#### **CHAPTER-6**

#### AGGREGATE ANNUAL REVENUE REQUIREMENT FOR FY25

#### **6.1 POWER PURCHASE COST:**

In the Chapter-5 "Energy/ Sales Projections" MESCOM has elaborated the projections made in respect of the energy sales for the years FY24 (RE) and FY25 (projections). Further, the energy requirement at generation point has also been arrived considering the distribution loss and transmission loss approved in TO 2022 for FY 25.

In this Chapter, the energy requirement projected for the years FY24 (RE) and FY25 (projections) has been considered for estimations of power purchase cost to arrive at the aggregate annual revenue requirement for the control period.

## a. Cost of power at generation point:

For FY24, MESCOM has applied the source wise quantum and cost as approved in the Tariff Order -2023. M/s PCKL has made available the source wise energy availability and related cost for FY25 as below, which has been considered in the filing.

#### PROJECTED ENERGY AVAILABILITY & COST FOR FINANCIAL YEAR 2024-25

**1.0** The energy required by ESCOMs of Karnataka for the Financial Year 2024-25 after considering the distribution and transmission losses is shown in **Table-1**.

Table-1 (Energy in Mus)

ESCOMs	2024-25
BESCOM	40331.37
GESCOM	11190.46
HESCOM including Hukkeri Society & AEQUS	15983.94
MESCOM Including MSEZ	6668.01
CESC, Mysore	10007.96
Total	84181.73

Month wise energy requirement by ESCOMs for the FY 2024-25 is as below; (Energy in MUs)

Month	CESC	GESCOM	HESCOM	MESCOM	BESCOM	Total
Apr-24	1137.49	1057.31	1675.80	786.31	4043.55	8700.46
May-24	943.00	972.71	1596.19	667.56	3837.24	8016.70
Jun-24	676.81	882.72	1466.02	549.42	3164.22	6739.19
Jul-24	739.43	858.51	1243.16	454.29	3157.44	6452.83
Aug-24	645.85	714.56	1125.56	428.58	3037.73	5952.28

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Total	10007.96	11190.46	15983.92	6668.01	40331.36	84181.71
Mar-25	1118.87	1056.45	1475.17	715.82	3837.71	8204.02
Feb-25	1065.93	1079.28	1451.02	688.24	3868.31	8152.78
Jan-25	875.50	980.48	1338.67	585.16	3392.79	7172.60
Dec-24	795.58	927.48	1210.53	489.94	3144.53	6568.06
Nov-24	660.97	749.10	1071.84	444.32	2875.04	5801.27
Oct-24	711.75	902.52	1181.76	435.98	2987.46	6219.47
Sep-24	636.79	1009.35	1148.21	422.38	2985.35	6202.08

### 2.0 Assessment Of Availability

The ESCOM's had broadly categorized the sources of energy into State owned Generation ie Generation from KPCL, allocation (firm and non-firm ) from Central generating Stations(CGS), Independent Power producers(IPPs), Renewable Energy sources such, Bio-Mass, Co-Generation, Mini Hydro, wind and Solar Power plants. And also tied up with bilateral and joint venture contract with DVC, TSGENCO (Priyadarshni Hydro Project) and TBHE. To meet the deficit quantum of power, banking / swapping of power arrangement with other State utilities such as PSPCL & UPPCL has been done.

- **3.0** The availability of power and related costs for the ensuing year FY 2024-25 for the state of Karnataka, forecasted taking into account the following aspects
  - ✓ Existing long term allocated generation capacity of Karnataka.
  - ✓ New generation capacity additions during FY 2024-25 for Karnataka from Central Sector, State Sector, and private players awarded through competitive bidding by individual ESCOMs.
  - ✓ Banking/swapping of power arrangement with State Utilities
  - ✓ Projects likely to be commissioned during the FY 2024-25 such as Kusum C

#### 4.0 Hydro and Thermal Stations of KPCL

The Energy availability of Hydel and Thermal stations of State Owned Power plants are considered as per the details furnished by KPCL in its email dated 24.11.2023. RPCL vide letter dated 24.11.2023 has furnished the availability of the energy and cost in respect of Yermarus thermal power plant. The energy projected by KPCL in respect of hydro stations is based on average energy generated in last 10 years average inflow with a 1% auxiliary consumption as per PPA. Energy availability in respect of Thermal Stations is as per the targeted availability defined in the PPA/Regulations wherever applicable and less by applicable auxiliary consumption of each station.

SRPC in the email dated 20.11.2023 has furnished the energy available for the FY 2024-25 in respect of NTPC stations, NLC & NPCIL.

During the Financial year 2024-25, energy availability from different sources is more than the quantum required by ESCOMs, considering the following factors;

- i) The energy availability from KPCL stations including RPCL as per the details furnished by Generating Stations.
- ii) Energy availability from CGS stations viz., NTPC, NLC, Nuclear Power Corporation as per SRPC email dated 20.11.2023
- iii) UPCL in the letter dated 21.11.2023 has furnished the details



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- iv) In respect of NCE projects, energy actual supplied during year 2022-23 has been considered for 2024-25.
- v) The actual energy drawal from Jurala Priyadarshini and TBHE for the year 2022-23 has been considered for the year 2024-25

The details of the energy available from different sources for the FY 2024-25 is as below:

Generating Stations	<b>Energy in Mus</b>	Source
KPCL Hydro	11609.47	KPCL
KPCL Thermal:		
RTPS -1 & 7	7471.10	KPCL
RTPS 8	1536.17	KPCL
BTPS		
Unit I	3063.60	KPCL
Unit II	3058.67	KPCL
Unit III	4776.48	KPCL
Yermarus TPS - 1& 2	10621.88	RPCL
CGS	21351.02	SRPC
Kudgi	9612.41	SRPC
DVC	3053.00	DVC
UPCL	7109.99	UPCL
NCE Projects	20077.79	Actuals of ESCOMs for the FY 2022- 23
TBHE & Jurala projects	207.28	Actuals of ESCOMs for the FY 2022- 23
Returning of Banking/ swapping of energy	-3187.94	
Total	100360.92	

# 5.0 Backing down of power:

After fully meeting the requirement of the State, the ESCOMs still have to partially back down/Keep Reserve Shut down the thermal plants so as to save on the variable costs being incurred. On the basis of average variable cost of April-2023 to September 2023 to arrive merit order dispatch for FY 2024-25 and thereafter, after considering all generating stations allocated to ESCOMs, availability of energy from different sources is more than quantum required by ESCOMs and hence available quantum from different sources have been reduced on the basis of Merit Order Dispatch is as detailed below;

Sources	Available quantum in Mus	Quantum offtake by ESCOMs in Mus	Difference in Mus
BTPS Uni1	3063.60	1704.96	1358.64
BTPS Unit-2	3058.67	2032.94	1025.73
BTPS Unit-3	4776.48	2772.89	2003.59
RTPS Unit1 to 8	7471.10	3929.13	3541.97



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Yermarus TPS - 1 & 2	10621.88	6988.57	3633.31
UPCL	7109.99	2435.09	4674.91
Total	36101.71	19863.57	16238.15

**5.1** The availability of Energy from Hydel & Thermal Power Station's details furnished by KPCL is shown in **Table 2 & 3**.

Table-2 HYDEL ENERGY

Sl. No.	Generating Source	Energy in MUs
1	Sharavathy Valley Projects (10x103.5 + 2x27.5)	4608.00
2	MGHE (4x21 + 4x13.2)	334.62
3	Gerusoppa_Sharavathi Tail Race_STR (4x60)	472.00
4	Kali Valley Project_KVP (2x50 + 5x150 +1x135)	3401.00
5	Varahi Valley Project_VVP (4x115 + 2x4.5)	1084.02
6	Almatti Dam Power House_ADPH (1x15 + 5x55)	483.00
7	Bhadra Hydro_BHEP (1x2+2x12)+(1x7.2+1x6)	55.00
8	Kadra Power House)KPH (3x50)	363.00
9	Kodasalli Dam Power House_KDPH (3x40)	364.00
10	Ghataprabha Dam Power House_GDPH (2x16)	70.00
12	Shivasamudram (4x4 + 6x3)	275.83
13	Shimshapura (2x8.6)	0.00
14	Munirabad Power House (2x9 + 1x10)	99.00
	TOTAL	11609.47

Table-3

KPCL THERMAL POWER STATIONS

Sl. No.	Stations	Installed Capacity in MW	Net scheduled Energy in MUs
1	RTPS I &7	1470	4860.83
2	RTPS Unit 8	250	963.06
3	BTPS Unit I	500	1216.34
4	BTPS Unit II	500	1494.18
5	BTPS UNIT-III	700	3234.79
6	Yermarus TPS - 1 & 2	1600	6390.66
	Total KPCL 7	18159.85	



5.2 Total Hydel generation would be 11607.47 MUs and energy from Thermal plants would be scheduled is around 18159.85 MUs for 2024-25 from KPCL Thermal Station and Raichur Power Corporation Ltd.

# 6.0 Projection of cost - KPCL Hydel and Thermal Stations:

#### **Hydel Stations:**

The tariff rates worked out by KPCL based on KERC order dated 03.08.2009 for hydel stations except for Shivasamudram, Shimsha, Munirabad & MGHE. The tariff for the hydel stations is based on the design energy. The over and above the design energy paid at 15 paise per kwh or 3% of the ROE whichever is less. The Hon'ble Commission vide order dated 22.8.2023 determined the tariff for KPCL Hydro Stations of Shiva and Shimsha, Munirabad & MGHE. The tariff proposed by KPCL in its letter dated 24.11.2023 is considered for above hydro stations. The rate details furnished by the KPCL is as shown in Table-4.

Table-4 (Amount in Rs crores)

PARTICULARS	SVP	KVP	VVP	КРН	KDPH	GPH	GHEP	ВРН	ADPH	Varah 3&4
1.Gross Block (Rs. Crs)	435.05	527.55	352.43	442.62	302.29	530.78	47.08	24.70	521.37	262.49
2. a) Capacity (MW)	1090.00	941.00	239.00	150.00	120.00	240.00	32.00	39.20	290.00	230.00
b) Tariff Design Energy (TDE) (MUs)	3737.95	2058.77	848.69	419.90	372.48	442.62	84.97	50.49	286.00	834.86
c) Estimated Net Metered Energy	4608.00	3401.00	1084.02	363.00	364.00	472.00	70.00	55.00	483.00	1060.0 0
d) Minimum of TDE or actual NME	3737.95	2058.77	848.69	363.00	364.00	442.62	70.00	50.49	286.00	834.86
e) PAF%	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00
3. Estimated Recoverable Capacity Charges: Rs Crores)										
a) Depreciation	10.27	9.47	4.92	14.87	9.05	21.66	0.67	2.34	25.62	11.94
b) Advance depreciation										
c) Total	10.27	9.47	4.92	14.87	9.05	21.66	0.67	2.34	25.62	11.94
e) Actual Recoverable Capacity charges	10.27	9.47	4.92	14.87	9.05	21.66	0.67	2.34	25.62	11.94
d) Monthly Capacity Charge Amount	0.86	0.79	0.41	1.24	0.75	1.81	0.06	0.20	2.13	0.99
4. Estimated Recoverable Primary Energy Charges: (Rs Crores)	ž.									
a) Return	12.98	14.74	10.31	13.26	9.07	15.91	1.41	0.74	15.96	5.39
b) Operation & maintenance expenses	168.22	177.53	122.50	53.98	34.08	39.59	17.23	24.69	19.60	7.37
c) Tax - MAT(15%) plus (12% SC+ 4% Cess)	2.75	3.12	2.18	2.81	1.92	3.37	0.30	0.16	3.38	1.14
d) Interest on working capital	8.70	8.71	5.46	3.29	2.18	3.19	0.73	0.95	3.36	1.45
e) Total (a to d)	192.65	204.10	140.45	73.34	47.25	62.06	19.67	26.55	42.30	15.35
f) Primary energy charges recoverable on minimum of Actual NME or TDE	192.65	204.10	140.45	63.40	46.17	62.06	16.20	26.55	42.30	15.35
g) Estimated recoverable primary energy charges (Ps. / kwh)	51.54	99.14	165.49	174.66	126.84	140.22	231.49	525.75	147.90	18.39
5. Secondary Energy Charges (Rs. Crores)	2.84	3.22	2.25	0.00	0.00	0.44	0.00	0.07	2.96	0.00
6. Dis-incentive at0.7% per 1% lower PAF below 85% (cap at 15% ROE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
5. Royalty (20/100 Ps./Kwh) (Rs. Crores)	92.16	68.02	21.68	7.26	7.28	9.44	1.40	1.10	48.30	0.00

