33kV lines rabbit conductor by Coyote Conductor:** The provision of Rs.15.00 Crores was made towards this work in FY19 as a measure for any of the left out 33kV feeders, since the reconductoring of almost all the 33kV feeders in HESCOM is carried out by Coyote ACSR.
- c) **Electrification of BPL households (Not covered under RGGVY), Electrification of Habitations which are not covered under RGGVY, DDUGJY, RGGVY, Extension & Improvement:** The rural electrification works in HESCOM including electrification of BPL households & Habitations were executed under on-going DDUGJY scheme which was awarded on April -2017. Hence, there was underutilization of Capex in respect of these works in FY19.
- d) **Maadari Grama (Model village):** The System Improvement works in 328 villages were taken up under Maadari Grama for which the works were awarded in June-2018. Due to abnormal delay in finalization of getting the village names from the elected representatives, the activities such as

tendering and finalization of works were delayed. Since the works were in initial stage, the complete expenditure was not booked during FY19.

- e) **DTC Metering:** HESCOM has taken up Metering of 40793 Nos. of Un-Metered Non-IP set DTCs in all the Non-RAPDRP Town Areas and Rural Areas in all O & M Divisions of HESCOM Jurisdiction in two Phases (Phase-I & II) in FY 2013-14 & FY 2014-15 for total award costing Rs.181.20 Crores and works are completed in FY 2014-15 and FY 2015-16.
- f) **Nirantara Jyothi Yojana:** Total expenditure of Rs. 49.91 Crores was made against the provisioned capex amount of Rs 31.07 Crores. Hence the provisioned budget has been utilized fully. In HESCOM, totally there were 48 Talukas, out of which 11 Taluks in Uttara- Kannada Districts, are already being fed with 24 Hrs power supply and hence they are excluded from NJY Scheme. Pilot Project has been implemented in three Talukas namely Bailhongal in Belgaum District, Shiggaon & Savanur Taluks in Haveri District. In the remaining 34 Taluks, it was proposed to implement NJY works in second phases as hereunder:
- Phase-I: covering 20 Talukas and No. of feeders proposed were 242 Nos.
 - Phase-II: covering 14 Talukas and No. of feeders proposed were 202 Nos.

Initially a decision was taken to take up NJY works under Phase-I & II covering 34 Talukas excluding the areas covered under RLMS. Subsequently, it was felt necessary to take up NJY works in the areas covered under RLMS also in Phase III, involving 92 no. of feeders proposed and covering 575 villages at an estimated cost of Rs.117.03 Crores. It is informed that 100% of the work has been completed on 31.07.2019.

- g) **R-APDRP:** R-APDRP Part-B project was completed on 31.03.2015 at an expenditure of Rs.51.134 Crores.

The Commission notes that the replies provided by HESCOM to the observation of the Commission in respect of DTC metering, electrification of BPL household/Habitations, NJY and R-APDRP are not satisfactory. This indicates HESCOM's lack of seriousness while furnishing replies to the Commission.

On the Commission observation that Rs.135.45 Crores is incurred towards replacement of failed distribution transformers as against the approved Rs.10 Crores and the Commission direction in the MYT Order for FY16, that, the failed transformers should be replaced by repaired good transformers only and it should be charged to revenue expenditure. In case, the failed transformer is scrapped, it can be replaced by a new transformer, which has to be accounted under capital expenditure, HESCOM has replied that as far as possible the failed distribution transformers are being replaced by repaired good transformers. However, in case of non-availability of particular capacity of repaired good transformers in the concerned stores, new transformers are being utilized to restore the power supply in time.

When the failed transformers are released and returned to stores, the original value of released transformer is withdrawn from the Asset account along with the accumulated depreciation. A separate repaired good transformer or new transformer will be issued from the stores for restoring the power supply. The repaired good transformers will be valued at their written down value only. However, since this transformer needs to be capitalized once again to the asset account, the same is being passed through Capex accounts.

During FY19, 25204 number of distribution transformers have failed in HESCOM (11.68%) compared to 22679 Nos (11.78%) in FY18 & 20605 Nos (12.33%) in FY17. Hence, there is comparatively marginal reduction in failure rate of distribution transformers in pervious 3 Financial Years in HESCOM.

