

CHAPTER – 4

ANNUAL PERFORMANCE REVIEW FOR FY22

4.0 HESCOM's Application for APR for FY22:

HESCOM has filed its application on 30th November, 2022, for Annual Performance Review (APR) for FY22 by the Commission, as per the audited accounts, approval of revised of Annual Revenue Requirement (ARR) and revision of Retail Supply Tariff for FY24, in terms of the MYT Regulations.

The Commission, in its letter dated 15th December, 2022, had communicated its preliminary observations on the application of HESCOM. HESCOM has furnished the replies to the preliminary observations of the Commission vide its letter dated 28th December, 2022 received in the Commission's office on 30th December 2022.

The Commission, in its Tariff Order dated 9th June 2021, had approved net Annual Revenue Requirement of Rs.9519.60 Crores for HESCOM along with the retail supply tariff for FY22.

The revised Annual Revenue Requirement of HESCOM as per Annual Performance Review of HESCOM for FY22, 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 after APR for FY22 as per the Audited Accounts as follows:

TABLE – 4.1
APR for FY22 – HESCOM's Submission

Sl. No.	Particulars	Amount in Rs. Crores	
		As Approved on 09.06.2021	As filed for APR of FY22
1	Energy at Gen Bus in MU (With HRECS & AEQUS)	14532.65	14599.45
	Transmission Losses in %	2.978%	2.977%

Sl. No.	Particulars	As Approved on 09.06.2021	As filed for APR of FY22
2	Energy at Interface in MU	13761.90	13700.80
3	Distribution Losses in %	13.50%	13.50%
	Sales in MU:		
4	Sales to categories other than BJ/KJ	5453.76	4995.60
5	Sales to BJ/KJ installations	188.87	162.92
6	Sales to IP sets	6261.41	6603.46
	Total Sales	11904.04	11761.98
	Revenue from sale of power:		
7	Revenue from tariff and Misc. Charges	5023.11	4089.76
8	Tariff Subsidy for BJ/KJ	151.08	128.70
9	Tariff Subsidy for IP	4345.42	4585.92
	Total Existing Revenue	9519.61	8804.38
	Expenditure:		
10	Power Purchase Cost	7247.53	7814.49
11	Transmission charges of KPTCL	790.92	792.26
12	SLDC Charges	6.39	2.25
	Power Purchase Cost including cost of transmission:	8044.84	8609.00
13	Employee Cost		984.98
14	Repairs & Maintenance	1379.23	132.83
15	Admin. & General Expenses		166.03
	Total O&M Expenses	1379.23	1283.84
16	Depreciation	285.66	304.91
	Interest & Finance charges:		
17	Interest on Loans	342.65	276.31
18	Interest on Working capital	189.83	314.75
19	Interest on belated payment on PP Cost	0.00	6.61
20	Interest on consumer deposits	40.84	40.50
21	Other Interest & Finance charges	0.00	30.39
22	Less interest capitalized	0.00	-31.52
	Total Interest & Finance charges:	573.32	637.04
23	Other Debits	0.00	56.02
24	Net Prior Period Debit/Credit	0.00	-61.01
25	Extraordinary Items	0.00	0.00
26	Return on Equity	0.00	0.00
27	Provision for taxation	0.00	0.00
	Approved Regulatory assets as per T.O. dated 06.11.2020 for FY22	144.07	0.00
28	Funds towards Consumer Relations/Consumer Education	0.50	0.41
29	Less: Other Income	-290.07	-302.36
30	ARR	10137.55	10527.86
	Carried forward Surplus / (-) Deficit of FY20	617.95	0.00
	Net ARR with RA and penalty for losses	9519.60	10527.86
	Deficit in Revenue for FY22	0.00	-1723.48

Considering the revenue of Rs.8804.38 Crores by including sale of power to HRECS, against the net ARR of Rs.10527.86 Crores, HESCOM has reported a deficit in revenue of Rs.1723.48 Crores for FY22.

4.2 HESCOM's Financial Performance as per Audited Accounts for FY22:

An overview of the financial performance of HESCOM for FY22 as per its Audited Accounts is given below:

TABLE – 4.2
Financial Performance of HESCOM for FY22

Amount in Rs. Crores		
Sl. No.	Particulars	FY22
	Revenue	
1	Revenue from Operations	8804.38
2	Other Income	302.36
3	Total Revenue (1+2)	9106.75
4	Expenditure	
5	(a) Purchase of Power	8609.00
6	(b) Employee benefits expenses	984.98
7	(c) Finance Costs	1004.34
8	(d) Depreciation & amortization expenses	304.91
9	(e) Administrative and other expenses	355.29
11	Prior Period Income	-125.95
12	Prior Period expenses	64.95
	Total Expenses	11197.51
13	Profit/Loss	-2090.76
14	Deferred Tax	232.97
17	Net profit / (-) Loss for FY22	-1857.79
18	Regulatory Income	564.16
19	Profit/-Loss for the year	-1293.63

As per the Audited Accounts, HESCOM has indicated a net revenue deficit of Rs.1293.63 Crores for FY22.

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 FY22 is as follows:

TABLE – 4.3
HESCOM's Accumulated Profit / Losses

Particulars	Amount in Rs. Crores
Restated balance of Loss at the beginning of FY22	-5128.24
Less loss for the year	-1293.63
Closing balance of accumulated losses	-6421.87

As per the audited accounts, the HESCOM has indicated accumulated losses of Rs.6421.87 Crores as at the end of FY22.

The Commission has taken up the Annual Performance Review for FY22, as per the provisions of the MYT Regulations, duly considering the actual revenue and expenditure booked as per the Audited Accounts and other details / documents as against the revenue and expenditure approved by the Commission, in its Tariff Order dated 9th June, 2021. 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 - Other than IP sets:

A. Annual Performance Review for FY22

- a. The Commission, in its Tariff Order, 2021 dated 09.06.2021, had approved total sales to various consumer categories for FY22, at 11904.04 MU as against the HESCOM's proposal of 11762.58 MU, excluding sales to HRECS & AEQUS SEZ. The actual sales of HESCOM, as per the current APR filing [D-2 Format], is 11761.98 MU, indicating decrease in sales to the extent of 142.06 MU as compared with the approved sales.
- b. The category-wise sales approved by the Commission and the actuals for FY22 are indicated in the table below:

Category	Approved	Actuals	Sales in MU
			Difference (Actuals-Approved)
LT-1 BJ/KJ above 40 units/month	73.85	72.88	-0.97
LT-2a	1694.55	1636.12	-58.43
LT-2b	25.29	17.13	-8.16
LT-3	542.81	508.45	-34.36
LT-4b	15.90	15.74	-0.16
LT-4c	0.99	0.83	-0.16
LT-5	327.75	332.11	4.36
LT-6	372.34	347.94	-24.40
LT-6	162.18	157.74	-4.44
LT-7	38.51	37.00	-1.51
HT-1	349.80	344.98	-4.82
HT-2a	1237.04	897.82	-339.22
HT-2b	136.87	116.54	-20.33
HT-2c	90.24	62.89	-27.35
HT-3a & b	338.90	422.92	84.02
HT-4	16.43	15.87	-0.56
HT-5	30.33	8.64	-21.69
Sub total	5453.76	4995.60	-458.16
BJ/KJ	188.87	162.92	-25.95
IP	6261.41	6603.46	342.05
Sub total	6450.28	6766.38	316.10
Grand total*	11904.04	11761.98	-142.06

*Excludes sale to HRECS and SEZ.

c. The Commission had observed that except in case of LT-5, LT-4a and HT-3 categories, there is reduction in sales in all the other categories. The major category of consumers contributing to the decrease in sales as compared to the estimates is HT-2a category in which the sales have decreased by 339.22 MU.

d. HESCOM has stated that the variation in the number of installations cannot be explained, in view of diversified geographical nature of area under HESCOM. The Commission notes that HESCOM has stated at page-51 that, there is 'increase' in number of installations when compared to the approved figures, even though there is reduction in number of installations. This shall be rectified.

HESCOM in its replies has stated that there is a decrease in number of installations by 31984 in FY22 compared to approved figures.

- e. HESCOM, in its filing has attributed the increase in sales to LT-4a and HT-3 categories to the increased ground water potential in most of the districts, LT-5 sales increase to increase in number of installations and HT-2a sales to DER scheme. Further, the reduction in sales in LT-2a category is attributed to use of energy efficient bulbs and fans and reduction in number of installations and in case of LT-6 water supply, HT-2b and HT-2c categories to the decrease in number of installations and in LT-3 category to the GoK guidelines on Covid-19.
- f. The Commission had noted that excluding open access sales, the actual overall energy sold by HESCOM is less by 142.06 MU when compared to the approved figures. The reduction is mainly in HT-2a category (339.22 MU) and therefore, the submission of HESCOM that the increase in HT-2a sales is due to DER scheme is not correct. HESCOM was directed to analyze the reasons for drastic reduction in HT-2a sales in FY22 when compared to the estimates. Further, in case of LT-2a the reduction in sales due to energy efficient bulbs and fans, shall be quantified.

HESCOM, in its replies has submitted that excluding OA / WB consumption there is a reduction of 53.22 MU in sales as compared with FY15 to FY20 CAGR. However, the actual sales over FY21 has increased by 18.22%, but there is overall decrease when compared to estimate due to open access.

Regarding reduction in sale to LT2a, it is submitted that use of LED bulbs/ Tube lights and installations of solar water heater has reduced the consumption. Also 902 Residential consumers have opted for SRTPV totaling to 7.158 MW which is also a reason for reduction in sales.

The Commission notes that HESCOM has not quantified the reduction in sales due to use of LED bulbs / Tube lights and solar water heaters. Henceforth, HESCOM shall quantify the savings in energy due to DSM measures. Further, out of 339.22 MU reduction in HT-2a category, HESCOM has only justified reduction of 53.22 MU.

B. Sales to IP sets – APR for FY22:

1. The Commission, in its Tariff Order dated 9th June, 2021, had approved specific consumption of 6,394.25 units per IP set per annum for the FY22. Whereas, the specific consumption, as per the data furnished by HESCOM in its Tariff filing for APR for FY22, works out to 6,814.33 units / IP / annum based on the number of installations (by deleting the disconnected installations) furnished by HESCOM, in the tariff filing. This indicates an increase in the specific consumption by 420 units/ IP / annum accounting for an increase by 6.57%.
2. Total sales to IP sets approved by the Commission for FY22 in the Tariff Order is 6,261.41 MU. As reported by HESCOM in its tariff filing, the actual consumption is 6,603.46 MU, indicating an increase of 342.05 MU, i.e., the sales have increased by 5.46%.
3. The Commission notes that as compared with the IP set sales for FY21, in FY22, there is an increase in sales by 664.64 MU which corresponds to 11.2% increase and increase in specific consumption by 564.67 units per IP set per annum, which corresponds to 9.03% for FY22 as compared with actual specific consumption of FY21.
4. As reported by HESCOM, the number of IP set installations as furnished in the tariff filing in page Nos. 50,51 and D2 Format is 9,95,372 whereas in the month-wise data as in page No. 105 the number is indicated as 9,79,307 and 9,79,306 respectively. The HESCOM in its replies to the preliminary observations has resubmitted corrected number of installations and sales to IP sets. Total number of live IP sets as at the end of March 2022 is 9,79,306 after deducting the disconnected IP Sets. Hence, the total numbers of live IP installations considered are 9,79,306 for computation of IP Sales. It is seen that there is an decrease of 12,419 number of IP installations as against the approved number of installations, which corresponds to a decrease by 1.25%.

The details of sales to IP sets for FY22 as approved by the Commission in its tariff order 2021 and the actual sales as furnished by HESCOM by considering the live installations as per its filing and e-mails are as follows:

Particulars	As approved by the Commission in ARR for FY21	As submitted by HESCOM for APR of FY22
Number of installations	9,91,725	9,79,306
Mid-year number of installations	9,79,225	9,69,054
Specific consumption in units / installation / annum	6,394.25	6,814.33
Sales in MU	6,261.41	6,603.46

5. The HESCOM has submitted the data of consumption by IP sets considering different values of distribution losses for all agricultural feeders, in its submissions in respect of feeder-wise, month-wise computations. HESCOM was directed to substantiate its claim for considering different values of distribution losses for all agricultural feeders and different for each month while assessing the sales to IP sets. The Commission directs HESCOM to consider the actual losses for the year of assessment as approved by the Commission in the Tariff Orders while assessing sales to IP sets in future by providing the distribution loss component and the consumption by other loads separately.
6. The Commission, in its preliminary observations had directed HESCOM to furnish the data of GPS as on 31.03.2021 and 31.03.2022 by reconciling survey data with the number of installations in the DCB. In its reply, HESCOM has submitted that the GPS survey is completed to an extent of 93.81% as at the end of FY21 and has completed to an extent of 98.45% as at the end of FY22.
7. As per the GPS survey data furnished by HESCOM, the Commission while noting the progress of GPS Survey hereby directs HESCOM to complete the remaining survey work, at the earliest and submit the details without any ambiguity in the data of total number of existing IP sets, defunct / dried up etc., within 3 months from the date of this Order.

8. Based on the above discussions and considering the feeder-wise, month-wise, subdivision-wise data submitted by HESCOM, it is noted that the HESCOM has substantiated the overall sales to an extent of 6,603.46 MU for FY22, as submitted in its Tariff application. Therefore, the Commission hereby considers the IP set consumption of 6,603.46 MU for FY22.
9. The details of sales to IP installations for FY22 as per the revised submissions are as follows:

Particulars	As submitted by HESCOM for APR of FY22	As per the revised submissions by HESCOM for FY22	As approved by the Commission for FY22
Number of installations	9,95,372	9,79,306	9,79,306
Mid-year number of installations	9,85,097	9,69,054	9,69,054
Specific consumption in units / installation / annum	6,703.36	6,814.33	6,814.33
Sales in MU	6,603.46	6,603.46	6,603.46

Based on the above computation, the Commission hereby approves 6,603.46 MU of energy, as sales to the IP sets for FY22.

