

CHAPTER - 4

ANNUAL PERFORMANCE REVIEW FOR FY21

4.0 BESCOM's Application for APR FY21

BESCOM has filed its application on 30th November, 2021, for approval of the Annual Performance Review (APR) of FY21, based on the Audited Accounts, along with the Annual Revenue Requirement for the Control Period FY23 - FY25 and Retail Supply Tariff for FY23.

The Commission in its letter dated 8th December, 2021, had communicated its preliminary observations to the application. BESCOM, vide its letter dated 20th December, 2021, has submitted its replies to the preliminary observations of the Commission.

The Commission in its Order dated 4th November, 2020, had approved BESCOM's net Annual Revenue Requirement (ARR) of Rs.24371.86 Crores for FY21. The net Annual Revenue Requirement (ARR) of the BESCOM under APR for FY21, based on the Audited Accounts, is discussed in this Chapter.

4.1 BESCOM's Submission:

BESCOM has submitted its proposals for Annual Performance Review and for revision of ARR for FY23, based on the Audited Accounts as follows:

TABLE – 4.1

APR for FY21 – BESCOM's Submission

(Amount in Rs. Crores)

Sl. No.	Particulars	As approved in Tariff Order dated 04.11.2020	As Filed
1	Energy at Generation Bus (MU)	34962.35	29963.43
2	Transmission Losses of KPTCL (%)	3.039%	4.59%
3	Energy at Interface Points with KPTCL (MU)	33899.84	28586.62
4	Distribution Losses (%)	11.65%	11.63%
	Sales in MU:		
5	Sales to other than IP & BJ/KJ in MU	22742.78	18170.96
6	Sales to BJ/KJ	170.94	181.77
7	Sales to IP Sets	7036.79	6910.20

Sl. No.	Particulars	As approved in Tariff Order dated 04.11.2020	As Filed
	Total Sales in MU	29950.51	25262.93
	Revenue in Rs. Crores		
8	Revenue from tariff and Misc. Charges	21277.26	16754.02
9	Revenue from Subsidy to BJ/KJ	139.15	133.93
10	Revenue from Subsidy to IP Sets	2955.45	2792.89
	Total Revenue	24371.86	19680.84
	Expenditure in Rs Crores:		
11	Power Purchase Cost	16343.68	15337.81
12	Transmission charges of KPTCL	2179.288	1970.43
13	SLDC Charges	11.923	12.83
	Power Purchase Cost including cost of transmission:	18534.89	17321.07
14	Employee Cost	2365.61	1699.35
15	Repairs & Maintenance		195.80
16	Admin, & General Expenses		416.01
	Total O&M Expenses		2311.18
17	Depreciation	606.35	821.14
	Interest & Finance charges:		
18	Interest on Loans	488.65	563.19
19	Interest on Working capital	464.38	395.43
20	Interest on belated payment on PP Bills	0.00	0.00
21	Interest on consumer deposits	235.69	179.67
22	Other Interest & Finance charges	12.00	35.81
23	Less: interest & other expenses capitalised	-130.37	-153.42
	Total Interest & Finance charges:	1070.35	1020.68
24	Other Debit/ Extraordinary Items	0.00	153.96
25	Net Prior Period Debit/Credit	0.00	0.00
26	Return on Equity with MAT	288.20	247.87
27	Provision for taxation	0.00	36.38
28	Funds towards Consumer Relations/Consumer Education	1.00	0.00
29	Exceptional Items	0.00	389.31
30	Other Income	-441.89	-435.44
	ARR	22424.52	21866.14
31	Add Deficit for FY19 carried forward	1947.34	0.00
	Net ARR	24371.86	21866.14
33	Deficit in Revenue for FY21	0.00	-2185.30

As per the APR application for FY21 filed by the BESCOM, it has reported a revenue deficit of Rs.2185.30 Crores for FY21, considering a Revenue from sale of power of Rs.19680.84 Crores and an ARR of Rs.21866.14 Crores.

4.2 BESCOM's Financial Performance as per Audited Accounts for FY21:

An overview of the financial performance of BESCOM for FY21 as per its Audited Accounts is given below:

TABLE – 4.2
Financial Performance of BESCOM for FY21

(Amount in Rs. Crores)		
Sl. No.	Particulars	FY21
	Receipts	
1	Revenue from Tariff and misc. charges	19680.84
2	Other income	435.44
	Total Revenue	20116.28
	Expenditure	
3	Power Purchase Cost	17321.20
4	Transmission charges of KPTCL	
5	SLDC Charges	
	Power Purchase Cost including cost of transmission	
6	Operating Expenses	183.58
7	Employee Benefit Expenses	1500.71
	Finance Cost	983.60
8	Depreciation	821.14
9	Other Expenses	546.08
10	Exceptional Items	389.31
11	Current Tax	36.38
12	Deferred Tax liability	83.79
	Total Expenditure	21865.79
	Net Movement of Regulatory Asset deferral account	-1957.74
14.	Profit	208.25

As per the Audited Accounts, BESCOM by considering Rs.1957.74 Crores towards Regulatory Assets deferral account has shown a profit of Rs.208.25 for FY21. The accumulated profits / losses reported by BESCOM in its audited accounts in the previous years and as on 31st March, 2021 are shown in the following Table:

TABLE – 4.3
BESCOM's Accumulated Profits / Losses

Particulars	Rs. Crores
Accumulated losses as at the end of FY20	-1.16
Profits/ -Loss earned in FY21	208.25
Accumulated as at the end of FY22	207.09

The accumulated profit, as seen from the above table, is Rs.207.09 Crores as at the end of FY21.

As per the provisions of the MYT Regulations, the Commission has taken up the Annual Performance Review of FY21, duly considering the actual revenue and expenditure as per the Audited Accounts vis-à-vis the revenue/expenditure approved by the Commission, in its Tariff Order dated 4th November, 2020. The item-wise review of expenditure and the decisions of the Commission thereon are discussed in the following paragraphs:

4.2.1 Sales for FY21:

A. Sales -other than IP Sets:

1. Annual Performance Review for FY21

The Commission, in its Tariff Order, 2020, dated 04.11.2020, had approved total sales to various consumer categories for FY21 at 29950.51 MU, as against the BESCOM proposal of 29938.62 MU. The actual sales of BESCOM, as per the current APR filing [D-2 FORMAT] is 25262.93 MU, indicating a shortfall in the sales to the extent of 4687.58 MU as compared with the approved sales.

The category-wise sales approved by the Commission and the actuals for FY21 are indicated in the table below:

TABLE – 4.4
Sales for FY21 as per APR filing

Category 1	Actual Sales –MU 2	Approved Sales-MU 3	Difference – MU 4=2-3
LT1 BJ/KJ <=40 units/month	181.77	170.94	10.83
LT1 BJ/KJ >40 nits/month	71.28	46.93	24.35
LT-2a Domestic Lighting	7160.88	7815.71	-654.83
LT-2b Pvt. Edcl. Instnns.	32.16	59.71	-27.55
LT-3 LT Commercial	1669.67	2426.36	-756.69
LT-4 (a) IP sets up to 10 HP	6910.20	7036.79	-126.59
LT-4 (b) IP sets Above 10 HP	1.73	1.47	0.26
LT-4 (c) Pvt. Nurseries, coffee & Tea Plantations	5.46	5.56	-0.10
LT-5 LT Industries	1038.44	1297.11	-258.67
LT-6 WS Water Supply	1238.30	1848.63	-610.33
LT-6 SL Street Lights	491.96	583.55	-91.59
LT-6 E. Vehicles charging	0.03	0.00	0.03
LT-7 Temporary Installations	187.06	214.62	-27.56
HT-1 HT Water Supply	796.61	783.18	13.43
HT-2 (a) HT Industries	3505.08	4576.34	-1071.26
HT-2 (b) HT Commercial	1466.98	2448.41	-981.43
HT-2(c) Aided Edcl. Instnns. & Hospital	243.04	381.94	-138.90
HT-3(a) & (b) HT Irrigation	95.38	77.82	17.56
HT-4 HT Apartments	79.15	80.58	-1.43
HT-5 HT Temporary	87.75	94.86	-7.11
Grand total	25262.93	29950.51	-4687.58
Sales to categories other than BJ/KJ <= 40units/month & IP sets	18170.96	22742.78	-4571.82
Sales to BJ/KJ <= 40units/month & IP sets	7091.97	7207.73	-115.76

The Commission had noted that except in LT-1, LT 4(b), HT-1 and HT-3 categories, there is considerable reduction in sales in all other categories.

BESCOM, in its Tariff Petition has attributed the reduction in sales to the shutting down of commercial and industrial establishments on account of lockdown due to Covid-19, which is noted by the Commission.

The observations of the Commission on the sales for FY21, BESCOM replies and the Commission views thereon are discussed in the following paragraphs:

- a. LT-2a sales should have increased during Covid-19, as most of the people were working from home and there was increased usage of gadgets like

TV etc. BESCOM may analyze the reasons for drastic reduction in sales to LT-2a category during FY21.

BESCOM's Reply:

BESCOM has attributed the reduction in FY21 LT-2a sales to the following:

- i. Most of the IT professionals working in Bangalore had vacated their homes and had returned to their hometown due to lockdown.
 - ii. Due to non-availability of jobs, even the people from rural areas who were in Bangalore headed back to their villages.
- b. BESCOM shall confirm as to whether the category-wise sales indicated in D-2 Format, is excluding unbilled sales. If unbilled sales are included, category-wise break up of unbilled sales shall be furnished.

BESCOM's Reply:

BESCOM has stated that, there are no unbilled sales for FY-21 and unbilled sales are not depicted in D-2 format.

- c. The specific consumption of LT-2a category works out to 69.42 units/installation/month, whereas the same for BJ/KJ installations consuming more than 40 units/month is 130.96 units/installation/month, which appears to be higher. BESCOM shall furnish the reasons for such high specific consumption in BJ/KJ installations consuming more than 40 units/month.

BESCOM's Reply:

Furnishing month-wise details, BESCOM has submitted that, the month wise consumption per installation is in the range of 66.15 to 88.47 units.

Regarding BJ/KJ consumption the Commission notes that the number of installations consuming more than 40 units/month varies from month to month and is in the range of 1479 numbers to 302256 numbers for FY21, as submitted by BESCOM. However, in D-2 format, BESCOM has indicated the year end figure

and therefore, considering the overall consumption and year end installations, the specific consumption is higher. However, the weighted average consumption works out to 79.52 units/month/installation.

B. Sales to IP sets:

1. The specific consumption of IP sets for FY21 as approved by the Commission in the Tariff Order dated 04.11.2020 is 7,411 units / IP / Annum. As per the feeder-wise data of segregated agricultural feeders furnished by BESCOM, the specific consumption for FY21 works out to 7,331.42 units / IP / Annum. It is observed that there is a decrease in specific consumption by 79.58 (7,411 – 7,331.42) units / IP / annum i.e., the specific consumption has decreased by 1.07% compared to the approved value.
2. Total sales to IP sets approved by the Commission for FY21 is 7,036.79 MU against 9,64,463 number of IP installations. As reported by BESCOM in the tariff filing, the actual consumption is 6,910.20 MU against 9,51,183 number of IP set installations. This has indicated a drop in sales by 126.59 MU, i.e., the sales have decreased by 1.8% as compared with the approved sales
3. The Commission notes that as compared with the IP set sales for FY20, in FY21 there is a decrease in sales by 6.16 MU [6916.36 (FY20) – 6910.20 (FY21)] which corresponds to just 0.09% and a decrease in the specific consumption by 193.02 [7524.44 (FY20) – 7331.42 (FY21)] units per IP set per annum corresponding to 2.56% for FY21 as compared to FY20 actuals.
4. As reported by BESCOM, the number of IP set installations in service at the end of FY21 is 9,51,183 as against the approved numbers of 9,64,463 which accounts for a decrease by 13,280 installations i.e. 1.38% reduction.
5. The details of sales to IP sets for FY21, as approved by the Commission in its tariff order dated 04.11.2020 and as per actuals, as furnished by BESCOM, in its current Tariff Filing, are as indicated below:

IP Sets Sales for FY21 Approved Vs Actuals;

Particulars	As approved by the Commission	As submitted by BESCOM
Number of installations	9,64,463	9,51,183
Mid-year number of installations	9,49,463	9,42,546
Specific consumption in units / installation / annum	7,411	7,331.42
Sales in MU	7,036.79	6,910.20

6. The Commission, in its Tariff Order dated 30th March, 2016, had directed the BESCOM to compute the IP-set consumption on the basis of meter readings of agricultural feeders segregated under NJY, for the reason that the energy consumed by the IP-sets could be measured at 11 kV level at the substations after allowing for the losses prevailing in the distribution system, and to report the same in the format, prescribed by the Commission, every month regularly to the Commission. The Commission has noted that, the BESCOM has not been submitting the required data of IP-set consumption regularly. Instead, it has submitted the month-wise / feeder-wise / subdivision-wise details of IP set consumption for FY21 vide its letter No BESCOM/D(F)/DGM(RA)/ BC-26/F-2411/ 2021-22/1721-1722 dated 18.10.2021, and for FY22 up to September 2021, vide its letter No BESCOM/D(F)/DGM(RA)/BC-26/F-2411/1953 dated 30.11.2021.
7. While assessing the IP consumption from the data furnished by BESCOM, it was observed that, BESCOM has considered 10% distribution loss for the months of April 2020 to October 2020 and 11.65% for the months of November 2020 to March 2021, prevailing in 11kV lines, distribution transformers and LT systems for FY21. In its replies to the preliminary observations, BESCOM has submitted that, it had considered the losses of 10% as per the prudent practice for assessment of sales to IP sets for the months of April 2020 to October 2020 and as per the direction of the Commission in the Tariff Order dated 04.11.2020, BESCOM has considered the actual loss for the year of assessment as approved by the Commission in the Tariff Order.