Transformer failure Percentage FY.2016-17, 2017-18, 2018-19 & 2019-20 up to Nov-2019				
Sl. No.	Financial Year	Existing No. of Transformer in the division	Transformers Failed in Nos.	Transformers failure rate (%)
1	2016-17	167117	20605	12.33
2	2017-18	192575	22679	11.78
3	2018-19	215873	25204	11.68
4	2019-20 (up to Nov-2019)	221313	18984	8.58

HESCOM has submitted that the grants were timely utilized under various schemes such as DDUGJY, RGGVY, IPDS, SCP/TSP, SDP schemes and no grants were lost in any of the schemes by its non-utilization.

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

Financial Progress of Schemes achieved during FY19

Name of the Scheme	Total Cost of the Scheme (Rs. in Crores)	Contribution borne by HESCOM in the total capex of the scheme	Scheduled Date of Completion	Target Date of Completion	Cost to Benefit Ratio
Model village	72.44	100%	31.06.2019	31.03.2020	Not indicated
DDUGJY	370.63	10% ; Balance: 60% Gol Grant; 30% Loan	31.03.2020	31.03.2020	Not indicated
IPDS	246.20	10%, Balance: 60% Gol Grant, 30% Loan	31.12.2019	31.12.2019	Not indicated
Saubhagya	119.5	10%, Balance: 60% Gol Grant, 30% Loan	31.12.2019	31.03.2020	Not indicated

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

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

The Commission, after reviewing the capex achieved by HESCOM for FY19, decides to allow capex of Rs.977.86 Crores, which is below the approved capex of Rs.1298.16 Crores for FY19, subject to Prudence Check.

A. Prudence Check of Capital Expenditure incurred by HESCOM 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 HESCOM for the period FY17 and FY18 respectively subject to carrying out the prudence check of the various works undertaken by HESCOM. Accordingly, the Commission had entrusted conducting prudence check work of HESCOM to M/s Price water house coopers (PWC), Bengaluru.

M/s PWC 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:

a) Summary of review for capital expenditure:

Particulars	FY17	FY18
Total capital expenditure categorized by HESCOM and for the review year (Rs in Lakh)	12,662	34,326
The no. of sample capital works reviewed	76	144
Total amount for sample capital works reviewed (Rs in Lakh)	2,793	16,445
Capital works reviewed as % of total capital expenditure	22%	48%
Material budget approved (Rs in Lakh)	18,043	30,565
Material procurement reviewed for major material items (Rs in Lakh)	10,446	16,164
Material procurement reviewed as % of material budget	58%	53%

b) Summary of prudence check results:

Description	FY17		FY18	
	Above Rs. 5 lakhs	Actual cost (Rs in Lakh)	Above Rs 5 lakhs	Actual cost (Rs in Lakh)
Works considered for review	76	2,793	144	16,445
Works that are non-deductible*	4	153	4	78
Works reviewed and graded	72	2,640	140	16,367
Works found non-prudent	9	199	15	470
Works found prudent	63	2,441	125	15,896
% of prudent works as compared to the sample	83%	87%	87%	97%
* works are found to be non-deductible as the information is not fully provided to Consultants to complete the evaluation and the project is wrongly shown during the site visit.				

c) Summary of performance on planning and implementation:

Description	FY17			FY18		
	Above 5 lakhs INR	Total	% of total	Above 5 lakhs INR	Total	% of total
Cost benefit analysis considered	14	63	22%	24	125	19%
Alternatives considered	19	63	30%	27	125	22%
No Cost overruns	32	63	51%	74	125	59%
No Time overruns	25	63	40%	60	125	48%

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

After analyzing HESCOM's replies on the findings of the Consultant on the non-prudent works and non-deductible works (Non-Traceable works) and justifications furnished by HESCOM, the Commission has noted that almost all the sample works in FY17 and FY18, related to DTC metering / providing modems & GPRS are categorized as imprudent in the report. The Commission after taking note of it, has decided to seek a detailed explanation from the HESCOM in this regard and based on their explanation, the Commission will take further decision and same will be incorporated in the next Tariff Order. However, one work amounting to Rs.0.12 Crores categorized under the category of other type of works for FY18 among the samples selected by the consultant, do not qualify for being treated as prudent.