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6. Calculation of interest on working capital:										
a) Operation &     maintenance expenses	14.02	14.79	10.21	4.50	2.84	3.30	1.44	2.06	1.61	0.61
b) Maintenance spares	4.35	5.28	3.52	4.43	3.02	5.31	0.47	0.25	5.21	6.67
c) Receivables	36.38	34.71626	20.59	11.77	7.84	11.49	2.68	3.70	14.33	4.55
Total	54.75	54.79	34.33	20.69	13.70	20.09	4.59	6.00	21.15	11.83
d) Interest @ SBI PLR (13.89%) + 2% (15.89%)	8.70	8.71	5.46	3.29	2.18	3.19	0.73	0.95	3.36	1.45
8. Tariff at 90% dependability (Rs./kwh)	0.789	1.368	1.968	2.274	1.707	2.105	2.559	5.940	4.063	0.327

Computation of Tariff in respect of MGHE Jog, Munirabad & Shiva & Simsha

Computation of farm in respect of MGHE Jog, Mi	MGHE -		Shiva &
PARTICULARS	Jog	Munirabad	Simsha
1. a) Energy Generation as considered by KERC	260	01	270
(MUs)	369	81	278
b) Estimated energy sales (MUs)  2. Estimated Recoverable Capacity Charges:	334.6	99	276
(Rs Crores)			
a) Interest payment	0	0	0
b) Depreciation	1.79	0.34	3.48
c) Total	1.79	0.34	3.48
d) Monthly Capacity Charge Amount	0.15	0.03	0.29
3. Estimated Recoverable Primary Energy Charges:			
(Rs Crores)			
a) Return	2.60	0.51	4.54
b) Operation & maintenance expenses			
i) Escalated O&M expenses as approved by	40.70		24.00
KERC	12.78	6.52	24.82
ii) 0&M expenses due to wage revision (pending KERC approval)			
Total O&M expenses	12.78	6.52	24.82
c) Tax - As determined by KERC	0.88	0.17	1.54
d) Interest on working capital	0.58	0.47	1.62
e) Total ( a to d )	16.84	7.68	32.52
f) Estimated recoverable primary energy charges			
(Ps. / kwh)	50.33	77.58	117.91
3. Royalty (20 Ps./Kwh) (Rs. Crores)	6.69	1.98	4.46
4. Calculation of interest on working capital:			
a) Operation & maintenance expenses	7.76	2.52	6.52
b) Maintenance spares	0.00	0.00	0.00
c) Receivables	4.16	1.34	6.70
Total	11.92	3.86	13.23
d) Interest @ SBI PLR rate as applied by KERC	1.46	0.47	1.62



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Rate considered for Hydro stations:

Sl. No.	Source	Design energy in MUs	Rs/unit
A	KPCL – Hydel		
1	Sharavathy Valley Projects (10x103.5 + 2x27.5)	3737.95	0.65
2	MGHE (4x21 + 4x13.2)	368.89	0.76
3	Gerusoppa_Sharavathi Tail Race_STR (4x60)	240.00	1.98
4	Kali Valley Project_KVP (2x50 + 5x150 +1x135)	2058.77	0.84
5	Varahi Valley Project_VVP (4x115 + 2x4.5)	848.69	1.56
6	Almatti Dam Power House_ADPH (1x15 + 5x55)	286.00	2.47
7	Bhadra Hydro_BHEP (1x2+2x12)+(1x7.2+1x6)	50.49	5.47
8	Kadra Power House)KPH (3x50)	419.90	2.36
9	Kodasalli Dam Power House_KDPH (3x40)	372.48	1.75
11	Ghataprabha Dam Power House_GDPH (2x16)	84.97	3.11
12	Shivasamudram (4x4 + 6x3)	278.00	1.47
13	Shimshapura (2x8.6)		0.00
14	Munirabad Power House (2x9 + 1x10)	80.58	1.01

Note: Paise 20 as royalty charges is considered for the actual generation in respect of all Hydro stations except for the Almatti Dam Power House Rs. 1.00 /unit and shimsa. The average cost of hydel stations works out to Rs.1.09/unit for FY 2024-25.

#### **KPCL Thermal Stations:**

The tariff rates worked out by KPCL based on various parameters of tariff orders in respect of thermal stations RTPS units 1 to 7, RTPS-8, BTPS unit-I, II & III is considered. Tariff proposed in the letter dated 24.11.2023 by KPCL is considered for the following units;

	Amount in
RTPS Unit 1 to 7	Rs. Crores
Estimated Recoverable Fixed Charges:	
a) i. Interest payment	0.00
ii. Lease rentals	0.65
b) Return	116.99
c) Depreciation	88.24
d) Operation & maintenance expenses	
i) Escalated O&M expenses approved by KERC	657.76
ii) 0&M expenses due to wage revision (pending	
KERC approval)	
Total O&M expenditure:	657.76
e) Tax - (15% + 12% Surcharge + 4% Cess)	
17.4720%	24.77
f) Interest on working capital	212.18
g) Fixed cost of FGD	161.01
h) Total ( a to f )	1261.59
CALCULATION OF INTEREST ON WORKING CAPITAL	
a) Operation & maintenance expenses 30 days	
requirement	54.06



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b) Stock of primary fuel 45 days requirement	466.81
c) Stock of secondary fuel 60 days requirement	21.97
d) Maintenance spares 1% of Capital Expenditure	29.37
e) Receivables 60 days of actual billing	763.07
Total	1335.29
f) Interest @ SBI PLR (12.27%) + 2% (14.27%)	212.18

	RTPS Unit	BTPS	BTPS	BTPS
Particulars	8	Unit 1	Unit 2	Unit 3
FINANCE CHARGES:	11.02	0.00	40.23	162.35
O&M EXPENSES				
i) O&M expenses as approved by KERC	104.80	124.13	149.71	168.49
DEPRECIATION	59.66	44.20	121.94	225.84
RETURN ON EQUITY	31.28	53.90	74.76	184.78
INTEREST ON WORKING CAPITAL	20.11	79.36	51.99	114.02
Income tax		11.41		
Total	226.87	313.01	438.63	855.48
INTEREST ON WORKING CAPITAL				
a. COAL COST 2 months requirement	50.88	252.02	115.01	316.74
b. OIL COST 2 months requirement	0.96	6.77	3.15	2.60
c. O&M EXPENSES AT 1 MONTH	7.81	10.34	11.16	14.04
d. SPARES AT 20% OF O&M expenses	18.75	33.84	26.79	33.70
e. RECEIVABLES AT 2 months	89.95	344.91	190.20	523.68
	168.35	647.87	346.31	890.76
Interest at SBI PLR as on 01.04.2010				
@11.75%	19.78	79.36	51.08	114.02

Capacity charges as determined by KERC in the order dated 17.1.2022 is considered for the YTPS for FY 2024-25. The average variable cost for the months of April 2023 to September 2023 is considered for the FY 2024-25.

Rs/kwh

Month	RTPS Unit 1 to 7	RTPS Unit-8	BTPS Unit-1	BTPS Unit-2	BTPS Unit-3	YTPS
Apr-23	4.38	4.39	4.75	4.46	4.38	4.43
May-23	4.65	4.57	4.95	4.64	4.41	4.52
Jun-23	5.05	5.00	4.99	4.56	4.50	4.68
Jul-23	5.10	5.05	5.34	4.97	4.81	4.76
Aug-23	4.93	4.80	5.20	5.16	4.50	4.77
Sep-23	6.09	5.99	4.88	4.36	4.54	5.19
Total	30.19	29.80	30.10	28.15	27.13	28.35
Average rate/unit	5.03	4.97	5.02	4.69	4.52	4.72



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Table-5

	(Rs /Kwh)						
		2024	25				
Sl. no.	Stations	Fixed cost Rs in Crores	Variable cost Paise per Kwh				
1	RTPS unit 1 to 7	1261.59	5.03				
2	RTPS unit-8	226.87	4.97				
3	BTPS unit-1	313.01	5.02				
4	BTPS unit-II	438.63	4.69				
5	BTPS Unit-III	855.48	4.52				
6	Yermarus Unit-I & II	2223.04	4.72				
	Total	5318.63					

#### 7.0 Central Generating Stations:

ESCOMs have a share in Central Generating station of NTPC, Neyveli Lignite Corporation (NLC), Nuclear power stations and other Joint Venture Projects. The allocation of capacity entitlement from these stations includes both firm and unallocated share. The unallocated share is vary depending upon the allocation issued by Ministry of Power, GoI.

The energy available to ESCOMs depends on the scheduled generation and share in a month and other parameters such as availability and outages (forced and planned). SRPC in the email dated 20.11.2023 has furnished the energy available at ex-bus generation in respect of NTPC stations, NLC and NPCIL for the year 2024-25. Out of the total month wise energy available at Ex-bus, the share of Karnataka including unallocated share for the month of September 2023 is taken to arrive the energy available to Karnataka for FY 2024-25. In order to arrive energy available at Karnataka Periphery, all India Transmission loss for the week from 20.11.2023 to 26.11.2023 as notified by the NLDC of 3.59% is taken. The scheduled energy available at ex-bus, share of Karnataka and net energy available at KPTCL periphery after considering the POC losses is shown in **Table-6**.

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Station	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
RSTP-I&II	1289	1332	1117	1182	1332	1289	1332	1064	1182	1332	1203	1332	14988.58
RSTP-III	329	340	329	340	340		340	329	340	70	240	340	3666.05
RSTP-Talcher	1327	1371	1143	1039	1371	1325	1370	1326	1211	1017	1237	1372	15108.02
Simhadri station II	645	666	473	355	666	645	666	645	666	666	602	666	7359.98
Vallur unit-I, II & III	830.70	858.39	608.77	591.13	858.39	781.83	807.89	703.65	568.95	573.62	775.32	858.39	8817.01
Kudigi Unit I,2 & 3	1539	1590	1026	1505	1590	1539	1590	1436	1094	1590	1436	1590	17528
NTPC Telagana	908	938	908	938	938	908	938	908	938	938	848	938	11049.86
NTPC Farakka STPS -I&II	217	217	217										652.32
NLC II Stage-1	311	361	348	253	363	241	204	274	352	361	291	319	3678.00
NLC II Stage-2	421	488	364	487	380	466	470	420	365	0.000		433	5046.00
NLC expansion I	260	270	130	213	269	260	156	254	262				2865.00
NLC expansion Stage II (Unit-	226	121	226	235	119	226	121	226	121	235	212	235	2303.00
NTPL Unit-2X 500 Mw	628	419	387	576	649	628	649	628	649	649			7100
New NLC Thermal projects	596	307	457	591	543	523	552	536	373				6232.00
MAPS	101	106	101	-18	69	101	106	200-00	106			(1) (2) (2)	1083.00
Kaiga Unit-1& 2	239	247	239	247	247	119	78	118	122				2010.00
Kaiga Unit-3&4	252	260	252	260	260	252	260		220				2 00 00 00
Kudamkulam Unit-1	435	692	670	692	692	670	110,000	670	692	692	0.00		7912.44
Kudamkulam Unit-II	698	89	0	502	692	670	692	670	692	692	625	692	6712.74
													127012.92

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# Energy allocated to State of Karnataka from the CGS stations: Table - 6