8. The Commission, in its preliminary observations had directed BESCOM to furnish the data of GPS as on 31.03.2020 and 31.03.2021 by reconciling survey data with the number of installations in the DCB. In its reply, BESCOM made submissions that the GPS survey is completed to an extent of 94.39% as at the end of FY20 and has completed to an extent of 97.47% as at the end of FY21.
9. As per the GPS survey data furnished by BESCOM, the Commission notes with displeasure that, in spite of the instructions having been given in the previous Tariff Orders, BESCOM has not taken any stringent action to complete the survey work. Looking into the facts reported by BESCOM, the progress in GPS survey of IP installations is not satisfactory during FY21 and BESCOM is yet to submit the report giving details of the actual number of IP installations with the break-up such as IP sets existing in the field, working IP sets, permanently disconnected IP sets for both the authorized and unauthorized categories, action taken to regularize the unauthorized IP sets etc., and to reconcile the numbers the data of the GPS survey with the DCB figures. **Hence, the Commission hereby gives a final chance and directs BESCOM to complete the survey at the earliest and submit the details without ambiguity in data of total number of IP sets existing, defunct / dried up etc., within 3 months from the date of this Order.**
10. Based on the above discussions and considering the feeder-wise, month-wise, subdivision-wise data submitted by BESCOM on 18.10.2021, by considering the initial and final readings with appropriate multiplying constants of the energy meters, distribution losses in the prescribed format and on a detailed verification of the data, it is noted that the BESCOM has substantiated the overall sales to an extent of 6,910.20 MU for FY21, as submitted in its Tariff application. Therefore, the Commission hereby considers the IP set consumption of 6,910.20 MU for FY21.

Hence, for the purpose of APR for FY21, the Commission decides to allow the consumption of 6,910.20 MU as claimed by the BESCOM in its tariff filing for FY21 with the following details:

Particulars	Approved sales of IP sets for FY20
Number of installations	9,51,183
Mid-year number of installations	9,42,546
Specific consumption in units / installation / annum	7,331.42
Sales in MU	6,910.20

The Commission, after taking note of the replies furnished by BESCOM 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 FY21, as indicated in the following Table:

TABLE – 4.5
Approved Sales as per APR for FY21

Category	Sales approved as per APR–MU
LT1 BJ/KJ <=40 units/month	181.77
LT1 BJ/KJ >40 nits/month	71.28
LT-2a Domestic Lighting	7160.88
LT-2b Pvt. Edcl. Instns.	32.16
LT-3 LT Commercial	1669.67
LT-4 (a) IP sets up to 10 HP	6910.20
LT-4 (b) IP sets Above 10 HP	1.73
LT-4 (c) Pvt. Nurseries, coffee & Tea Plantations	5.46
LT-5 LT Industries	1038.44
LT-6 WS Water Supply	1238.30
LT-6 SL Street Lights	491.96
LT-6 E. Vehicles charging	0.03
LT-7 Temporary Installations	187.06
HT-1 HT Water Supply	796.61
HT-2 (a) HT Industries*	3505.08
HT-2 (b) HT Commercial	1466.98
HT-2(c) Aided Edcl. Instns. & Hospital	243.04
HT-3(a) & (b) HT Irrigation	95.38
HT-4 HT Apartments	79.15
HT-5 HT Temporary	87.75
Grand total	25262.93
Sales to categories other than BJ/KJ <= 40 units/month & IP sets	18170.96
Sales to BJ/KJ <= 40 units/month & IP sets	7091.97

* Includes auxiliary / SRTPV consumption of 28.72 MU

4.2.2 Distribution Losses for FY21:

The BESCOM, in the tariff application as per Format-A1 and as per Annexure to the audited accounts, has reported the distribution losses of 11.63% for FY 21. However, the BESCOM while furnishing the month-wise Distribution losses details for FY 21 and also as per audited accounts, has reported the distribution losses of 11.73% by excluding the auxiliary consumption and SRTPV energy of 28.72 MU. The computation of distribution losses for FY21 as submitted by BESCOM is as under:

Distribution loss of 11.63%.

Particulars	Actuals
Sales in MU	25262.93
Percentage distribution losses in %	11.63%
Distribution losses in MU	3323.69
Energy at interface point in MU	28586.62
Percentage transmission losses in%	4.59%
Total Energy requirement in MU	29963.43

Distribution loss of 11.73%.

Year	Total Input Energy to BESCOM in MU	Metered Sales in MU	Unmetered Sales in MU	Total Sales in MU	Energy Loss in MU	% Distribution Loss
FY-21	28586.62	18324.01	6910.20	25234.21	3352.41	11.73%

Commission Analysis and Decision:

The Commission in its tariff Order 2020 has approved the distribution losses for FY21 as under:

Figures in Percentage

Particulars	FY21
Upper limit	11.90
Average	11.65
Lower limit	11.40

The Commission in its tariff Order 2021 has revised and approved the distribution losses for FY21 as under:

Figures in Percentage

Particulars	FY21
Upper limit	11.75
Average	11.50
Lower limit	11.25

From the above Table and based on the BESCOM filing, it is noticed that, in the audited accounts, the sale of energy for auxiliary consumption of KPTCL stations and Solar Roof Top energy has been excluded for computation of Distribution Losses for FY21.

The Commission notes that, in OP No. 83/2016, the Commission had made it clear that the power utilized by KPTCL Sub-stations is being supplied by the ESCOMs through a separate/local feeder/ transformer. The energy supplied from the distribution network of the ESCOMs for the consumption of the KPTCL sub-station has to be accounted as sales and charged in accordance with the provisions of the KERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2006 as amendment from time to time. As per Clause 3.05 of the Conditions of Supply of Electricity by Distribution Licensees in the State of Karnataka, the power supplied by the ESCOMs to the KPTCL's Substations for auxiliary consumption purposes, the Commission decides to fix a single part tariff rate at the state Average Power Purchase Cost, as approved by the Commission, in the Tariff Orders issued from time to time. Hence, the auxiliary consumption of KPTCL substation has to be considered as sale of energy and shall be included in total energy sales in computation of Distribution losses.

The purchase of energy from the SRTPV (Net metering / Gross metering) is distributed energy to the BESCOM network and utilized by the other consumers is a sale of energy. Hence, the energy purchased from the solar roof top plants and consumed by the consumers has to be added as a sale of energy while computing the distribution losses of the Company. Accordingly, the actual distribution losses is 11.63% for FY21.

The Commission notes the performance of BESCOM in achieving the Distribution Losses from FY13 onwards, as detailed below:

Particulars	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21
Approved Distribution losses in %	14.00	13.80	13.60	13.40	13.25	12.50	12.25	12.25	11.65 as per Tariff Order 2020 11.50 revised in T.O. 2021 issued on 29.06.2021
Actual Distribution losses in %	14.20	13.89	14.78	13.51	13.19	13.17	12.54	11.99	11.63

In the light of the above, based on the achievement made by the BESCOM 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 at 11.63% for FY21.

The actual approved distribution losses of 11.63% achieved by BESCOM for FY21 is well within the approved upper & lower range of 11.90% & 11.405% and the revised range of 11.75% and 11.25% respectively, Therefore, BESCOM is not entitled for any incentive/penalty for achieving the distribution losses for FY21.

4.2.3 Power Purchase for FY21:

a. BESCOM's Submission:

The Commission, in its Tariff Order dated 4th November 2020, had approved power purchase quantum of 34,962.35 MU for BESCOM at a cost of Rs.18,534.89 Crores, indicating source-wise quantum of power purchase and cost thereon, for FY21. BESCOM, in its application has submitted the details of actual power purchase for FY21 vis-à-vis the approved figures, for the purpose of Annual Performance Review, as under:

TABLE - 4.6
Power Purchase for FY21 - Approved and Actuals

Source of Generation	Approved for 2020-21			Actuals as per filing for 2020-21			Difference			% increase (+)/decrease (-) over approved figures	
	Energy in MU	Amount in Cr	Avg cost in Rs/kWh	Energy in MU	Amount in Cr	Avg cost in Rs/kWh	Energy in MU	Amount in Cr	Avg cost in Rs/kWh	Energy	Amount
KPCL Hydel Stations	4296.83	326.65	0.76	4494.16	381.57	0.85	197.33	54.92	0.09	4.59	16.81
KPCL-Thermal Stations	8279.05	5229.36	6.32	5245.57	3588.32	6.84	-3033.48	-1641.04	0.52	-36.64	-31.38
KPCL-Wind	10.08	4.04	4.01	7.13	2.79	3.91	-2.95	-1.25	-0.10	-29.27	-30.94
CGS	11605.54	5233.51	4.51	11969.34	5301.73	4.43	363.80	68.22	-0.08	3.13	1.30
Major IPPs	1800.00	1224.00	6.80	1078.23	921.41	8.55	-721.77	-302.59	1.75	-40.10	-24.72
Minor IPPs(RE Projects)	8879.43	3542.60	3.99	9230.21	3935.45	4.26	350.79	392.85	0.27	3.95	11.09
Other State Hydro Projects	91.42	30.72	3.36	113.25	32.02	2.83	21.83	1.30	-0.53	23.88	4.23
Transmission Charges (KPTCL/PGCIL)	0.00	2930.77		0.00	3406.68			475.91			16.24
SLDC Charges	0.00	11.92		0.00	12.83			0.91			7.63
POSO & PCKL Charges	0.00	1.32		0.00	6.89			5.57			421.97
ENERGY Balancing	0.00	0.00		-1275.57	-591.32	4.64	-1275.57	-591.32	4.64		
Inter ESCOM Energy Charges	0.00	0.00		20.58	8.66	4.21	20.58	8.66	4.21		
Open Access/ UI	0.00	0.00		-144.31	-32.84	2.28	-144.31	-32.84	2.28		
Prior Period	0.00	0.00		0.00	347.01			347.01			
IEX	0.00	0.00		-775.16	-238.19	3.07	-775.16	-238.19	3.07		
Total	34962.35	18534.89	5.30	29963.43	17083.01	5.70	-4998.91	1451.88	0.40	-14.30	-7.83

b. Commission's analysis and decisions:

1. Approved and Actual quantum & Cost of energy for FY21:

The actual power purchase quantum for FY21, as per annual accounts submitted by BESCOM is 29,963.43 MU, purchased at a cost of Rs.17,083.01 Crores, after considering the sale of power of 775.16 MU and Rs.238.19 Crores being the revenue earned thereon which is accounted under other income head of accounts as against the approved quantum of 34,962.35 MU at a cost of Rs.18,534.89 Crores. This indicates that there is a decrease in the quantum of power purchased to an extent of 4,998.91MU and decrease in the power purchase cost by Rs.1,451.88 Crores.

The decrease in quantum and cost of power purchase is to the tune of 14.30% and 7.83% respectively as compared with the approved figures.

On the decrease of power by 4,998.91 MU BESCOM has stated that, due to decrease in sales to revenue yielding categories on account of prevailing Covid 19 situation during the year, there is decrease in quantum of power purchase.

2. Merit Order Despatch:

On the deviation from the merit order scheduling, BESCOM has submitted that, SLDC is scheduling the power of thermal stations based on variable cost of thermal stations. The thermal stations having lower variable cost are dispatched first. When the demand is capable to be met from hydel, RE and thermal stations having low variable cost, the thermal stations having higher variable cost like NTPC's Kudgi, Vallur, Simhadri, NLC's Expansion II, NTPL, UPCL are backed down or kept under reserve shut down. When the thermal plant declares day ahead availability and during real time operation, if the unit goes out of order due to technical problems, then there will be deviation in merit order despatch and next available unit is scheduled.

3. Purchase of Energy from RE Sources:

As regards the reasons for variation in renewable energy consumption against the approved consumption, BESCOM has submitted that the Solar projects having capacity of 525 MW & 60 MW are commissioned during 2019-20 and 2020-21 respectively. Due to addition of these capacities, there is an increase of 90.21 MU in generation of Renewable Energy, other than energy from Co-Gen. sources. The capacity agreed under the medium term PPAs from Co-Gen. plants is 291 MW and the expected energy thereon at a PLF of 60% is 1529.50 MU. Against this, the actual energy supplied by Co-Gen plants is 850.66 MU. The Co-gen plants are having must run status and the energy generated has to be off taken by ESCOMs. The energy of 593.04 MU approved by the Commission is at a PLF of 23.27%. As such there is increase in Co-Gen energy as per actuals compared to approved quantum by the Commission. Further, RE Power generation mainly depends on the weather condition i.e. during high wind conditions or if high solar radiance occurs, high wind/solar generation takes place. As RE is having must run status the energy generated/injected as per agreed PPAs is to be off taken by BESCOM though the forecasting of RE generation is based on historical data by ESCOMs.

The Renewable Energy Management Centre (REMC) of SLDC is forecasting day ahead RE generation from Solar and Wind through an expert consultant. There is +25% variation in actual generation compared to day ahead forecasting.

The Commission takes note of the above facts submitted by BESCOM. The Commission further notes that, as per the Karnataka Electricity Grid Code, Co-generation Power Projects are excluded from 'must-run-status' and therefore the statement of BESCOM in this regard is incorrect. However, the Commission hereby directs BESCOM/REMC to take necessary steps to ensure that the Deviation in forecasting of power from Solar and Wind generation is restricted to within $\pm 15\%$ in accordance with KERC (Forecasting, Scheduling, Deviation Settlement and related matters for Wind and Solar Generation Sources) Regulations, 2015.