Accordingly, subject to final decision on imprudence on works related to DTC metering /providing modems & GPRS, which will be considered during the next Tariff exercise, the corresponding depreciation and interest on loans allowed by the Commission in the tariff shall have to be disallowed in APR of FY18 and as detailed below:

The amount to be disallowed for HESCOM due to imprudent works of FY18 as below (Amount in Rs in Crores)		
1	Total cost of capital works categorized during the year as per during the year as per D-17 Statement FY18	1421.68
2	Total cost of categorized works costing more than Rs.5 Lakhs considered for prudence check	343.26
3	Total cost of sample works out of Rs.126.62 Crores	164.45

4	Cost of sample works not meeting prudence norms	0.12
5	Cost of sample works not meeting prudence norms attributable to other companies (viz. KPTCL & other ESCOMs)	0.00
6	Net Capex which is not meeting prudence norms as per the Report of Prudence check of HESCOM	0.12
7	Name of the imprudent Work: Design, Manufacture, Supply installation of RTPV @ Mahalingapur Section	0.12
8	Target date of completion, Year of completion and categorization	28.11.2017, 15.07.2017 and 31.03.2018
9	The capex not meeting the prudence norms at 0.12 Crores is 0.10% (0.12/120.29) of cost of total sample of Rs.120.29 Crores in category of Other type of works\$. When this is escalated to the total categorized amount of Rs.495.81 Cores in respect of Other type of works for FY18 (0.12*495.81/120.29)	0.48
10	Period for which amount to be disallowed towards works not meeting prudence norms calculated on the basis of weighted average interest and weighted average depreciation on the amount in the above item	1st Aug 2017 to March- 2019
11	Amount to be disallowed for Aug 2017 to March 2018	0.05
	Amount to be disallowed for FY19	0.08
	Sub-total amount to be disallowed	0.13
12	The capex not meeting prudence norms in KPTCL and other ESCOMs attributable to HESCOM	0.00
13	Total amount to be disallowed	0.13
\$\$	In the report the subject project has been categorized under the category of "Emergency/Calamity". However, on perusal, it is felt that the work may not come under the category of "Emergency/Calamity". Hence, a confirmation in this regard was obtained from HESCOM through their email dated: 26th February 2020. HESCOM has confirmed that the subject work comes under the category of "Other type of works" and not under "Emergency/Calamity".	

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

Company	FY18		FY19	
	Wt. Avg. Dep. Rate	Wt. Avg. Interest on loan	Wt. Avg. Dep. rate	Wt. Avg. Interest on loan
HESCOM	4.66%	11.20%	4.87%	11.53%

HESCOM is directed to note the following issues and challenges vis-à-vis mitigation measures suggested in the report on prudence check for both FY17 and FY18 and take suitable actions/measures in future while implementing a scheme / project in order to avoid disallowance of amounts towards imprudent works:

Particulars	Issues and challenges	Mitigation measures
Data collection	<p>There is a significant delay in furnishing the information by HESCOM and HREC for the capital works.</p> <p>No centralized database is designed to capture the detailed information pertaining to capital works.</p> <p>There is no system developed for monitoring and review of projects resulting in inconsistent information maintained in multiple worksheets.</p>	<p>A web based central database needs to be created for maintaining the detailed information pertaining to the capital works. In this regard, the various parameters mentioned in capex prudence guidelines shall be included while designing the database.</p> <p>The database should generate periodic reports for each capital work and trigger alerts to the management if any project is not progressing in line with the intended benefits.</p>
Project data format	<p>The project data format for some of the sample projects are incomplete when it is handed over to consultant.</p> <p>Lack of awareness and understanding on capturing the requisite parameters for the works.</p>	<p>Capacity building workshops may be conducted to familiarize the capex prudence guidelines.</p> <p>Awareness must be created within the employees for furnishing the required information to facilitate during the evaluation process.</p>
Project objectives	<p>Primary and secondary objectives are not clearly defined with measurable benefits.</p>	<p>Primary and secondary objectives shall be clearly defined with measurable benefits including but not limited to load growth/ load relief and new load/ loss reduction/ quality of supply/ reduction in interruptions/ as defined in the specific works.</p>
Secondary objectives	<p>Secondary objective are not defined for most of the projects.</p>	<p>Secondary objectives need to be defined wherever applicable with measurable benefits.</p>
Time overrun	<p>Reasons for time overrun are not captured for most of the projects.</p>	<p>Reasons for time overrun need to be captured in writing by the concerned authorities. Also, the documentary proof must be</p>