The Commission, after taking note of the replies furnished by HESCOM on the preliminary observations on energy sales and based on the audited accounts and the discussions made in the previous paragraphs, approves the sales for FY22, as indicated in the following Table:

TABLE – 4.4

Approved category-wise Sales under APR for FY22

Category	Sales in MU	
	Actuals	
LT-1 BJ/KJ above 40 units/month	72.88	
LT-2a	1636.12	
LT-2b	17.13	
LT-3	508.45	
LT-4b	15.74	
LT-4c	0.83	
LT-5	332.11	

LT-6	347.94
LT-6	157.74
LT-7	37.00
HT-1	344.98
HT-2a	897.82
HT-2b	116.54
HT-2c	62.89
HT-3a & b	422.92
HT-4	15.87
HT-5	8.64
Sub total	4995.60
BJ/KJ	162.92
IP	6603.46
Sub total	6766.38
Grand total*	11761.98

*Excludes sale to HRECS and SEZ.

4.2.2 Distribution Losses for FY22:

HESCOM's Submission:

The HESCOM, in the tariff application has reported the distribution losses of 13.50% for FY22. The computation of distribution losses for FY22 as submitted by HESCOM is as under:

Energy Received in MU (including EHT Cons, wheeled, Open Access & SRTPV Energy)	Energy sold in M.U (including EHT Cons, Wheeled, Open Access SRTPV Energy)					Energy in MU un-accounted (Distribution Loss)	% Distribution Loss
	Metered Energy in MU (including EHT Cons, Wheeled, Open Access SRTPV Energy)	Unmetered Energy in MU	Total energy Sales	Wheeled & Open Access Energy	Total Energy in MU		
14365.83	5211.61	6550.36	11761.97	665.04	12427.00	1938.83	13.50

The HESCOM in the A-1 Format has reported the actual energy and the sales with the distribution loss, as detailed below:

Distribution loss for FY22 – HESCOM's Submission

Particulars	Actuals
Total Input Energy requirement in MU	14259.45
Energy at interface point in MU	13700.80
Sales in MU	11761.98
Distribution losses in %	13.50

Commission's Analysis and Decision:

The Commission in its Tariff Order 2021 has approved the distribution losses for FY22 as under:

Figures in Percentage

Particulars	FY22
Upper limit	13.75%
Average	13.50%
Lower limit	13.25%

The Commission, in its preliminary observations, had directed the HESCOM to re-compute the distribution loss after deducting the Wheeled & Open Access Energy comparing with the actual sales. The HESCOM, in its reply has stated that for calculation of technically correct distribution losses, the total actual energy flow in the network is considered which includes wheeled and open access energy both in input as well as in sales and requested the Commission to consider distribution loss calculated by including the wheeled and open access energy.

The Commission, earlier in its Orders, had directed the ESCOMs to consider the energy for calculating the distribution loss without wheeled and open access energy. The distribution loss after excluding the wheeled and open access energy is computed below

Distribution loss for FY22

Particulars	Actuals
Sales in MU	11761.98
Distribution losses in %	14.15
Energy at interface point in MU	13700.80
Total Energy requirement in MU	14259.45

(Excluding HRECS & AEQUS)

The Commission notes that as per the division-wise losses furnished by the HESCOM for FY22, the actual distribution losses in some of the divisions are very high for FY22. Hence, there is scope to reduce the losses further in these divisions and therefore, HESCOM shall draw an action plan to reduce the losses in these divisions. The Commission reiterates its direction to HESCOM to put forth continuous efforts to reduce the losses in these divisions.

The Commission notes the performance of HESCOM in achieving the Distribution Losses from FY14 onwards, as detailed below:

Particulars	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Approved Distribution losses in %	19.00	19.00	17.50	16.00	15.50	14.90	14.40	13.75	13.50
Actual Distribution losses in %	18.05	16.74	16.89	16.02	14.76	14.64	14.10	13.25	14.15

In the light of the above, based on the HESCOM's achievements in reduction of losses during the previous years and the capex incurred so far, the Commission decides to consider and approve the actual distribution losses of 14.15% for FY22.

The Commission has taken note of the replies submitted by HESCOM for having achieved the actual distribution losses of 14.15% as against the approved distribution losses of 13.50% for FY22. Considering the distribution loss for FY22 at 14.15%, which is above the upper limit of the approved target loss of 13.75%. In terms of the MYT Regulations, the Commission decides to impose the penalty of Rs.37.58 Crores for non-achievement of approved loss target to the extent of 0.40% as computed below.

TABLE – 4.5
Incentive for reduction in Distribution Losses

Particulars	FY22
Actual input at IF points as per audited accounts in MU	13700.80
Retail sale in MU	11761.98
Percentage distribution losses (Actual)%	14.15
Target Upper limit of distribution loss%	13.75
Target distribution loss %	13.50
Target lower limit of distribution loss%	13.25
Increase in percentage loss to the upper target %	0.40
Input at target loss for actual sales in MU	13637.08
Increase in input due to increase in distribution losses in MU	63.72
Average cost of power purchase Rs. per Unit	5.8968
Penalty for increase in power purchase cost due to increase in losses in Rs. Crores	37.58

Accordingly, by reckoning the actual Distribution loss of 14.15% the Commission decides to levy penalty of Rs.37.58 Crores towards non-achievement of distribution loss targets fixed by the Commission for FY22.

4.2.3 Power Purchase for FY22:

a. HESCOM's Submission:

The Commission, in its Tariff Order 2021, dated 9th June 2021, had approved power purchase quantum of 14,532.64 MU for HESCOM at a cost of Rs.8,044.84 Crores, inclusive of power purchase requirement of Hukeri and AEQUS SEZ, indicating source-wise quantum of power purchase and cost thereon, for FY22. HESCOM, in its application has submitted the details of actual power purchase for FY22 vis-à-vis the approved figures, for the purpose of Annual Performance Review, as under:

TABLE – 4.6
Power Purchase for FY22- Approved and Actuals

Source of Generation	Approved for 2021-22			Actuals as per filing for 2021-22			Difference			% increase (+)/decrease (-) over approved figures	
	Energy (in MU)	Amount (Rs. in Cr)	P.U. Cost (Rs/kWh)	Energy (in MU)	Amount (Rs. in Cr)	P.U. Cost (Rs/kWh)	Energy (in MU)	Amount (Rs. in Cr)	P.U. Cost (Rs/kWh)	Energy (in MU)	Amount (Rs.in Cr)
KPCL Thermal	3030.23	1862.42	6.15	4263.61	2420.44	5.68	1233.38	558.02	-0.47	40.70%	29.96%
CGS	4065.69	1920.95	4.72	2239.24	1123.44	5.02	-1826.45	-797.51	0.29	-44.92%	-41.52%
UPCL	900.87	520.59	5.78	334.27	403.42	12.07	-566.60	-117.17	6.29	-62.89%	-22.51%
KPCL Hydro	1362.27	177.17	1.30	1609.13	193.80	1.20	246.85	16.63	-0.10	18.12%	9.39%
Other State Hydro	37.01	12.35	3.34	40.56	12.34	3.04	3.55	-0.01	-0.30	9.58%	-0.12%
Renewable Energy	4384.37	1871.75	4.27	4596.20	2232.80	4.86	211.83	361.05	0.59	4.83%	19.29%
Total Bundled Power	752.20	340.41	4.53	414.24	212.31	5.13	-337.96	-128.11	0.60	-44.93%	-37.63%
Transmission Charges (PGCIL+KPTCL)		1332.19			1396.15			63.96			4.80%
SLDC Charges		6.39			2.25			-4.14			-64.78%
POSO CO Charges		0.62			0.00			-0.62			-100.00%
Reactive Energy					-0.28			-0.28			
UI Charges				-41.62	-15.14	3.64	-41.62	-15.14	-3.64		
UI SWR				-4.82	0.00	0.00	-4.82	0.00	0.00		
Energy Balancing				2579.17	1313.61	5.09	2579.17	1313.61	5.09		
PCKL Seed Money					2.74			2.74			
TANTRANSCO					0.06			0.06			
LC Charges					3.21			3.21			
IEX				-1275.45	-682.62	5.35	-1275.45	-682.62	-5.35		
Sale to HPPC through PTC India				-155.08	-9.53	0.61	-155.08	-9.53	-0.61		
Total	14532.64	8044.84	5.54	14599.45	8609.00	5.90	66.81	564.16	0.36	0.46%	7.01%

b. Commission's Analysis and Decisions:**1. Approved and Actual quantum and Cost of energy for FY22:**

The actual power purchase quantum for FY22, as per Annual Report submitted by HESCOM is 14,599.44 MU, purchased at a cost of Rs.8,609.00 Crores, as against 14,599.45 MU and Rs.8,609.00 Crores indicated respectively in the D-1 Format, provided by HECOM, in its replies to preliminary observations and in the above table. As the power purchase quantum submitted in the D-1 Format is in excess by 0.01 MU compared to Annual Report, the power purchase quantum of 14,599.44 MU as per Annual Accounts is considered for approval under APR for FY22. The above power purchase quantum and corresponding cost is after considering the sale of power of 1,645.10 MU and Rs.779.77 Crores being the amount realized thereon as against the approved quantum of 14,532.64 MU at a cost of Rs.8044.84 Crores. A comparison of the actual and approved quantum and costs indicates that there is an increase in the quantum of power purchase to an extent of 66.80 MU and increase in the power purchase cost by Rs. 564.16 Crores.

The increase in quantum and cost of power purchase is to the tune of 0.46% and 7.01% respectively as compared with the approved figures.

On the increase in power purchase quantum by 66.80 MU and corresponding increase in the power purchase cost by Rs.564.16 Crores, HESCOM has submitted that the approved power purchase cost is based on the actuals of previous year but the cost for FY22 is as per actual power purchase cost incurred. Further, backing down of energy from power plants having higher Energy Charge Rate (ECR) viz. UPCL TPS etc. as per Merit Order Dispatch (MOD), resulted in payment of Capacity Charges. Further, the per unit tariff of cogeneration power projects for FY22 has been increased as per the Commission's order dated 15th November 2021 and as per this order HESCOM has paid the rate difference amount of Rs.246.60 Crores to long term cogeneration power projects in the FY22, for the period from FY18 to FY21.

2. Regulation of Power Supply from Central Generating Stations:

HESCOM was directed to explain the reasons for:

- a) Negative variable charges, totaling to Rs.-113.64 Crores and non-utilization of energy, totaling to 1,271.87 MU in respect of NTPC's RSTPS-I, II & III, Talcher, Simhadri and Kudgi thermal power stations.
- b) Payment of capacity charges, totaling to Rs.118.77 Cores, without utilizing any energy from the NTPL (Tuticorin) and DVC (Mejia Unit-7&8, Koderma Unit-1&2) thermal power stations. The total energy approved by the Commission in respect of these projects was 692.18 MU.

Further, HESCOM was directed to explain the impact on power purchase tariff due to non-utilization of above energy.

On the above observations, HESCOM has submitted the following:

- a) In respect of NTPC's RSTPS-I, II & III, Talcher, Simhadri and Kudgi thermal power stations, HESCOM was not able to fulfil the Letter of Credit requirement, payment of outstanding dues of the generator viz. NTPC. Hence, NTPC has regulated supply of power to HESCOM from these thermal power stations and has sold the energy share of HESCOM through Exchange. Further, NTPC has shared the above gains with HESCOM and the same is accounted. Hence, there is negative variable charges.
- b) As HESCOM was not able to open Letter of Credit requirement in favour of NTPL (Tuticorin) and DVC (Mejia Unit-7&8, Koderma Unit-1&2) thermal power stations, generators have regulated supply of power to HESCOM.

Further, in reply to the Commission's observation on the impact of above said Regulation of Power Supply by CGS, on power purchase tariff, HESCOM has submitted that there is net increase in power purchase cost by Rs.81.11 Crores (value arrived after considering individual values as per data provided by HESCOM, as against Rs.80.27 Crores submitted by HESCOM) due to imposition of Regulation of Power Supply as detailed below:

Sl. No.	Particulars	Quantum	Unit
I	If Regulation of Power Supply was not imposed then the energy purchased from the GENCOs (NTPC, NLC, NTPL, and DVC) would have been	1,425.59	MU
II	If Regulation of Power Supply was not imposed, the estimated power purchase cost for 1425.59 MUs @ average cost of Rs.2.73/kWh would have been	389.19	Crores
III	Due to imposition of Regulation of Power Supply, the cost of power purchase for 1425.59 MU at the average of Energy Balance rate of Rs.5.10/kWh	727.05	Crores
IV	The total increase in cost due to imposition of Regulation of Power Supply for the quantum of 1425.59 MU:(III - II)	337.86	Crores
V	Less: Gain Sharing by NTPC, NLC on sale of Regulated Power through Exchange	256.75	Crores
VI	Net increase in cost of power purchase due to imposition of Regulation of Power Supply: (IV-V)	81.11	Crores

The breakup of details provided by HESCOM in respect of 1,425.59 MU and Rs.2.73/kWh considered in the above calculations are as below:

Sl. No.	Name of the station	Energy (in MUs)	Average ECR/kWh (in Rs.)	Energy Charges (Rs. in Crs)
1	NTPC Kudgi	202.64	3.63	73.56
2	NTPC RSTPS1	237.25	2.75	65.24
3	NTPC RSTPS3	72.34	2.70	19.53
4	NTPC SMTPS	90.53	2.90	26.25
5	NTPC Talcher	238.81	1.72	41.08
6	NLC TPS 1	19.67	2.42	4.76
7	NLC TPS 2	11.96	2.58	3.09
8	NLC TPS St 1	20.82	2.67	5.56
9	NLC TPS St 2	26.50	2.72	7.21
10	NLC NNTPS	12.05	2.19	2.64
11	DVC MTPS	154.48	2.88	44.49
12	DVC KTPS	229.69	2.67	61.33
13	NTPL	108.85	3.15	34.29
	Total	1425.59	2.73	389.02

The breakup of total gain sharing of Rs.256.75 Crores by NTPC and NLC under Regulation of Power Supply as provided by HESCOM, which is considered in the above calculations is as below:

Sl. No.	Name of GENCO	Amount (Rs. in Crs)
1	NTPC	247.60
2	NLC	9.15
	Total	256.75

Further, on sharing of gains from other CGS, HESCOM has submitted that, during above Regulation of Power Supply, DVC and NTPL have apportioned HESCOM share of energy allocation to other ESCOMs of Karnataka and not traded it in the Energy Exchange, hence, there is no sharing of gains made to HESCOM from these Central Generating Stations.