4. Sale of surplus energy:

The Commission had observed that BESCOM has sold surplus energy of 775.16 MU energy at Rs.3.07 per unit through IEX and had desired to know as to whether there was profit/loss. BESCOM has submitted that the surplus RE power beyond RPO targets are traded in IEX by PCKL based on the surplus quantum given by SLDC on day ahead basis and on real time basis. The surplus power is being traded in various segments of IEX as furnished below:

- a. Day Ahead Market (DAM)
- b. Term Ahead Market (TAM)
- c. Real Time Market (RTM)
- d. Day Ahead Contingency (DAC)
- e. Green Term Ahead Market (GTAM)

The amount realized in IEX is being shared with all the ESCOMs by PCKL as per the share of allocation of power approved by GOK from time to time. The energy traded in IEX for BESCOM's share is 775.16 MU and amount realized is Rs.238.19 Crore resulting in average realization rate of Rs.3.07 per unit. The realized amount of Rs.238.19 Crore has reduced the power purchase cost of BESCOM and reduced the burden of the consumer to some extent. Hence, it is neither to profit nor a loss.

In this regard, the Commission directs BESCOM/SLDC to make a critical analysis at each block on the energy sold and amount realized considering the merit order despatch, grid conditions and other relevant parameters, in order to know whether the amount realized from such sale results in profit or loss.

5. Increase in average cost of power supply:

On the Commission's observation that the average cost of thermal stations like BTPS Unit-1, NTPC Vallur, Kudgi and UPCL, Mega Solar Scheme, Land owned Solar Scheme is on a higher side, BESCOM has replied that the variable cost of thermal stations like BTPS Unit-1, NTPC Vallur, Kudgi and UPCL are on higher side and hence not qualified for dispatch fully under merit order dispatch. In monsoon months from June to December if there are rains, solar and wind energy generation is good, most of the thermal stations having higher variable cost are backed down or kept under reserve shut down, though they are available for generation. As per the agreed PPAs and CERC / KERC terms and conditions of tariff Regulations, if generator declares full availability and if the ESCOMs does not off take the power, fixed charges as agreed to, are payable. Due to this, the fixed charges have been paid to BTPS Unit 1, NTPC Vallur, Kudgi and UPCL even when there is no generation. Hence, the average cost tends to be on a higher side.

Further, in respect of Mega Solar Scheme, the solar plants are established during 2016-17, where in investment cost of solar plant were are on a higher side. The tariff agreed in the PPA during 2015-16, 2016-17 is in the range of Rs.6.50 to Rs.10.00 per unit. To meet the solar RPO targets, the solar power is procured at these higher rates. As such, the average cost of mega solar scheme is higher. In respect of land owned farmer's scheme, the tariff agreed as per the PPAs is Rs.8.40 per unit. Some of the solar plants commissioned on time the rate is Rs.8.40 per unit. Due to delay in Commissioning of some of the solar plants, the rates are reduced to Rs.6.51 per unit and Rs.4.36 per unit depending on the generic tariff approved by the Commission, at the time of Commissioning of the plant as per Article 12.2 of PPA. As such, the average cost of solar energy is on a higher side.

6. PGCIL Charges:

In response to the Commission's observation that, the PGCIL Charges have increased by around 91% and whether, BESCOM has taken any initiative to address this issue of abnormal increase in the PGCIL POC charges, BESCOM has submitted that, the transmission charges payable to PGCIL is being determined by CERC based on norms defined in CERC (terms and Conditions of generation and transmission tariff) Regulations for all transmission assets of PGCIL and CERC is conducting Truing up exercise based on Audited Accounts of PGCIL for each financial year. Further, though BESCOM files the actual POC charges in ARR as per CERC (Terms and Conditions of generation and Transmission Tariff) Regulations and CERC (sharing of Inter State Transmission Charges and Related matters) Regulations issued from time to time, this Commission had only approved POC charges by reducing the same by 47% to 49% as compared with the claims filed by BESCOM. As such, when the actual amounts paid are compared with the approved POC charges, it is more than 91%. **Further, as per CERC (sharing of Inter State Transmission Charges and related matters) Regulations 2020, the BESCOM's POC Chagres have been reduced to the extent of Rs.30 Crore per month.** Hence, the Commission is requested to allow the actual POC charges incurred by BESCOM while Truing up the ARR for FY21.

Taking note of the above submissions, the Commission directs BESCOM 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 make sure such amount arrived is prudent.

7. Source-wise Generation:

On an analysis of the source-wise approved and actual power purchases, 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 Central Generating Stations, Renewal energy sources of power and from energy supplied by the State Owned Hydel projects and other hydro projects. Whereas, there is

decrease in the supply from the State owned Thermal Power Plants and Major Thermal IPPs as indicated below:

Source of Generation	Approved Energy for 2020-21 in MU	Actual Energy for 2020-21 in MU	Excess(+)/ Shortfall (-) Energy in MU
KPCL Hydel Stations	4296.83	4494.16	197.33
KPCL-Thermal Stations	8279.05	5245.57	-3033.48
KPCL-Wind	10.08	7.13	-2.95
CGS	11605.54	11969.34	363.80
Major IPPs	1800.00	1078.23	-721.77
Minor IPPs(RE Projects)	8879.43	9230.21	350.79
Other State Hydro Projects	91.42	113.25	21.83

Source of Generation	Approved Amount for 2020-21 in Rs. Crores	Actual Amount for 2020-21 in Rs. Crores	Excess (+)/ Shortfall (-) Amount in Rs. Crores
KPCL Hydel Stations	326.65	381.57	54.92
KPCL-Thermal Stations	5229.36	3588.32	-1641.04
KPCL-Wind	4.04	2.79	-1.25
CGS	5233.51	5301.73	68.22
Major IPPs	1224.00	921.41	-302.59
Minor IPPs(RE Projects)	3542.60	3935.45	392.85
Other State Hydro Projects	30.72	32.02	1.30

The excess energy supplied from Renewable Energy Sources, State Owned Hydel projects and other hydro projects and reduction in the energy requirement has resulted in backing down of KPCL Thermal Power Stations and Major Thermal IPPs, but at the same time payment of fixed cost was made to the thermal station, though no energy was purchased from these thermal stations. Added to this, the PGCIL charges have increased by 91.12% over the previous year. This has resulted in increase in per unit cost from Rs.5.30 Per unit (Approved) to Rs.5.70 per unit, as per actuals.

8. Variation in the Variable Cost of Thermal Generating Stations:

It was noted from the D- statement and details of Variable Cost (Rs/kWh) submitted in the ascending order, in the compliance of the Commission's preliminary observations, that there is variation in variable cost (Rs/kWh) of thermal generating stations among ESCOMs as indicated below:

Variable Cost (Rs/kWh) as noted from information provided by ESCOMS in D1 Format and in respect of preliminary observation on statement showing the variable cost in the ascending order w.r.t. Merit Order Despatch						
Sl. No.	Source/ESCOM Name	BESCOM	MESCOM	CESC	HESCOM	GESCOM
A	KPCL Thermal					
1	RTPS -1 to 7	2.96	3.15	3.18	3.18	3.18
2	RTPS-VIII	3.41	3.55	3.58	3.58	3.58
3	BTPS Unit I	2.84	2.94	2.98	2.98	2.98
4	BTPS Unit II	2.73	2.82	2.90	2.90	2.90
5	BTPS Unit III	2.86	2.74	2.88	2.88	2.88
6	Yeramarus TPS	2.85	3.17	2.97	2.96	2.95
B	Central Projects					
1	N.T.P.C-Ramagundam, St-I & II	2.38	2.49	2.55	3.87	2.39
2	NTPC-Ramagundam, St-III	2.37	2.35	2.40	1.10	2.20
3	NTPC-Talcher, St-II	1.98	2.01	1.97	1.97	1.98
4	NTPC-Simhadri	3.11	3.08	3.12	3.18	3.30
5	NLC TPS2-Stage 1	2.68	2.75	2.75		3.42
6	NLC TPS2-Stage 2	2.84	2.72	2.75	3.17	2.00
7	NLC TPS-2-Expn 1 &2	2.68	2.68	2.61		2.67
8	NLC TPS1-Expn	2.45	3.46	3.73	3.96	3.48
9	Tuticorin (NTPL)1&2	3.07	2.95	3.10	Not Provided	3.00
10	Vallur TPS 1,2 &3	4.09	3.16	3.51	4.19	3.71
11	DVC Unit-1 & 2 Koderma	2.49	2.50		Not Provided	2.65
12	DVC Unit-7 & 8 Mejia TPS	2.76	2.77	2.61	Not Provided	2.77
13	Kudugi 1,2 &3	3.06	2.87	3.28	3.05	2.92
14	NNTPS	2.27	2.22	2.31	2.61	2.28
C	IPPs-Major-Thermal					
1	UPCL	3.48	3.07	3.53	3.54	3.37

Individually all the ESCOMs were requested to provide proper reasoning behind this variation in variable cost. The reasons provided by each of the ESCOMs are as below:

BESCOM: BESCOM has submitted that, in respect of variable charges of KPCL thermal stations, KPCL is claiming GCV on station weighted average basis i.e. GCV as fired basis. As per PPA, GCV is to be admitted "as received basis" at power stations. The same is pointed by AG Audit. As such 150 kCal/kg is added to the arrived GCV on received basis of KPCL Thermal Stations. KPCL is considering moisture correction factor only on quantity and not for cost. As per Coal Supply Agreements, the moisture correction factor is to be

considered for both quantity and cost. As such, moisture correction factor is considered both for cost and quantity. Due to these factors, variable charges of KPCL Thermal Stations billed by BESCOM is on lower side compared to variable cost billed by other ESCOMs.

Regarding variable charges of Central Generating Stations, BESCOM has submitted that, it includes compensation charges, incentives, SRLDC Charges, FERV and revisions of previous months and has enclosed the Statement showing the details of variable charges considered by BESCOM and the variable cost per unit of other ESCOMs if same charges are proportioned to their share allocation. According to it, the resulting variable cost (Rs/kWh) in respect of all the thermal power plants for all other ESCOMs are in line with BESCOM.

MESCOM: MESCOM has submitted that, the variable cost indicated in the D-1 statement inadvertently includes certain other costs also. MESCOM separates these inadvertent costs and arrives at exclusive variable costs. Such separated exclusive variable costs will be subject to scrutiny by applying the energy charges of each of the generating stations to the monthly scheduled energy, wherein, monthly energy charges are arrived at based on the parameters and formula as per PPA / CERC norms. It is further submitted that, such a scrutiny endorses the correctness of variable charges being admitted by MESCOM in the monthly bills of generating stations.

CESC: The CESC has submitted that, in respect of KPCL thermal power plants except Yeramarus TPS, KPCL is raising monthly invoices on the basis of PPA's and tariff orders issued by the Commission from time to time. The Variable cost in respect of RTPS stations 1 to 7, RTPS-8, BTPS-Unit 1 to 3 stations are worked out on the basis of Coal cost with moisture correction factor i.e. CESC is not deducting the cost related to excess moisture content of the coal received by KPCL in order to arrive at the weighted average cost of the coal in respect of thermal stations. Also, the year-end revision of the Power Purchase cost as furnished by KPCL on 23.08.2021, has been accounted by CESC.

Further as per the approval conveyed by Energy Dept., Govt. of Karnataka vide letter No. Energy/386/PSR/2019 dated 14.10.2020, joint verification of records and accounts of both KPCL and ESCOMs for the purpose of verification of bills and reconciliation of dues of KPCL is being carried out by M/s.Ramraj & Co., Chartered Accountants, Bengaluru, for the period from 2005-06 to current year. After the completion of this reconciliation work, issues relating to moisture content etc. will be resolved. It is further submitted that, in respect of Yeramaras TPS monthly invoices are raised on the basis of PPA and tariff filing.

In respect of Central Generating Stations and UPCL generating station, CESC has submitted that, the energy charges shown in the D-1 statement is inclusive of RLDC charges, Filing charges, Compensation charges, Cess and other Prior period claims received along with the invoices. It is further submitted that, while finalizing the energy and cost for the year 2020-21, the revisions pertaining to FY-21, received up to August-2021 have been included as per the observations of Statutory and AG auditors.

HESCOM: HESCOM has submitted that, Variable Charges of thermal stations includes Energy Charges Rate (ECR), Compensation Charges, SRLDC Charges, Incentive Claims, Foreign Exchange Rate Variation (FERV) charges. Hence, the rate per unit varies. Further, on not providing the variable cost in respect of Tuticorin and DVC units, HESCOM has replied that these units are not scheduling power to HESCOM since HESCOM has not opened valid letter of Credit(LC).

GESCOM: GESCOM has submitted that, in respect of KPCL thermal generating stations, the Variable Cost is taken into account as per KPCL Revised bill dated 23-08-21. It is further, submitted that, KPCL billing & reconciliation work has been assigned to M/s Ramraj & Co. Bengaluru.

In respect of other thermal generating stations, GECOM has submitted that, in Format D-1, the Variable Cost is taken into account including other charges of the bill which is not part of the Variable Cost. Due to consideration of other charges in Variable Cost the per unit variable cost varies from other ESCOMs.

After examining the response from ESCOMs, the Commission is of the considered view that due to lack of proper scrutiny by ESCOMs (other than BESCOM), the variable charges payable to the generating stations tend to vary among the ESCOMs, whereas they should be uniform to all the ESCOMs, except where some specific reasons.