SI. No.	Stations	Total Energy scheduled at EX- bus in MUs	Share of Karnataka in %	Karnataka Share in MUs
1	NTPC_RSTP-I&II (3x200 + 3x500)	14989	23.29	3491.29
2	NTPC_RSTP-III (1x500)	3666	25.12	920.91
3	NTPC_Thalcherl (4x500)	15108	19.72	2978.70
4	Simhadri Unit 1&2 (2x500)	7360	21.79	1604.03
5	NTPC Tamilnadu Energy Company Ltd (NTECL)_Vallur	8817	11.53	1016.25
6	NTPC Kudgi STPP(800 X3)	17528	56.88	9970.34
7	NTPC Telagana STPP(800X2)	11050	6.72	742.09
8	NTPC Khalgon	652	100.00	652.32
9	Neyveli Lignite Corporation_TPS II_Stage 1 (3x210)	3678	23.62	868.78
10	Neyveli Lignite Corporation_TPS II_Stage 2 (4x210)	5046	23.96	1209.02
11	Neyveli Lignite Corporation_TPS I_Expansion (2x210)	2865	28.99	830.59
12	Neyveli Lignite Corporation_TPS II_Expansion (2x250)	2303	28.76	662.43
13	NLC Tamilnadu Power Ltd (NTPL) (Tuticorin) (2x500)	7100	22.20	1576.22
14	New NLC Thermal Project	6232	7.65	477.00
15	MAPS (2x220)	1083	8.45	91.52
16	Kaiga Unit 1 & 2 (2x220)	2010	31.37	630.44
17	Kaiga Unit 3 & 4 (2x220)	2901	33.87	982.43
18	NPCIL-Kudankulam Atomic Power Generating Statio	7912	24.37	1928.52
19	NPCIL-Kudankulam Atomic Power Generating Statio	6713	22.10	1483.52
20	DVC_Unit 1 & 2_Mejia TPS (2x500)	7037	20.00	1407.42
21	DVC_Unit 7 & 8_Koderma TPS (2x500)	7037	25.00	1759.27

# Energy available at KPTCL periphery

Stations	Energy scheduled @ generators Ex-bus in MUs	Losses (%)	Energy @ Ex-bus Mus
NTPC_RSTP-I&II (3x200 + 3x500)	3491.29	3.59	3365.95
NTPC_RSTP-III (1x500)	920.91	3.59	887.85
NTPC_ThalcherI (4x500)	2978.70	3.59	2871.76
Simhadri Unit 1&2 (2x500)	1604.03	3.59	1546.45
NTPC Tamilnadu Energy Company Ltd (NTECL)_Vallur TPS Stage 1&2 &3 (3x500)	1016.25	3.59	979.76
NTPC Kudgi STPP(800 X3)	9970.34	3.59	9612.41
NTPC Telagana STPP(800X2)	742.09	3.59	715.45
NTPC Kahalgaon	652.32	3.59	628.90
Neyveli Lignite Corporation_TPS II_Stage 1 (3x210)	868.78	3.59	837.59
Neyveli Lignite Corporation_TPS II_Stage 2 (4x210)	1209.02	3.59	1165.62
Neyveli Lignite Corporation_TPS I_Expansion (2x210)	830.59	3.59	800.77
Neyveli Lignite Corporation_TPS II_Expansion (2x250)	662.43	3.59	638.65

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NLC Tamilnadu Power Ltd (NTPL) (Tuticorin) (2x500)	1576.22	3.59	1519.64
New NLC Thermal Project	477.00	3.59	459.87
MAPS (2x220)	91.52	3.59	88.24
Kaiga Unit 1 & 2 (2x220)	630.44	3.59	607.81
Kaiga Unit 3 & 4 (2x220)	982.43	3.59	947.16
NPCIL-Kudankulam Atomic Power Generating Station (KKNPP_Unit 1 (1x1000)	1928.52	3.59	1859.29
NPCIL-Kudankulam Atomic Power Generating Station (KKNPP_Unit 2 (1x1000)	1483.52	3.59	1430.26
DVC_Unit 1 & 2_Mejia TPS (2x500)	1407.42	3.59	1356.89
DVC_Unit 7 & 8_Koderma TPS (2x500)	1759.27	3.59	1696.11
Total	35283.09		34016.43

CERC has determined the tariff for the control period 2019 to 2024. The tariff for the further control period shall be determined after filing tariff petition by the generator. Hence, the applicable capacity charges for the year 2023-24 has been considered for the FY 2024-25.

The average variable cost for the month of April -2023 to Sept 2023 is considered for

energy charges for FY 2024-2025.

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Station	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep- 23	Average rate Rs./unit
RSTP-I&II	3.38	3.42	3.61	3.865	4.115	3.965	3.73
RSTP-III	3.33	3.37	3.56	3.81	4.06	3.91	3.67
RSTP-Talcher	1.68	1.68	1.99	2.19	2.39	1.82	1.96
Simhadri station II	4.73	4.70	4.91	4.772	3.955	3.314	4.40
Vallur unit-I, II & III	3.27	3.73	3.79	3.847	3.99	4.079	3.78
Kudigi Unit 1,2 & 3	5.75	4.96	5.19	5.196	4.777	5.143	5.17
NTPC Telagana						3.68	3.68
NTPC Kahalgaon STPS - I&II						3.7	3.70
NLC II Stage-1	3.21	3.21	3.21	3.214	3.206	3.204	3.21
NLC II Stage-2	3.21	3.21	3.21	3.214	3.206	3.204	3.21
NLC expansion I	2.84	2.85	2.85	2.844	2.87	2.852	2.85
NLC expansion Stage II (Unit-1)	3.03	3.03	3.04	3.084	3.042	3.042	3.04
NTPL Unit-2X 500 Mw	3.50	3.43	4.02	3.425	3.374	3.312	3.51
New NLC Thermal projects	2.58	2.63	2.62	2.561	2.565	2.581	2.59
MAPS	2.60	2.60	2.60	2.60	2.60	2.60	2.60
Kaiga Unit-1& 2	3.497	3.497	3.500	3.500	3.500	3.500	3.50
Kaiga Unit-3&4	3.497	3.497	3.500	3.500	3.500	3.500	3.50
Kudamkulam Unit-1	4.397	4.402	4.244	4.245	4.247	4.250	4.30
Kudamkulam Unit-II	4.397	4.402	4.244	4.245	4.247	4.250	4.30

In respect of MAPS, Kaiga, and Kundamkulam power station the average rate per unit for the months of April – 2023 to Sep-2023 is considered.

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Rs/kwh

Particulars	MAPS	Kaiga Units 1 to 4	Kudamkulam Unit -1	Kudamkulam Unit -2
Base Price	2.402	3.415	3.545	3.545
Heavy Water adjustment charges	0.007	-0.189	0.535	0.535
Heavy Water lease adjustment charges	0.000	0.020	0.000	0.000
Insurance	0.123	0.183	0.052	0.052
Decommissiong Levy	0.020	0.020	0.020	0.020
Forex Variation Adjustment Charges	0.050	0.050	0.095	0.095
Nuclear Liability & Forex adjustment	0.000	0.000	0.050	0.050
Total tariff	2.602	3.499	4.298	4.298

As per the order of CERC, CGS stations are claiming ash transportation charges, the same is considered in the projection. The capacity charges (Fixed Cost) and variable cost considered for 2024-25 is shown in Table-9.

Table-9

Central Projects	FC Rs in Cr	Rs/kwh	Other charges Rs crores
NTPC_RSTP-I&II (3x200 + 3x500)	266.16	3.73	0.33
NTPC_RSTP-III (1x500)	75.32	3.67	0.01
NTPC_ThalcherI (4x500)	225.66	1.96	24.51
Simhadri Unit 1&2 (2x500)	219.26	4.40	9.89
NTPC Tamilnadu Energy Company Ltd (NTECL)_Vallur TPS Stage 1&2 &3 (3x500)	205.03	3.78	0.12
NTPC Kudgi STPP(800 X3)	1590.05	5.17	0.00
NTPC Telagana STPP(800X2)	74.85	3.68	0.00
NTPC Kahalgaon	50.10	3.70	0.00
Neyveli Lignite Corporation_TPS II_Stage 1 (3x210)	84.23	3.21	0.11
Neyveli Lignite Corporation_TPS II_Stage 2 (4x210)	117.16	3.21	0.15
Neyveli Lignite Corporation_TPS I_Expansion (2x210)	81.97	2.85	1.82
Neyveli Lignite Corporation_TPS II_Expansion (2x250)	191.55	3.04	0.12
NLC Tamilnadu Power Ltd (NTPL) (Tuticorin) (2x500)	242.01	3.51	0.17
New NLC Thermal Project	96.41	2.59	0.29
MAPS (2x220)	0.00	2.60	0.00
Kaiga Unit 1 & 2 (2x220)	0.00	3.50	0.22
Kaiga Unit 3 & 4 (2x220)	0.00	3.50	0.00
NPCIL-Kudankulam Atomic Power Generating Station (KKNPP_Unit 1 (1x1000)	0.00	4.30	0.19
NPCIL-Kudankulam Atomic Power Generating Station (KKNPP_Unit 2 (1x1000)	0.00	4.30	0.17
DVC_Unit 1 & 2_Mejia TPS (2x500)	205.56	3.26	5.03
DVC_Unit 7 & 8_Koderma TPS (2x500)	283.51	2.99	2.99

Income tax for the CGS station included in the capacity charges payment on normative basis by grossing up of RoE with effective tax rate of the respective financial year of the



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generating company. Income tax is included as a part of capacity charges and not payable separately and hence not considered.

# 8.0 Sharing Transmission Charges

The power transmission from Central Sector Generating Stations is either through the PGCIL lines or any lines constructed by developer selected through competitive bidding route from the generating plants. ESCOMs have to pay POC (Transmission charges) to PGCIL / Independent Power Transmission Utility for transmitting the CGS power and power from other States.

Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses), Regulations 2020 came into force with effect from 1.11.2020. National Load Despatch Centre (NLDC) as the Implementing Agency under Sharing Regulations 2020 has been entrusted with the responsibility of computation of Inter State Transmission Charges (ISTS) and losses. As per Regulation (14)(5)(b), Transmission Charges payable by DICs shall be notified by the Implementing Agency by 25th day of the month following billing period. The computation of transmission charges shall be done on the basis of inputs received from ISTS Licensees, DICs / States, CTU as per the Regulations.

As per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, the ESCOMs shall have to make transmission charges on the following components;

- 1) National Component (NC);
- 2) Regional Component (RC):
- 3) Transformer Component (TC); and
- 4) AC System Component (ACC).

CERC has issued the Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-state transmission system), Regulation, 2022.

State Transmission Utility on behalf of intra-State entities including distribution licensees has been allocated GNA quantum of 4376 MW to Karnataka in Annexure-I of Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022 notified on 07.06.2022.

ESCOMs have tied up the total power purchase quantum connected to ISGS network is 5996 MW. The additional GNA is proposed to an extent of 1620 MW. The total GNA quantum including additional GNA is 5996 MW (4376 MW Plus additional GNA of 1620 MW). As per the above notification, the PoC charges payable by ESCOMs of Karnataka for the FY 2024-25 is worked out as below:

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Amount in Rs crores

GNA	Usage based AC system charges	Balance AC system charges	National component		Regional Component	Transforme rs component	Bilateral charges	Total Transmiss ion charges
	AC-UBC	AC-BC	NC-RE	NC+HVDC	RC	TC		
5996.93	625.92	1208.68	187.54	157.53	822.94	124.92	0.00	3127.52

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Particulars
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TOTAL

5996.93

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Yearly charges						
Rs crores	1520.97	226.98	365.83	583.33	430.41	3127.52

The above charges vary on month to month depending on load, generation, usage of lines and transmission charges of additional lines added to the system.