Particulars	Issues and challenges	Mitigation measures
		<p>furnished for such projects in which Liquidated Damages (LD) is applicable. In cases of any wave off on LD clauses, it shall be justified with reasons in writing.</p> <p>During evaluation of the works, the time overrun should be linked to percentage in lieu of the no. of years. This will ensure a more practical approach in evaluating the works.</p>
Cost overrun	Reasons for cost overrun are not captured for most of the works.	Reasons for cost overrun need to be captured in writing by the concerned authorities.
Cost benefit ratio/ Payback period	The cost benefit ratio and payback period are not calculated for many projects in the estimation copy.	Benefit cost ratio shall be more than 1 and payback period shall be less than 10 years before taking up any capital work. The reasons need to be provided in writing in case of any deviation.
Post project completion review	There is no system for conducting the post implementation review of the works for which it becomes difficult to measure the actual achievement against the envisaged benefits for the project.	It is recommended to carry out ex-post analysis for all capex projects after completion of projects to see achievements of benefits against the objectives.
Project monitoring department	There is no separate project monitoring department at corporate office/ division office(s). Currently, the works department monitors all ongoing works with help of field officers from the respective division office(s).	There is a need of project monitoring department to monitor all the works to take corrective actions as needed. Also, monthly meeting needs to be arranged with contractors for review of works.
Quality	<p>Guarding is not provided for most of the works for the overhead 11 kV feeder at the road crossing.</p> <p>Unauthorized electrical connections are observed in some feeders.</p> <p>Sagging of the feeders is observed in some cases.</p> <p>No safety board or fencing</p>	<p>The quality of execution of capital works shall be given priority considering the safety aspect into account. For instance, the safety boards and a fencing can be placed to avoid any accident.</p> <p>Also, identification of the asset at the site is required to be done to ascertain the authenticity of the projects during site visits. For</p>

Particulars	Issues and challenges	Mitigation measures
	provided when the tapping point can be reached by living being.	instance, the name plates can be put at the site location to identify a particular work.

In view of the above, the Commission hereby disallows Rs.0.13 Crore for FY18, towards depreciation and interest on loans allowed in respect of imprudent works subjected to outcome of the decision on imprudence in respect of works related to DTC metering /providing modems &GPRS as stated above. Accordingly, the same is ordered to be deducted in HESCOM's revised ARR, consequent to APR of FY19.

4.2.8 Interest and Finance Charges:

Interest on Capital loan:

HESCOM's Submission:

HESCOM in its application has claimed an amount of Rs.241.31 Crores towards interest on capital loans drawn from Banks/Financial Institutions as against Rs.201.54 Crores approved by the Commission for FY19.

Considering the average amount of loans during FY19, the weighted average rate of interest on long term capital loans works out to 11.53%.

Commission's analysis and decisions:

The Commission has taken note of the opening and closing balances of capital loans as per the audited accounts for FY19 and the data in Format D-9 of the filings and the additional information furnished by HESCOM to the Commission. Accordingly, on the average long-term capital loan of Rs.2092.32 Crores, the weighted average interest rate works out to 11.53% for the interest amount of Rs.241.31 Crores for FY19 as indicated in the following Table:

TABLE – 4.17**Allowable Interest on Loans – FY19**

Amount in Rs. Crores	
Particulars	FY19
Total loan at the end of the year	2082.34
Add new Loans	174.74
Less Repayments	154.78
Total loan at the end of the year	2102.30
Average Loan	2092.32
Allowable Net Interest	241.31

The Commission takes note of the capital loan portfolios of HESCOM for FY19. As per the audited accounts for FY19 and the information submitted by HESCOM under Format D9, it has availed majority of the capital loans from REC and PFC with the interest rate ranging from 9.50% to 12.00%. The actual weighted average rate of interest is comparatively on the higher side when compared with the prevailing rate of interest for long term loans charged by the commercial banks. The Commission directs HESCOM to make efforts, in future, to take advantage of the prevailing favourable banking conditions offering long term loans at the most competitive rates, to minimise the interest burden on the consumers.

Thus, the Commission decides to allow an amount of Rs.241.31 Crores towards interest on capital loans for FY19.

4.2.9 Interest on Working Capital:

HESCOM's Submission:

HESCOM in its application has claimed an amount of Rs.148.28 Crores towards interest on working capital as against Rs.140.69 Crores as approved by the Commission for FY19.