In view of the above, in respect of variation in variable charges among ESCOMs, the Commission directs BESCOM to convey a coordination meeting involving all the ESCOMs within Two weeks from the issuance of the tariff order. In the meeting the ESCOMs has to discuss in detail the reasons for variation of variable charges for FY21 and has to arrive at the following:

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

Further, BESCOM shall 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.

In the circumstances explained above 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.17,083.01 Crores towards purchase of 29,963.43 MU for FY21.

4.2.4 RPO Compliance for FY21:

- i. BESCOM has furnished the details of compliance of the Solar and Non-Solar RPO for 2020-21 and has submitted that it has complied with both Solar & Non-Solar RPO.
- ii. The Commission's observation and replies furnished by BESCOM are as follows:

As per Table-3.19, the input energy is 29917.66 MU, whereas as per Table-3.14 it is 29963.43 MU. The solar energy purchased under PPA is 4498.84 MU & banked

energy is 152.10 MU as per Table-3.21 and it is 4499.15 MU & 15.52 MU respectively as per Table-3.14. Further, SRTPV energy of 106.86 MU indicated in table 3.14 is not accounted for RPO. Similarly, co-generation energy is 840.47 MU in table 3.20 and it is 850.66 MU in Table 3.14. Non-solar banked energy of 24.55 MU indicated in table 3.14 is not included for RPO. As such BESCOM was directed to reconcile the figures with accounts data for FY21.

BESCOM's Reply:

BESCOM has submitted that, the TBC, SLDC had reconciled the energy of all ESCOMs during energy balancing and has furnished the details of RPO compliance by each ESCOM on 25.10.2021 for FY 21. As per, finalized details of RPO compliance by SLDC the break up details of energy considered for RPO compliance by BESCOM is as below:

(Energy in MU)	
Total Energy	29963.43
Less KPCL Hydro	4494.16
Less Other Hydro	113.25
Less: Energy balancing hydro	251.46
Net of Hydro	25607.48

Further, for Non-Solar compliance, BESCOM has furnished the following data:

Non-Solar

Energy in Million Units	
Source	MU
Co-Generation	850.66
Biomass	91.59
Mini-Hydel	546.35
Wind Mill	2474.91
KPCL Wind	7.13
Shimsha	5.83
Mani	14.87
Banked energy	24.55
Total	4015.89

Also, for Solar compliance, BESCOM has furnished the following data:

Source	Million Units
PPA route including roof top and KPCL solar	4610.09
Bundled power	620.62
Banked energy	15.52
Total	5246.23

- a. For Non-solar RPO, the energy procured from Shimsha & Mani Hydro Station shall be furnished separately.

BESCOM in its reply has submitted the energy generated by Shimsha as 5.83 MU and Mani as 14.87 MU.

- b. For validating the RPO compliance and to work out APPC, BESCOM was directed to furnish the data as per the specified format, duly reconciling the data with audited accounts of FY21.

BESCOM's Reply:

BESCOM, in response, has furnished the following data:

TABLE – 4.7

Compliance of Non Solar RPO for FY21

Sl. No.	Particulars	Quantum in Mu	Cost Rs Crs
1	Total Power Purchase quantum from all sources excluding Hydro energy	25607.48	16669.29
2	Non solar Renewable energy purchased under PPA ROUTE AT Generic tariff including Non-solar RE Purchased from KPCL	3,991.34	1666.11
3	Non Solar Short term Purchase from RE sources excluding Sec 11 purchase	0	
4	Non Solar Short term Purchase from RE sources under Sec 11 purchase	0	
5	Non solar RE purchased at APPC	0	
6	Non solar RE pertaining to green energy sold to consumers under green tariff	0	
7	Non solar RE purchased from other ESCOMs	0	
8	Non solar RE sold to other ESCOMs	0	

9	Non solar RE purchased from any other source like banked energy purchased at 85% of generic tariff	24.55	7.56
10	Total non-solar RE Energy purchased (No 2+3+4+5+7+9)	4015.89	1673.67
	Non solar RE accounted for the purpose of RPO (No 10-5-6-8)	4015.89	1673.67
	Non solar RE complied in % (No 11/No 1)*100	15.68	

TABLE – 4.8**Compliance of Solar RPO for FY21**

Sl. No.	Particulars	Quantum in Mu	Cost Rs Crs
1	Total Power Purchase quantum from all sources excluding Hydro energy	25607.48	16669.29
2	Solar Renewable energy purchased under PPA ROUTE AT Generic tariff including solar RE Purchased from KPCL	4610.09	1760.80
3	Solar Short term Purchase from RE sources excluding Sec 11 purchase	0	
4	Solar Short term Purchase from RE sources under Sec 11 purchase	0	
5	Solar energy purchased at APPC	0	
6	Solar energy pertaining to green energy sold to consumers under green tariff	0	
7	Solar energy purchased from other ESCOMs		
8	solar energy sold to other ESCOMs		
9	Solar Energy purchased from NTPC or others as bundled power	620.62	1960.29
10	Solar Energy purchased from any other source like banked energy purchased at 85% of generic tariff	15.52	3.50
11	Total solar Energy purchased (No 2+3+4+5+7+9+10-11)	5246.23	3724.59
12	Solar energy accounted for the purpose of RPO (No 11-5-6-8)	5246.23	3724.59
13	Solar RPO complied in % (No 12/No 1)*100	20.49	

Commission Analysis & decision:

The Commission has noted the replies furnished by the BESCOM. The Commission has approved the source-wise power purchase quantum and cost for FY21 based on audited accounts, as discussed earlier. The Commission notes that the power procured from Shimsha is 5.83 MU and Mani Dam power house is 14.87

MU. Since, Shimsha and Mani Dam power is considered as Mini-Hydel source and accounted for RPO, the same is deducted out of KPCL hydro of 4494.16 MU. Thus, the input energy net of Hydro for the purpose of RPO considered by the Commission is as follows:

(Energy in MU)	
Total Energy	29963.43
Less KPCL Hydro	4494.16
Less Other Hydro	113.25
ADD: Energy balancing hydro	251.46
Add: Shimsha & Mani	20.70
Net of Hydro	25628.18

The details of Non-solar energy procured as per D-1 format/audited accounts, is as indicated below:

Energy in Million Units	
Source	MU
Co-Generation	850.65
Biomass	91.58
Mini-Hydel	546.35
Wind Mill	2474.91
KPCL Wind	7.13
Shimsha	5.83
Mani	14.87
Banked energy	24.55
*Less : Energy Sold under APPC/75% of Generic tariff	0.00
*Less: Energy Sold under Green tariff	0.00
*Less: sold to other States/ESCOMs	0.00
*Less: Sold in IEX/market	149.75
Total	3866.12

*As per additional information furnished by BESCOM

Regarding the Non-Solar RPO, considering the input energy (excluding procurement from hydro sources) of 25628.18 MU, the Non-solar RPO target at 12.00% works out to 3075.382 MU (3075382 MWh after rounding off). BESCOM has purchased 3866.12 MU (3866120 MWh) of Non-solar energy including purchase of 24.55 MU of banked energy. Thus, BESCOM has purchased 790.738 MU (790738 MWh) excess non-solar energy beyond the target specified. The Commission

holds that BESCOM has met its Non-Solar RPO target of 12% for FY21, in terms of the prevailing Regulations.

Regarding the Solar RPO, the details of solar energy purchased as per D-1 format/audited accounts, is as indicated below:

Energy in Million Units	
Source	MU
PPA route including roof top and KPCL solar	4605.74
Bundled power	620.62
Banked energy	15.52
*Less : Energy Sold under APPC/75% of Generic tariff	0.00
*Less: Energy Sold under Green tariff	0.00
*Less: sold to other States/ESCOMs	0.00
*Less: Sold in IEX/market	80.37
Total	5161.51

***As per additional information furnished by BESCOM**

Considering the input energy (excluding procurement from hydro sources) of 25628.18 MU, the Solar RPO target at 8.50% works out to 2178.395 MU (2178395 MWh after rounding off). BESCOM has purchased 5161.510 MU (5161510 MWh) of Solar energy including 15.52 MU of banked energy. Thus, BESCOM has purchased 2983.115 MU (2983115 MWh) excess solar energy beyond the target specified. Therefore, the Commission holds that BESCOM has met its Solar RPO target of 8.50% for FY21, in terms of the prevailing Regulations.

4.2.5 Operation and Maintenance Expenses:

BESCOM's Submission:

The BESCOM in its application has sought approval of O&M expenditure of Rs.2311.16 Crores as against the approved O&M expenses of Rs.2365.61 Crores for FY21. As per the audited accounts, the BESCOM has incurred O&M expenses of Rs.2311.16 Crores as detailed in the following Table:

TABLE – 4.9
BESCOM's O&M Expenses for FY21

Amount in Rs. Crores	
Employee Cost	1699.35
Repairs and Maintenance	195.80
Admin & General Expenses	416.01
O&M expenses	2311.16

BESCOM has submitted that in accordance with the Commission's Order dated 4th November, 2020, BESCOM has considered an indexation ratio of CPI: WPI at 80:20 based on the actual expenditure incurred in respect of Repairs and Maintenance, Employee Cost and A & G expenses ratios, as against the CPI and WPI ratio of 55:45 as followed by the CERC. Accordingly, BESCOM has worked out the weighted inflation rate at 6.96% and has arrived at the normative O&M expenditure after factoring in the compounded annual growth rate (CAGR) for number of consumers at 4.47%, computed based on the consumer growth as per actuals for the period FY18 to FY21, with the base year adjusted O&M expenses of Rs.2000.52 Crores for FY20. O&M expenses as projected by BESCOM for FY21 is as follows:

TABLE – 4.10
Normative O & M Expenses – BESCOM's submission

Particulars	FY21
3- year Consumer growth rate as per actual (CGI) (FY18 to FY21) in %	4.47
Weighted Inflation Index (WII) %	6.96
O&M Cost of FY20 as per APR (base year) in Rs. Crores (Adjusted).	2000.52
O&M Index= O&M (t-1)*(1+WII+CGI-X) in Rs. Crores.	2209.20

Further, the BESCOM has claimed additional O&M expenses of Rs.53.79 Crores, Rs.25.20 Crores and Rs.22.98 Crores incurred towards additional contributions of terminal benefits to the Pension and Gratuity Trust during FY19, FY20 and FY21 respectively. Thus, the BESCOM has claimed uncontrollable O&M expenditure of Rs.101.97 Crores over and above the normative O&M expenses of Rs.2209.20 Crores. The total O&M expenses claimed by the BESCOM for FY21 is Rs.2311.17 Crores.

Commission's analysis and decisions:

The Commission in its Tariff Order dated 4th November, 2020 had approved O&M expenses inclusive of contribution to the P&G Trust for FY21 as detailed below:

TABLE – 4.11
Approved O&M Expenses for FY21

Particulars	FY21
No. of installations	1,30,01, 326
Weighted Inflation Index	8.2604.%
CGI based on 3 Year CAGR	4.96%
Base year O&M expenses (as per actuals of FY19) in Rs. Crores.	1878.08
Normative O&M Index= O&M (t-1)*(1+WII+CGIX) Rs. in Crores	2365.61
Total Approved O&M Expenses for FY21– in Rs. Crores	2365.61

In accordance with the methodology adopted while approving APRs, the Commission proceeds with the determination of the normative O&M expenses based on the 12-year data of WPI and CPI and three year CAGR of consumers.

Considering the Wholesale Price Index (WPI) as per the data available from the Ministry of Commerce and Industries, Government of India (GoI) and Consumer Price Index (CPI) as per the data available from the Labour Bureau, Government of India (GoI), and adopting the methodology followed by the CERC, with CPI and WPI in a ratio of 80: 20 and as per the provisions of MYT Regulations, the allowable inflation for FY21 as shown in the following Table:

TABLE-4.12
Allowable Inflation for FY21

Year	WPI	CPI	Composite Series	Yt/Y1=Rt	Ln Rt	Year (t-1)	Product [(t-1)* (LnRt)]
2009	81.9	54.5	59.98				
2010	89.7	61.1	66.82	1.11	0.11	1	0.11
2011	98.2	66.5	72.84	1.21	0.19	2	0.39
2012	105.7	72.7	79.30	1.32	0.28	3	0.84
2013	111.1	80.6	86.70	1.45	0.37	4	1.47
2014	114.8	85.7	91.52	1.53	0.42	5	2.11
2015	110.3	90.8	94.70	1.58	0.46	6	2.74
2016	110.3	95.3	98.30	1.64	0.49	7	3.46

2017	114.1	97.6	100.90	1.68	0.52	8	4.16
2018	118.9	102.4	105.70	1.76	0.57	9	5.10
2019	121.2	110.2	112.40	1.87	0.63	10	6.28
2020	121.8	116.3	117.40	1.96	0.67	11	7.39
A= Sum of the product column							34.05
B= 6 Times of A							204.28
C= (n-1)*n*(2n-1) where n= No of years of data=12							3036.00
D=B/C							0.07
g(Exponential factor)= Exponential (D)-1							0.0696
e=Annual Escalation Rate (%)=g*100							6.9602%
As per CERC Notification No .Eco T I / 2021-CERC dated 23.04.2021 with weightage of 80% on CPI and 20% on WPI							

While determining the normative O & M expenses for FY21, the Commission has considered the following aspects:

- The normative O&M expenses for FY20, excluding contribution to Pension and Gratuity Trust.
- The three year compounded annual growth rate (CAGR) 4.47% of the number of installations considering the actual number of installations as per the audited accounts up to FY21.
- The weighted inflation index (WII) at 6.9602% as computed above.
- Efficiency factor at 1% as considered in the earlier control periods.