9.0 The **Grid Controller of India Ltd (**POSOCO-SRLDC) charges are considered as per CERC order dated 31.5.2021 and SRLDC fee Regulation 2019. The Charges payable for the year is Rs. 5.50 Crores. The ESCOM wise charges allocated is as below;

ESCOMS wise % of allocation	BESCOM	MESCOM	CESCO	HESCOM	GESCOM	TOTAL	Capacity entitlement in MW for the month of October- 2023
NTPC-Ramagundam (RSTPS) I &II	49.5000	7.0000	11.7500	18.5000	13.2500	100	483.35
NTPC-Ramagundam (RSTPS) III	49.5000	7.0000	11.7500	18.5000	13.2500	100	120.58
NTPC TALCHER II	49.5000	7.0000	11.7500	18.5000	13.2500	100	402.38
NTPC SHIMHADRI II	49.5000	7.0000	11.7500	18.5000	13.2500	100	208.05
NTPC KUDGI	49.5000	7.0000	11.7500	18.5000	13.2500	100	1211.18
NLC TS TPS II-Stage-I	49.5000	7.0000	11.7500	18.5000	13.2500	100	146.03
NLC TS TPS II-Stage-II	49.5000	7.0000	11.7500	18.5000	13.2500	100	196.62
NLC TPS - I Expansion	49.5000	7.0000	11.7500	18.5000	13.2500	100	121.04
NLC TPS - II Expansion	49.5000	7.0000	11.7500	18.5000	13.2500	100	144.10
NLC NNTPS	49.5000	7.0000	11.7500	18.5000	13.2500	100	73.72
NTECL- Vellore STPS TPS I, II & III	49.5000	7.0000	11.7500	18.5000	13.2500	100	162.65
NTPL Tuticorin	49.5000	7.0000	11.7500	18.5000	13.2500	100	211.78
NPCIL MAPS	49.5000	7.0000	11.7500	18.5000	13.2500	100	37.18
NPCIL Kaiga-UNIT I & II	49.5000	7.0000	11.7500	18.5000	13.2500	100	138.01
NPCIL Kaiga-UNIT III & IV	49.5000	7.0000	11.7500	18.5000	13.2500	100	149.01
NPCIL KKNPP-UNIT I	49.5000	7.0000	11.7500	18.5000	13.2500	100	243.73
NPCIL KKNPP-UNIT II	49.5000	7.0000	11.7500	18.5000	13.2500	100	221.00
Telangana STTP-UNIT I	49.5000	7.0000	11.7500	18.5000	13.2500	100	53.73
Damodar Valley Corporation U-I & II (Mejia)	49.5000	7.0000	11.7500	18.5000	13.2500	100	188.50
Damodar Valley Corporation U-7 & 8 (Koderma)	49.5000	7.0000	11.7500	18.5000	13.2500	100	235.63
NTPCVVNL SOLAR (Rajasthan)	46.6473	7.9087	11.5021	19.0788	14.8631	100	65.00
NTPC-NTPCVVNL Solar (New)	46.6473	7.9087	11.5021	19.0788	14.8631	100	600.00
Balance National Solar Mission (Pavagada)	46.3898	7.8896	11.5998	18.9999	15.1209	100	1250.00
Total							6663.26
NTPC-Ramagundam (RSTPS) I &II	239.26	33.83	56.79	89.42	64.04	483.35	
NTPC-Ramagundam (RSTPS) JII	59.69	8.44	14.17	22.31	15.98	120.58	
NTRC TALCHER II	199.18	28.17	47.28	74.44	53.32	402.38	

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NTPC SHIMHADRI II	102.99	14.56	24.45	38.49	27.57	208.05	
NTPC KUDGI	599.53	84.78	142.31	224.07	160.48	1211.18	
NLC TS II-Stage-I	72.29	10.22	17.16	27.02	19.35	146.03	
NLC TS II-Stage-II	97.33	13.76	23.10	36.37	26.05	196.62	
NLC TPS - I Expansion	59.92	8.47	14.22	22.39	16.04	121.04	
NLC TPS - II Expansion	71.33	10.09	16.93	26.66	19.09	144.10	
NLC NNTPS	36.49	5.16	8.66	13.64	9.77	73.72	
Vellore STPS TPS I & II	80.51	11.39	19.11	30.09	21.55	162.65	,
NTPL Tuticorin	104.83	14.82	24.88	39.18	28.06	211.78	
NPCIL MAPS	18.41	2.60	4.37	6.88	4.93	37.18	
Kaiga-UNIT I & II	68.31	9.66	16.22	25.53	18.29	138.01	
Kaiga-UNIT III	73.76	10.43	17.51	27.57	19.74	149.01	
NPCIL KKNPP-UNIT I	120.65	17.06	28.64	45.09	32.29	243.73	
NPCIL KKNPP-UNIT II	109.40	15.47	25.97	40.89	29.28	221.00	
Telangana STTP-UNIT I	26.59	3.76	6.31	9.94	7.12	53.73	
Damodar Valley Corporation (Mejia)	93.31	13.20	22.15	34.87	24.98	188.50	
Damodar Valley Corporation (Koderma)	116.63	16.49	27.69	43.59	31.22	235.63	
SOLAR NTPCVVNL (Rajasthan) (OLD)	30.32	5.14	7.48	12.40	9.66	65.00	
NTPC-NTPCVVNL Solar (New)	279.88	47.45	69.01	114.47	89.18	600.00	
Balance National Solar Mission (Pavagada)	579.87	98.62	145.00	237.50	189.01	1250.00	
Total	3240.47	483.59	779.41	1242.80	917.00	6663.26	The Company of the Co

ESCOMS	B.E.S.COM	M.E.S.COM	C.E.S.CO	HESCOM	G.E.S.COM	TOTAL
Weighted average allocation in MW	3240.47	483.59	779.41	1242.80	917.00	6663.26

7.2580

0.40

11.6970

0.64

18.6520

1.03

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100

5.50

0.76

# 10.0 Independent Power Producers

Weighted Average %

Charges in Rs

The generation of 1200 MW of UPCL Unit -1 & Unit-2 taken at 85% of 90% installed capacity as per PPA/ approval given by Government. Tariff in respect of control period 2019-20 to 2023-24 is yet to be determined by CERC and hence the auxiliary consumption of 5.75% as per CERC Regulation 2019 and additional auxiliary consumption 1.2% allowed by CERC vide order dated 20.02.2014 and 10.07.2015 is taken. The capacity charges determined by CERC in the order dated 22.01.2020 applicable for FY 2018-19 is considered for FY 2024-25. The average variable cost for the month of April 2023 to Oct-2023 is considered for FY 2023-24

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	Table-10											
Stations Energy in Mus		Fixed cost Rs in Cr	Variable cost Rs/kwh	Other Charges Rs crores								
	UPCL	2435.09	1091.48	5.34	32.00							

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### Month wise Variable cost per unit

Month	Rs /unit
Aug-23	6.008
Sep-23	5.207
Oct-23	4.797
Average	5.337



# 11.0 Non-conventional Energy Source (NCE source)

- 11.1 The actual generation of NCE projects for the year 2022-23 has been considered for FY 2024-25 including Solar, Co-generation, Bio-mass, Wind Mills and Mini Hydel projects..
- 11.2 Ministry of power allocated un allocated power of coal based NTPC stations for bundling with solar power in ratio of 1.2 (unallocated power: Solar power) as envisaged under National Solar Mission Phase–II, Batch-II Tranche-I has been surrendered on 15.7.2021.
- **11.3** ESCOM wise NCE energy projected for FY2024-25 is shown in **Table 11**.

**Energy in Mus** 

Sources	BESCOM	GESCOM	HESCOM	MESCOM	CESC	Total
Co-generation	0.00	57.61	588.72	0.00	20.75	667.08
Mini Hydel_EXISTING	524.30	157.75	59.72	381.97	275.34	1399.08
Mini Hydel_New	0.00	0.00	0.00	0.00	0.00	0.00
Wind Mill_EXISTING	2464.13	1351.07	1896.36	257.32	195.52	6164.40
Wind Mill_New	0.00	0.00	0.00	0.00	0.00	0.00
Solar_EXISTING	4652.11	1074.40	1865.86	740.31	1004.63	9337.31
Solar_New	0.00	0.00	0.00	0.00	0.00	0.00
Biomass_EXISTING	64.58	0.00	0.00	0.00	0.00	64.58
Biomass_New	0.00	0.00	0.00	0.00	0.00	0.00
KPCL-Wind (9x0.225+10x0.230)	6.95	0.00	0.00	0.00	0.00	6.95
KPCL-Solar (Yelesandra, Itnal, Yapaldinni, Shimsha) (3x1+3x1+1x3+1x5)	2.21	2.71	1.40	0.00	0.00	6.32
KUSUM C	618.91	0.00	6.32	0.00	0.00	625.23
Waste to Energy	71.93	0.00	0.00	0.00	0.00	71.93
Total	8405.11	2643.54	4418.38	1379.60	1496.24	18342.88
Bundled Power:						
Bundled Power Coal (old)	181.82	57.93	74.39	30.84	44.83	389.81
Bundled Power Solar	45.80	14.59	18.74	7.77	11.29	98.19

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(old)						
Bundled Power Coal (new)	0.00	0.00	0.00	0.00	0.00	0.00
Bundled Power Solar (new)	578.95	188.40	236.73	98.30	144.53	1246.91
Sub Total	806.57	260.92	329.86	136.91	200.65	1734.92
Grand total	9211.68	2904.46	4748.25	1516.51	1696.89	20077.79

11.4 The average cost of the year 2022-23 is considered for Hydro, wind and, Solar. The tariff in respect of commission order dated 15.11.2021 has been considered for Co-

generation projects.						
Sources	BESCOM	GESCOM	HESCOM	MESCOM	CESC	Total
Co-generation	0.00	32.46	331.71	0.00	11.80	375.97
Mini Hydel_EXISTING	167.74	51.73	17.49	132.54	90.21	459.71
Mini Hydel_New	0.00	0.00	0.00	0.00	0.00	0.00
Wind Mill_EXISTING	960.26	531.94	772.94	92.12	67.73	2424.99
Wind Mill_New	0.00	0.00	0.00	0.00	0.00	0.00
Solar_EXISTING	2470.55	471.36	1031.27	335.36	424.98	4733.52
Solar_New	0.00	0.00	0.00	0.00	0.00	0.00
Biomass_EXISTING	36.21	0.00	0.00	0.00	0.00	36.21
Biomass_New	0.00	0.00	0.00	0.00	0.00	0.00
KPCL-Wind (9x0.225+10x0.230)	2.29	0.00	0.00	0.00	0.00	2.29
KPCL-Solar (Yelesandra, Itnal, Yapaldinni, Shimsha) (3x1+3x1+1x3+1x5)	1.59	1.62	0.84	0.00	0.00	4.05
KUSUM C	195.39	0.00	1.94	0.00	0.00	197.33
Waste to Energy	50.93	0.00	0.00	0.00	0.00	50.93
Total	3884.96	1089.11	2156.19	560.02	594.72	8285.00
Bundled Power:						
Bundled Power Coal (old)	105.17	33.51	43.03	17.84	25.93	225.48
Bundled Power Solar (old)	54.32	17.31	22.23	9.21	13.39	116.46
Bundled Power Coal (new)	0.00	0.00	0.00	0.00	0.00	0.00
Bundled Power Solar (new)	291.20	94.77	119.08	49.45	72.70	627.18
Sub Total	806.57	260.92	329.86	136.91	200.65	1734.92
Grand total	4691.53	1350.03	2486.05	696.94	795.37	10019.91

### 12.0 Jurala Project

TRARDATAKA) \$250 R.D. 8354

The ESCOMs having a share of 50% from Jurala Priyadarshni Hydro Electric Projects ie 117 MW. The net energy exported to Karnataka from Jural Priyadarshni Hydro Electric Projects for the year 2022-23 is considered for FY 2024-25. The TSERC vide tariff order dated 22.03.2023 has determined the capacity charges for Diet Bakshim Kamazia the project for the control period from 1.4.2019 to 31.3.2024. The 50% of the

Mangaluru - 575 004

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capacity Charges applicable for the FY 2023-24 as determine by the TSERC is considered

### Table-13

	Apr-24	M ay-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	M ar-25	Total
Energy in Mus	-0.096	-0.112	1.168	28.288	58.64	60.264	68.2544	12.704	0.2576	-0.072	-0.0768	-0.0656	229.1536
Amount in Rs Cr	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	50.61

13.0 The energy from T. B. Dam power is shared between AP/Telangana and Karnataka. The 1/5<sup>th</sup> share of revenue expenditure and energy has been shared between two states. The actual cost and energy supplied for the FY 2022-23 is considered for FY 2024-25. The power purchase cost and energy from T. B. Dam has been estimated at 37.08 MUs and Rs. 4.00 crore.