Under the above circumstances, HESCOM was directed to provide justification on why **net increase in cost of power purchase i.e. Rs.81.11 Crores or such other relevant cost due to Regulation of Power Supply** should be considered for approval under APR for FY22. In reply, HESCOM has submitted the following:

- a) In FY22 the HESCOM was not able to fulfil the Letter of Credit(LC) requirement and payment of dues of NTPC in time and the generator had regulated supply of power to HESCOM as per Ministry of Power, Govt. of India, guidelines dated 18th March 2021.
- b) HESCOM was sanctioned only Rs.150 Crores of LC limit by SBI up to June 2022. The Board has approved Rs.300 Crores LC limit in its 84th meeting held on 21st July 2018. But, the SBI even after several requests, did not come forward for additional sanction of LC limit and has sought Government Guarantee for additional LC limit. Based, on this HESCOM has requested Energy Department, Govt. of Karnataka, for providing Government Guarantee and same was denied by the Govt. of Karnataka.
- c) Board, in its 101st meeting held on 21st June 2022 enhanced the LC limit from Rs.300 Crores to Rs.600 Crores. After continuous follow up with the Banks, SBI has sanctioned Rs.150 Crores of additional LC limit and Canara Bank has sanctioned Rs.150 Crores of LC limit in the month of June 2022 (total LC limit sanctioned by Banks: Rs.450 Crores). After the sanction of LC limits by the Banks, the following New LCs have been issued to CGS generators in June

2022 and at present, the payments to CGS generators are being released within the due date.

Name of the Generator	Amount (Rs. in Crs)
NTPC	51.92
NTPC NSM	26.44
NTPC Vidyut Vyapar Nigam Ltd	24.36
NTECL Vallur	0.35
NPCIL Kaiga	5.52
Damodar Valley Corporation	17.24
NLC India Limited	7.60
NLC Tamilnadu Power Limited	8.64
Central Transmission Utility of India	10.98
Total	153.05

- d) The power purchase liability in HESCOM, is 75% to 80% out of total expenditure and 53% of total revenue demand depends on the release of subsidy by the Govt. of Karnataka towards free power supply to BJ/KJ and IP set installations up to 10 HP. HESCOM has taken the prompt action in issue and collection of bills from the consumers under non-subsidized categories. As per MYT Regulations, KERC is calculating interest on working capital on normative basis. HESCOM is experiencing working capital shortfall every year as the 53% of total revenue demand depends on the release of the subsidy by the Govt. of Karnataka, which is not releasing the subsidy at the beginning of each quarter as per "Karnataka Electricity Regulatory Commission (Manner of payment of subsidy by State Government) Regulations 2008".
- e) The Commission and also the Hon'ble APTEL are passing several orders relating to power purchase liability and is an additional burden as the same is not a pass through in the tariff. In the present situation, HESCOM is not in a position to immediately make payments that have been ordered and ultimately HESCOM has to borrow loans from various banks and financial institutions to make payment of the said amount.
- f) HESCOM has paid Rs.142.76 Crores towards power purchase dues and Rs.6.61 Crores towards LPS to the Generators on account of KERC/APTEL

Orders in FY22 by borrowing loans from various banks and financial institutions, paying interest of Rs.13.91 Crores.

g) Due to scarcity of funds for the reasons stated above, the HESCOM was not in a position to make payment for Generators in time as per PPA and also due to the reasons mentioned in above paras, Letter of Credit was not issued in FY22.

h) At present, the payments to CGS generators are being released within due date. As per MYT Regulations the power purchase cost being the uncontrollable expenditure and also for the reasons explained above, HESCOM is requesting the Commission to approve the actual power purchase expenditure for FY22.

Taking note of the above submissions made by the HESCOM, the Commission notes that HESCOM is not managing its finances properly and accordingly, directs HESCOM to take appropriate steps in this regard. Further, HESCOM should ensure that in future Regulation of Power Supply is not imposed by any Central Generating Companies and to avoid unnecessary increase in power purchase cost.

3. Variation in the Variable Cost of Thermal Power Stations:

The variation in variable charges among ESCOMs in respect of all Thermal Power Stations (KPCL, Central and UPCL) has continued as it was noted from the Tariff filing of ESCOMs for truing up of FY22, as indicated below:

Variable Cost (Rs/kWh) as noted from Tariff filing of ESCOMs for truing up of FY22 in respect of Thermal Power Stations						
Sl. No.	Source/ESCOM Name	BESCOM	MESCOM	CESC	HESCOM	GESCOM
A	KPCL Thermal Power Stations					
1	RTPS -1 to 7	3.13	3.39	3.39	3.75	3.37
2	RTPS-VIII	3.31	3.58	3.58	3.83	3.58
3	BTPS Unit I	3.05	3.17	3.17	3.22	3.17
4	BTPS Unit II	2.88	3.00	3.00	2.93	3.00
5	BTPS Unit III	2.98	3.10	3.10	2.90	3.10
6	Yearamurus TPS	3.35	3.11	3.07	3.00	2.90

Variable Cost (Rs/kWh) as noted from Tariff filing of ESCOMs for truing up of FY22 in respect of Thermal Power Stations						
Sl. No.	Source/ESCOM Name	BESCOM	MESCOM	CESC	HESCOM	GESCOM
B	Central Thermal Power Stations					
1	NTPC-Ramagundam, St-I & II	2.83	2.81	2.84		2.62
2	NTPC-Ramagundam, St-III	3.29	2.76	2.95		3.79
3	NTPC-Talcher, St-II	1.68	1.77	1.77		1.83
4	NTPC-Simhadri	3.15	2.93	3.52		3.29
5	NLC TPS2-Stage 1	2.64	2.66	2.66		2.65
6	NLC TPS2-Stage 2	2.65	2.66	2.66	2.65	2.52
7	NLC TPS-2-Expn 1 &2	2.57	2.56	2.57		2.54
8	NLC TPS1-Expn	2.27	2.42	2.45	1.57	2.41
9	Tuticorin (NTPL)1&2	3.82	3.25	3.76	-	3.55
10	Vallur TPS 1,2 &3	3.36	3.37	3.45	3.40	3.33
11	DVC Unit-1 & 2 Koderma TPS	2.76	2.90	2.65		2.75
12	DVC Unit-7 & 8 Mejia TPS	2.90	2.65	2.90		2.79
13	Kudugi TPS Unit-1,2 &3	3.98	4.02	4.21		3.99
14	NNTPS	2.19	2.19	2.20	2.18	2.18
C	IPPs Major Thermal Power Station					
1	UPCL	4.54	4.27	6.10	4.93	4.68

In the Tariff Order 2022, dated 4th April 2022, regarding variation in variable charges among ESCOMs, in respect of all Thermal Power Stations (KPCL, Central and UPCL), the Commission had directed BESCOM to convene a coordination meeting involving all the ESCOMs within two weeks from the issuance of the above Tariff Order to discuss the reasons for variation of variable charges for FY21 and to arrive at the following:

- Actual variable cost to be paid in respect of each of the power plants by the respective ESCOM.
- Deviations in payment of variable cost made by respective ESCOM as against actual variable cost in respect of each of the power plants.

Further, BESCOM was directed to submit the detailed Minutes of the meeting involving the above details to the Commission within two weeks from the date of conduct of meeting, for further needful action. However, BESCOM has not conducted the above said coordination meeting nor HESCOM or any of the other ESCOMs have followed up with BESCOM in conduct of above coordination meeting. The ESCOMs should understand here that the above

directions were issued by the Commission in the interest of all ESCOMs and the Commission does not approve the inaction of ESCOMs in the matter.

Further, individually all the ESCOMs were requested to provide proper reasoning for variation in variable cost. The reasons provided by each of the ESCOMs are as below:

BESCOM: KPCL had entrusted the verification of bills from **2005-06 to till date to M/s Ramraj & Co**, Chartered Accountants. M/s Ramraj & Co had furnished Part-1 report which was discussed in the meeting conducted by PCKL on 19th July 2022 with ESCOMs, KPCL and M/s Ramraj & Co. The Part-1 report is based on opinion of Chartered Accountants but bills are yet to be verified and the same will be furnished in "Part-2" Report later. As there are no GoK orders / KERC orders to bill GCV as claimed by KPCL, BESCOM had continued to bill the GCV on received basis. The other ESCOMs may be considering GCV as per KPCL bills. As such, there is variation in variable cost considered by BESCOM and other ESCOMs. In respect of CGS, BESCOM has considered the variable cost billed up to March 2022. The revision of variable cost for the period up to March 2022 and billed during April 2022 to July 2022 is also considered. Some of the ESCOMs have considered the accounting year as February 2021 to February 2022. As such, there is variation in variable cost of CGS thermal stations and UPCL among ESCOMs.

MESCOM: KPCL has entrusted reconciliation of billing issues to M/s Ramraj & Co., Chartered Accountants. The Chartered Accountants has issued Part-1 of reconciliation vide letter dated 22nd February 2022. The audit firm is yet to furnish detailed monthly bill calculation. In this regard, a meeting was conducted on 07th July 2022 to discuss the billing procedure. In respect of CGS the supplementary bills related to 2021-22 received in 2022-23 were considered for FY22 itself. Monthly energy charges are based on the parameters and formula as per PPA/CERC norms. MESCOM separates the inadvertent costs and arrives at exclusive variable costs. Other costs like revisions related to previous years are accounted under other charges.

CESC: In respect of KPCL Thermal Power Stations, except Yermarus TPS, the variable charges as claimed by KPCL is being admitted and paid. The issues pertaining to billing of KPCL stations, both hydel & thermal, have been entrusted to M/s Ramraj & Co., Chartered Accountants & the verification of the bills is underway. Once the verification is completed and accepted by ESCOMs, the difference, if any will be accounted by CESC. In respect of Yermarus TPS, revision as per KERC Tariff Order dated 17th January 2022 has been included. In respect of CGS, the variable charge includes Income tax and others and in respect of UPCL TPS, the variable charge includes prior period claims, PLC & others.

HESCOM: It is submitted that, reconciliation of M/s KPCL dues between M/s KPCL and ESCOMs has been entrusted to the third-party for verification i.e., M/s Ramraj & Co., Chartered Accountants, which is under process. With reference to the CGS and UPCL TPS, variable charges admitted includes the components namely Incentives, Compensation, SRLDC Charges and ECR revisions pertaining to previous years admitted during FY22 where the allocation among ESCOMs differ from previous year to FY22. Hence, there may be variation in variable cost per unit among ESCOMs.

GESCOM: The variation in actual & approved variable charges of Thermal Power Stations as shown in D1 format is due to allowing of following pass through components in accordance with PPA/Tariff Orders which are included as variable charges by generators i.e., changes in RLDC/SRLDC charges, RTM trade gain share, incentive claims & variation in coal charges.

On examination of the responses from ESCOMs, it is observed that the responses completely differ from one another. The Commission is of the considered view that the present situation wouldn't have arisen if ESCOMs have reconciled power purchase cost with the concerned Generating Stations at least for the financial year for which the APR is submitted to the Commission, along with proper scrutiny of power purchase bills as and when they are raised. As per the copy of the KPCL letter dated 31st October 2022, addressed to Energy Department, Govt. of Karnataka, it is made out that services of M/s Ramraj & Co., Chartered Accountants towards Part-2 of reconciliation for the billing

period from FY 2005-06 to FY 2019-20 and not up to till date (FY22), as submitted by BESCO.

As PCKL has been made the nodal agency to ascertain the correctness of billing and furnish the correct bill amounts, as submitted by BESCO, PCKL is directed to ascertain the following:

- a) The Part-2 report of the M/s Ramraj & Co., Chartered Accountants in respect of KPCL Thermal Power Stations is cross checked for its correctness and accordingly reconciliation as per the above report takes place between ESCOMs and KPCL within reasonable time by submitting a copy of the abstract of reconciliation statement to the Commission for information.
- b) Convene a coordination meeting with ESCOMs for resolving differences in respect of variable cost of CGS and UPCL TPS for the FY21, FY22 and in respect of other previous financial years, wherein such differences exists. The proceedings of the meeting may be submitted to the Commission for information. Also, in the above meeting decision on reconciliation of KPCL bills for the FY21 and FY22 needs to be taken.

4. Increase in per unit cost of power purchase and power procurement made under medium-term from cogeneration power projects:

The HESCOM was directed to explain the reason for increase in total per unit cost in respect of power purchase from cogeneration power project to Rs.7.30/kWh as against approved Rs.3.93/kWh. In reply, HESCOM has submitted that, the tariff per unit of cogeneration power projects for FY22 has been increased as per Hon'ble KERC order dated 15th November 2021. Further, HESCOM has also paid the rate difference amount of Rs.246.60 crores to long term cogeneration power projects in the year FY22 for the period from FY18 to FY21.