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

TABLE – 4.13
Normative O&M Expenses

Particulars	FY21
No. Of Installations	12821422
CGI based on 3 Year CAGR	4.47%
Inflation index	6.9602%
On Base Year O&M Cost of Rs.1515.81 Crores for FY19 excluding contribution to P & G Trust the normative O&M expenses for FY20 (Rs.in Crores)	1696.37
Normative O&M Index= O&M (t-1)*(1+WII+CGI-X) (Rs. In Crores)	1873.32

The Commission notes that, by considering the normative O&M expenses of Rs.1873.32 Crores and uncontrollable additional O&M cost of Rs.414.92 Crores

towards contribution to Pension and Gratuity Trust (Terminal Benefits), the total O&M expenses works-out to Rs.2288.24 Crores as detailed below:

TABLE – 4.14
Allowable O & M Expenses for FY21

Amount in Rs. Crores		
Sl. No.	Particulars	FY21
1	Normative O & M expenses	1873.32
2	Additional employee cost (uncontrollable O & M expenses) towards contribution to P & G Trust	414.92
	Allowable O & M expenses for FY21	2288.24

The O & M Expenses as per norms and the additional employee cost works out to Rs.2288.24 Crores.

The Commission, in its earlier Orders, has been consistently stressing the need to control the controllable O&M expenses and opines that allowing O&M expenses, beyond the actual amount of O&M expenses incurred and accounted in the audited accounts, will be a burden to the end consumers, if the same is passed on in the retail supply tariff, to be approved for FY23.

As per the audited accounts, BESCOM has incurred actual O & M expenses of Rs.2043.88 Crores for FY21. Hence, the allowable O & M expenses of Rs.2288.24 Crores for FY21 as computed above is more than the actual total O&M expenses incurred by BESCOM by Rs.244.36 Crores. The Commission notes that along with the APR revenue gap of Rs.2185.29 Crores for FY22, the proposed ARR of Rs.28027.81 Crores, and projected revenue gap of Rs.4609.57 Crores for FY23. This has resulted in the average tariff hike of Rs.1.69 per unit in retail supply tariff for FY23, which is going to be a huge burden on the end consumers. BESCOM has not properly exercised due diligence in controlling the O&M expenses during FY21. The Commission has been consistently stressing the need to control the O&M expenses and opines that allowing controllable O&M expenses beyond the actual amount incurred and accounted in the available accounts will be a burden to the end consumers in the tariff to be approved for FY23.

After examining the submission of BESCOM in details, the Commission decides to allow the actuals O&M charges of Rs. 2043.88 Crores as per audited incurred by BESCOM for FY21.

Thus, the Commission decides to limit the O&M expenses to the actuals and allow Rs.2043.88 Crore as the O&M expenses for FY21.

4.2.6 Depreciation:

BESCOM's Submission:

BESCOM in its application has claimed an amount of Rs.821.14 Crores as against Rs.606.35 Crores as approved by the Commission towards depreciation after deducting an amount of Rs.244.34 Crores being the depreciation amount on the assets created out of consumers' contribution / grant as per Indian Accounting Standards (AS) – 20 as detailed below:

TABLE – 4.15
Depreciation for FY21 – BESCOM's Submission

Particulars	Amount in Rs. Crores	
	FY21	
	Approved	Actual
Buildings	14.34	11.59
Civil Works	0.34	0.36
Other Civil works	0.15	0.18
Plant & Machinery	203.44	253.44
Line, Cable Network	635.27	763.03
Vehicles	2.18	1.93
Furniture	1.065	1.11
Office Equipment	0.96	1.21
Intangible assets/Released materials	2.48	32.61
Sub Total	860.23	1065.48
Depreciation Withdrawn	-253.88	-244.34
Total	606.35	821.14

The BESCOM has requested the Commission to allow the above depreciation amount for FY21.

Commission's analysis and decisions:

In accordance with the provisions of the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006, the allowable depreciation for FY21

has been determined by the Commission duly considering the value of assets as per the audited accounts as shown in the following Table:

TABLE – 4.16
Allowable Depreciation for FY21

Particulars	Amount in Rs. Crores	
	FY21	
	Closing Balance of Asset as on 31.03.2021	Depreciation Amount
Buildings	353.98	11.59
Civil works	7.83	0.36
Other Civil works	6.40	0.18
Plant & M/c	4315.74	253.44
Line, Cable Network	14988.77	763.03
Vehicles	38.64	1.93
Furniture	23.01	1.11
Office Equipment	23.75	1.21
Released assets reused & depreciation	79.95	3.70
Intangible Assets	210.29	28.91
Sub Total:	20048.36	1065.48
Less Depreciation on Assets created out of Consumer Contributions/ grants		244.34
Land and Rights	17.74	0.00
Total	20066.10	821.14

Considering the opening and closing balance of gross blocks of fixed assets for FY21 and the amount of depreciation as per audited annual accounts, the weighted average rate of depreciation works out to 5.63%.

As per the audited accounts for FY21, an amount of Rs.244.34 Crores towards depreciation on assets created out of consumer's contribution and grants on actual basis has been deducted while computing the allowable depreciation for FY21.

Accordingly, the Commission decides to allow the actual net depreciation of Rs.821.14 Crores for FY21.

4.2.7 Capital Expenditure for FY21:

1. Annual Performance Review for FY21:

The BESCOM, in its application for APR for FY21, has indicated a capital expenditure of **Rs.2226.18 Crores** as against the Commission approved capex

of Rs.**2450.83** Crores for the FY21. The BESCOM has furnished the breakup of category-wise expenditure of **Rs.2226.18 Crores** for FY21, is as shown under:

TABLE – 4.17
Break up of Capital expenditure for FY21

Amount in Rs. Crores			
Sl. No.	Particular of the works under Major/ Minor heads	Approved by KERC for FY21	Expenditure incurred
1	Ganga kalyana Works	80.00	78.34
2	Service connection works	66.85	86.43
3	Water Works	23.67	0.00
4	11 KV Evacuation line	185.00	68.31
5	Providing Additional DTC's /Enhancement of DTCs	77.00	29.10
6	Strengthening of HT network including OH/UG cable, Covered conductor and AB cable	258.75	79.08
7	Strengthening of LT network including OH/UG cable, Covered conductor and AB cable	197.00	67.90
8	SDP Progress	30.00	0.00
9	Local planning, Safety works, Emergency / Calamity Works	93.80	50.43
A	E&I Total	1012.07	459.58
10	Smart grid & EV	45.96	0.32
11	NJY	25.00	40.37
12	DDUGJY	90.75	45.02
13	IPDS	151.25	57.46
14	Civil	100.00	52.67
15	IT initiative	77.00	5.40
16	Meters and Commercial (with relevant accessories)	250.00	17.40
17	DSM	100.00	0.00
18	UNIP	80.00	272.36
19	HVDS	61.00	96.78
20	Erection of distribution transformer centres using 11 mts Spun poles	0.00	-0.01
21	Model Sub division	290.22	127.79
22	Technology Innovative Centre	27.58	-4.57
23	Corporate reserve fund	50.00	74.06
24	Auto reclosure and sectionalizer	0.00	22.55
25	Model Village	10.00	3.70
26	Smart city	80.00	8.74
27	Replacement of faulty transformer	-	167.58
28	Conversion of overhead lines into UG/AB cable	-	778.99
B	Projects Total	1438.76	1766.6
C	Grand Total (A+B)	2450.83	2226.18

2. Preliminary Observations and Replies by BESCOM:

The Commission had observed that:

- a. The Commission, in its Tariff Order 2020, had recognized the expected capital expenditure of Rs.2450.83 Crores for FY21, as per the original proposal of BESCOM in the MYT Order 2019. BESCOM was directed not to exceed the approved capex and if any excess expenditure in any head of expenditure, the same shall be met from the savings in any other head of expenditure. BESCOM, in its filling has indicated a capital expenditure of Rs.2226.18 Crores in Table-3.22 and Rs.2724 Crores in Format D-17. In view this, Commission had directed BESCOM to indicate the capex incurred for FY21 correctly vis-à-vis the Commission approved capex.

In reply, BESCOM has submitted that the capital expenditure incurred for FY21 is Rs.2226.18 Crores and the amount shown under D-17 is the cumulative balance as on 31.03.2021. Hence, the two statements differ.

Further, the Commission notes that BESCOM in its annexure has furnished the breakup of actual capital expenditure for FY21 as Rs.2232.05 Crores. Whereas, the actual capital expenditure in BESCOM's 19th Annual Report for FY21, is shown as **Rs.2371.96 Crores**, which includes **Rs.145.79 Crores** interest capitalized during FY21 on capex incurred.

In view of inconsistent data in the actual capital expenditure incurred, the BESCOM was directed to furnish correct data. Thereafter, BESCOM on further verification has submitted the breakup details for the amount indicated in the format D-17 for **Rs.2735.43 Crores** as indicated below:

Particulars	Amount in Rs. Crores
CWIP	2294.97
Contract in progress & provision for works	11.50
Land	3.11
Consumer contribution/grants	385.24
Reclassification/Rectification	29.64
16 series released	10.97
Total	2735.43

The inconsistency, while furnishing the figures shows that BESCOM is not properly Scrutinizing the data before filing/preparing the Tariff application. In order to avoid the inconsistent data in filing, the Commission hereby directs BESCOM to submit the correct amount of capex incurred duly tallying it with the audited accounts and other formats which requires proper monitoring of the physical and financial progress of the capex periodically.

- b. The Commission, in its preliminary observations had directed BESCOM to furnish the details of sources of funding (like grants, debt, equity and internal sources) besides loans raised to meet the capex towards the capex incurred during the FY21, against each of the category of works.

In reply, BESCOM has submitted that details of sources of funding as indicated below:

SI No	Particulars	Amount in Rs. Crores
1	Approved by KERC for the FY 2020-21	2450.83
2	Expenditure incurred	2226.2
3	Loan	688.88
4	Grant	25.808
5	Equity	155.502
6	Internal Resource	1355.009

- c. The Commission, in its preliminary observations had directed BESCOM to furnish the details of replacement of faulty transformers by new transformers with reasons for having incurred such a huge amount of Rs.167.58 Crores during FY21.

The Commission notes the reply submitted by BESCOM, wherein, BESCOM has stated that amount incurred of Rs.18.44 Crores towards replacements of faulty transformers by new transformers and amount incurred of Rs.149.14 Crores towards replacement of faulty transformers by repaired transformers. Further, BESCOM has stated that out of 32024 no's of failed transformers 29564 no's of transformers are replaced by repaired ones and 2558 no's of transformers are replaced by new transformers and also stated

that BESCOM is maintaining sufficient buffer stock of transformers to replace failed transformers.

- d. The Commission, in its preliminary observations had also directed BESCOM to furnish abstract of number of works sanctioned, Completed, balance number of works to be taken up, details source of funding for capex incurred for Rs.127.79 Crores under Model sub-division works for FY21.

In reply BESCOM has furnished the details as indicated below:

Sl. No	Name of the Sub Division	No. of Works Sanctioned	No. of Works Completed	Date of completion of work
1	S-10 & S-19	75	58	31.08.2021
2	S13	38	30	31.08.2021
3	E8	13	13	23.02.2020
4	N4	24	24	23.02.2020
5	E3 (System Improvement)	170	128	30.09.2021

Further, BESCOM has stated that all the works in S10 (S19), S13, E3 E8 and N4 works are completed restricting to the Detailed Work Award amount and also assured the Commission that balance works will be completed during FY22 along with financial closure. BESCOM submitted that it has availed Rs.127.79 crores loan from Canara Bank, Bank of Maharashtra and Bank of India for funding of the said project.

In view of the above, BESCOM shall furnish the benefits achieved as envisaged in the DPR to the Commission along with physical and financial progress in the interest of consumers within 3 months of date of this Order.

- e. The Commission, in its preliminary observations had directed BESCOM to furnish the details of works carried out under Corporate reserve fund for incurred capex of Rs.74.06 Crores.

The Commission notes the reply furnished by the BESCOM, wherein, BESCOM has stated that it has utilized the amount of **Rs.27.60 Crores**

towards System improvement works at Indiranagar division and amount of **Rs.16.84 Crores** towards DAS and other works.

From the reply, the Commission concludes that corporate reserve fund was allotted to some of the works which are originally not included neither in MYT filing nor in revision of ARR of FY21. This shows that BESCOM is violating the directions issued in the Commission in Tariff Order dated 4th November 2020 in respect of Capital Expenditure, wherein, the **Commission had directed BESCOM not to exceed the approved capex of Rs.2450.83 Crores for FY21 and if there is any excess expenditure in one head of account, the same shall be met from the savings in any other head of expenditure.**

Hence, the Commission here by directs BESCOM to strictly adhere to the directions issued in the Tariff Order, failing which the Commission will be constrained to take necessary action for violation of the Commission's directions. In future, if same is continued by BESCOM, the corresponding expenditure of unapproved heads of works will not be passed on to consumers.

- f. BESCOM, in its filing has indicated an amount of **Rs.5031.65 Crores** for which DWA has been issued vide dated 15th July 2019, 30th April 2020 and 11th February 2021 in respect of conversion of OH (Over Headlines) into UG/AB cable. In view of this, the Commission, in its preliminary observations had directed the BESCOM to furnish the Work-wise progress of conversion of OH (Over Headlines) into UG/AB cable for FY21 against incurred capex of **Rs.778.99 Crores** along with details of the amount incurred against each subdivision in compliance with the directions issued in the Commission's letter dated 21st January 2019, 1st February, 2019, 17th March, 2020 and 19th June 2020.