Table-14

a .	Apr-	May-	Jun-	Jul-	Aug-	Sep-	Oct-	Nov-	Dec-	Jan-	Feb-	Mar-	
	24	24	24	24	24	24	24	24	24	25	25	25	Total
Energy in Mus	1.70	-0.10	0.06	2.99	6.82	5.51	4.28	2.44	2.90	3.55	3.27	3.78	37.08
Amount in Rs crore	0.03	0.66	0.34	0.11	0.23	0.03	0.09	1.12	0.62	0.31	0.16	0.30	4.00

14.0 The projected energy and cost has been allocated among the ESCOMs is as detailed below(except Renewable source) (In %)

Generating Stations	BESCOM	GESCOM	HESCOM	MESCOM	CESC	TOTAL
A. KPCL Thermal Stations:	_					
Raichur Thermal Power Station_RTPS						
1-7 (7x210)	66.85	14.50	5.00	6.50	7.15	100.00
Raichur Thermal Power Station_RTPS						
8 (1x250)	66.85	14.50	5.00	6.50	7.15	100.00
Bellary Thermal Power Station_BTPS-						
1 (1x500)	66.85	14.50	5.00	6.50	7.15	100.00
Bellary Thermal Power Station_BTPS-						
2 (1x500)	66.85	14.50	5.00	6.50	7.15	100.00
Bellary Thermal Power Station_BTPS-						
3 (1x700)	66.85	14.50	5.00	6.50	7.15	100.00
raichur Thermal Power Plant	66.85	14.50	5.00	6.50	7.15	100.00
B. KPCL Hydel Stations:						
Sharavathy Valley Projects (10x103.5						
+ 2x27.5)	13.00	10.00	38.00	14.00	25.00	100.00
MGHE (4x21 + 4x13.2)	13.00	10.00	38.00	14.00	25.00	100.00
Gerusoppa_Sharavathi Tail Race_STR						
(4x60)	13.00	10.00	38.00	14.00	25.00	100.00
Kali Valley Project_KVP (2x50 + 5x150						
+1x135)	13.00	10.00	38.00	14.00	25.00	100.00
Varahi Valley Project_VVP (4x115 +						
2x4.5)	13.00	10.00	38.00	14.00	25.00	100.00
Almatti Dam Power House_ADPH						
(1x15 + 5x55)	13.00	10.00	38.00	14.00	25.00	100.00
Bhadra Hydro_BHEP						
(1x2+2x12)+(1x7.2+1x6)	13.00	10.00	38.00	14.00	25.00	100.00

Superinter Charles (Ele.) Commercial

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MESCOM: 06 <sup>th</sup> MYT	Tariff Peti	tion for FY25	5: Ch.06 ARR			
Kadra Power House)KPH (3x50)	13.00	10.00	20.00	14.00	35.00	100.00
Kodasalli Dam Power House KDPH	13.00	10.00	38.00	14.00	25.00	100.00
(3x40)	13.00	10.00	38.00	14.00	25.00	100.00
Ghataprabha Dam Power						
House_GDPH (2x16)	13.00	10.00	38.00	14.00	25.00	100.00
Shivasamudram (4x4 + 6x3)	13.00	10.00	38.00	14.00	25.00	100.00
Shimshapura (2x8.6)	13.00	10.00	38.00	14.00	25.00	100.00
Munirabad Power House $(2x9 + 1x10)$	13.00	10.00	38.00	14.00	25.00	100.00
Varahi Units # 7 4	13.00	10.00	38.00	14.00	25.00	
C. Central Generating Thermal						
<b>Stations:</b>						
$NTPC_RSTP-I&II (3x200 + 3x500)$	49.50	13.25	18.50	7.00	11.75	100.00
NTPC_RSTP-III (1x500)	49.50	13.25	18.50	7.00	11.75	100.00
NTPC_ThalcherI (4x500)	49.50	13.25	18.50	7.00	11.75	100.00
Simhadri Unit 1&2 (2x500)	49.50	13.25	18.50	7.00	11.75	100.00
NTPC Tamilnadu Energy Company Ltd						NUMBER
(NTECL)_Vallur TPS Stage 1&2 &3						
(3x500)	49.50	13.25	18.50	7.00	11.75	100.00
NTPC Kudgi STPP(800 X3)	49.50	13.25	18.50	7.00	11.75	100.00
NTPC Telagana STPP(800X2)	49.50	13.25	18.50	7.00	11.75	100.00
NTPC Khalgon	49.50	13.25	18.50	7.00	11.75	100.00
Neyveli Lignite Corporation_TPS	17.50	15.25	10.50	7.00	11.73	100.00
II_Stage 1 (3x210)	49.50	13.25	18.50	7.00	11.75	100.00
Neyveli Lignite Corporation_TPS	17.00	10.20	10.00	7.00	11.75	100.00
II_Stage 2 (4x210)	49.50	13.25	18.50	7.00	11.75	100.00
Neyveli Lignite Corporation_TPS			10.00	1		100100
I_Expansion (2x210)	49.50	13.25	18.50	7.00	11.75	100.00
Neyveli Lignite Corporation_TPS						
II_Expansion (2x250)	49.50	13.25	18.50	7.00	11.75	100.00
NLC Tamilnadu Power Ltd (NTPL)						
(Tuticorin) (2x500)	49.50	13.25	18.50	7.00	11.75	100.00
New NLC Thermal Project	49.50	13.25	18.50	7.00	11.75	100.00
MAPS (2x220)	49.50	13.25	18.50	7.00	11.75	100.00
Kaiga Unit 1 & 2 (2x220)	49.50	13.25	18.50	7.00	11.75	100.00
Kaiga Unit 3 & 4 (2x220)	49.50	13.25	18.50	7.00	11.75	100.00
NPCIL-Kudankulam Atomic Power				1	22.70	100100
Generating Station (KKNPP_Unit 1						
(1x1000)	49.50	13.25	18.50	7.00	11.75	100.00
NPCIL-Kudankulam Atomic Power		,				
Generating Station (KKNPP_Unit 2		( )				
(1x1000)	49.50	13.25	18.50	7.00	11.75	100.00
DVC_Unit 1 & 2_Mejia TPS (2x500)	49.50	13.25	18.50	7.00	11.75	100.00
DVC 11-:+ 7 0 0 V 1 TDC (2 F00)	40.50	40.0=	10 70			

Bundled Power Solar (new) E. Independent Power Producers (other than RE): IRAHIHATA ESSIBAT

COM, Corporate Office

49.50

46.65

46.65

0.00

46.39

61.00

13.25

14.86

14.86

0.00

15.12

10.00

DVC\_Unit 7 & 8\_Koderma TPS (2x500)

**D. Bundled Power:** Bundled Power Coal (old)

Bundled Power Solar (old)

Bundled Power Coal (new)

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18.50

19.08

19.08

0.00

19.00

7.00

7.00

7.91

7.91

0.00

7.89

7.00

Page 65

11.75

11.50

11.50

0.00

11.60

15.00

100.00

100.00

100.00

100.00

100.00

0.00

0.00

F. Other Hydro Stations (other than						
KPCL:	,					
Priyadarshini Jurala Hydro Electric						
Station (6x39)	50.00	13.19	20.60	8.00	8.21	100.00
Tunga Bhadra Dam Power						
House_TBPH (4x9+4x9)	50.00	13.19	20.60	8.00	8.21	100.00
I. Other Charges / Credits /						
Adjustments:	0.00	0.00	0.00	0.00	0.00	
Returning of Banked power	46.51	13.19	20.60	8.57	11.14	100.00

15.0 Considering the above percentage of Energy allocation , ESCOMs wise energy and cost projected for the financial year 2024-25 is as below:

ESCOMs	Energy requirement in MUs	Power Purchase cost (Rs/Crores)	Average cost (Rs. /unit)
BESCOM	40331.37	25983.85	6.44
GESCOM	11190.46	6505.80	5.81
HESCOM including Hukkeri Society & AEQUS	15983.94	7621.44	4.77
MESCOM	6668.01	3399.74	5.10
CESC, Mysore	10007.95	4902.61	4.90
Total	84181.73	48413.45	5.75

Power purchase cost incurred by MESCOM (excluding Transmission Charges) in previous years and the projected for future years are indicated in the below table;

agar and	TA	RP	To the last of the	
(2)		SEE'M	1.1	
	et Daksta	(A)(A)		-
* 1	REGD.	NO. 6354 NO. 6354 1134 2008	<b>%</b>	
16		-OF	КРТС	т,
	The state of the s	NAME OF THE PARTY	Kric	L

	Rs. in Cr.		
Year	Amount		
FY20 (Actuals)	2541.03		
FY21 (Actuals)	2814.73		
FY22 (Actuals)	2257.73		
FY23(Appd.in TO 22)	2331.34		
FY23 (Actuals)	2708.94		
FY24 (RE)	3317.56		
FY 25(Projections)	3399.74		

KPTCL Transmission Charges, POSOCO Charges and SLDC Charges:

In the KPTCL Tariff Order -2023, Hon'ble Commission has approved the transmission charges, SLDC charges and POSOCO charges for FY24 as below;

FY24

KPTCL transmission charges : Rs.424.53 Cr.

SLDC charges : Rs.2.02 Cr.

POSOCO charges : Rs.0.34 Cr.

Superinter Landing Engineer (Ele.) Commercial MESCOM, Corporate Office Mangaluru - 575.004

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Accordingly, MESCOM has considered the above charges in the filing for FY25.

# 6.2 Operation and Maintenance (O&M) Costs:

The Operation and Maintenance (0&M) costs includes employee-related costs, repairs & maintenance costs and administrative & general costs. All the above sub components of the 0&M costs are projected for the years FY24 (RE) and FY25 (projections) as detailed below;

MESCOM has considered the norms as prescribed in MYT regulations for projecting the various costs under the head 'O&M Expenses' and accordingly, the parameters considered for projections for the years FY24 (RE) and FY25 (projections).

- ✓ Actual O&M Expenses in the year FY23 as the base.
- ✓ Consumer growth index of 2.56% (3 year CAGR, FY 20 to FY23).
- ✓ Weighted average inflation index of 5.70%
- ✓ Efficiency factor of 1%.