Commission's analysis and decisions:

The Commission, in its Tariff Order dated 14th May, 2018, while approving the ARR for FY19, had considered the rate of working capital interest at 11.00%, based on the interest rate prevailing at that time. The Commission notes, the rate of interest ranging from 8.55% to 11.75% at which the medium / short term loans and overdrafts were availed by the HESCOM, during FY19, is on the higher side when compared to the interest rate at which the other ESCOMs

have borrowed the working capital from the commercial banks. The Commission notes that as the interest rates on the loans is showing a reducing trend in the recent years, the HESCOM has not taken advantage of the reduction in the rate of interest in the Banking sector, while availing its requirement of working capital.

The Commission directs the HESCOM that the working capital loans shall be availed at lower rates in view of the reduction of interest rates by the Banks/financial institutions, in order to minimise the interest burden on the consumers. Thus, the Commission decides to allow the working capital loan at a normative interest rate of 11% for FY19.

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

TABLE – 4.18
Allowable Interest on Working Capital for FY19

Amount in Rs. Crores	
Particulars	FY 19
One-twelfth of the amount of O&M Expenses	80.93
Opening GFA as per Provisional Accts	5418.30
Stores, materials and supplies 1% of Opening balance of GFA	54.18
One-sixth of the Revenue	1293.86
Total Working Capital	1428.97
Rate of Interest (% p.a.)	11.00%
Normative Interest on Working Capital	157.19
Actual Interest on Working capital	148.27
Allowable interest on Working Capital (Actual interest on working capital + 50% of the difference between the normative interest on WC and the actual interest on WC)	152.73

Thus, in accordance with the provisions of the MYT Regulations and amendments thereto, the Commission decides to allow the interest on working capital of Rs.152.73 Crores for FY19.

4.2.10 Interest on Consumer Deposits:

HESCOM's Submission:

HESCOM, in its application, has claimed an amount of Rs.50.95 Crores as per the audited accounts, towards payment of interest on consumers' security deposits as against Rs.48.33 Crores as approved by the Commission for FY19.

Commission's analysis and decisions:

The Commission notes the opening and closing balance of consumer security deposits amount as per the HESCOM's audited account for FY19. Accordingly, based on the amount of consumer security deposits, the interest on consumer security deposits of Rs.50.95 Crores has been claimed by HESCOM, as per the audited accounts for FY19. As per the KERC (Interest on Security Deposit) Regulations, 2005, the interest on consumer deposits shall be allowed as per the bank rate prevailing on the 1st of April of the relevant year. The bank rate as on 1st April, 2018 was 6.25%.

Thus, the Commission decides to allow an amount of Rs.50.95 Crores towards interest on consumer security deposits for FY19.

4.2.11 Interest on belated payments:

HESCOM, in its filing has claimed Rs.95.37 Crores towards interest on belated payments of power purchase for FY19.

Commission's analysis and decisions:

The Commission notes that, as per the audited accounts, the HESCOM has incurred an amount of Rs.95.37 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 in the approved ARR. Since, the revenue expenditure approved by the Commission (ARR) is fully allowed to be recovered by revision of retail supply tariff from the consumers, the question of delay in power purchase payment does not arise, if the HESCOM has taken the prompt action in issue and collection of bills from the consumers and exercised due diligence in incurring the expenses. Hence, there is no justification for the

delay in arranging payments towards power purchase bills and incurring interest on power purchase dues. The Commission directs the HESCOM that in future, it should pay the power purchase bills of the generators, by availing working capital loans and avoid payment of interest thereon.

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

4.2.12 Other Interest and Finance charges:

HESCOM, in its filing has claimed Rs.3.23 Crores towards other interest and finance charges for FY19.

Commission's analysis and decisions:

The HESCOM has claimed an amount of Rs.3.23 Crores towards other interest and finance charges as per the audited accounts for FY19. The Commission notes that HESCOM has claimed Rs.1.31 Crores being the bank charges for remittances and collection of funds between the offices under interest and finance charges for FY19. As these expenses were not incurred in availing the loans, the Commission decides to include and allow the same under normative O&M charges. Hence, the Commission decides to allow the remaining amount of Rs.1.92 Crores as other interest and finance charges.

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

TABLE – 4.19
Allowable Interest and Finance Charges

Amount in Rs. Crores		
Sl. No.	Particulars	FY19
1.	Interest on capital Loans	241.31
2.	Interest on working capital	152.73
3.	Interest on consumer deposits	50.95
5.	Other interest and finance charges	1.92
	Total interest and finance charges	446.91

4.2.13 Other Debits:

HESCOM's Submission:

HESCOM, in its application, has claimed a net amount of Rs.105.03 Crores by including Rs.82.73 Crores of prior period expenses under other debits for FY19.