The BESCOM, in its compliance has stated that, it has issued award for the above said work in **14 sub divisions under phase -1** on 15.07.2019, **15 sub divisions under Phase-II** on 15.07.2019, **10 sub divisions under Phase-III** on 30.04.2020 and **13 sub divisions under Phase-IV** on 10.02.2021 & 11.02.2021

(total 52 sub divisions) with a direction to the executing agencies to complete the works within 18 months from the date of issue of award. BESCOM also stated that the said project was approved in the 95th BESCOM Board of Directors meeting held on 1st March 2019, wherein, it was decided to take all necessary steps for implementation of the said project in stages spread across 3 years i.e., 2018-19, 2019-20 & 2020-21. Accordingly, the 52 sub divisions are earmarked for implementation in Phased manner, based on the T&D losses, Benefit to Cost ratio.

Further, it has stated that, BESCOM is following all the directives of Hon'ble Commission without any violation.

The Physical and Financial progress of said works as on Nov-2021 are shown below:

Phase	Approved Qty.				Physical Progress				Financial Progress (Amount in Rs. Crores)	
	11kv UG Cable in K.M's	RMU in No's	LT UG Cable in KM's	LT AB Cable in KM's	11kv UG Cable in K.M's	RMU in No's	LT UG Cable in KM's	LT AB Cable in KM's	Award cost	Expenditure incurred
1	1238.85	781.00	100.70	1010.16	1109.86	675.00	72.13	830.34	1068.10	475.53
2	1619.05	815.00	210.40	1549.80	1530.64	761.00	196.44	1402.75	1336.02	790.02
3	1901.68	693.00	0.00	1038.59	1534.67	490.00	0.00	634.05	1267.96	377.10
4	7001.05	3244.00	311.10	4448.83	5089.97	2051.00	268.57	2867.14	5031.66	1822.79
Total	11760.63	5533.00	622.20	8047.38	9265.14	3977.00	537.14	5734.28	8703.74	3465.45

In view of the reply, the Commission re-iterates its earlier directions issued in respect of said work as follows:

The Commission vide its letter no: KERC/M/03/17-18/1425, dated 21st January 2019 had directed BESCOM to plan proposed Capex of Rs.6550 Crores by prioritizing the expenditure in a phased manner over a period, say 5 to 7 years, in order to minimise the tariff impact on the retail supply tariff and to avoid the Tariff shocks to the consumers.

The Commission vide its letter no: KERC/M/03/17-18/1517, dated 1st February 2019 had accorded in 'principal approval' to take up this project, subject to the condition that the expenditure towards these works shall be met out of the Capex approved / to be approved by the Commission, for the relevant years.

Whereas, BESCOM without complying with the directives of the Commission, has gone ahead with calling for tenders. Hence, the Commission vide its letter no: KERC/M/03/17-18/1533, dated 17th March 2020 had directed BESCOM that it should note that any new work to be taken up shall be on the basis of pilot project implemented in one or two sub-division. After successful completion and confirmation of the benefits in reduction of distribution losses, reduction in accidents, increase in revenue, improving the quality and reliability of power, the same can be taken up in the other sub-divisions with prior approval of the Commission in a phased manner, keeping in view the finances and tariff impact on the end consumers of the State as a whole. **Hence, the above capex proposals of BESCOM are not acceptable.**

The Commission vide its letter no: KERC/M/03/17-18/230, dated 19th June 2020 had directed BESCOM to the compliance provided by the BESCOM, vide its letter no: BESCOM/MD/CGM(P)/BC-14/19-20/59946-48, dated 31st March 2020 is not acceptable as it requires additional investment and will be a burden to the consumers and also informed BESCOM that, it should not make any interim proposals through administrative correspondence in the middle of the financial year. **This direction may be strictly adhered to.**

BESCOM, in its Tariff filing of Table 5.56 has proposed the amount of Rs.3693.31 Crores for spill over works in respect of the above said works. Whereas, the approved Capex for FY22 is of Rs.2200.00 Crores, which also includes Capex of Rs.1000.00 Crores for carrying out the Conversion of OH lines into UG/AB cable for FY22.

From BESCOM's reply, the Commission concludes that even after the Commission's Clear-cut directions issued in this regard, BESCOM has gone ahead for calling tenders on 11th February 2021 without complying with the Commission's directions issued in above letters. This act of BESCOM is not justifiable and BESCOM has not justified the least cost option and optimum investment under section 61 of the Electricity Act from the consumer's point of view.

In view of the above, the Commission directs BESCOM not to incur any capital expenditure on conversion of HT/ LT Overhead (OH) lines to Underground (UG) / Aerial Bunched (AB) cable in the jurisdiction of Bangalore Metropolitan Area Zone (BMAZ) without prior approval from FY23 onwards. In case BESCOM incurs any capex on this account without approval, the Commission will not allow the consequential costs in the tariff, which the BESCOM shall take note of.

Further, BESCOM shall submit the cost benefit analysis in respect of works already completed giving adequate justification in terms of reduction of interruptions, T&D losses, increase in the reliability and quality of power resulting in additional sales etc. In the absence of these details, the investments made would be futile and will result in avoidable tariff burden to the consumers.

3. Commission's Analysis and decision:

In view of the preliminary observations and the replies thereon, BESCOM has not furnished the correct amount of capex incurred during FY21. On a verification of filing, the details of capital loans availed and interest on loans incurred vis-à-vis the approved figures is as under:

Amount in Rs. Crores				
Year	Approved as per Tariff Order dated 4.11.2020		Actuals as per accounts	
	Capital Loan	Interest	Capital Loan	Interest
FY21	1000	488.65	688.88	506.61

It could be seen from the above that, BESCOM has not exceeded the amount of capital loan approved thereon during FY21.

The interest on short-term borrowings, if any to meet the capex, is not being allowed separately. The borrowing towards meeting the working capital requirement are being allowed as per MYT norms.

In case BESCOM has met the capex by meeting the same from revenue receipts, in the guise of meeting it through internal sources, the same is not permissible as per the rules. The responsibility thereon will lie with BESCOM

and the Commission hereby cautions that such a practice will lead to financial indiscipline and would lead to serious problems in cash flow management in future.

In view of the inconsistent figures furnished by BESCOM, the Commission retains the original approved capex of Rs.2450.83 Crores for FY21 for the purpose of APR for FY21. The Capital expenditure incurred by BESCOM for FY21 is subject to Prudence Check.

4. Review of Dis-allowance towards imprudent works / conditionally prudent works pertaining to FY17, FY18 and FY20 as per Tariff Order dated 9th June 2021.

The Commission vide its letters dated 15.07.2021 and 01.09.2021, had directed and reminded BESCOM to furnish the comments / opinions on final report submitted by M/s ABPS, Mumbai in respect of Prudence check of Capital Expenditure pertaining to completed / capitalized works categorized during FY19 and FY20, including imprudent works pertaining to FY17 and FY18. Accordingly, BESCOM vide its letter dated 09th September 2021, had submitted its comments and compliance on the observations made in the final report along with current status of imprudent works of FY17 and FY18.

The current status of Imprudent/ conditionally prudent works as furnished by BESCOM / KPTCL and the Commission decisions thereon is as under:

Sl. No.	Commission's Observations	Status as furnished by BESCOM /KPTCL	Commission's Decision
1	Construction of new 11 KV link line from 66/11 kV Kempanahalli MUSS to Uragahalli Crusher limits for bifurcation of Overloaded F1 Namadhari feeder from 66/11 KV kempanahalli MUSS in Uragahalli O&M Section of Bidadi Sub Division (Awarded Amount for FY17 is Rs. 0.15 Crores)	BESCOM has stated that the F1-MG Palya crusher (Industrial) Feeder charged on 28.06.2021 at 14.40 Hrs along with KPTCL log extract.	Based on the BESCOM compliance and KPTCL log extract on the subject work, Commission decides consider this work as prudent from 28.06.2021 onwards and decided to disallow the corresponding interest on loan and depreciation for the period from 1 st April 2020 to 31 st March 2021 in APR of FY 21 of BESCOM. (up to FY20 amount disallowed in T.O dated 09.06.2021).
2	Evacuation of new 11Kv feeders from 66/11KV C - station to reduce overload of F14 and F9 feeders of LR Bande MUSS in O & M -14 of C5 sub-division, BESCOM. (Awarded Amount for FY18 is Rs. 3.18 Crores)	11kv Switchgear was commissioned on 20.04.2020 by KPTCL. BESCOM has submitted that the said work was taken under self-execution by BESCOM and same has commissioned on 14.12.2020 by clearing faults at multiple locations.	Based on the BESCOM and KPTCL compliance on the subject work, Commission decides the said work is attributable to BESCOM and treats this work as prudent from 14.12.2020 onwards and decided to disallow the corresponding interest on loan and depreciation for the period from 19 th

			August 2017 to 14 th December 2020 in APR of FY 21 of BESCOM.
3	Evacuation of one new feeder from Nimhans sub-station Muss, sarakki MUSS in U-1 of S1 sub division. (Awarded Amount for FY20 is Rs. 2.57 Crores).	BESCOM has stated that due to hard rock the said work was short closed and 0.855 Kms, of HT UG cable was utilized in the month of January 2021, along with KPTCL log extract.	In view of reply furnished by BESCOM and KPTCL log extract, Commission decides to consider this work prudent from 12.01.2021 onwards and decided to disallow the corresponding interest on loan and depreciation for the period from 21.02.2020 to 11.01.2021 in the APR of FY21 of BESCOM.

After analyzing BESCOM replies on the findings on the consultant on the imprudent works and justifications furnished by BESCOM and KPTCL, the Commission has decided that, three works amounting to Rs.3.74 Crores for FY21 among the samples selected by the consultant, do not qualify for being treated as prudent. Hence, the Commission has considered disallowance of the related costs on account of imprudent works, in the APR of BESCOM for FY21.

Accordingly, the expenses towards depreciation and interest incurred on capital works by BESCOM, on such imprudent works have to be disallowed, in APR of FY21, as detailed below.

Amount in Rs. Crores

The amount to be disallowed in BESCOM ARR-APR for FY21, due to imprudent works for FY21		
1	Cost of sample works not meeting prudence norms for FY21	3.74
Disallowance for BESCOM due to imprudent work of FY17		
2	Name of the imprudent Work : Construction of new 11 KV link line from 66/11 kV Kempanahalli MUSS to Uragehalli Crusher limits for bifurcation of Overloaded F1 Namadhari feeder from 66/11 KV kempanahalli MUSS in Uragehalli O&M Section of Bidadi Sub Division.	0.15
3	Target date for completion, Year of completion and categorization	20.11.2015, 20.11.2015 and 12.12.2016
4	Amount to be disallowed for FY21 (1 st April 2020 to 31 st March 2021)	0.017
5	Sub-total	0.017
Disallowance for BESCOM due to imprudent work of FY18		
6	Name of the imprudent Work : Evacuation of new 11kV feeder from 66/11kV C Station to reduce overload of F14 and F9 feeders of LR Bande MUSS in O&M-14 of C5 Sub-Dvn.	3.18
7	Target date for completion, Year of completion and categorization	21.08.2017, 19.08.2017 and 11.12.2017
8	The capex not meeting the prudence norms at 3.18 Crores is 3.43% (3.18/92.70) of cost of total sample of Rs 92.70 Crores in category of E&I works/11kV Evacuation & UG Cable works/ additional DTC/HT < reconductoring/TC failure. When this is escalated to the total categorized amount of Rs.432.532 Crores in respect of E&I works/11kV Evacuation & UG Cable works/ additional DTC/HT < reconductoring for FY18 (3.18*432.532/92.70)	14.84
9	Period for which amount to be disallowed	19 th August 2017 to 14 th December 2020
10	Amount to be disallowed for FY18 (19 th August 2017 to 31 st March 2018)	0.937
11	Amount to be disallowed for FY19	0.341
12	Amount to be disallowed for FY20	0.383

13	Amount to be disallowed for FY21 (1 st April 2020 to 14 th December 2020)	0.255
14	Sub - total	1.916
Disallowance for BESCOM due to imprudent work of FY20		
15	Name of the imprudent Work: For evacuation of one new feeder from Nimhans sub-station Muss, sarakki MUSS in U-1 of S1 sub division. (Awarded Amount in Rs.Crores)	2.57
16	Amount categorized for FY20 in Rs. Crores	0.41
17	Target date for completion	21.02.2020
18	Year of completion (Partial)	21.02.2020
19	Year of categorization (Partial)	18.03.2020
20	Period for which amount to be disallowed	21.02.2020 to 11.01.2021
21	Amount to be disallowed for FY20 (21 st February 2020 to 31 st March 2020)	0.005
22	Amount to be disallowed for FY21 (1 st April 2020 to 11 th January 2021)	0.037
23	Sub-Total	0.042
24	Grand Total	1.975

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

Company	FY18		FY19		FY20		FY21	
	Wt. Depreciation rate	Avg. Interest	Wt. Depreciation rate	Avg. Interest	Wt. Depreciation rate	Avg. Interest	Wt. Depreciation rate	Avg. Interest
BESCOM	5.11%	8.13%	5.48%	8.28%	6.11%	9.34%	5.63%	9.06%

In view of the above, the Commission hereby disallows Rs.1.975 Crores for FY21 towards depreciation and interest on loans allowed in respect of imprudent works. Accordingly, the same is ordered to be deducted in BESCOM's APR of FY21.