Weighted average inflation index of 7.26% is computed as follows:

Series   Y1	Year	WPI	CPI	Comp.	Yt/	Ln	Year	Product	
2011       98.20       66.50       72.84         2012       105.70       72.70       79.30       1.09       0.08       1.00       0.08         2013       111.10       80.60       86.70       1.19       0.17       2.00       0.35         2014       114.80       85.70       91.52       1.26       0.23       3.00       0.68         2015       110.30       90.80       94.70       1.30       0.26       4.00       1.05         2016       110.30       95.30       98.30       1.35       0.30       5.00       1.50         2017       114.10       97.60       100.90       1.39       0.33       6.00       1.96         2018       118.90       102.40       105.70       1.45       0.37       7.00       2.61         2019       121.20       110.20       112.40       1.54       0.43       8.00       3.47         2020       121.80       116.30       117.40       1.61       0.48       9.00       4.30         2021       135.00       122.00       124.60       1.71       0.54       10.00       5.37         2022       151.30       129.20       133.62 <th></th> <th></th> <th></th> <th>Series</th> <th><b>Y1</b></th> <th>Rt</th> <th>(t-1)</th> <th>[(t-</th>				Series	<b>Y1</b>	Rt	(t-1)	[(t-	
2012         105.70         72.70         79.30         1.09         0.08         1.00         0.08           2013         111.10         80.60         86.70         1.19         0.17         2.00         0.35           2014         114.80         85.70         91.52         1.26         0.23         3.00         0.68           2015         110.30         90.80         94.70         1.30         0.26         4.00         1.05           2016         110.30         95.30         98.30         1.35         0.30         5.00         1.50           2017         114.10         97.60         100.90         1.39         0.33         6.00         1.96           2018         118.90         102.40         105.70         1.45         0.37         7.00         2.61           2019         121.20         110.20         112.40         1.54         0.43         8.00         3.47           2020         121.80         116.30         117.40         1.61         0.48         9.00         4.30           2021         135.00         122.00         124.60         1.71         0.54         10.00         5.37           A=Sum of the product co					=Rt			1)*(LnRt)	
2013       111.10       80.60       86.70       1.19       0.17       2.00       0.35         2014       114.80       85.70       91.52       1.26       0.23       3.00       0.68         2015       110.30       90.80       94.70       1.30       0.26       4.00       1.05         2016       110.30       95.30       98.30       1.35       0.30       5.00       1.50         2017       114.10       97.60       100.90       1.39       0.33       6.00       1.96         2018       118.90       102.40       105.70       1.45       0.37       7.00       2.61         2019       121.20       110.20       112.40       1.54       0.43       8.00       3.47         2020       121.80       116.30       117.40       1.61       0.48       9.00       4.30         2021       135.00       122.00       124.60       1.71       0.54       10.00       5.37         2022       151.30       129.20       133.62       1.83       0.61       11.00       6.67         A=Sum of the product column       28.04         T=6 times of A       168.22         T=(n-1)*n*(2n-1) </td <td>2011</td> <td>98.20</td> <td>66.50</td> <td>72.84</td> <td></td> <td></td> <td></td> <td></td>	2011	98.20	66.50	72.84					
2014       114.80       85.70       91.52       1.26       0.23       3.00       0.68         2015       110.30       90.80       94.70       1.30       0.26       4.00       1.05         2016       110.30       95.30       98.30       1.35       0.30       5.00       1.50         2017       114.10       97.60       100.90       1.39       0.33       6.00       1.96         2018       118.90       102.40       105.70       1.45       0.37       7.00       2.61         2019       121.20       110.20       112.40       1.54       0.43       8.00       3.47         2020       121.80       116.30       117.40       1.61       0.48       9.00       4.30         2021       135.00       122.00       124.60       1.71       0.54       10.00       5.37         2022       151.30       129.20       133.62       1.83       0.61       11.00       6.67         A=Sum of the product column       28.04         B=6 times of A       168.22         C=(n-1)*n*(2n-1)       3036         D=B/C       0.55409	2012	105.70	72.70	79.30	1.09	0.08	1.00	0.08	
2015         110.30         90.80         94.70         1.30         0.26         4.00         1.05           2016         110.30         95.30         98.30         1.35         0.30         5.00         1.50           2017         114.10         97.60         100.90         1.39         0.33         6.00         1.96           2018         118.90         102.40         105.70         1.45         0.37         7.00         2.61           2019         121.20         110.20         112.40         1.54         0.43         8.00         3.47           2020         121.80         116.30         117.40         1.61         0.48         9.00         4.30           2021         135.00         122.00         124.60         1.71         0.54         10.00         5.37           2022         151.30         129.20         133.62         1.83         0.61         11.00         6.67           A=Sum of the product column         28.04           B=6 times of A         168.22           C=(n-1)*n*(2n-1)         3036           D=B/C         0.55409	2013	111.10	80.60	86.70	1.19	0.17	2.00	0.35	
2016       110.30       95.30       98.30       1.35       0.30       5.00       1.50         2017       114.10       97.60       100.90       1.39       0.33       6.00       1.96         2018       118.90       102.40       105.70       1.45       0.37       7.00       2.61         2019       121.20       110.20       112.40       1.54       0.43       8.00       3.47         2020       121.80       116.30       117.40       1.61       0.48       9.00       4.30         2021       135.00       122.00       124.60       1.71       0.54       10.00       5.37         2022       151.30       129.20       133.62       1.83       0.61       11.00       6.67         A=Sum of the product column       28.04         R=6 times of A       168.22         C=(n-1)*n*(2n-1)       3036         D=B/C       0.55409	2014	114.80	85.70	91.52	1.26	0.23	3.00	0.68	
2017       114.10       97.60       100.90       1.39       0.33       6.00       1.96         2018       118.90       102.40       105.70       1.45       0.37       7.00       2.61         2019       121.20       110.20       112.40       1.54       0.43       8.00       3.47         2020       121.80       116.30       117.40       1.61       0.48       9.00       4.30         2021       135.00       122.00       124.60       1.71       0.54       10.00       5.37         2022       151.30       129.20       133.62       1.83       0.61       11.00       6.67         A=Sum of the product column       28.04         B=6 times of A       168.22         C=(n-1)*n*(2n-1)       3036         D=B/C       0.55409	2015	110.30	90.80	94.70	1.30	0.26	4.00	1.05	
2018         118.90         102.40         105.70         1.45         0.37         7.00         2.61           2019         121.20         110.20         112.40         1.54         0.43         8.00         3.47           2020         121.80         116.30         117.40         1.61         0.48         9.00         4.30           2021         135.00         122.00         124.60         1.71         0.54         10.00         5.37           2022         151.30         129.20         133.62         1.83         0.61         11.00         6.67           A=Sum of the product column         28.04           B=6 times of A         168.22           C=(n-1)*n*(2n-1)         3036           D=B/C         0.55409	2016	110.30	95.30	98.30	1.35	0.30	5.00	1.50	
2019       121.20       110.20       112.40       1.54       0.43       8.00       3.47         2020       121.80       116.30       117.40       1.61       0.48       9.00       4.30         2021       135.00       122.00       124.60       1.71       0.54       10.00       5.37         2022       151.30       129.20       133.62       1.83       0.61       11.00       6.67         A=Sum of the product column       28.04         B=6 times of A       168.22         C=(n-1)*n*(2n-1)       3036         D=B/C       0.55409	2017	114.10	97.60	100.90	1.39	0.33	6.00	1.96	
2020   121.80   116.30   117.40   1.61   0.48   9.00   4.30   2021   135.00   122.00   124.60   1.71   0.54   10.00   5.37   2022   151.30   129.20   133.62   1.83   0.61   11.00   6.67   A=Sum of the product column	2018	118.90	102.40	105.70	1.45	0.37	7.00	2.61	
2021   135.00   122.00   124.60   1.71   0.54   10.00   5.37     2022   151.30   129.20   133.62   1.83   0.61   11.00   6.67     A = Sum of the product column   28.04     B = 6 times of A   168.22     C = (n-1)*n*(2n-1)   3036     D = B/C   0.55409	2019	121.20	110.20	112.40	1.54	0.43	8.00	3.47	
2022   151.30   129.20   133.62   1.83   0.61   11.00   6.67     A=Sum of the product column   28.04     B=6 times of A   168.22     C=(n-1)*n*(2n-1)   3036     D=B/C   0.55409	2020	121.80	116.30	117.40	1.61	0.48	9.00	4.30	
2022   151.30   129.20   133.62   1.83   0.61   11.00   6.67     A=Sum of the product column   28.04     B=6 times of A   168.22     C=(n-1)*n*(2n-1)   3036     D=B/C   0.55409	2021	135.00	122.00	124.60	1.71	0.54	10.00	5.37	
$B \neq 6 \text{ times of A}$ 168.22 $C \neq (n-1)*n*(2n-1)$ 3036 D = B/C 0.55409	2022	151.30	129.20	133.62	1.83	0.61	11.00	6.67	
(n-1)*n*(2n-1) 3036 D=B/C 0.55409	A=Sun								
D=B/C 0.55409	B ≠6 tir	168.22							
0.00107	(n-1)*n*(2n-1)							3036	
17	<del></del>							0.55409	
Annual Escalation rate (exponential of D) 5.70%	Annua	l Escalatio	n rate (ex	ponential	of D)			5.70%	

On the above elucidated norms / parameters, MESCOM has proceeded to project the O&M Expenses for the years FY24 (RE) and FY25 (projections) as below;

### **6.2.1** Employee Related Costs:

Super per Engineer (Ele.) Commercial
MESCOM, Corporate Office
Mangalury - 575 no.4

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As per the Annual Accounts, employees cost incurred for FY23 is Rs.640.43 Cr, which has been considered as base cost projecting the employees expenses for FY24(RE) and FY25(projections) duly applying the normative inflation factor.

Calculations are given in the below table;

7		~
Rs.	In	1 2
175.	111	\.I.

Particulars	FY23	FY24 (RE)	FY25 (proj)
Actual Expenses in FY23	640.43	-	-
Consumer Growth Index	-	2.56%	2.56%
Weighted Inflation Index	-	5.70%	5.70%
Efficiency Factor	-	1.00%	1.00%
Net Growth Rate	-	7.26%	7.26%
Expenses projected		686.90	736.77

# 6.2.2 Repairs and Maintenance Costs:

As per the Annual Accounts, Repairs & Maintenance cost incurred for FY23 is Rs.83.14 Cr, which has been considered as base cost for projecting the Repairs & Maintenance expenses for FY23(RE) and FY25 (projections) duly applying the normative inflation factor.

Rs. in Cr.

Particulars	FY23	FY24 (RE)	FY25 (proj)
Actual Expenses in FY23	83.14	-	-
Consumer Growth Index	-	2.56%	2.56%
Weighted Inflation Index	-	5.70%	5.70%
Efficiency Factor	-	1.00%	1.00%
Net Growth Rate	-	7.26%	7.26%
Expenses projected		89.18	95.67

# 6.2.3 Administrative and General Costs:

Dist. Dakstinn Kannada (KARNAT/AKA) REGN, NO. 6354 As per the Annual Accounts, Administrative and General incurred for FY23 is Rs.114.74 Cr, which has been considered as base cost for projecting the Administrative and General expenses for FY24(RE) and FY25 (projections) duly applying the normative inflation factor.

Rs. in Cr.

Particulars	FY23	FY24 (RE)	FY25 (proj)
Actual Expenses in FY23	114.84	-	-
Consumer Growth Index	-	2.56%	2.56%
Weighted Inflation Index	-	5.70%	5.70%



Efficiency Factor	1) <b>—</b> 1	1.00%	1.00%
Net Growth Rate	-	7.26%	7.26%
Expenses projected		123.19	132.14

# 6.2.4 ABSTRACT of Operation and Maintenance (0&M) Costs:

n		
Rs.	In	(:r
	ın	

**				NS. III CI
Year	Employee	R&M	A&G	Total
	Costs	Costs	Costs	0&M
		l'		Costs
FY18 (Actual)	355.68	39.39	93.60	488.67
FY19 (Actual)	392.40	59.14	106.84	558.38
FY20 (Actual)	493.34	67.33	123.59	684.26
FY21 (Actual)	467.61	64.99	113.39	645.99
FY22 (Actual)	518.22	63.66	106.97	688.85
FY23 (Appd. TO 2022)		E		762.76
FY23 (Actual)	640.43	83.14	114.84	838.41
FY24 (Projection)	686.90	89.18	123.19	899.27
FY25 (Projection)	736.77	95.67	132.14	964.58

### 6.3 DEPRECIATION:

A. I. KAREEM
Dist. Dakshina Kanneda

(KARNATAKA) REGD. ND. 5354 File No. 5(1134)2008 NC The historical data on CAPEX is submitted below;

Year	FY 13	FY14	FY 16	FY 17	FY18
MESCOM Proposed	249.85	281.40	262.33	827.33	320.40
KERC Approved	249.85	281.40	262.33	353.89	288.90
Actual Exp as per A/c	130.92	193.17	261.18	257.68	316.54
% of actual to the approved	52.40%	68.65%	99.56%	72.81%	109.57%

Year	FY19	FY20	FY 21	FY22	FY 23
MESCOM Proposed	595.40	803.50	914.75	521.89	661.92
KERC Approved	289.40	763.50	914.75	521.89	661.92
Actual Exp as per A/c	451.52	839.17	402.83	428.83	464.87
% of actual to the approved	156.02%	109.91%	44.04%	82.17%	70.23%

In the Tariff Order -2022, Hon'ble Commission has approved the CAPEX program of MESCOM for the year FY 25 amounting to Rs.509.69.