Commission's analysis and decisions:

The Commission notes that as per the audited accounts, the Other Debits are indicated as Rs.22.30 Crores, which also include an amount of Rs.0.75 Crores towards provision for bad and doubtful debts for FY19. It is noted that HESCOM has considered Rs.82.73 Crores of prior period expenses under this item of expenditure and again claimed under net prior period debit / credit head of expenses for FY19. **The Commission has not been allowing the provisions for bad and doubtful debts and allowing only the actuals bad and debts written off, and allowed the prior period expenses under net prior period debit / credit head of expenses. Thus, the Commission by excluding the prior period expenses of Rs.82.73 Crores and the provisions for bad and doubtful debts amounting to Rs.0.75 Crores decides to allow Rs.21.55 Crores towards other debits for FY19.**

4.2.14 Prior Period Charges (Debit)/income(credit):**HESCOM's Submission:**

HESCOM in its application has claimed credit of Rs.38.39 Crores towards Prior Period debit / credit for FY19.

Commission's analysis and decisions:

The Commission notes that, as per the Audited Accounts for FY19, the prior period expenses (debit) are indicated as Rs.82.735 Crores which include the short / under provision in the previous year for employee costs, power purchase cost, depreciation, A&G expenses, interest and finance charges, material related expenses and other expenses relating to earlier years. HESCOM, in its filing, has shown the prior period income of Rs.121.137 Crores as prior period income which includes prior period receipts from consumers, excess provision for depreciation, interest and finance charges, other income and excess provision. The net of Income and expenses works out to Rs.38.40 Crores.

Thus, the Commission decides to allow the net prior period income (credit) of Rs.38.40 Crores for FY19.

4.2.15 Return on Equity:

HESCOM's Submission:

HESCOM in its application has not claimed any Return on Equity due to negative net-worth for FY19. HESCOM, in its application has indicated the negative equity as follows:

TABLE – 4.20
Return on Equity – HESCOM's Submission

Particulars	Amount (Rs. Crores)
Opening Balance: Paid-up share capital	1211.07
Opening Balance : Share Deposit	200.35
Opening Balance: Accumulated deficit	(2645.75)
Total Equity	(1234.33)

Commission's analysis and decisions:

i. Debt Equity Ratio Vis-à-vis GFA:

The Commission notes that, 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 actual data as per the audited accounts are indicated as follows:

TABLE – 4.21
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	Percentage of actual debt on GFA	Percentage of actual equity on GFA
Opening Balance	5418.30	2082.34	-1268.34	3792.81	1625.49	38.43	Negative Equity
Closing Balance	6204.78	2102.30	-435.53	4343.35	1861.43	33.88	Negative Equity

From the above table it is evident that the amounts of debt are within the normative limit as per the debt equity ratio of 70:30 on the closing balances

of GFA for FY19. The equity on GFA is showing a negative percentage as the Net Equity is negative.

ii. Allowable RoE:

As per the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments thereto, the Commission shall allow Return on Equity at 15.5% on share capital plus the accumulated balance of profit/loss under Reserve & Surplus as per audited accounts as at the beginning of the year duly factoring the recapitalization of security deposit of Rs.34.00 Crores, in compliance of the Orders of the Hon'ble ATE in appeal No.46/2014. The allowable RoE for FY19 is determined as follows:

TABLE – 4.22
Allowable RoE for FY19

Particulars	Amount in Rs.Crores
	FY19
OB: Paid-up share capital	1211.07
OB: Share Deposit	200.35
OB: Accumulated Deficit	-2645.75
Total Equity	-1234.33
Less: Recapitalised Security Deposit	-34.00
OB: Net Equity	-1268.34

Further, as per the audited accounts and as reported by the HESCOM, an additional equity of Rs.142.82 Crores has been received during the year from Government of Karnataka in various Government Order. Even after considering the additional equity infused by the GoK during FY19, the total equity is negative and hence, the Commission is unable to allow any return on equity for FY19.

4.2.16 Other Income:

HESCOM's Submission:

HESCOM in its application by considering the amount collected for the sale of power to HRECS and AEQUS SEZ of Rs.161.56 Crores has claimed an amount of Rs.256.61 Crores as Other Income as against Rs.224.02 Crores approved by the Commission for FY19.