4.2.8 Interest and Finance Charges;

a) Interest on Capital loan:

BESCOM's Submission:

The BESCOM in its application has claimed an amount of Rs.563.19 Crores towards interest on capital loans drawn from banks/financial institutions at weighted Average interest rate of 8.77% as against Rs.488.65 Crores as approved by the Commission, in its Tariff Order dated 4th November, 2020. BESCOM has submitted that an outstanding loan of Rs.7343.04 Crore of long term borrowings existed at the end of FY21.

The details of interest on capital loans claimed by the BESCOM are as shown in the following Table:

TABLE – 4.18
Interest on Capital Loans- BESCOM's Submission

Amount in Rs. Crores	
Particulars	FY21
Opening balance of the capital Loans	5,493.62
Add: New Loans availed	2,613.89
Less: Repayments of Loans	764.47
Closing balance of capital loans	7343.04
Average loan for the year	6,418.33
Weighted Average Rate of Interest	8.77%
Interest on long term loans	563.19

BESCOM has requested the Commission to allow an amount of Rs.563.19 Crores towards interest on capital loans for FY21.

Commission's analysis and decisions:

The Commission has noted the opening and closing balances of long term capital loans as per the audited accounts for FY21 and repayments/new loans as per Format D-9 of the Tariff application and the interest thereon to arrive at the allowable interest on capital loans for FY21, as shown in the following Table:

TABLE – 4.19
Allowable Interest on Capital Loans – FY21

Amount in Rs. Crores	
Secured Loans	5601.72
Unsecured Loans	5601.72
Total	5601.72
Add: new Loans borrowed	688.88
Less: Repayments	704.31
Total loan at the end of the year	5586.28
Average Loan	5594.00
Interest paid on long term loans as per schedule 22	506.61
Weighted average rate of interest based on the actual interest paid on long term loans	9.06%
Interest Rate allowed	9.06%
Interest Allowed	506.61

The Commission notes that BESCOM while computing interest on long term loans of Rs.563.19 Crores has considered working capital loans availed from banks towards payment of power purchase dues during Covid-19 (working capital) as furnished in Annexure-2 as long term capital loan. The Commission has considered the same as working capital in allowing the interest on working capital for FY21. Thus, for arriving at an allowable Interest on Capital Loans, the Commission has considered the average loan of Rs.5594.00 Crores and an amount of Rs.506.61 Crores has been arrived at as interest on long term capital

loans. The weighted average interest rate works out to 9.06%, which is comparable with the prevailing interest rates.

Thus, the Commission decides to allow Rs.506.61 Crores towards interest on capital loan for FY21.

b) Interest on Working Capital:

BESCOM's Submission:

BESCOM in its filing, has claimed an interest on working capital of Rs.395.43 Crores as against Rs.464.38 Crores approved by the Commission for FY21. BESCOM has submitted the details of short term loans/overdraft borrowed during the year FY21 to meet its day to day expenditure (working capital) from Banks. BESCOM has indicated the total opening and closing balances of short term loans at Rs.2917.86 Crores and Rs.3540.18 Crores respectively and the total opening and closing balances of overdraft at Rs.1918.15 Crores and Rs.1654.70 Crores respectively for FY21. The actual interest on short term loan and overdraft is indicated as Rs.241.41 Crores and Rs.136.96 Crores respectively and the weighted average rate of interest on short term loan is 7.54%

In accordance with the provisions of the MYT Regulations, the BESCOM has computed the normative interest on working capital, at Rs.395.43 Crores at an interest rate of 11.30% p.a. for FY21, limited to the actual expenditure plus 50% of the difference between the actual expenditure and the amount calculated on normative basis as detailed below:

TABLE – 4.20
Interest on Working Capital - BESCOM's Submission

Particulars	Amount in Rs. Crores	
	FY21	
One-twelfth of the amount of O&M Expenses	192.43	
Stores, materials and supplies at 1% of Opening balance of GFA	178.25	
One-sixth of the Revenue	3280.14	
Total Working Capital	3650.82	
Rate of Interest (% p.a.)	11.30%	
Interest on Working Capital	412.54	
Actual Interest incurred for FY21	378.31	
50% of the difference of interest incurred and interest on normative basis	34.23	
Normative Interest on Working capital	395.43	

Commission's analysis and decisions:

As per Format D-9, and the audited accounts the BESCOM has incurred interest of Rs.378.37 Crores on short term borrowings and Overdrafts during FY21.

The Commission as per the provisions of MYT Regulations has computed the interest on working capital by considering the Marginal Cost of fund based Lending Rates (MCLR). For both the short term loans and the overdraft availed by BESCOM, the actual weighted average rate of interest works out to 7.54% for FY21. However, for computation of normative interest on working capital, as per the provisions of the MYT Regulations, the Commission decides to consider the prevailing MCLR rate on short term loan upto one year as notified by the RBI as on 1st April of the financial year of 7.50% per annum plus 200 basis points to arrive at interest rate of 9.50% per annum while approving the ARR for FY21. As per the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments thereon, the Commission has computed the allowable interest on working capital for FY21 as follows:

TABLE – 4.21
Allowable Interest on Working Capital for FY21

Particulars	Amount in Rs. Crores
	FY21
One-twelfth of the amount of O&M Exp.	170.32
Opening GFA	17833.57
Stores, materials and supplies 1% of Opening balance of GFA	178.34
One-sixth of the Revenue	3280.14
Total Working Capital	3628.80
Allowable Rate of Interest (% p.a.)	9.50%
Normative Interest on Working Capital	344.73
Actual Interest on Working Capital	434.95
Allowable Interest on Working Capital	344.73

Since the actual interest on working capital is more than the normative interest on working capital, the Commission, as per the provisions of the MYT Regulations, decides to allow the normative interest on working capital.

Thus, the Commission decides to allow Rs.344.73 Crores towards interest on working capital for FY21.

c) Interest on Consumer Deposits:**BESCOM's Submission:**

BESCOM in its filing, has claimed an amount of Rs.179.67 Crores towards payment of interest on consumer security deposits as against Rs.235.69 Crores as approved by the Commission for FY21. BESCOM has computed the Interest on Consumer deposits as per RBI notification dated 1st April, 2020 at 4.65%, as per the following Table:

TABLE – 4.22
Interest on consumer security deposits for FY21
BESCOM Submission

Particulars	Rs. Crores
	FY21
Opening balance of Consumer Deposits	4582.21
Closing balance of consumer deposits.	4906.47
Average Consumer deposit for FY21	4744.34
Weighted Average Interest Rate	4.65%
Interest on consumer deposits claimed	179.67

Commission's analysis and decisions:

As per the audited accounts, the actual opening and closing balance of consumer security deposits for FY21 is Rs.4354.12 Crores and Rs.4661.71 Crores respectively. The actual interest on consumer security deposits factored in the audited accounts of the BESCOM is Rs.179.67 Crores for FY21. The interest on consumer security deposits amounting to Rs.179.67 Crores claimed by the BESCOM as per the audited accounts for FY21 works out to a weighted average rate of interest of 3.98%.

As per the KERC (Interest on Security Deposit) Regulations, 2005, the interest on consumer deposits shall be allowed as per the bank rate prevailing as on the 1st of April of the relevant year. The bank rate as on 1st April, 2020 was 4.65%.

Hence, the Commission decides to allow an amount of Rs.179.67 Crores being the actual interest on consumer security deposits for FY21.

d) Other Interest and Finance charges:

BESCOM has claimed an amount of Rs.35.81 Crores towards other interest and finance charges which includes charges payable to banks / financial

institutions, guarantee commission payable to GoK and the stamp duty charges as against Rs.12.00 Crores as approved by the Commission for FY21.

Commission's analysis and decisions:

The Commission notes that as per the audited annual accounts, BESCOM has paid Rs.26.73 Crores on Bank Charges, Rs.0.92 Crores towards Stamp duty and Rs.8.16 Crores towards Guarantee Commission to GoK during FY21. The Commission, as per the audited accounts has considered the other interest and finance charges as per the following Table:

TABLE- 4.23
Allowable other Finance Charges for FY21

Amount in Rs. Crores	
Particulars	FY21
Guarantee Commission to GoK	8.16
Stamp duty	0.92
Bank Charges	26.73
Total	35.81

Thus, the Commission allows an amount of Rs.35.81 Crores towards other finance charges for FY21.

e) Interest and other expenses capitalized:

BESCOM in its filing, has claimed an amount of Rs.153.42 Crores, as per the audited accounts as against Rs.130.37 Crores as approved by the Commission towards capitalization of interest on loan and other expenses for FY21.

Commission's analysis and decisions:

The Commission notes that, BESCOM as per its audited accounts, has capitalized interest and finance charges of Rs.145.79 Crores, R&M expenses of Rs.0.47 Crores, employee expenses of Rs. 6.38 Crores and administrative and general expenses of Rs.0.78 Crores for FY21. Hence, the Commission decides to consider interest and other expenses capitalized at Rs.153.42 Crores for FY21.

Thus, the total allowable interest and finance charges for FY21 are as shown in the following Table:

TABLE – 4.24
Allowable Interest and Finance Charges

Amount in Rs. Crores		
Sl. No	Particulars	FY21
1	Interest on Loan capital	506.61
2	Interest on working capital	344.73
3	Interest on consumer deposits	179.67
4	Other interest and finance charges	35.81
5	Less: interest and other expenses capitalized	-153.42
6	Net Interest and Finance Charges	913.40

4.2.9 Other Debits:

BESCOM's Submission:

BESCOM, in its filing, has claimed an amount of Rs.153.96 Crores towards other debits as detailed below:

TABLE – 4.25
Other Debits-BESCOM's Submission

Amount in Rs. Crores		
Sl No	Particulars	FY21
1	Small and Low value items written off	0.31
2	Losses/gains relating to Fixed assets	0.04
3	Assets decommissioning cost	0.41
4	Bad debts written off	0
5	Provision for bad and doubtful debts	10.63
6	Miscellaneous losses and write offs	2.04
7	Material cost variance	11.40
8	Others	129.13
	Total	153.96

Commission's analysis and decisions:

The Commission notes that as per the audited accounts for FY21, an amount of Rs.153.96 Crores including the material cost variance, provisions for bad debts, small and low value items written off, miscellaneous losses written off, asset decommissioning cost and interest on belated payment for power purchase of Rs.129.13 Crores have been factored as other operating expenses. Commission, as per the provisions of MYT Regulations has not been allowing the provisions against doubtful debts amounting to Rs.10.63 Crores and interest on belated payment of power purchase of Rs.129.13 Crores. The other items of expenses of

Rs.14.20 Crores as claimed by BESCOM as per audited accounts are factored under other income.

Thus, the Commission decides to consider an amount of Rs.14.20 Crores as other debits for FY21.

4.2.10 Return on Equity:

BESCOM's Submission:

BESCOM in its filing, has claimed Return on Equity of Rs.247.87 Crores as against the approved RoE at 15.5% Grossed up with applicable MAT (MAT 21.5488%) of Rs.288.20 Crores for FY21, on the opening balance of equity amount consisting of share capital, share deposit, accumulated surplus and recapitalized security deposit amount and the equity amount received during the year, as detailed below:

TABLE – 4.26
Return on Equity – BESCOM's Submission

Particulars	Rs. Crores
	FY21
Opening balance of paid up share capital	1,343.54
Share deposit	273.44
Equity addition during the year	38.13
Reserves and surplus	-1.16
Less: Recapitalized Security deposit	-54.81
Total Equity	1599.14
Return on equity @ 15.50%	247.87

Commission's analysis and decisions:

i. Debt-Equity Ratio Vis-à-vis Gross Fixed Assets:

The opening and closing balances of gross fixed assets without considering the GFA created out of consumer contribution and grants along with break-up of equity (Net worth) and capital loan component details for FY21 as per actual data as per the audited accounts are indicated in the following Table:

TABLE – 4.27
Status of Debt Equity Ratio for FY21

Amount in Rs. Crores							
	Without GFA created out of CC grants (Actuals)	Debt (Actuals)	Equity (Net-worth) (Actuals)	Normative Debt @ 70% of GFA	Normative Equity @ 30% of GFA	% age of actual debt on GFA	% age of actual equity on GFA
Opening Balance	14776.13	5601.72	1515.82	10343.29	4432.84	27.91	10.26
Closing Balance	15948.95	5586.29	1879.65	11642.51	4784.69	35.03	11.78

From the above table, it is evident that the ratio of debt and equity are within the normative limits (in the debt equity ratio of 70:30) on the opening and closing balances of GFA for FY21.

ii. Return on Equity (RoE):

The Commission notes the BESCOM claims of Rs.247.87 Crores as Return on Equity for FY21 on the equity amount for FY21.

The Commission notes that as per the audited accounts the opening balance of equity of BESCOM is Rs.1515.82 Crores BESCOM has also claimed the RoE on the additional Equity received from the Government during FY21. As per the provisions of Clauses 3.9, 3.6.1 and 3.6.2 of the MYT Regulation, the RoE shall be allowed on the opening balance of net worth of the licensee.