The revised CAPEX program of MESCOM for the year FY 25 is Rs.600 Crs. The detailed breakup for this is submitted in the ensuing para of this Chapter.

Net weighted average rate of depreciation in the year FY23 is 5.05% on the average of the opening & closing balances of value of assets, which has been considered to project the depreciation for the years FY24(RE) and FY 25 (projections), as detailed below;

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Further, depreciation chargeable on the assets created out of Govt. Grants and Consumer Contribution received after 01.04.2016 is deducted in the respective years;

Rs. In Cr.

Year	Value of assets created out of consumer contribution and government grants	Depreciation charged
FY23	819.32	48.61
FY24(RE)	(819.32+126.67)	46.60
FY25(projections)	(897.39+126.67)	50.73

The depreciation for the FY 23 (Actual), FY 24(RE) and for FY 25 is as given below;

(Rs. in Cr.)

	·							(10	s. m cr.j
Particulars	Av	verage Asse	Weighted Average Deprecation		е	Do	Depreciation		
	FY 23	24 (RE)	FY25	FY 23	FY24 (RE)	FY 25	FY 23	24 (RE)	FY25
Plant & Machinery, Lines, Cables, networks	4414.24	4,947.34	5468.59				226.59	253.96	280.72
Buildings	217.68	231.26	244.59				7.39	7.86	8.31
Vehicles	13.42	13.39	13.36				1.07	1.07	1.07
Other Civil Works	1.65	1.98	2.29				0.07	0.08	0.09
Furniture Fixtures	10.37	11.21	12.02	5.05	5.05	5.05	0.58	0.63	0.68
Office Equipment	18.56	19.33	20.08				0.99	1.03	1.07
Land: Free Hold	12.95	13.40	13.83				0.00	0.00	0.00
Hdraulic Works	4.24	4.55	4.84				0.20	0.21	0.22
Total	4693.13	5242.45	5779.60				236.90	264.84	292.16
Intangible Asset						1.94	-	-	
Grand Total					238.84	264.84	292.16		
Less: Depreciation on Grants and Consumer contribution					48.61	46.60	50.73		
Net Depreciation					190.23	218.24	241.43		



Abstract:	(Rs. in Cr.)
Year	Depreciation Amount in
	different years
FY20 (Actual)	166.65
FY21 (Actual)	193.14
FY22 (Actual)	166.76
FY23 (Appd. TO 2022)	201.94
FY23 (Actual)	190.23
FY24 (RE)	218.24
FY25 (Projection)	241.43

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#### 6.4 **INTEREST AND FINANCE COSTS:**

Interest and Finance costs include interest on capital loan, interest on working capital, interest on consumer deposits and other finance costs.

#### 6.4.1 **Interest on Capital Loan:**

MESCOM has estimated the capital borrowings of Rs.240 Crs, and Rs.320 Crs, respectively for the years FY 24(RE), FY25 after considering estimated internal resources as follows:

-		•
NC	in	ı Cr.
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Particulars	FY 24	FY 25
CAPEX	506.42	600.00
85% of CAPEX	430.46	510.00
Less: Consumer Contribution and Govt.	126.67	126.67
Grants		
Less Consumer Security Deposit	55.92	55.92
Net	247.86	327.41
Estimated CAPEX Loan	240.00	320.00

Considering the above interest on loan capital has been projected as indicated below.

MESCOM has considered the interest rate for estimating the interest on capital loan as follows;

- (i) Weighted average interest rate of FY23, i.e., 7.89 % is considered for old loans.
- (ii) SBI MCLR rate (for three years term) as on 15.09.2023 is 8.75%. Considering 200 points on MCLR, the borrowing rate for new loans will be 10.75%.

(Rs. in Cr.)

Particulars	FY23	FY24 (RE)	FY25 (proj)
	(Actual)		
Opening Balance of loan	1312.00	1223.96	1218.66
Add: New Loan	118.00	240.00	320.00
Less: Repayments	206.04	245.30	244.09
Closing Balance of old loans	1223.96	1218.66	1294.57
Average Loan	1267.98	1221.31	1256.62
Interest Paid	100.14	109.35	142.98
Weighted Avg. Int. on old loan	9.09%	9.08%	9.07%
Weighted Avg. Interest	-	10.75%	10.75%

#### 6.4.2 **Interest on Consumer Deposits:**

Dist. Dakshina Kannsda

(KARNATAKA) REGD. NO. 6354

> Methodology adopted by the Hon'ble Commission in the Tariff Order 2023 has been followed for projecting the interest on consumer security deposit.

Increase in consumer deposit in FY23 with reference to security deposit in FY22 is taken as the estimated additions for the year FY24 (RE) and for FY25 (projections). Further, interest rate of 6.75%, for April-23, as per RBI monitory policy statement 2023-24 dated 06.04.2023 has been considered for FY24 (RE) and for FY 25 (Projection) for estimating the interest on consumer deposits. Accordingly, Interest on Consumer Deposits is projected as below;

-		0
Rs.	ın	1 r
17.5.	111	( .I

Particulars	FY23 (Actual	FY24 (RE)	FY25 (proj)
OB of the security deposits	749.66	805.58	861.50
Add: Collection during the year	55.92	55.92	55.92
CB of the security deposits	805.58	861.50	917.42
Average	-	833.54	889.46
Rate of interest	-	6.75%	6.75%
<b>Interest on Consumer Security Deposits</b>	30.90	56.26	60.04

# 6.4.3 Interest on Working Capital:

Interest on working capital has been projected for the year FY25 as per the norms prescribed in the MYT regulations.

SBI MCLR rate as on 15.08.2023 for tenor of one year is 8.55%. With 250 points on MCLR, the working capital interest @ 11.05% has been considered.

(Rs. in Crores)

		(113.111	Crores
Year	FY23	FY24	FY25
Teal	(Actual)	(RE)	(proj)
1/12th of O&M Expenses	69.91	74.93	80.37
Opening GFA	4389.38	4996.88	5488.02
1% on opening GFA	43.89	49.97	54.88
1/6th of Revenue	757.50	810.10	813.68
Total Working Capital	871.30	935.00	948.93
Rate of Interest (%)	11.05%	11.05%	11.05%
Normative Interest on Working	96.28	103.32	104.86
Capital	90.20	103.32	104.00
Int. on Working Capital Claimed in	61.59		
APR	01.59	-	-

### 6.4.4 Cost of raising finance:

NARMATAKA REGU. WO. 8354 REGUT34808NE In the year FY23 MESCOM has incurred an expense of Rs.1.07 Cr towards cost of raising finance for capital loans. The same amount has been maintained for FY24 (RE) and FY25 (projections).

#### 6.4.5 ABSTRACT of Interest and Finance Costs:

eer (Ele.) Commercial

Corporate Office

(Interest and Finance Costs: Rs. in Crores)

	Interes	Workin	Interest	Cost	
	ton	g	on	of	
Year	Capital	Capital	consume	raisin	Total
	Loan	Interes	r	g	
	LUAII	t	Deposit	financ	

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				e	
FY20 (Actual)	84.96	52.45	39.85	1.08	178.34
FY21 (Actual)	98.61	54.01	30.15	1.58	184.35
FY22 (Actual)	98.69	51.75	29.11	1.51	181.06
FY23 (Appd. TO					
2022)	129.04	76.61	33.69	1.58	240.92
FY23 (Actual)	100.14	61.59	30.90	1.07	193.70
FY24 (RE)	109.35	104.84	56.26	1.07	271.52
FY25(Projection)	142.98	104.86	60.04	1.07	308.95

# 6.4.6 Interest & Other expenses capitalized:

In FY23 annual accounts no amount is reflected as 'Interest & other expenses capitalized'. Hence, MESCOM has not projected any amount in this regard for FY24(RE) and FY25(projections).

# 6.5 OTHER DEBITS (including bad debts):

Actual 'Other Debits' charges of FY 23 amounting Rs.14.61 Crs is considered for FY24(RE) and FY25(projections) as shown in the Format D-11.

# 6.6 PRIOR PERIOD (CREDITS) / CHARGES:

In FY23 annual accounts no amount is reflected as 'Prior period (Credits) / Charges'. Hence, MESCOM has not projected any amount in this regard for the control period.

# 6.7 RETURN ON EQUITY:

Paid up share capital, share deposit and reserves & surplus, at the beginning of the year, considered for projection of 'Return on Equity' for the years FY24(RE) and FY25 (projections) is indicated below;

(Return on Equity: Rs. in Crores)

Year	FY23 (Actual)	FY24 (RE)	FY25 (proj)
Opening balance of paid up share capital	662.42	741.30	741.30
Share Deposit	14.75	0	0
Reserves & Surplus	211.13	262.98	397.86
Less: Recapitalized Security Deposit	(26.00)	(26.00)	(26.00)
Total:	862.30	978.28	1113.17
Rate of ROE (grossed up with MAT) [*]	15.50%	18.7815%	18.7815%
ROE (Projection)	163.44	183.74	209.07



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[\*] Considered 15.50% of return on equity duly grossed up with the applicable MAT of 17.472% which works out to 18.7815%, as approved in Tariff Order 2023.

Status of Debt Equity Ratio:

Particulars	FY23	FY4	FY25
Particulars	(Actual)	(RE)	(proj)
GFA Closing Balance	4996.88	5488.02	6071.19
Debt	1223.96	1218.66	1294.57
Equity	1004.28	1139.17	1290.80
Normative Debt @ 70% of	3497.82	3841.61	4249.83
GFA			
Normative Equity @ 30% of	1499.06	1646.41	1821.36
GFA			
% of actual DEBT on GFA	24.49%	22.21%	21.32%
% of actual EQUITY on GFA	20.10%	20.75%	21.26%

From the above table, it is clear that the debt equity amount lies within the normative debt equity ratio of 70:30 on the closing balances of GFA.

#### 6.8 PROVISION FOR TAX:

In line with the norms adopted by the Hon'ble Commission in the Tariff Orders, MESCOM has not claimed separately any amount towards income tax as the RoE projections are considered duly factoring MAT.

#### **FUNDS TOWARDS CONSUMER RELATIONS:** 6.9

During FY 2023 the expenditure towards consumer education is incurred to the extent of Rs.11 lakhs. The inflation index of 7.26% is applied while projecting for FY24 (RE) and FY25 (projections) as shown in the Format D-7.

#### 6.10 Regulatory Assets;

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# To consider the Truing up results of previous year in the Truing up exercise of year under consideration.

Determination of the Retail Supply Tariff chargeable by the Company to its consumers is governed by KERC (Terms and conditions for determination of Tariff for Distribution and Retail Sale of Electricity) Regulations 2006, and the amendments made thereon from time to time, whereby KERC is required to determine the Tariff in a manner that the Company recovers its Power purchase cost as well as other prudently incurred expenses and earns post tax 51134 2006 W return of 15.50% p.a. on KERC approved Equity.

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Accordingly Hon'ble Commission is determining the tariff based on the estimations submitted by the Company each year at the beginning of the year itself. Later, on finalization of accounts for the respective year, Hon'ble Commission will carry out the process of Annual Performance Review (Truing up), based on the audited accounts of the Company and the actual deficit / surplus will be carried forward for determination of tariff for future year/years.

For example, the Truing up deficit of FY 2016-17 was carried forward by the Hon'ble Commission for estimation/ determination of Tariff for FY 2018-19, as the Audited accounts of FY 2016-17 was made available to the Hon'ble Commission in the middle of the FY 2017-18.