Further, as HESCOM has not indicated power purchase under medium term from cogeneration power projects as was the case with other ESCOMs, HESCOM was directed to provide the corresponding details in this regard. In reply, HESCOM has submitted the following:

- a) In the medium term PPAs of cogeneration plants, the following terms were agreed by ESCOMs with cogeneration plants in respect of "term of PPA".
- (i) **Contract Period:** Shall mean period of 5 years from the date of Commencement of power supply after signing of PPA.
 - (ii) **Effective Date:** Means the date of execution of PPA.
 - (iii) **Term:** Means the term of the Agreement as defined in clause 8.1.
 - (iv) **Approval of the Commission:** KERC vide letter No. 2263 dated 23.12.2016 approved the PPA for procurement of power from cogeneration units for a period of 5 years.
 - (v) **Article 8.1:** Term of the Agreement: This agreement shall become effective upon the execution and delivery thereof by the parties and unless terminated, shall continue to be in force for such time until the completion of a period of five (5) years from the date of commencement of power supply **i.e., 2016-17 to 2020-21.**
- b) Most of the cogeneration units have filed Writ Petitions before the Hon'ble High Court of Karnataka, both before Dharwad Bench and Bangalore Bench. The Hon'ble High Courts have granted stay on BESCO's letter. Govt. of Karnataka vide letter dated 4th June 2021 had directed to pay the 60% of tariff applicable for FY21 for energy injected after April 2021.
- c) Hon'ble High Court of Karnataka vide order dated 20th July 2021 in a Batch of Petitions had quashed BESCO's communication dated 6th March 2021 and ordered to continue the contract till its subsistence, up to 1st January 2022 except otherwise provided for its termination.
- d) Govt. of Karnataka vide letter dated 28th January 2022 had directed ESCOMs to release the payments as per the Hon'ble High Court of Karnataka order and withdraw the Writ Appeals filed by ESCOMs. PCKL vide letter dated 3rd March 2022 had advised ESCOMs to make the payment as per Govt. of Karnataka letter dated 28th January 2022 till expiry of 5 years from the date of signing of PPA.
- e) ESCOMs had filed a Memo for withdrawal of Writ Appeal as per Govt. of Karnataka letter dated 28th January 2022 and Hon'ble High Court of

Karnataka vide order dated 16th February 2022 had dismissed the Writ Appeals as withdrawn in term of the Memo.

- f) Under the circumstances explained above, HESCOM has accounted 261.80 MU at a cost of Rs.103.18 Crores as energy purchased under medium term from cogeneration plants though the Commission had not approved any energy from cogeneration plants under medium term. The details of PPAs validity in respect of cogeneration plants from April 2022 onwards is as below:

Sl. No	Name of Cogeneration Plant	Capacity (in MW)	PPA valid date
1	Nandi Sahakari Sakkare Karkhane	5.54	30.01.2023
2	Chidananda Basaprabhu Sahakari Sakkare Karkhane	8.54	18.01.2023
3	Hiranyakeshi Sahakari Sakkare Karkhane	11.08	18.01.2023
4	Ugar Sugars Khurd	14.31	30.01.2023
5	Ugar Sugars Nagarhalli	3.23	30.01.2023
6	Athani Sugars	7.67	18.01.2023

- g) HESCOM has filed Review Petition for review of Hon'ble High Court of Karnataka order dated 26th July 2021 in WP No.101282/2021 filed by M/s Ugar Sugar Works Ltd, M/s Nandi Sahakari Sakkare Karkane Niyamit and M/s Hiranyakeshi Sahakari Sakkare Karkhane Niyamit, Order dated 26th July 2021 in WP No.101557/2021 filed by M/s. Chidanand Basaprabhu Kore Sahakari Sakkare Karkahane Niyamit (Shree Doodhganga Krishna Sahakari Sakkare Karkahane Niyamit) and Order dated 8th November 2021 in WP No. 103178/2021 filed by M/s. Athani Sugars Ltd. The same are pending for adjudication.

The Commission has taken note of the submissions made by HESCOM.

5. Difference in details of IEX sales and energy under 'Energy Balancing' indicated in 'D-1 Format' with 'Energy Balance Statement of ESCOMs':

HESCOM was directed to explain the reasons for mentioning energy under 'IEX' as -1,275.45 MU and energy under 'Energy Balancing' as 2,579.17 MU in D-1 Format, as against corresponding values of -1,645.10 MU and 2,632.05 MU in 'Energy Balance Statement of ESCOMs'.

In reply, HESCOM has submitted that, 1,645.10 MU indicated in Energy Balancing Statement pertains to sales only which includes sales through IEX and sales to HPPC through PTC India. In D-1 Format purchase through IEX has been adjusted against sales through IEX and net sales under 'IEX' is indicated as 1275.45 MU as indicated below.

Particulars	Energy in MU	Amount Rs. in Crs
IEX Sales	1,490.02	770.24
IEX Sales Total	1,490.02	770.24
IEX Purchase	103.58	41.60
GTAM/GDAM(NS) Purchase	111.00	46.02
IEX Purchase Total	214.58	87.62
Net Sales through IEX	1,275.45	682.62
Sale to HPPC through PTC India	155.08	9.53
Total Sales in MU & Rs.Crores	1,645.10	779.77

Further, regarding energy under 'Energy Balancing' in D-1 Format shown as 2579.17 MU and as against corresponding value of 2632.05 MU, in Energy Balance Statement, HESCOM has submitted that an inter-ESCOM flow at 11/33 kV level between HESCOM and other ESCOMs namely MESCOM, BESCOM and GESCOM, is being accounted every year duly confirming the energy exported and imported with ESCOMs at Interface Points (IF). Accordingly, for FY22 the inter ESCOM flow at 11/33 kV level between HESCOM and other ESCOMs has resulted in net export of 52.88 MU (at the cost of Rs.29.43 Crores). The same has been accounted with 2632.05 MU and the same is indicated in D-1 Format under 'Energy Balancing' as 2579.17 MU. The Commission has noted HESCOM's response.

6. Inter-ESCOM Energy Accounting below 66 kV level:

The Commission notes with concern that this important aspect of metering is not being attended to by the ESCOMs and hence, hereby directs all the ESCOMs to ensure that proper metering arrangements are made at all the required interface points below 66kV level in line with Central Electricity Authority (Installation and Operation of Meters) Regulations 2006 and its amendments

thereof, for proper accounting of Inter-ESCOM Energy. The action taken in this regard should be reported to the Commission within two months from the date of issuance of this Tariff Order.

7. Payment under Capacity Charges for KPCL hydro power plants:

The HESCOM has claimed capacity charges of Rs.25.62 Crores and variable cost of Rs.168.18 Crores for KPCL Hydro. Whereas Commission in its approval has allowed only variable charges of Rs.177.17 Crores. On the reason for consideration of payment under capacity charges, HESCOM has submitted that, as per PPA, HESCOM is bound to pay annual capacity charges pertaining to the KPCL Hydel Stations. The Commission notes the HESCOM's response.

8. Analyzing the reasons for Deviations and Action taken to reduce such Deviations:

HESCOM in the D-1 Format has indicated DSM charges of Rs.-15.14 Crores against -41.62 MU, which works out to Rs.3.64/unit. In this regard HESCOM was directed to provide its reply as to whether HESCOM is analyzing the reasons for such deviations on regular basis and what is the action being taken/recommended by HESCOM for reducing such deviations, in consultation with SLDC. In reply, HESCOM has submitted that, SLDC has been entrusted with the responsibility of monitoring the DSM on behalf of all the ESCOMs. Further, during the situations where grid stability is involved, deviations may still occur. However, corrective actions are being taken whenever any major deviations are noticed by shifting the loads to other blocks, so that deviations can be brought to the minimum possible level. The Commission takes note of the response from HESCOM.

9. Energy drawn by SWR without payment:

HESCOM was directed to explain the reason for considering energy of -4.82 MU under 'UI (South Western Railways)' without any payment. In reply, HESCOM has submitted that, South Western Railways has overdrawn energy to an extent of 4.82 MU as per SLDC statement. Since the energy has been drawn from HESCOM, the energy has been accounted accordingly. Further, submitted that

as discussed with SLDC, KPTCL, UI (SWR) Charges amount is included in the CGS UI Charges amount of Rs.-15.14 Crores, which is a single pool account for all CGS UI and also includes UI (SWR) as well. The Commission notes the HESCOM's response.

10. Energy not accounted in respect of providing power supply to 'Dhamanes village':

HESCOM was directed to explain the reason for not accounting any energy amounting to Rs.0.46 Crores incurred by HESCOM indicated against the head 'Belagavi Rural Solar' in D-1 Format. In reply, HESCOM has submitted that, in **D-1 Format, Rs.0.46 Crores is shown as power purchase pertaining to 'Belagavi Rural Solar', but actually this relates to power purchased from Western Region Electricity Board, Mumbai.**

Dhamanes is a village in the border of Karnataka and Maharashtra states. This village is like island surrounded by Maharashtra State land. There is no infrastructure to supply the power to this village from Karnataka. The power supply being arranged by the Western Region Electricity Board, Mumbai, Maharashtra, and as per the agreement, payment will be made to Western Region Electricity Board, Mumbai, Maharashtra, at their HT commercial bulk supply tariff. During FY22 Rs.45,94,383/- has been paid for purchase of 2,81,095 units. HESCOM has explained that by oversight 0.28 MU pertaining to this power purchase has not been included in the T-1/D-1 Format. Further, as observed by the Commission, this energy is not accounted in Annual Report of HESCOM for FY22.

From the above, the Commission is of the view that, the required amount of care and diligence required on the part of HESCOM in accounting the power purchase transactions, is lacking.

11. Sale of Energy to HPPC/TPDDL and Charges against PCKL, TANTRANSCO and LC:

The HESCOM was directed to explain the deviations in respect of above transaction as compared with the approval provided by the Commission.

HESCOM, accordingly has submitted the following replies in respect of the deviations:

- a) Sale to HPPC/TPDDL: PCKL on behalf of ESCOMs sold power to HPPC/TPDDL through PTC India.
- b) LC Charges: HESCOM has to open Letter of Credit(LC) in favour of the generators as per PPA conditions and accordingly the bank charges have been borne by HESCOM.
- c) PCKL Charges: PCKL is the nodal agency for performing power purchase activities on behalf of ESCOMs of Karnataka. Hence, the administrative expenses are paid to PCKL.
- d) TANTRANSCO charges: HESCOM has paid transformer charges for the transformer at Sriperumbudur and Salem as per SRPC, REA, towards fixed charges of CTU asset maintained by TANTRANSCO.

The Commission has noted the HESCOM's response.

12. Backing Down of Power:

The HESCOM explanation is silent on the power backed down during FY22. It is to be noted here that, the State ESCOMs have backed down power to an extent of 25,956 MU during FY22 as per the information provided by SLDC. This factor needs to be considered by the State ESCOMs including HESCOM before considering any power procurement and should take measures to reduce/utilize power backed down on commercial principles, considering reliability of the State grid into consideration. The PCKL shall guide ESCOMs and should take responsible measures in this aspect.

13. Accuracy of Demand-Supply projections:

The Commission directs all ESCOMs to provide correct data for demand/supply projections including in respect of Electric Power Survey (EPS) Reports, Load Generation Balance Reports (LGBR), etc., as the correct data will ensure accuracy in demand/supply projections. Further, the Commission directs, all the ESCOMs /PCKL /SLDC to conduct proper demand-supply projections at

specific time intervals for ensuring reliability in supply and avoid stranded generation capacities.

14. Source-wise Generation:

On an analysis of the source-wise approved and actual power purchase, it is observed that, there are deviations in the quantum of energy purchased and cost thereon. There is increase in supply of energy from the KPCL Thermal, KPCL Hydel, other State hydro projects and Renewable energy sources of power. Whereas, there is decrease in the supply from the CGS, UPCL and Bundled Power as indicated below:

Source of Generation	Approved Energy for 2021-22 in MU	Actual Energy for 2021-22 in MU	Excess(+)/ Shortfall (-) Energy in %
KPCL-Thermal Stations	3030.23	4263.61	40.70%
CGS	4065.69	2239.24	-44.92%
UPCL	900.87	334.27	-62.89%
KPCL Hydel Stations	1362.27	1609.13	18.12%
Other State Hydro Projects	37.01	40.56	9.58%
RE Projects	4384.37	4596.20	4.83%
Total Bundled Power	752.20	414.24	-44.93%
Others	0.00	1102.20	
Total	14532.64	14599.45	0.46%

Source of Generation	Approved Amount for 2021-22 in Rs. Crores	Actual Amount for 2021-22 in Rs. Crores	Excess (+)/ Shortfall (-) Amount in %
KPCL-Thermal Stations	1862.42	2420.44	29.96%
CGS	1920.95	1123.44	-41.52%
UPCL	520.59	403.42	-22.51%
KPCL Hydel Stations	177.17	193.80	9.39%
Other State Hydro Projects	12.35	12.34	-0.12%
RE Projects	1871.75	2232.80	19.29%
Total Bundled power	340.41	212.31	-37.63%
Transmission Charges (PGCIL+KPTCL)	1332.19	1396.15	4.80%
Others	7.01	614.30	8664.45%
Total	8044.84	8609.00	7.01%

The total power purchase cost has increased beyond expectations i.e., by 7.01% compared to 0.46% of increase in power purchase cost. This is mainly due to Regulation of Power Supply of CGS, backing down of power having high

variable cost by paying fixed charges viz. UPCL etc., payments made towards revision of power purchase cost in respect of cogeneration units under long term for the period FY18 to FY21 and increase in PGCIL transmission charges. However, the Commission directs HESCOM to ensure that the amount paid towards PGCIL charges are thoroughly verified as per the CERC approved methodology in terms of CERC (sharing of Inter State Transmission Charges and related matters) Regulations 2020 and its amendments from time to time and make sure such amount arrived at is prudent. Further, energy to the extent of 1,645.10 MU has been sold outside, much importance should be given towards it considering commercial principles and reliability of the State Grid.