The Commission, in accordance with the KERC (Terms and Conditions for Determination of Distribution and Retail Supply Tariff) Regulations, 2006, as amended from time to time, has considered the opening balance of equity at the beginning of the financial year in computation of the allowable Return on Equity at 15.5%. The equity consist of the share capital, share deposit, accumulated balance of profit/loss as per the audited accounts, as at the beginning of the year, duly factoring in the recapitalization of security deposit of Rs. 100 Crores, in compliance with the Orders of the Hon'ble ATE, in Appeal No.46/2014. Thus, the allowable RoE is as under:

TABLE – 4.28
Allowable Return On Equity for FY21
Amount in Rs. Crores

Particulars	FY21
OB: Paid Up Share Capital	1343.54
OB: Share Deposit	273.44
OB: Reserves and Surplus	-1.16
Less: Recapitalized Security Deposit	-100.00
Total Opening Balance Equity	1515.82
Return on Equity @15.50%	234.95

The Commission has also taken note of the additional equity of Rs.155.58 Crores infused by the Government of Karnataka in various Government Orders during FY21. For the equity invested by the Government of Karnataka during the year, the Commission has computed the return on equity on pro-rata basis, as per the provisions of the MYT Regulations, as under:

TABLE – 4.29
Return on Equity on the Additional Equity infused during FY21
Amount in Rs. Crores

Additional Equity Received	Amount in Rs. Crs.	Date of Receipt	No. of Months	RoE Allowed
EN321 PSR 2020 dated 29.08.2020	42.17	25.08.2020	7	3.81
EN322 PSR 2020 dated 29.08.2020	0.44	29.08.2020	7	0.04
EN322 PSR 2020 dated 19.09.2019	0.06	29.08.2020	7	0.01
EN353 PSR 2020 dated 14.06.2019	9.19	15.09.2020	6	0.71
EN353 PSR 2020 dated 19.09.2019	9.19	05.01.2021	2	0.24
EN322 PSR 2020 dated 23.09.2019	0.44	05.01.2021	2	0.01
EN321 PSR 2020 dated 19.09.2019	42.17	05.01.2021	2	1.09
EN322 PSR 2020 dated 21.12.2019	0.06	05.01.2021	2	0.00
EN321 PSR 2020 dated 19.09.2019	42.17	09.03.2021	0	0.00
EN8322 PSR 2020 dated 21.12.2019	0.44	09.03.2021	0	0.00
EN86 PSR 2020 dated 25.02.2020	9.19	09.03.2021	0	0.00
EN322 PSR 2020 dated 20.02.2020	0.06	09.03.2021	0	0.00
Total	155.58			5.91
Return on Equity allowed on Additional Equity Infusion in FY21				5.91

As worked out above, the additional RoE allowable on the additional equity infused by the GoK is Rs.5.91 Crores for FY21.

Hence, the total allowable RoE for FY21 is determined as indicated in the following table:

Particulars	FY21
Allowable RoE (Rs. In Crores)	234.95
Return on Equity by allowed as the additional equity infused in FY21	5.91
Total allowable RoE	240.86

Therefore, the Commission decides to allow Rs.240.86 Crores towards Return on Equity for FY21.

4.2.11 Other Income:

BESCOM's Submission:

BESCOM, in its application, has claimed an amount of Rs.435.44 Crores as other income for FY21, as against Rs.441.89 Crores as approved by the Commission in its Tariff Order dated 4th November, 2020. BESCOM, in its filing has submitted that it has earned Rs.238.19 Crores from sale of 775.16 MU in IEX at an average rate of Rs.2.38/unit and included the same under other income for FY21. Further, major portion of other income of Rs.143.91 Crores is from incentives received for the payment of power purchase bills of the generators prompt during FY21. BESCOM has submitted that it is facing serious cash flow problems, and accordingly, it has requested the Commission to retain the efficiency gain for prompt payment of power purchase bills by at least 100% as a special case for FY21. Accordingly, BESCOM has requested the Commission to allow the net other income of Rs.435.44 Crores for FY21.

The details of the other income claimed by the BESCOM for FY21, as per the audited accounts, are as under:

TABLE – 4.30
Other Income – BESCOM's Submission

Amount in Rs. Crores	
Particulars	FY21
Interest on Income	9.01
Profit on sale of stores	0.01
Losses/gain relating to fixed Assets	5.20
Rent	3.06
Incentive Received	143.91
Value of materials found excess during physical verification	0.07
Miscellaneous	29.48
Interest subsidy received under National Electricity Fund Scheme	0.00
Rebate 0.5% for Collection of Electricity Duty	6.50
Revenue from sale of power through Indian Energy Exchange (IEX)	238.20
Total other income	435.44

Commission's analysis and decisions:

The Commission notes that, as per the audited accounts, BESCOM has accounted an amount of Rs.435.44 Crores as other income for FY21. As regard BESCOM's request to allow it to retain the 100% of the incentive earned on prompt payment of power purchase bills, the Commission notes that any income earned during the course of business has to be passed on to the consumers as they bear the entire cost of operation of the distribution company including the incentive earned for payment of power purchase bills in time. However, in order to encourage and bring in financial discipline in timely payment of monthly power purchase bills, Commission, in line with the earlier Tariff Orders, decides to continue to allow 10% of the total incentive amounting to Rs.14.39 Crores earned on account of timely payment of power purchase bills, to be retained by the BESCOM for FY21.

Further, the Commission notes that, BESCOM has considered an amount of Rs.238.19 Crores realized through sale of surplus power through IEX, as other income. The Commission has considered the same under power purchase cost reduction in power purchase cost. Hence the same is not allowed as other income.

Thus, the Commission decides to allow an amount of Rs.182.86 Crores as other income for FY21 as worked out below:

TABLE – 4.31
Allowable Other Income for FY21

Particulars	Rs. Crores
	FY21
Interest on Income	9.01
Profit on sale of stores	0.01
Losses/gain relating to fixed Assets	5.20
Rent	3.06
Incentive Received (Rs.143.91 Crs-Rs.14.39 Crs)	129.53
Value of materials found excess during physical verification	0.07
Miscellaneous	29.48
Interest subsidy received under National Electricity Fund Scheme	0.00
Rebate 0.5% for Collection of Electricity Duty	6.50
Total other income	182.86

4.2.12 Fund towards Consumer Relations / Consumer Education:

BESCOM in its application had not claimed any expenditure towards Consumer Relations/ Consumer Education.

The Commission notes that BESCOM as per the audited accounts has not accounted any expenses towards consumer relation/consumer education. Thus, the Commission decides not to allow any amount towards consumer relations and Consumer Education for FY21.

4.2.13 Revenue Demand for FY21:

BESCOM has considered an amount of Rs.16754.02 Crores, towards Revenue from sale of power to other than BJ/KJ and IP set consumers and Rs.2926.82 Crores as subsidy towards power supply to BJ/KJ and IP set consumers. Thus the total revenue considered for FY21 is Rs.19680.84 Crores.

Commission's analysis and decisions:

The Commission, as per the audited accounts, has considered the total amount of revenue from sale of power and miscellaneous charges of Rs.19680.84 Crores for FY21, which includes subsidy from GoK for power supply to BJ/KJ and IP set installations.

4.2.14 Subsidy for FY21:

BESCOM, in its Petition, has claimed an amount of Rs.2792.89 Crores as tariff subsidy for supply of free power to IP installations and Rs.133.93 Crores towards free power supply to BJ/KJ installations as against Rs.3094.60 Crores as approved by the Commission in accordance with the prevailing Government Order towards sale of power to BJ/KJ and IP sets for FY21.

Commission's analysis and decisions:

The Commission notes that, as per the audited accounts, Rs.2792.89 Crores and Rs.133.93 Crores have been factored towards tariff subsidy for supply of free power to IP category and towards BJKJ installations consuming up to 40 units / month respectively, amounting to Rs.2926.82 Crores for FY21.

Thus, the Commission has considered the total tariff subsidy of Rs.2926.82 Crores towards IP Set installations and BJ/KJ installation, to be received from the Government by BESCOM for FY21.

4.2.15 Income Tax:

BESCOM in its filing, has requested the Commission to allow the actual tax of Rs.36.38 Crores paid by the company for FY21, as the Commission is allowing only the actual tax paid by BESCOM.

Commission's analysis and decisions:

The Commission, in accordance with the provisions of Clause 3.12.6 of the KERC (Terms & Conditions for Determination of Tariff for Distribution and Retail Supply of Electricity) (Second Amendment) Regulations, 2015, has decided to allow the actual payment of Income Tax of Rs.36.38 Crores, as per the audited accounts for FY21.

4.3 Abstract of Approved ARR for FY21:

As per the above item-wise decisions of the Commission, the consolidated Statement of revised ARR as per the APR for FY21 is as indicated in the following Table:

TABLE – 4.32
Approved ARR for FY21 as per APR

Sl. No	Particulars	Amount in Rs. Crores		
		APR FY21		
		As approved in Tariff Order dated 04.11.2020	As Filed by BESCOM	As Approved in APR
1	Energy at Generation Bus-MU	34962.35	29963.43	29963.43
2	Transmission Losses of KPTCL in %	3.039%	4.595%	4.595%
3	Energy at Interface Points with KPTCL in MU	33899.84	28586.62	28586.62
4	Distribution Losses in %	11.65%	11.63%	11.63%
	Sales in MU			
5	Sales to other than IP & BJ/KJ in MU	22742.78	18170.96	18170.96
6	Sales to BJ/KJ	170.94	181.77	181.77
7	Sales to IP Sets	7036.79	6910.20	6910.20
	Total Sales	29950.51	25262.93	25262.93
	Revenue in Rs. Crores			
8	Revenue from tariff and Misc. Charges	21277.26	16754.02	16754.02
9	Revenue from Subsidy to BJ/KJ	139.15	133.93	133.93
10	Revenue from Subsidy to IP Sets	2955.45	2792.89	2792.89
	Total Revenue	24371.86	19680.84	19680.84
	Expenditure in Rs Crores			
11	Power Purchase Cost	16343.68	15337.81	15099.75
12	Transmission charges of KPTCL	2179.288	1970.43	1970.43
13	SLDC Charges	11.923	12.83	12.83
	Power Purchase Cost including cost of transmission	18534.89	17321.07	17083.01
14	Employee Cost	2365.61	1699.35	2043.88
15	Repairs & Maintenance		195.80	
16	Admin & General Expenses		416.01	
	Total O&M Expenses		2311.16	
17	Depreciation	606.35	821.14	821.14
	Interest & Finance charges			
18	Interest on Loans	488.65	563.19	506.61
19	Interest on Working capital	464.38	395.43	344.73
20	Interest on belated payment on PP Bills	0.00	0.00	0.00
21	Interest on consumer deposits	235.69	179.67	179.67
22	Other Interest & Finance charges	12.00	35.81	35.81
23	Less: Interest & other expenses capitalised	-130.37	-153.42	-153.42
	Total Interest & Finance charges	1070.35	1020.68	913.40

Sl. No	Particulars	APR FY21		
		As approved in Tariff Order dated 04.11.2020	As Filed by BESCOM	As Approved in APR
24	Other Debit/ Extraordinary Items	0.00	153.96	14.20
25	Exception Items	0.00	389.31	0.00
26	Return on Equity	288.20	247.87	240.86
27	Provision for taxation	0.00	36.38	36.38
28	Funds towards Consumer Relations/Consumer Education	1.00	0.00	0.00
29	Other Income	-441.89	-435.44	-182.86
30	ARR	22424.52	21866.14	20970.01
31	Add Deficit for FY19 carried forward	1947.34	0.00	0.00
32	Less Disallowance towards Imprudent works for FY 19 & FY20 and earlier periods			-1.98
32	Net ARR	24371.86	21866.14	20968.04
33	Deficit in Revenue for FY21	0.00	-2185.30	-1287.20
34	Approved Regulatory assets to be recovered during FY22 & FY23 as per T.O dated 04.11.2020	698.84		698.84
35	Net deficit to be carried forward to ARR of FY23			-588.36

4.4 Gap in Revenue for FY21:

The Commission after Annual Performance Review of BESCOM for FY21, decides to allow a net ARR of Rs.20968.04 Crores as against the approved ARR of Rs.24371.86 Crores, for FY21. The Commission has issued the Tariff Order, 2020 dated 4th November 2020, which is effective from 1st November, 2020. Due to total lock down declared by the GOI/GOK on account of Covid-19 pandemic, pendency of Appeal No. 97 of 2020 filed by KPTCL before the Hon'ble Tribunal against the Commission's Order dated 16.01.2020 and the disposal of the Appeal on 05.10.2020 and the applicability of the Code of Conduct on account of announcement of bye-election to the Assembly Constituencies, the Tariff Order for FY21 could not be issued on time. While issuing the Tariff Order to reduce the burden on the end consumers, particularly during the adverse financial situation faced by the consumers due to the setback of economic activities during the lock down period, the Commission decided to give effect of the revision in Retail Supply Tariff with effect from 1st November, 2020 which has

resulted in recovery of additional revenue only for a period of 5 months during FY25. The remaining unmet gap of 7 months of Rs.698.84 Crores has been kept as Regulatory Asset, which is allowed to be recovered during FY22 and FY23

The Commission while carrying out the Annual Performance Review of BESCOM for FY21, based on the actual revenue and expenditure earned/incurred as per the audited accounts has arrived the net Revenue Deficit of Rs.1287.20 Crores for FY21. As the Regulatory Assets of Rs.698.84 Crores created by the Commission in the Tariff Order dated 4th November, 2020 was allowed in the approved revised ARR and allowed to be recovered in the revised Retail Supply Tariff for FY22 and to be allowed even for FY23, the question of carry forward of the same amount of the Regulatory Assets once again to the approved ARR and recovery in Retail Supply Tariff for FY23 does not arise. Hence, the Commission after accounting the Regulatory Assets amount of Rs.698.84 Crores to be recovered during FY22 and FY23, the remaining gap that has to be allowed for recovery will be Rs.588.36 Crores for FY21. Thus, the Commission decides to carry forward the net revenue gap of Rs.588.36 Crores of FY21 to the ARR for FY23 as discussed in the subsequent Chapter of this Order.