Accordingly the Truing up deficit of FY 2016-17 amounting to Rs. 553.83 Crs was carried forward for estimation/ determination of Tariff for FY 2018-19 as detailed below:

Table -1 Rs. In Crs

I abit			NS. 111 C13
Sl.	Particulars	Truing up of	Estimation of
NO.		FY 2016-17	FY 2018-19
1.	Approved Expenses for the current	3372.13	2691.87
	year		
2	True up gap of FY 2016-17	-	553.83
3	Total Expenses (1+2)	3372.13	3245.70
4	Total Revenue	2818.30	3103.65
5	Surplus (+)/Deficit (-) (4-3)	(-)553.83	(-)142.05

It can be seen from the above table that, deficit of FY 2016-17 amounting to Rs. 553.83 Crs was carried forward for estimation/ determination of Tariff for FY 2018-19.

However, after finalization of the accounts for the year 2018-19, while passing the True up Order for this year, the deficit of the year 2016-17 which was considered for estimation **was not carried forward** by the Hon'ble Commission as detailed in the table below:

Table -2

Rs. In

Crs

S NA REEN X		Estimation of FY 2018-	As per Audited Accounts	As per APR order of KERC for FY
A. II. KAREE!!! 19-54. BONGSHIP 10 10 10 10 10 10 10 10 10 10 10 10 10	Approved Expenses for the current year	2691.87	3131.06	<b>2018-19</b> 3037.25

Superintending Wheer (Ele.) Commercial

2	True up gap of FY 2016-17	553.83	553.83	0.00
3	Total Expenses (1+2)	3245.70	3684.89	3037.25
4	Total Revenue	3103.65	3352.25	3270.80
5	Surplus (+)/Deficit (-) (4-3)	(-)142.05	(-)332.64	(+)233.55

It can be seen from the above table that, the gap of FY 2017 amounting to Rs. 553.83 Crs which was carried forward as a cost while arriving at the ARR/ Tariff determination for FY 2018-19, was not carried forward by the Hon'ble Commission in the process of APR of same year. However, the entire revenue recovered during the year 2018-19 (Rs. 3270.80 Crs) which includes the revenue recovered on account of gap of FY 2017 was factored in the APR. By doing so, Hon'ble Commission has wrongly arrived at APR Surplus of Rs. 233.55 Crs for the year 2018-19 in place of actual gap (deficit) of Rs. 332.64 Crs. Hence it is opined that, the True-up Gap of FY 2016-17 which was determined, approved and allowed by Hon'ble KERC amounting to Rs. 553.83 Crs was remained unrealized.

Since the revenue recovered during the year 2018-19 (Rs. 3270.80 Crs) is inclusive of the revenue towards the deficit of FY 2016-17 also, while carrying out True-up of FY 2018-19, the Hon'ble Commission, either should have carried forward the True-up gap of FY 2016-17 (Rs. 553.83 Crs) in expenditure side (as was done while estimating) OR the revenue of the year 2018-19 should have been reduced to that extent, so that exclusive revenue and expenses of year 2018-19 are considered for arriving at actual Truing up gap of the year 2018-19.

Hon'ble KERC is carrying out Truing up exercise (APR Process) every year since 2007-08 as per KERC (Terms and conditions for determination of Tariff for Distribution and Retail Sale of Electricity) Regulations 2006. The details of surplus/deficit arrived in the APR process of MESCOM by KERC in each year since FY 2007-08 is as below:

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-	*	~
N.c	ln	Crs
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7
-42.11
-136.37
-132.87
-213.25
-144.36
-392.93
-306.93

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8	2014-15	30.03.2016	2046.84	2191.35	144.51	-162.42
9	2015-16	11.04.2017	2758.95	2363.21	-395.74	-558.16
10	2016-17	30.05.2018	3372.13	2818.30	-553.83	-1111.99
11	2017-18	30.02.2019	3184.86	3156.64	-28.22	-1140.21
12	2018-19	04.11.2020	3037.25	3270.80	233.55	-906.66
13	2019-20	09.06.2021	3859.55	3756.41	-103.15	-1009.81
14	2020-21	04.04.2022	4115.18	3650.29	-464.89	-1474.7
15	2021-22	12.05.2023	3729.92	3953.71	223.79	-1250.91
	Total		36182.87	34931.96	-1250.91	

Since, Hon'ble KERC is not carrying forward the previous gaps as narrated above, the total gap approved by Hon'ble Commission up to FY 2021-22 amounting to Rs. 1250.91 Crs was remained unrecovered.

It is evident from the records that, though the Hon'ble Commission is taking into account the surplus or the deficit of the relevant year for determining the tariff for ensuing financial year, it was not recovered in the real sense, as Hon'ble Commission has considered the entire revenue as the revenue of the year under consideration for APR but has not considered the previous year's gap on expenditure side. It is very conspicuous from the APR format that, the gap figure of the previous year which was considered in the tariff determination is missing in the APR of respective year. This missing figure is the reason for not passing on of the gap of the previous/ earlier years.

During filing APR for FY 2018-19, Company had requested the Hon'ble Commission to consider the deficit of previous years upto FY 2016-17 amounting to Rs. 1111.98 Crs. However the claim of the Company was rejected by Hon'ble Commission stating that, "As per the decisions of the Hon'ble ATE, True up of ARR once done cannot be re-opened at subsequent point of time". In this regard it is once again submitted that MESCOM is not requesting for reopening or redoing of the APR of any earlier years for determination of the surplus or deficit of the respective years. MESCOM has already conceded for the APR results carried out by the Hon'ble Commission except non-considering of previous year's gap. The only appeal to the Hon'ble Commission is, to pass on the result of APR of the respective years in the current APR, to this Company.

It is prayed before the Hon'ble Commission to consider the trued up deficit balances to the extent of Rs. 1250.91 Crs, as shown in the **Table-3** above, in the truing up exercise of the FY 2022-23 which is under consideration in this appeal petition.

6.11 ABSTRACT – Annual Revenue Requirement (Rs. In Cr.):

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Projections of the expenditures in all the sub heads are detailed in the respective prescribed formats D1 to D21 and the values are abstracted in the below table;

below table;	FY23			
	As	As per	As	
Particulars	approved	Accounts	propose	
	in TO-		d for APR	
	2021			
Power Purchase Cost	2328.88	2708.94	2708.94	
KPTCL Transmission charges	383.26	385.07	385.07	
SLDC Charges	2.46	2.46	2.46	
O&M Costs	762.76	838.96	838.20	
Depreciation	201.94	238.84	190.23	
Interest & Finance Charges	240.92	159.01	193.70	
Interest & Finance Charges				
Capitalized	-2.10	-	-	
Other Debits	-	13.95	14.61	
Funds towards consumer				
relations	0.50	0.11	0.11	
TOTAL:	3918.62	4347.34	4333.32	
Return on Equity	151.53	-	163.44	
APR (Surplus) / Deficit	341.96	-	-	
Reg. Assets as per TO-	61.47	-	12.29	
2020/carrying cost				
Other Income	(95.53)	(148.24)	(99.62)	
Regulatory Assets as per accounts	=	341.96	-	
Trued up deficits of previous	=	1250.91	1250.91	
years				
Regulatory Assets requested	-	(1250.91)	(1250.91)	
ARR:	4378.05	4541.06	4409.43	

Particulars	FY24	FY25
Fai ticulai S	RE	Projections
Power Purchase Cost	3317.90	3399.74
KPTCL Transmission charges	424.53	424.53
SLDC Charges	2.02	2.02
O&M Costs	899.15	964.45
Depreciation	218.24	241.43
Interest & Finance Charges	271.52	308.95
Interest & Finance Charges Capitalized	-	-
Other Debits	14.61	14.61
Funds towards consumer relations	0.12	0.13
TOTAL:	5148.09	5355.85
Return on Equity	183.74	209.07
APR (Surplus) / Deficit	-223.78	(183.37)
Regulatory Assets as per TO-2020	-	-
Regulatory Assets as per accounts	-	-
Other Income	(99.62)	(99.62)
Trued up deficits of previous years	1250.91	1250.91
Regulatory Assets requested	(1250.91)	(1250.91)
ARR:	5008.43	5281.93



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6.12 It is to be submitted before the Hon'ble Commission to consider the projected Aggregate Annual Revenue Requirement of MESCOM as elaborated above. The enclosed formats from A1 to D24 have contained the costs under each sub heads of income / expenditure.

### 6.13 Segregation of ARR FY -25:

It is to be submitted before the Hon'ble Commission MESCOM has considered the following allocation matrix as approved in the Tariff Order -23 for segregation of ARR for Distribution Business and Retail Business.

Sl No.	Particulars	Distri.	Retail
		Business	Business
1	Power Purchase Cost	0 %	100%
2	O&M Cost	39%	61%
3	Deprecation	84%	16%
4	Interest on Loan	100%	0%
5	Interest on Working Capital	15%	85%
6	Interest on Consumer Security Deposit	0%	100%
7	Other Income	7%	93%
8	ROE	78%	22%

The segregated ARR for Distribution Business and Retail Business is submitted in Format A-1

#### 6.14 CAPITAL INVESTMENT PROGRAMME:

Bakshina Kannada (KARNATAKA) REGO, NO. 635A In the Tariff Order -2022, Hon'ble Commission has approved the CAPEX program of MESCOM for the year FY 25 amounting to Rs.509.69. The revised CAPEX program of MESCOM for the year FY 25 is Rs.600 Crs. The detailed breakup for this is submitted below;

Sl.	Particulars	2024-25
No.		
1	E&I Works (Addl. Transformers, Link-Lines, HT/LT Re-	250.00
	conductoring, HVDS, UG/AB cable )	
2	DTC metering,	5.00
3	Replacement of MNR/DC & Electromagnetic meters by	8.00
	Static meters and SMART metering	
4	Replacement of faulty Distribution Transformers	6.00
5	Service Connection including promoter vanished layout	60.00
1 1	Works	
	Sub- Total	329.00
64	Rural Electrification (General)	
/(a/	Electrification of Hamlets	2.00

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b	Energisation of general IP sets Including Ganga Kalyana	100.00
	Sub- Total	102.00
7	Tribal Sub-Plan	
а	Electrification of Tribal Colonies	0.60
b	Energisation of IP sets	1.50
С	Improvement works in Tribal Colonies	2.00
	Sub- Total	4.10
8	Special Component Plan	
a	Electrification of S.C Colonies	1.00
b	Energisation of IP sets	6.00
С	Improvement works in SC Colonies	3.00
	Sub- Total	10.00
9	Tools & Plants & Computers	10.00
10	Civil Engineering Works	25.00
11	IT Infrastructure and Software, DSM	8.50
12	33 KV Station and Line Works ( UG/AB cable )	30.00
	Total	518.60
1	Deen Dayal Upadyaya Grama Jyoti Yojana (DDUGJY)	35.69
2	IPDS: System improvement & Strengthening works in R-	3.41
	APDRP/statutory towns	
3	IPDS:Gas insulated substations	0.35
4	IPDS (Integrated Power Development Scheme) Phase	0.04
	II-IT	
5	Improvement works for Model Sub-division	41.91
	Total	81.40
		The cook and a sour factor

# 6.15 RPO compliance for FY24 (RE) and FY25 (projections):

Considering the projected source wise energy, as depicted in Format D1, RPO compliance in respect of Non-solar and Solar have been estimated in the below given tables for the years FY24(RE) and FY25(projections).

# **Estimated RPO Compliance:**

EEO NO 5350

Sl. No.	Particulars	FY24 (RE)	FY25 (proj)
1.	Total power purchase quantum from all sources excluding Hydro-energy	5273.61	5021.38
2.	Non-Solar RE purchased under PPA route	666.85	639.29
3.	Solar RE purchased under PPA route	845.74	846.38
4.	Total (3+4)	1512.59	1485.67
5.	RPO Compliance (%)	28.68%	29.59%
6.	RPO Target (%)	26.50%	26.50%

:-:-:-:

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MESCOM, Corporate Office
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Chapter-06

**Grand Total** 

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600.00