- 15. HESCOM shall ensure that in future, all the costs related to power purchase for a financial year, for which APR is being submitted before the Commission, are reconciled between the ESCOMs and concerned Generation Stations/Transmission Utilities/State Load Despatch Centres etc. and checked for its correctness before its submission. PCKL is directed to ensure co-ordination meetings at regular intervals is held in this aspect and copy of the proceedings of such meeting shall be submitted to the Commission for information. Further, in the above meeting attention shall be given to all the aspects discussed in the above paras including energy reconciliation, variation in DSM charges between ESCOMs and other relevant subjects.**

- 16. In the circumstances explained above, considering the consolidated replies provided by ESCOMs in respect of Energy Reconciliation Statement, Power procurement under medium term from cogeneration power plants and in view of fact that the power purchase is un-controllable cost as per MYT Regulations, the Commission hereby decides to approve the actual power purchase cost of Rs.8609.00 Crores towards purchase of 14,599.44 MU for FY22, subject to the following:**
 - a) Revision of Energy Reconciliation Statement among ESCOMs for FY22, if any.**
 - b) Subject to outcome of the orders on the petitions/review petitions filed in respect of power procurement under medium term from cogeneration power plants.**

- c) The decision, if any, of the Commission (KERC) in respect of tariff regarding power procurement under medium term from cogeneration power plants.
- d) Accounting of 0.28 MU of energy supplied to 'Dhamanes village'.

4.2.4 RPO Compliance for FY22:

The Commission notes that HESCOM has submitted the RPO data for both solar and non-solar compliance for FY22. HESCOM has submitted that it has complied with Non-solar RPO to the extent of 15.09% against the target of 11% and solar RPO to an extent of 13.11% against the target of 10.50%.

The observations of the Commission on the RPO, the replies furnished by HESCOM and the Commission's views thereon are discussed in the following paragraphs:

- i. Excluding hydro, the input energy for FY22 as per D1-format is 12967.79 MU for FY22 [14599.45-1609.13(KPCL hydro)-31.78MU (Jurala)+Shimsha 9.25 MU], whereas HESCOM has indicated the same as 12419.96 MU at page 71 for RPO calculations. HESCOM was directed to furnish the working details for considering 12419.96 MU for the purpose of RPO, duly tallying with the accounts data.

HESCOM's reply:

Total energy purchased excluding Major Hydro considered for computation of RPO for FY22 is 12419.96 MU which is as follows:

Sl. No.	Particular	Consumption in MU
1	Total energy purchased	12005.52
2	Add Solar Roof top	14.76
	Total energy purchased	12020.28
3	Add Shimsha	9.25
	Add Mani dam	4.319
3	Less KPCL Hydel	-1609.13
4	Less TBHE	-8.77
5	Less Priyadarshini Jurala Hydro Project	-31.78
	Total energy purchased excluding Major Hydel	10384.169
6	Add energy purchase from other ESCOMs as per SLDC	2035.79
	Total power purchase considered for RPO	12419.96

Note: Energy purchased from other ESCOMs 2035.79MU as per SLDC statement is considered for RPO Computation.

As per page No.70 total energy purchased is 14599.45 MU which includes energy purchased from solar roof top 14.76MU. Hence, the energy purchased i.e. 14599.45 MU as per T1/D1 statement is correct.

- ii. Also, HESCOM shall indicate the banked energy, infirm energy, IEX energy and hydro energy accounted in energy balancing separately.

The Commissions notes that the breakup data as requested is not separately furnished.

- iii. **The Non-solar energy as per D-1 format and as per pages 59 to 70 is indicated below:**

Source	MU	
	D-1 Format-MU	Pages 59 to 70
Wind	2090.35 (2067.60 MU PPA+22.75MU Banked)	2087.70 (2067.60 PPA +20.10 banked)
Mini-Hydel	62.90	62.90
Co-generation	864.19	864.19
Biomass	0.00	0.00
Shimsha	9.25	9.25
Total	3026.69	3022.04

As per D-1 Format the total Non-solar energy is 3026.69 MU and as per data at Pages 59 to 70, it is 3022.04 MU, whereas HESCOM has considered 3155.04 MU for RPO. The non-solar energy source-wise as above shall be reconciled tallying with FY22 accounts data.

HESCOM's reply:

The Non-solar energy purchased for FY22 is 3155.04 MU which includes following sources and the same is considered for RPO.

Sl. No.	Non Projects	Consumption in MU
1	Wind Mill	1931.06
2	Mini Hydel	62.90
3	Co-gen with PPA	602.39
4	Co-gen Short term	261.80
5	W&B Energy (wind)	20.10
6	Through SLDC	2.65
7	Un banked	1.09
8	Infirm Energy (wind)	11.95
9	Shimsha	9.25
10	Mani dam	4.32
11	Add Non-solar RE purchase from other ESCOMs and GTAM	111
12	Non-solar RE purchase under APPPC	136.54
	Total	3155.04

The wind W&B energy purchased through SLDC is 22.75 MU as per T1/D1. But revised is 23.84 MU as per T1/D1 statement.

iv. The Solar energy as per D-1 format and as per pages 59 to 70 is indicated as follows:

Source	MU	
	D-1 Format	Pages 59 to 70
KPCL	1.54	1.54
NTPC VVNL	17.24	-
NTPC NSM	236.08	-
Solar-others	1565.27 (1563.89+1.38 banked)	1806.48 (includes NTPC-VVNL & NSM) (1714.85+87.60 + banked energy of 4.03)
Total	1820.13	1808.02

As per D-1 Format the total Solar energy is 1820.13 MU and as per data at Pages 59 to 70, it is 1808.02 MU, whereas HESCOM has considered 1819.05 MU. The Solar energy source-wise as above shall be reconciled and matched with FY22 accounts data.

HESCOM's reply:

The solar energy purchased for FY21 is 1819.05 MU which includes following sources and the same is considered for RPO.

Sl. No.	Solar Projects	Consumption in MU
1	KPCL Solar	1.54
2	1-3 MW Farmers Scheme	87.6
3	MW scale Solar PPA	1461.53
4	NTPC VVNL	17.24
5	NTPC NSM	236.08
6	Solar Roof top	14.76
7	Solar under W&B	0.30
	Total	1819.05

The solar under W&B energy purchased through SLDC is 1.38 MU as per T1/D1. Revised is 0.30 MU as per T1/D1 statement.

v. For validating the RPO compliance and to work out APPC, HESCOM was directed to furnish the data as per the specified format, duly reconciling the data with audited accounts for FY22 [indicating each item distinctly.

HESCOM's reply:

HESCOM in its replies has furnished the following details:

For validating the RPO compliance and to work out APPC., below stated data are submitted as in the format indicated below duly reconciling the data with audited accounts for FY22.

a. Non-solar RPO:

TABLE 4.7
Non Solar RPO Compliance by HESCOM

No.	Particulars	Quantum in MU	Cost- Rs. Crs.
1	Total Power Purchase quantum from all sources excluding Hydro energy	12419.96	7060.39
2	Non-solar Renewable energy purchased under PPA route at Generic tariff including Non-solar RE purchased from KPCL	2609.92	1348.89
3	Non-solar Short-Term purchase from RE sources, excluding sec-11 purchase	261.80	103.18
4	Non-solar Short-Term purchase from RE sources under sec-11	0.00	0.00
5	Non-solar RE purchased at APPC	136.54	49.50
6	Non-solar RE pertaining to green energy sold to consumers under green tariff	0.00	0.00
7	Non-solar RE purchased from other ESCOMs / Market	111.00	0.00
8	Non-solar RE sold to other ESCOMs / Market	1144.75	0.00
9	Non-solar RE purchased from any other source like banked energy purchased at 85% of Generic tariff	35.78	11.28
10	Total Non-Solar RE Energy Purchased [No 2+ No.3+No.4+No.5 +No.7+No.9]	3155.04	1512.85
11	Non-Solar RE accounted for the purpose of RPO [No.10- No.5-No.6-No.8]	1873.75	1463.35
12	Non-solar RPO complied in % [No11/No1]*100	15.09	20.73

b. Solar RPO:

TABLE – 4.8
Solar RPO Compliance by HESCOM

No.	Particulars	Quantum in MU	Cost- Rs. Crs.
1	Total Power Purchase quantum from all sources excluding Hydro energy	12149.96	7060.39
2	Solar energy purchased under PPA route at Generic tariff including solar energy purchased from KPCL	1565.42	721.11
3	Solar energy purchased under Short-Term, excluding sec-11 purchase	0.00	0.00
4	Solar Short-Term purchase from RE under sec-11	0.00	0.00
5	Solar energy purchased under APPC	0.00	0.00
6	Solar energy pertaining to green energy sold to consumers under green tariff	0.00	0.00
7	Solar energy purchased from other ESCOMs / Market	0.00	0.00
8	Solar energy sold to other ESCOMs / Market	190.49	0.00

9	Solar energy purchased from NTPC (or others) as bundled power	253.31	134.82
10	Solar energy purchased from any other source like banked energy purchased at 85% of Generic tariff	0.30	0.08
11	Total Solar Energy Purchased [No.2+ No.3+No.4+No.5+No.7+No.9+No.10]	1819.03	856.01
12	Solar energy accounted for the purpose of RPO [No.11- No.5-No.6-No.8]	1628.54	856.01
13	Solar RPO complied in % [No12/No.1]*100	13.112	12.12

Commission's Decision:

The replies furnished by HESCOM is noted and the RPO compliance based on audited accounts/D-1 format is discussed in the following paragraphs:

i) Input energy net of hydro:

The input energy net of hydro is computed as indicated below:

1	Input energy-MU	14599.44
2	KPCL hydro including Shimsha & Mani-MU	1609.13
3	Shimsha & Mani-MU[As per replies]	13.569
4	KPCL hydro excluding Shimsha & Mani-MU (Sl. No.2-Sl.No.3)-MU	1595.561
5	Other Hydro-MU	40.56
6	Hydro under energy balance	-596.26
7	Total hydro-MU (Sl. No.4+Sl.No.5)-MU	1636.121
8	Input energy net of Hydro- MU (Sl. No.1- Sl.No.7-Sl.No.6)	12367.059

ii) Non-solar RPO compliance

The Non-solar quantum purchased as per audited accounts / D1 format is as follows:

Source	MU
Co-generation	864.19
Bio-mass	0.00
Mini hydel	62.90
Wind including KPCL	2067.60
Shimsha & Mani	13.569
Banked energy	23.84
Infirm energy	11.95
Non-solar Energy purchased	0.00
Less energy sold in market	-1144.75
Less Purchased under APPC	-136.54
TOTAL- Non-solar purchased	1762.759

Considering the input energy net of hydro of 12367.059MU and the non-solar energy of 1762.759 MU, the HESCOM has complied with RPO to the extent of 14.25 % against the target of 11% for FY22. Thus, HESCOM has purchased 402.383 MU (402383 MWh) of excess Non-solar energy beyond the specified target.

iii) Solar RPO compliance

The Solar quantum purchased as per audited accounts / D-1 format is as follows:

Source	MU
KPCL solar	1.54
NTPC VVNL	17.24
NTPC NSN	236.08
Solar others	1563.89
Solar banking	0.30
Less sold in market	-190.50
Total	1628.55

Note: PCKL has informed that neither solar nor non-solar energy is purchased from exchanges/market. Hence, solar or non-solar energy purchased from exchanges/market is considered as Zero.

Considering the input energy net of hydro of 12367.059MU and the solar energy of 1628.55MU, the HESCOM has complied with RPO to the extent of 13.17% against the target of 10.50% for FY22. Thus, HESCOM has purchased 330.009MU (330009 MWh) of excess solar energy beyond the specified target.

4.2.5 Operation and Maintenance Expenses:

HESCOM's Submission:

HESCOM, in its Petition, has submitted that as per the audited accounts, it has incurred Rs.1283.84 Crores towards O&M expenditure as against Rs.1379.23 Crores, approved by the Commission for FY22. The break-up of O&M expenses are as follows:

TABLE – 4.9
O & M Expenses – HESCOM's submission

Particulars	Amount in Rs. Crores	
	FY22	
Employee cost	984.98	
Repairs and Maintenance Expenses	132.83	
Administrative & General Expenses	166.03	
Total O & M Expenses	1283.84	

Commission's Analysis and Decisions:

The Commission, in its Tariff Order dated 9th June, 2021 had approved the O&M expenses inclusive of contribution to the P&G Trust for FY22 as detailed below:

TABLE – 4.10
Approved O&M Expenses as per Tariff Order 2021

Particulars	FY22
No. of installations as per actuals as per Audited Accts	5695962
CGI based on 3 Year CAGR in %	4.23%
Inflation index in %	7.9586%
Base year O&M expenses (projected as per actuals of FY19 including P&G Contribution)	971.20
O&M Index= O&M (t-1)*(1+WII+CGI-X)	1379.23
Total approved O&M Expenses for FY22– in Rs. Crores.	1379.23

The Commission notes the actual O&M expenses incurred and claimed as per audited accounts and other details submitted by HESCOM for FY22.

The Commission, in its preliminary observations, had observed that HESCOM has claimed the actual O&M expenses of Rs.1283.84 Crores for FY22. HESCOM was directed to compute the normative allowable O&M expenses as per MYT provisions and compare it with the actuals and furnish the same to the Commission.