Commission's analysis and decisions:

The Commission notes that as per the audited accounts, the other income is Rs.95.04 Crores for FY19 as against Rs.256.61 Crores indicated by HESCOM by including the amount collected towards energy sold to HRECS. The Commission, while approving the power purchase cost and quantum of HESCOM for FY19, has deducted of Rs.161.56 Crores on the sale of 346.63 MU at IF point to Hukeri RECS from the total purchase cost and quantum of HESCOM and allowed the net power purchase cost and quantum in the approved APR of HESCOM for FY19. Thus, the amount of Rs.161.56 Crores is not included in other income. The Commission in determination of power purchase cost of HRECS for FY19, based on the actual power purchase cost of HESCOM, has arrived at the difference of Rs.2.34 Crores payable by HRECS to HESCOM. Further, to encourage and bring in financial discipline in timely payment of monthly power purchase bills, the Commission, has confirmed to allow 10.00% of the total incentive received for prompt payment of power purchase bills, amounting to Rs.3.78 Crores, to be retained by HESCOM for FY19. Thus the amount allowed as other income is indicated below:

TABLE - 4.23
Approved Other Income for FY19

Amount in Rs.Crores

Particulars	FY19
Interest on Bank Fixed Deposits and others	1.16
Other Miscellaneous Receipt from trading (PTC)	18.17
Sale of scrap	0.55
Meter reading and calibration charges	0.67
Reactive energy charges	0.36
Rental from staff quarters / others	1.35
Rebate for collection of electricity duty	0.97
Other recoveries	73.78
Allowable Total other Income	97.01

Thus, the Commission decides to allow an amount of Rs.97.01 Crores as other income for FY19.

4.2.17 Fund towards Consumer Relations / Consumer Education:

The Commission had allowed an amount of Rs.0.50 Crore per year towards consumer relations / consumer education. HESCOM in its filing has claimed an amount of Rs.0.16 Crores towards Consumer Relations / Consumer Education for FY19.

Commission's analysis and decisions:

The Commission notes that the actual expenditure incurred towards consumer relations education as per audited accounts is Rs.0.16 Crores for FY19.

Thus, the Commission decides to allow Rs.0.16 Crores towards the consumers' relation education for FY19.

4.2.18 Extraordinary Items

HESCOM in its, application has claimed an amount of Rs.102.90 Crores towards extraordinary items for FY19 for the adjustment of excess subsidy received during FY09, as per the Order of the Commission in approval of APR for FY09 dated 23.04.2015 and subsequent GoK Order No. EN 38 PSR 2015 dated 31.03.2016.

Commission Views / Decisions:

The Commission notes that, the claims made by HESCOM in its application towards the exceptional items of adjustment of excess subsidy accounted and received during FY09. The Commission, in its Order dated 23.04.2015, while approving the revised ARR as per APR had directed HESCOM to adjust the excess subsidy received during FY09 in five equal installments out of the subsidy amount receivable from FY16 onwards.

Accordingly, in compliance of the Order of the Commission and as per GoK order dated 31.03.2016, mere accounting the excess amount of subsidy received in previous years in the accounts of the subsequent years cannot be treated as an item of expenditure in determination and approval of APR/ARR. In view of the above, the Commission is unable to accept the claims made by HESCOM to allow an amount of Rs.102.90 Crores under exceptional items in the APR for FY19.

4.2.19 Revenue for FY19:

HESCOM, in its application as per Format D-2 has considered Rs.7684.25 Crores as revenue from sale of power from tariff and miscellaneous charges for FY19.

Commission Views / Decisions:

As per the audited accounts for FY19, the revenue from sale of power is Rs.7764.56 Crores.

The Commission as discussed earlier has disallowed 2.27 MU of IP set consumption resulting in reduced subsidy of Rs.1.41 Crores at CDT of 6.24 per unit. Thus, the Commission after deducting the above amount, has considered Rs.7763.15 Crores as revenue from sale of power and miscellaneous charges from the consumers in the approval of revised ARR as per APR of HESCOM for FY19.