In compliance to the direction of the Commission, HESCOM in its reply to the preliminary observations, has computed the O&M expenses of Rs.1335.23 Crores, as per MYT provisions for FY22 by considering Weighted Inflation Index (WII) at 6.1611%, Consumer Growth Index(CGI) at 4.04% and additional employees cost towards contribution to P&G Trust of Rs.261.65 Crores. The Commission has noted the reply submitted by HESCOM.

Thus, the Commission proceeds with the determination of normative O&M expenses in accordance with the provisions of MYT Regulations and the methodology adopted while approving the ARR for FY22 and earlier APR's, considering 12-Year data of WPI and CPI for arriving at Weighted Inflation Index (WII), besides considering three year compounded annual growth rate (CAGR) of consumers. The Commission, while computing the allowable rate of inflation,

has considered the Wholesale Price Index (WPI) as per the data available from the Ministry of Commerce & Industry, GoI and Consumer Price Index (CPI) as per the data available from the Labour Bureau, GoI and has adopted the methodology followed by the CERC with CPI and WPI in a ratio of 80:20 for FY22 is computed as shown in the following Table:

TABLE – 4.11**Computation of Rate of Inflation**

Year	WPI	CPI	Composite Series	Yt/Y1=Rt	Ln Rt	Year (t-1)	Product [(t-1)* (LnRt)]
2010	89.7	61.1	66.82				
2011	98.2	66.5	72.84	1.09	0.09	1	0.09
2012	105.7	72.7	79.3	1.19	0.17	2	0.34
2013	111.1	80.6	86.7	1.30	0.26	3	0.78
2014	114.8	85.7	91.52	1.37	0.31	4	1.26
2015	110.3	90.8	94.7	1.42	0.35	5	1.74
2016	110.3	95.3	98.3	1.47	0.39	6	2.32
2017	114.1	97.6	100.9	1.51	0.41	7	2.88
2018	118.9	102.4	105.7	1.58	0.46	8	3.67
2019	121.2	110.2	112.4	1.68	0.52	9	4.68
2020	121.8	116.3	117.4	1.76	0.56	10	5.64
2021	135	122	124.6	1.86	0.62	11	6.85
A= Sum of the product column							30.25
B= 6 Times of A							181.51
C= (n-1)*n*(2n-1) where n= No of years of data=12							3036.00
D=B/C							0.06
g(Exponential factor)= Exponential (D)-1							0.0616
e=Annual Escalation Rate (%)=g*100							6.1611
As per CERC Notification No.Eco T I / 2022-CERC dated 30.03.2022 with weightage of 80% on CPI and 20% on WPI							

The Commission while determining the normative O & M expenses for FY22, has considered the following:

- a) The actual O & M expenses as per the audited accounts for FY19 as the base year expenses excluding contribution to Pension and Gratuity Trust and the allowable normative O&M expenses for FY20 and FY21.

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 FY22 of 4.04%.

- b) The weighted inflation index (WII) at 6.1611% as computed above.
c) Efficiency factor at 2% as considered in the earlier control periods.

Thus, the normative O & M expenses for FY21 are computed as shown in the following Table:

TABLE - 4.12
Allowable Normative O & M Expenses for FY22

Particular	FY22
No of installations as per actuals as per Audited Accts	5663978
CGI based on 3 Year CAGR (Using actuals of FY18 to FY21)	4.04%
Inflation index	6.1611%
Normative allowable O&M cost without P&G contribution for FY21 (Based on actual as per audited accounts FY19 for Rs.797.77 Crores)	992.21
O&M Index= O&M (t-1)*(1+WII+CGI-X)	1073.56
Normative allowable O&M Expenses for FY22 (t-1) x (1+WII+CGI-X) (Rs.in Crores)	1073.56

The normative O&M expenses of Rs.1073.56 Crores have been computed without considering the contribution to the Pension and Gratuity Trust for FY22.

The Commission notes the details submitted by HESCOM and notes that HESCOM has incurred additional employee cost of Rs.261.65 Crores towards contribution of terminal benefits to P&G Trust for FY22. 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 accordingly, the allowable normative O&M expenses works out to Rs.1335.21 Crores.

The Commission further notes that, the actual O&M expenses inclusive of contribution of terminal benefits to P&G Trust as per audited accounts is Rs.1283.83 Crores for FY22 which is less than the allowable normative O&M expense by Rs.51.38 Crores.

As the O&M expenses are controllable as per the provisions of MYT Regulations, HESCOM need to control the expenses under the employees cost head of expenditure.

Allowing O&M expenses beyond the actual O&M expenses in the retail supply tariff is a burden on the end consumers. The Commission notes that, HESCOM in its filing has claimed the O&M expenses to the level of actual amount as

accounted in the audited accounts for Rs.1283.84 Crores for FY22. The Commission in order reduce the burden on the consumers and as claimed by the HESCOM decides to allow the actual O&M expenses inclusive of additional O&M expenses towards contribution of terminal benefits to P&G Trust for Rs.1283.83 Crores for FY22.

Thus, the Commission decides to allow the actual O&M expenses of Rs.1283.83 Crores, as claimed by HESCOM for FY22.

4.2.6 Depreciation:

HESCOM's Submission:

HESCOM, in its application as per the audited accounts has claimed an amount of Rs.304.91 Crores as net depreciation as against Rs.285.66 Crores as approved by the Commission for FY22.

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

TABLE – 4.13
Depreciation for FY22– HESCOM's Submission

Amount in Rs. Crores	
Particulars	Depreciation
Buildings	6.00
Hydraulic works	0.30
Other Civil	0.25
Plant & M/c	77.07
Line, Cable Network	217.71
Vehicles	0.35
Furniture	0.36
Office Equipment	0.21
Intangible Assets – software	2.66
Total	304.91
Depreciation on Assets created out of consumer contribution / grant included in the total depreciation amount	127.04
Net Gross Fixed Asset	304.91

Commission's Analysis and Decisions:

The Commission 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, has computed the depreciation for FY22, duly considering the opening and closing balances of gross blocks of fixed assets for FY22 and the depreciation as per the audited accounts. Accordingly, the weighted average rate of depreciation works out to 5.10%.

The Commission notes that, as per the audited accounts, the gross depreciation amount charged to the profit and loss account is Rs.459.43 Crores. The depreciation on assets created out of consumer contributions/grants as per the Accounting Standard AS-12 is Rs.154.53 Crores for FY22. Thus the net depreciation for FY22 is Rs.304.91 Crores. The Commission while computing the allowable depreciation for FY22 has considered considers the opening and closing balance of gross fixed assets less assets created out of consumer contributions / grants and the amount of depreciation charged thereon as per the audited accounts and as filed by HESCOM for FY22. Thus the allowable depreciation for FY22 is as under:

TABLE – 4.14
Allowable Depreciation for FY22

Amount in Rs.Crores

Particulars	Depreciation
Buildings	6.00
Hydraulic works	0.30
Civil	0.25
Plant & Machinery	77.07
Line, Cable Network	372.23
Vehicles	0.35
Furniture	0.36
Office Equipment's	0.21
Intangible Assets – software	2.58
Land / Leasehold land	0.0085
Depreciation on Small and Low value assets	0.06
Total GFA with intangible assets	459.44
Depreciation on assets created out of consumer contributions / grants	154.53
Allowable Net Depreciation for FY22	304.91

Based on the above, the Commission decides to allow the net depreciation of Rs.304.91 Crores for FY22.

4.2.7 Capital Expenditure – APR for FY22:

1. HESCOM's Submission:

HESCOM, in its filing has indicated a capital expenditure of Rs.934.89 Crores, duly comparing the incurred capex with capital budget submitted to the Commission for FY22 and Capital Budget approved in the HESCOM Board. Whereas, comparison has to be done with reference to approved capex of Rs.825 Crores for FY22, as per the Commission's Tariff Order dated 9th June 2021. The Commission had considered Rs.500 Crores towards new loans for financing the capex.

On a verification of the filing, the Commission had observed inconsistent figures relating to the actual capex incurred for FY22, such as Rs.934.89 Crores, in Table 'Details of category-wise actual capital expenditure booked for FY22; Rs.3320.74 Crores in Format - A3-Cashflow statement and Rs.3345.79 Crores in Format D-17 (Capital Works in Progress).

Hence, the Commission, in its preliminary observations had directed the HESCOM to furnish correct capex incurred under each sub-head of account code 14 Series for FY22, duly agreeing with the figures as per the audited accounts.

HESCOM in its reply, has furnished the detailed break up of capex of Rs.934.89 Crores incurred under each sub-head of account code 14 Series for FY22.

2. Preliminary Observations and Replies by HESCOM:

- a) In case the total capex of Rs.3345.79 Crores is considered as capex for FY22, HESCOM appears to have exceeded the approved capex (of Rs.825 Crores) by Rs.2520.79 Crores, which is a huge capex incurred without approval of the Commission. By furnishing different figures in different Formats, HESCOM appears to be misleading the Commission. Hence, HESCOM was directed to furnish the correct capex incurred for FY22, in preliminary observations, along with the explanation as to why the excess amount incurred without approval of the Commission should not be disallowed for tariff purposes. It was made

clear that in case HESCOM does not furnish satisfactory explanation, the Commission would be constrained to disallow the corresponding costs on the capex incurred without approval of the Commission.

In reply, HESCOM has furnished the revised Format D-17, by considering the incurred capex of Rs.934.89 Crores for FY22 and further requested the Commission to consider the same for FY22.

- b) The Commission has noted that HESCOM has not indicated any expenditure against shifting of existing transformers to load centers, providing covered conductor for villages to prevent Theft/ accident and hazardous condition, rectification of Hazardous locations, replacement of electromechanical energy meters by static meters, Madari Vidyut Gram, providing numerical relays to provide power supply to farm houses, T&P materials, DSM Projects and shifting of IP sets in NTPC area (B Bagewadi) and has stated that due to similar category of works, capex incurred booked under other heads of account, works were not taken up under DSM, and pending payments etc. and hence capex incurred not indicated.
- c) The Commission, in its MYT Order 2022 dated 4th April 2022, had directed HESCOM not to compare the incurred capex with board approved budget in the filing in future. In view of violating the said directions, HESCOM was directed to submit reasons and justification for comparing the actual Capex incurred for FY22 with HESCOM Board approved Budget and Capital Budget submitted to KERC for FY22.

In reply, HESCOM has submitted that in future they will not compare the incurred capex with board approved budget.

- d) The Commission, in its preliminary observations had directed HESCOM to furnish the details of Spill over and New works taken up during FY22, duly agreeing with actual Capex. Whereas, HESCOM has not furnished the break-up details for the same. This shows that, HESCOM is not properly maintaining the record of planning and implementation of its capex under different heads of works. Hence, the Commission directs HESCOM to plan and maintain category-wise capex incurred, so that effective and proper

monitoring is done in capital expenditure, as per the Capital Expenditure Guidelines issued by the Commission, so as to ensure prudence in incurring the capex in respect of all the categories of works.

e) The Commission notes that as per the reply submitted by HESCOM, capex has been paid by diversion of Revenue to an extent of Rs.312.66 Crores, which is against all norms of financial management. As a result of this, HESCOM has been defaulting on power purchase payments resulting in regulating power supply by the Central Generating Stations. This also indicates the poor state of cash management in HESCOM.

f) The Commission, in its preliminary observations had directed HESCOM to furnish the Division-wise abstract of Pump-sets energized under Ganga Kalyana Schemes against capex of Rs.50.44 Crores and the amount of capital grants received from the Government of Karnataka and the balance amount to be received from the Government of Karnataka.

The summary of the details of IP sets energized under GK scheme, Grants received and balance to be received as submitted by HESCOM, in reply to the preliminary observations of the Commission are as under:

IP sets energized during FY22	incurred capex Rs. in Crores	Capital grants received from the Government of Karnataka Rs. in Lakhs	Balance amount to be received from the Government of Karnataka in Rs.Crores
2857	50.44	12.64	50.31

The Commission hereby directs HESCOM to take follow up action to get the Government Grants without any delay.

g) The Commission, in its preliminary observations had directed HESCOM to furnish the details of sources of funding (like Loans, grants, debt, equity and internal sources) for the capex of Rs.3345.79 Crores incurred during the FY22, along with break up details for internal sources of funding.

In reply, HESCOM has furnished the breakup details for funding of the capex for Rs.728.13 Crores. Further, HESCOM has stated that payment made

towards capex during FY22, is of Rs.1040.79 Crores. However, HESCOM has furnished the actual incurred capex of Rs.934.89 Crores for FY22. From this, the Commission notes that HESCOM has not maintained proper records of the capex incurred along with the sources of funding the capex.

In view of the above, the Commission directs HESCOM to furnish the correct breakup details, in future filing without fail.

- h) The Commission, in its preliminary observations had directed HESCOM to furnish the Division-wise abstract of works in progress pertaining to UNIP for the capex incurred of Rs.210.89 Crores.

The summary of the Physical and Financial progress furnished by HESCOM, in reply is as under:

DWA Qty	Physical		Financial
	Executed Qty	% of progress w.r.t DWA	Amount in Rs. Crores
24084	12993	53.95	210.89

- i) The Commission, in its preliminary observations had directed HESCOM to furnish the reasons for showing negative capex amount in respect of replacement of 11KV OH feeders by UG cables.

In reply, HESCOM has stated that no expenditure is booked in respect of replacement of 11KV OH feeders by UG cables.

- j) The Commission, in its preliminary observations had directed HESCOM to furnish the abstract of works carried out under DTC metering works for the capex of Rs.11.75 Crores.

In reply, HESCOM has furnished the abstract of works carried out under DTC metering works. Wherein, HESCOM has submitted that all the DTC metering works has been completed by M/s Asian Fab Tech LTD and these bills pertain to maintenance of DTC Metering and others.

The Commission notes that the expenses towards maintenance of DTC should find a place in Revenue expenditure under maintenance and not in the capex.

- k) The Commission, in its preliminary observations had directed HESCOM to furnish the details of total number of water supply works carried out during FY22 and amount received from respective departments.

In reply, HESCOM has submitted that total 627 number of DWS installations energized and Rs.16.86 Crores received from respective departments.

- l) The Commission notes the reply submitted by HESCOM in respect of replacement of faulty transformers by new transformers, wherein, HESCOM has stated that it has replaced 465 number of 25 KVA transformers, 386 number of 63 KVA transformers and 366 number of 100 KVA transformers with new transformers. Total capex incurred is of Rs.15.13 Crores towards replacement of faulty transformers by new transformers. The net incurred capex works out to Rs.751.40 Crores, after deducting the capitalized capex of Rs.183.49 Crores for FY22.

3. Commission's Analysis and Decision:

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

The Commission also directs HESCOM to take concrete measures to complete and capitalize the works in the prescribed time schedule, so that, its benefits are passed on to the consumers effectively and also capitalize the completed works so as to ensure charging of depreciation thereon.

Thus, in view of the facts and replies submitted by HESCOM, the Commission, decides to recognize the net incurred capex of Rs.751.40 Crores for the purpose of APR for FY22. The net capex is arrived at after deducting the capitalized capex of Rs.183.49 Crores for FY22, in respect of replacement of faulty transformers by new transformers, which is within the Commission approved capex of Rs.825 Crores.

4. Prudence Check of Capital Expenditure for FY21 and FY22:

The Commission, in its Tariff Orders dated 4th November 2020 and 9th June 2021, had allowed Capital expenditure incurred by the HESCOM for FY21 and FY22 respectively, subject to carrying out the prudence check of the various works undertaken by HESCOM. Accordingly, the Commission had entrusted conducting prudence check of capital expenditure to Consultants including HRECS.

The Consultants have submitted the report in the matter. 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. HESCOM was required to submit the reply in the matter within 7 days so as enable the Commission to incorporate the findings of Prudence Check of Capex in this Order. Since the replies were not received on time, the Commission will incorporate the findings including previous years' imprudent works, in the ensuing tariff Order.

4.2.8 Interest and Finance Charges:

a. Interest on Capital loan:

HESCOM's Submission:

HESCOM in its application has claimed an amount of Rs.276.31 Crores towards interest on capital loans drawn from Banks/Financial Institutions as against Rs.342.65 Crores approved by the Commission for FY22. HESCOM in its Petition, has submitted that there is a decrease of Rs.66.34 Crores over the approved amount of Rs.342.65 Crores for FY22.

Commission's Analysis and Decisions:

The Commission notes that HESCOM has drawn major capital loan from REC and PFC for carrying out UG cabling, NJY, metering DDUGJY works, etc. The Commission has taken note of the opening and closing balances of capital loans as per the audited accounts for FY22 and the data in Format D-9 of the filing. Accordingly, the weighted average interest rate works out to 10.29% for the interest amount of Rs.276.31 Crores, considering the average long-term capital loan of Rs.2684.76 Crores for FY22 as indicated in the following Table:

TABLE – 4.15**Allowable Interest on Loans – FY22**

Particulars	Amount in Rs. Crores	
	FY22	
Total capital loan at the beginning of the year	2521.67	
Add: New Loans	643.63	
Less: Repayments	317.45	
Total loan at the end of the year	2847.85	
Average Loan	2684.76	
Interest on long term capital loans as per accounted as per the audited accounts	276.31	
Weighted average rate of interest	10.29%	
Allowable interest on capital loan	276.31	

The Commission takes note of the capital loan portfolios of HESCOM for FY22. As per the audited accounts for FY22 and the details submitted by HESCOM in Format D-9, it has availed majority of the capital loans from REC, PFC and other Banks at the interest rate ranging from 7.60% to 12.75% per annum. The actual weighted average rate of interest of 10.29% is comparatively on the higher side as compared with the prevailing rate of interest for long term loans charged by the commercial banks. The Commission would reiterate that HESCOM should make efforts to improve its liquidity position to improve its financial standing to take advantage of the prevailing favourable banking conditions with respect to long term loans at the most competitive rates, to minimise the interest burden on the consumers.

The Commission notes that, due to liquidity problem of HESCOM in availing the capital loan from the Commercial Banks, it has availed the majority of the capital loan from REC and PFC at a higher rate of interest and the weighted

average rate works out to 10.29%, which is within the acceptable limits, given the financial position of HESCOM.

Thus, the Commission decides to allow the actual interest amount of Rs.276.31 Crores incurred by HESCOM on capital loans for FY22.

4.2.9 Interest on Working Capital:

HESCOM's Submission:

HESCOM in its application has claimed an amount of Rs.314.75 Crores towards interest on working capital as against Rs.189.83 Crores approved by the Commission for FY22.

HESCOM has submitted that the power purchase liability being 75% to 80% of the total expenditure and 53% of the total revenue demand depends on the release of subsidy by the GoK. HESCOM is experiencing shortfall in working capital as 53% of the total revenue demand depends on the release of the subsidy by GoK which is not being released in accordance with the KERC (Manner of payment of Subsidy by State Government) Regulations, 2008.

Further, HESCOM has submitted that the Commission and Hon'ble APTEL had issued several orders relating to payment of power purchase liability resulted in additional burden on account of these orders. HESCOM is not in a position to arrange payment immediately, HESCOM has borrowed additional working capital from various Banks / Financial institutions to settle the payment and incurred additional burden of interest on working capital for FY22. For these reasons, HESCOM has requested the Commission to allow the actual interest on working capital of Rs.314.75 Crores incurred during FY22.

Commission's Analysis and Decisions:

The Commission in its preliminary observations had observed that HESCOM, in its filing has claimed the actual interest on working capital of Rs.314.75 Crores for FY22 without submitting any details of computation of interest on working capital, as per the provisions of MYT Regulations. HESCOM was directed to submit computation sheet for interest on working capital as per the provisions of MYT Regulations.

Accordingly, HESCOM in its reply to the preliminary observation has worked out the normative interest on working capital of Rs.182.66 Crores along with interest of Rs.13.91 Crores incurred on the amount of working borrowed for payment of Rs.142.76 Crores to the generators towards outstanding dues as per KERC/Hon'ble APTEL Orders for FY22. Thus, the total normative interest on working capital works out to Rs.196.57 Crores. However, the Commission notes that as per the audited accounts, HESCOM has incurred the interest on working capital of Rs.314.75 Crores for making payment towards power purchase and to meet the other expenditure for FY22.

The Commission also noted that HESCOM in its filing, has submitted that, an amount of Rs.142.76 Crores has been paid to the generators towards outstanding dues as per KERC/Hon'ble APTEL Orders by borrowing additional working capital and incurred Rs.13.91 Crores towards interest on the amount borrowed for FY22. As such, HESCOM was directed to clarify whether interest of Rs.13.91 Crores is included in the interest on working capital claims of Rs.314.75 Crores. The Commission also directed HESCOM to furnish the details of cases with OP No./Petition No. of the Hon'ble ATE and of the Commission relating to outstanding dues of generators and interest claims of Rs.13.91 Crores.

HESCOM in its reply to the preliminary observation has stated that it has included Rs.13.91 Crores incurred towards interest on the amount borrowed for payment of Rs.142.76 Crores to the generators towards outstanding dues as per the Commission/APTEL orders in the interest claims on working capital of Rs.314.75 Crores for FY22.

The Commission has computed the allowable interest on working capital for FY22 as per the KERC (Terms and Conditions for Determination of Tariff for Distribution and Retail Sale of Electricity) Regulations, 2006 and amendments thereto, which is as tabulated below:

TABLE – 4.16
Allowable Interest on Working Capital for FY22

Amount in Rs. Crores

Computation of Interest on Working Capital	
Particulars	FY 22
O&M expenses	1283.83
One-twelfth of the amount of O&M Exp.	106.99
Opening GFA as per Provisional Accts	8615.50
Stores, materials and supplies 1% of Opening balance of GFA	86.15
Revenue	8804.38
One-sixth of the Revenue	1467.40
Total Working Capital	1660.54
Rate of Interest (MCLR of one year 7% + 250 basis points 2.5% = 9.50%)	9.50%
Normative Interest on Working Capital	157.75
Actual interest on working capital as per audited accounts	314.75
Allowable normative Interest on WC	157.75
Add: Interest on PP cost as per KERC/ APTEL/ Court Orders	13.56
Total Allowable Interest	171.31

The Commission notes that, HESCOM has availed the working capital beyond the allowable amount as per the above table and incurred higher interest thereon at higher rate of interest for FY22. Hence, the Commission directs HESCOM to avail the working capital at the reasonable rates in view of the prevailing interest rates being charged by the Banks/financial institutions, to minimise the interest burden on the consumers. The Commission further notes the financial position and the liquidity problem faced by HESCOM in settlement of power purchase payment necessitate to avail higher amount of working capital during FY22.

By considering all these facts, the Commission has computed the allowable normative working capital interest as per MYT norms for Rs.157.75 Crores for FY22.

The Commission also decides to allow the additional Interest on working capital of Rs.13.56 Crores incurred is availing the additional working capital for payment of Rs.142.76 Crores of power purchase dues as per Orders of the Hon'ble ATE for FY22. Thus, the total allowable interest on working capital is Rs.171.31 Crores for FY22.

Thus, the Commission decides to allow the total Interest on working capital of Rs.171.31 Crores for FY22.

4.2.10 Interest on Consumer Deposits:

HESCOM's Submission:

HESCOM, in its application, has claimed an amount of Rs.40.50 Crores towards payment of interest on consumers' security deposits, as per the audited accounts, as against Rs.40.84 Crores, approved by the Commission for FY22.

Commission's Analysis and Decisions:

The opening and closing balance of consumer security deposits amount as per the HESCOM's audited account for FY22 is Rs.924.70 Crores and Rs.1012.97 Crores, respectively. Accordingly, based on the amount of consumer security deposits, the interest on consumer security deposits of Rs.40.50 Crores has been claimed by HESCOM for FY22. 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, 2021 was 4.25%. Whereas, HESCOM the weighted average rate of interest allowed by HESCOM works out to 4.18%. Thus, considering the average deposits held during FY22, the interest on consumer security deposit amount incurred, falls within the prescribed rates.

Thus, the Commission decides to allow an amount of Rs.40.50 Crores towards interest on consumer security deposits for FY22.

4.2.11 Interest on belated payments:

HESCOM, in its filing has claimed Rs.6.61 Crores towards interest on belated payments of power purchase cost / Late Payment Surcharge (LPS) to the generators as per orders of the Hon'ble APTEL / KERC in FY22.

Commission's analysis and decisions:

The Commission in its preliminary observations, had directed HESCOM to furnish details of cases along with OP no. and date of order, In support of LPS of Rs.6.61

Crores claimed towards interest on belated payment of power purchase bills / Late Payment Surcharge as per the Orders of Hon'ble APTEL / KERC for FY22.

HESCOM in reply to the preliminary observation has submitted the details sought by the Commission.

The Commission notes that, as per the audited accounts, the HESCOM has paid Rs.6.61 Crores interest on belated payment of power purchase cost and towards LPS to the generators as per the Orders of the Hon'ble APTEL / KERC in FY22. **Since the interest on belated payment of power purchase dues and LPS has been paid in compliance of the Orders of the Hon'ble APTEL / KERC, the Commission decides to allow an amount of Rs. 6.61 Crores for FY22.**

4.2.12 Other Interest and Finance charges:

HESCOM, in its filing has claimed Rs.30.39 Crores towards other interest and finance charges for FY22.

Commission's Analysis and Decisions:

The Commission notes that, as per audited accounts, HESCOM has incurred Rs.30.39 Crores towards other interest and finance charges for FY22.

Thus, the Commission decides to allow an amount of Rs.30.39 Crores, as other interest and finance charges for FY22.

4.2.13 Capitalisation of Interest and Other Expenses:

HESCOM in its filing as per the audited accounts has claimed Rs.31.52 Crores towards capitalised interest on capital loan for FY22.

The Commission notes that, as per the audited accounts of FY22, HESCOM has accounted Rs.31.52 Crores towards interest and finance charges capitalised for FY22.

Thus, the Commission decides to consider the total capitalised interest and finance charges of Rs.31.52 Crores for FY22.

The total allowable interest and finance charges for FY22 are as follows:

TABLE – 4.17

Total Allowable Interest and Finance Charges

Amount in Rs. Crores		
Sl. No.	Particulars	FY22
1	Interest on capital Loans	276.31
2	Interest on working capital	171.31
3	Interest on belated payment on PP Cost/LPS as per KERC/ APTEL/CERC Orders	6.61
5	Interest on consumer deposits	40.50
6	Other interest and finance charges	30.39
7	Less: Interest and finance charges capitalised	-31.52
8	Allowable Total interest and finance charges	493.59

4.2.14 Other Debits:**HESCOM's Submission:**

HESCOM, in its application, has claimed a net amount of Rs.56.02 Crores towards other Debits for FY22 by including Rs.9.12 Crores of Bad and Doubtful Debts Written-off/ provided for.

Commission's Analysis and Decisions:

The Commission notes that as per the audited accounts, HESCOM has accounted Rs.56.02 Crores as other debit for FY22, which also include an amount of Rs.9.12 Crores towards provision for bad and doubtful debts for FY22. The Commission has not been allowing any provision for bad and doubtful debts. **Thus, the Commission, by excluding the provisions for bad and doubtful debts amounting to Rs.9.12 Crores, decides to allow Rs.46.90 Crores towards other debits for FY22.**

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

HESCOM in its application has claimed Rs.61.01 Crores towards Net Prior Period credit for FY22.