4.2.20 Tariff Subsidy for FY19:

The Commission in its Tariff Order dated 14th May, 2018 has approved the tariff subsidy of Rs.3480.62 Crores and Rs.121.93 Crores, towards the sale of power to IP sets and BJ/KJ installations for FY19 respectively, totaling to Rs.3602.55 Crores, in accordance with the prevailing Policy of the Government of Karnataka in the matter of free power supply to BJ/KJ installations and IP sets installations of 10HP & below. HESCOM, in its application has claimed an amount of Rs.4348.24 Crores towards Tariff subsidy for BJ/KJ and IP sets installations for FY19.

Commission Views / Decisions:

The Commission notes that, as per the audited accounts of HESCOM, Rs.4239.38 Crores, and Rs.129.98 Crores has been factored as tariff subsidy for IP Set and BJ/KJ installations respectively, for FY19. Thus, the Commission, while computing the revised ARR as per APR for FY19, considering the disallowance of Rs.1.41 Crores on 2.26 MU of sales to IP set installations as stated earlier in this chapter has considered the total net tariff subsidy of Rs.4367.95 Crores, towards sale of power to BJ/KJ and IP sets installations for FY19. Accordingly, the net difference in the tariff subsidy of Rs.765.40 Crores shall be payable by the Government of Karnataka to HESCOM 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 – 4.24

HESCOM's Approved revised ARR for FY19 as per APR

Sl. No	Particulars	Amount in Rs. Crores		
		As approved 14.05.2018	As Filed	As per APR
1	Energy at Gen Bus in MU (Including HRECS & AEQUS)	13333.57	14592.28	14245.65
2	Energy at Interface in MU (Excluding HRECS)	12576.27	14245.65	13773.58
3	Distribution Losses in %	14.90%	14.62%	14.64%
	Sales in MU			
4	Sales to other categories	4750.18	4830.91	4830.92
5	Sales to BJ/KJ	189.62	199.94	199.94
6	Sales to IP	5762.61	6729.14	6,726.87
	Total Sales	10702.41	11759.99	11757.73
	Revenue			
7	Revenue from tariff and Misc. Charges	3676.99	3336.01	3395.20
8	Tariff Subsidy for BJ/KJ	121.93	129.65	129.98
9	Tariff Subsidy for IP	3480.62	4218.59	4237.97
	Total Revenue	7279.54	7684.25	7763.15
	Expenditure			
10	Power Purchase Cost	4818.00	6265.50	6104.46
11	Transmission charges of KPTCL	555.72	555.72	555.72
12	SLDC Charges	5.30	5.83	5.30
	Total Power Purchase Cost	5379.02	6827.05	6665.48
13	Employee Cost		781.78	
14	Repairs & Maintenance		62.37	
15	Admin & General Expenses	835.77	125.73	971.20
	Total O&M Expenses	835.77	969.88	971.20
16	Depreciation	156.53	194.58	194.59
	Interest & Finance charges			
17	Interest on Loans	201.54	241.31	241.31
18	Interest on Working capital	140.69	148.28	152.73
19	Interest on belated payment on PP Cost	0.00	95.37	0.00
20	Interest on consumer deposits	48.33	50.95	50.95
21	Other Interest & Finance charges	0.00	3.23	1.92
22	Less: interest capitalized	0.00	0.00	0.00
	Total Interest & Finance charges	390.56	539.14	446.91
23	Other Debits	0.00	105.03	21.55
24	Net Prior Period Debit/Credit	0.00	-38.39	-38.40
25	Extraordinary Items	0.00	102.90	0.00
26	Return on Equity	0.00	0.00	0.00
27	Provision for taxation	0.00	0.00	0.00
28	Funds towards Consumer Relations/Consumer Education	0.50	0.16	0.16
29	Less: Other Income	-224.02	-256.61	-97.01
	ARR	6538.36	8443.74	8164.50
30	Deficit for FY17 carried forward	-741.17	0.00	0.00
31	Disallowance for imprudent CAPEX			-0.13
	Net ARR	7279.54	8443.74	8164.37
	REVENUE SURPLUS / -DEFICIT		-759.49	-401.22

4.3.1 Gap in Revenue for FY19:

As against the approved ARR of Rs.7279.54 Crores, the Commission, after the Annual Performance Review of HESCOM, decides to allow the revised ARR of Rs.8164.37 Crores for FY19. Considering the revenue of Rs.7763.15 Crores, the deficit in revenue of Rs.401.22 Crores is determined for the year FY19.

The Commission decides to carry forward the deficit of Rs.401.22 Crores of FY19 to the proposed ARR for FY21 as discussed in the subsequent Chapter of this Order.