Commission's Analysis and Decisions:

The Commission in its preliminary observations, has observed that under net prior period credits (charges), HESCOM has claimed Rs.41.93 Crores as "Other expenditure relating to prior periods". Accordingly, HESCOM was directed to submit the breakup for this item of expense for FY22.

The Commission, notes the details submitted by HESCOM in its reply to the preliminary observations in the matter.

The Commission notes that, as per the audited accounts, HESCOM has earned prior period income of Rs.125.95 Crores and has incurred prior period expenses of Rs.64.95 Crores, resulting in net prior period income of Rs.61.01 Crores for FY22. The prior period income earned by HESCOM comprises of excess provision for depreciation, interest and finance charges, excess provision of interest on consumer security deposit in prior periods and other income relating to prior period. The Prior period expenses of Rs.64.945 Crores includes short / under provision in the previous year for employee costs, power purchase cost, depreciation, interest and finance charges and other expenses relating to prior periods. Thus, the net prior period Income works out to Rs.61.01 Crores.

Thus, the Commission decides to allow the net prior period income (credit) of Rs.61.01 Crores for FY22.

4.2.16 Return on Equity:

HESCOM's Submission:

HESCOM in its Petition, has not claimed any Return on Equity due to negative net-worth for FY22. HESCOM, in its application has indicated the negative equity as follows:

TABLE – 4.18
Return on Equity – HESCOM's Submission

Amount in Rs. Crores)

Particulars	FY22
Opening Balance: Paid-up share capital	1554.24
Opening Balance : Share Deposit	481.59
Opening Balance: Accumulated deficit	(5128.24)
Total Equity at the beginning of the years	(3092.41)

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 FY22 as per actual data as per the audited accounts are indicated as follows:

TABLE – 4.19
Status of Debt Equity Ratio for FY22

Amount in Rs. Crores

	GFA	Debt (Actuals)	Equity (Net- worth)	Normative Debt @ 70% of GFA	Normative Equity @ 30% of GFA	Percentage of actual debt on GFA	Percentage of actual equity on GFA
	(Actuals)		(Actuals)				
Opening Balance	8615.50	2521.67	-3126.41	6030.85	2584.65	29.27%	-36.29%
Closing Balance	11721.74	2847.85	-4398.52	8205.22	3516.52	24.30%	-37.52%

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 opening and closing balances of GFA for FY22. The equity on GFA is showing a negative percentage as the Net Equity is negative.

ii. Allowable RoE:

The Commission, in accordance with the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments thereto, allows 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 FY22 is determined as follows:

TABLE – 4.20
Allowable RoE for FY22

Amount in Rs.Crores

Particulars	FY22
OB: Paid-up share capital	1554.2378
OB: Share Deposit	481.59
OB: Accumulated Deficit	-5128.24
Less: Recapitalised Security Deposit	-34.00
OB: Net Equity	-3126.41

Further, as per the audited accounts and as reported by the HESCOM, an additional equity of Rs.21.52 Crores has been received during the year from the Government of Karnataka in various Government Orders. However, even after considering the additional equity infused by the GoK, the total equity remains

negative to the tune of Rs.3104.89 Crores for FY22 and hence, the Commission is unable to allow any Return on Equity to HESCOM, for FY22.

The Commission decides to include this amount of Rs.25.19 Crores under other income of HESCOM for FY22. **Since the net worth of HESCOM is negative balance of Rs.3126.41 Crores for FY22, the Commission decides not to allow any amount towards Return on Equity for FY22.**

4.2.17 Other Income:

HESCOM's Submission:

HESCOM in its Petition, has claimed Rs.302.36 Crores as against Rs.290.07 Crores approved by the Commission towards Other Income for FY22.

Commission's Analysis and Decisions:

The Commission notes that as per the audited accounts, the other income of Rs.302.3629 Crores earned by HESCOM mainly includes Rs.2.49 Crores on account of rebate from generators. To encourage and bring in financial discipline in timely payment of monthly power purchase bills, the Commission, has decided to allow 10.00% of the total incentive of Rs.2.49 Crores received for prompt payment of power purchase bills, amounting to Rs.0.249 Crores, to be retained by HESCOM for FY22. The Commission, while approving the power purchase cost and quantum of HESCOM for FY22, has not deducted Rs.183.87 Crores on the sale of 340 MU at IF points to Hukeri RECS from the total purchase cost and quantum of HESCOM. The Commission has allowed the total power purchase cost and quantum in the approved APR of HESCOM for FY22. The amount of Rs.183.87 Crores received on the sale of power to HRECS as per audited accounts has been booked under other head of account income by HESCOM for FY22. The Commission in computing the power purchase cost of HRECS for the supply of power by HESCOM has arrived the total power purchase payable by HRECS for the supply of 340 MU is Rs.209.06 Crores for FY22 and thus, the difference in power purchase cost is Rs.25.19 Crores for FY22. Thus, after allowing to retain 10% on the rebate earned from the early payment of Power Purchase bills and adding Rs.25.19 Crores towards the difference in power purchase cost on the (be collected from HRECS) of 340 MU energy supplied to

Hukeri RECS and also by considering the other items of other income earned by HESCOM as per audited accounts, the allowable other income for FY22 is as under:

TABLE - 4.21
Approved Other Income for FY22

Amount in Rs.Crores

Particulars	FY22
Other Income as per Audited Accounts for FY22	302.363
Add: Trued up power purchase cost to HRECS and AQUES	25.193
Less: Incentive/Rebate @ 10% to be retained by HESCOM	0.249
Allowable Total other Income	327.31

Thus, the Commission decides to allow an amount of Rs.327.31 Crores as other income for FY22.

4.2.18 Fund towards Consumer Relations / Consumer Education:

The Commission had allowed an amount of Rs.0.50 Crore per year towards consumer relations / consumer education. HESCOM in its filing as per the audited accounts has claimed an amount of Rs.0.41 Crore towards Consumer Relations / Consumer Education for FY22.

Commission's Analysis and Decisions:

The Commission notes that the actual expenditure incurred towards consumer relations / education as per audited accounts is Rs.0.41 Crores for FY22.

Thus, the Commission decides to allow Rs.0.41 Crores towards the consumer relation / education for FY22.

4.2.19 Carrying Cost on the Regulatory Assets for FY22:

The Commission has issued the Tariff Order 2020 dated 06.11.2020, with a delay of 7 months and made effective from 1st November, 2020 for the following reasons:

- i) Due to the various restrictions / measures initiated and enforced by Gol/ GoK during lockdown period on account of the Pandemic Covid-19 resulted in setback of all economic activities.
- ii) Pendency of Appeal No.97/2020 filed by KPTCL before the Hon'ble Tribunal against the Commission's Order dated 16.01.2020 and disposed of the said Appeal by the Hon'ble Tribunal vide Order dated 05.10.2020.
- iii) Applicability of the Code of Conduct due to the announcement of bye-election to Assembly Constituencies scheduled on 03.11.2020 by the Election Commission of India.

Due to the postponement of the issue of Tariff Orders, HESCOM is not able to recover the rejected additional revenue of Rs.493.95 Crores during FY21. Thus, the Commission decided to create the unrecovered portion of the revenue gap of seven months amounting to Rs.288.14 Crores for FY21 as Regulatory Assets to be recovered in tariff over the next two years FY22 and FY23. The Commission also decided to allow carrying cost at 10% per annum on the amount of Regulatory Asset to be determined at the time of Annual Performance Review for FY22 and FY23.

Accordingly, the Commission decides to allow Rs.28.81 Crores as Carrying Cost on the Regulatory Assets for FY22.

4.2.20 Revenue for FY22:

HESCOM, in its application, has considered Rs.4089.76 Crores as revenue from sale of power to other than IP sets and BJ/KJ installation and Revenue subsidies of Rs.4714.62 Crores towards IP Sets / BJ/KJ installation totaling to Rs.8804.38 Crores as against Rs.9519.61 Crores as approved by the Commission for FY22.

Commission's Views / Decision:

As per the audited accounts and statement of subsidy claims annexed thereon submitted for FY22, the Commission notes that HESCOM has earned total Revenue earned from other than IP Sets and BJ/KJ installation and Miscellaneous Charges is Rs.4157.97 Crores. Thus, considering the total subsidy

of Rs.4646.41 Crores of BJ/KJ and IP Set installations, the total revenue earned by HESCOM for FY22 is Rs.8804.38 Crores.

The break-up of the above amount is as under:

Amount in Rs.Crores	
Revenue from tariff and Miscellaneous Charges	4157.97
Subsidy from BJ/ KJ Installations	128.04
Subsidy from IP Sets	4518.37
Total	8804.38

Thus, the Commission has considered Rs.8804.38 Crores as total revenue earned by HESCOM from sale of power to various category of consumers, in approval of the revised ARR as per APR for FY22.

4.2.21 Tariff Subsidy for FY22:

HESCOM, in its Petition, has claimed an amount of Rs.4585.92 Crores and Rs.128.70 Crores, towards the sale of power to IP sets and BJ/KJ installations respectively for FY22. The Commission in its Tariff Order dated 09th June, 2021 has approved the tariff subsidy of Rs.4345.42 Crores and Rs.151.08 Crores, towards the sale of power to IP sets and BJ/KJ installations for FY22 respectively totaling to Rs.4496.50 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 10 HP & below.

Commission's Views / Decision:

The Commission notes that, as per the audited accounts and the statement of subsidy annexed to the audited accounts of HESCOM, Rs.4518.37 Crores, and Rs.128.04 Crores has been factored as tariff subsidy for IP Set and BJ/KJ installations respectively, for FY22. Thus, the Commission, while computing the revised ARR as per APR for FY22, has considered the total tariff subsidy of Rs.4646.41 Crores, towards sale of power to BJ/KJ and IP sets installations for FY22. Thus, there has been an increase in the tariff subsidy burden of Rs.149.91 Crores on the Government of Karnataka for FY22.

Accordingly, total tariff subsidy payable by GoK is Rs.4646.41 Crores towards sale of power to BJ/KJ and IP sets installations to HESCOM for FY22.

4.3 Abstract of Approved ARR for FY22:

As per the above item-wise decisions of the Commission, the consolidated statement of revised ARR for FY22 is as follows:

TABLE – 4.22
HESCOM's approved revised ARR for FY22 as per APR

Amount in Rs. Crores

Sl. No	Particulars	As approved on 09.06.2022	FY22	
			As Filed	As per APR
1	Energy at Gen Bus in MU (Including HRECS & AEQUS)	14532.65	14599.45	14599.44
	Transmission Losses in %	2.978%	2.977%	3.827%
2	Energy at Interface in MU (excluding HRECS)	13761.90	13700.80	13700.80
3	Distribution Losses in %	13.50%	13.50%	14.15%
	Sales in MU			
4	Sales to other categories	5453.76	4995.60	4995.60
5	Sales to BJ/KJ	188.87	162.92	162.92
6	Sales to IP	6261.41	6603.46	6603.46
	Total Sales	11904.04	11761.98	11761.98
	Revenue			
7	Revenue from tariff and Misc. Charges	5023.11	4089.76	4157.97
8	Tariff Subsidy for BJ/KJ	151.08	128.70	128.04
9	Tariff Subsidy for IP	4345.42	4585.92	4518.37
	Total Revenue	9519.61	8804.38	8804.38
	Expenditure			
10	Power Purchase Cost	7247.53	7814.49	7814.49
11	Transmission charges of KPTCL	790.92	792.26	792.26
12	SLDC Charges	6.39	2.25	2.25
	Total Power Purchase Cost	8044.84	8609.00	8609.00
13	Employee Cost	1379.23	984.98	1283.83
14	Repairs & Maintenance		132.83	
15	Admin & General Expenses		166.03	
	Total O&M Expenses	1379.23	1283.84	1283.83
16	Depreciation	285.66	304.91	304.91
	Interest & Finance charges			
17	Interest on Loans	342.65	276.31	276.31
18	Interest on Working capital	189.83	314.75	171.31
19	Interest on belated payment on PP Cost	0.00	6.61	6.61
20	Interest on consumer deposits	40.84	40.50	40.50

21	Other Interest & Finance charges	0.00	30.39	30.39
22	Less: interest capitalized	0.00	-31.52	-31.52
	Total Interest & Finance charges	573.32	637.04	493.59
23	Other Debits	0.00	56.02	46.90
24	Net Prior Period Debit/Credit	0.00	-61.01	-61.01
25	Extraordinary Items	0.00	0.00	0.00
26	Return on Equity	0.00	0.00	0.00
27	Provision for taxation	0.00	0.00	0.00
	Approved Regulatory assets as per T.O. dated 06.11.2020 for FY22 / carrying cost	144.07	0.00	28.81
28	Funds towards Consumer Relations/Consumer Education	0.50	0.41	0.41
29	Less: Other Income	-290.07	-302.36	-327.31
	ARR	10137.55	10527.86	10379.14
30	Surplus for FY20 carried forward	617.95	0.00	0.00
31	Disallowance for imprudent CAPEX	0.00	0.00	0.00
32	Penalty for exceeding the distribution loss target	0.00	0.00	-37.58
	Net ARR	9519.60	10527.86	10341.56
	Revenue Surplus / -Deficit	0.00	-1723.48	-1537.18
	Average Cost	8.00	8.95	8.79

4.3.1 Deficit in Revenue for FY22:

As against the approved ARR of Rs.9519.60 Crores, the Commission, after the Annual Performance Review of HESCOM, decides to allow the revised ARR of Rs.10341.56 Crores for FY22. Considering the revenue of Rs.8804.38 Crores, the deficit in revenue of Rs.1537.18 Crores is determined for the year FY22.

The Commission decides to carry forward the deficit **of Rs.1537.18 Crores** of FY22 to the proposed ARR for FY24 as discussed in the subsequent Chapter of this Order.