

REVISED SALES FORECAST FOR FY-20 AND FY-21

No. of Installations:

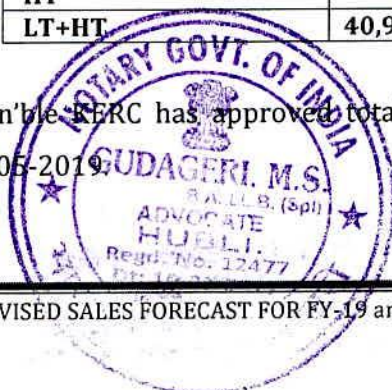
As per Regulation No. 2.5.2, the ARR for Retail Supply Business shall be expected revenue from charges at the existing tariff. In order to estimate ERC, the accurate sale forecast is necessary. The energy sale for control period depends upon the population, policies of the Government, the various schemes under implementation, the No. of hours of supply available to consumers etc. These facts have an impact on growth of installations. Hence HESCOM has analyzed the growth of installations in the area of supply for the period from FY-15 to FY-19. Due to various reasons, some of the installations across the categories are being dismantled. This fact is also considered in estimation of sale forecast. In order to have accurate sale forecast, year-end number of installations and total energy sold across the categories during respective year is reviewed to ascertain the growth.

Projection for FY-20 FY-21 based on 5 years CAGR from FY-15 to FY-19 :

No. of installations from FY-15 to FY-19:

Tariff	2014-15	2015-16	2016-17	2017-18	2018-19
LT1 - 18/40 units	6,18,729	5,94,773	6,22,737	7,20,063	718179
LT1 above 18/40 units	1,42,905	1,67,789	1,40,645	39,871	42349
Total BJ KJ	7,61,634	7,62,562	7,63,382	7,59,934	760528
LT-2a (i)	10,65,830	11,30,060	12,04,845	12,53,329	1305596
LT-2a (ii)	11,65,916	11,93,193	12,21,446	12,84,018	1376517
LT-2(b)(i)	3,258	3,650	4,061	4,434	4629
LT-2(b)(ii)	1,941	2,008	2,148	2,219	2378
LT-3(i)	2,04,085	2,18,641	2,33,475	2,46,372	258052
LT-3(ii)	99,032	1,00,194	1,03,375	1,08,631	113655
LT-4(a)	6,01,939	6,37,907	6,63,011	6,96,647	930551
LT - 4b	813	832	1,276	856	842
LT- 4c(i)	172	236	249	273	302
LT- 4c(ii)	60	72	78	83	92
LT-5	96,255	1,01,446	1,07,801	1,13,582	117989
LT-6	31,354	33,051	38,229	42,618	46004
LT-6	19,665	20,206	21,545	22,823	23831
LT-7	35,739	40,371	43,369	66,658	85289
LT Total	40,87,693	42,44,429	44,08,290	46,02,477	50,26,255
HT-1	224	245	275	318	364
HT-2(a)	1,187	1,287	1,421	1,586	1760
HT - 2(b)	464	486	514	578	629
HT-2 (C) (i)	144	168	190	190	208
HT-2 (C) (ii)	69	77	83	109	117
HT - 3 (a)(i)	103	108	114	126	140
HT - 3 (a)(ii)	71	92	100	121	124
HT - 3 (a)(iii)	12	10	10	10	12
HT-3(b)	2	2	2	2	2
HT-4	33	31	30	32	30
HT-5	47	55	52	49	59
HT	2,356	2,561	2,791	3,121	3,445
LT+HT	40,90,049	42,46,990	44,11,081	46,05,598	50,29,700

The Hon'ble KERC has approved total No of installations of 5035498 for FY-20 vide Tariff Order Dtd 30-05-2019.



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Number of installations is worked out for FY-20 duly considering the compound annual growth rate for period from FY-15 to FY-19.

Normally, average of five year growth rates is indicated as CAGR. CAGR is calculated as under:

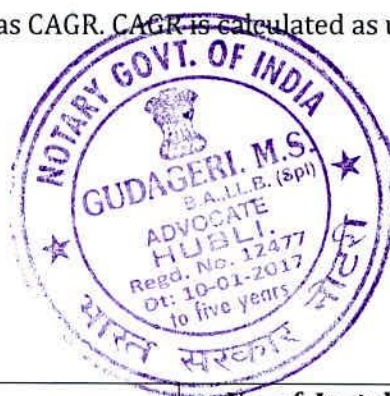
$$\text{CAGR} = \{(Y_n/Y_1)^{1/(n-1)} - 1\} * 100$$

For estimating CAGR for the period FY-15 to FY-19.

Y_n is the data pertaining to FY-19.

Y_1 is the data pertaining to FY-15 and $n=5$.

The details of Projection are as follows :



LT-1 Bhagya Jyothi/Kuteer Jyothi (Up to 40 units):

Sl No.	Particulars	No. of Installations
1	Total No. of installations in FY-15	618729
2	Total No. of installations in FY-19	718179
3	Increase in no of installations	99450
4	No. of installations projected for FY-20	718179
5	No. of installations projected for FY-21	718179

LT-1 Bhagya Jyothi/Kuteer Jyothi (Above 40 units):

Sl No.	Particulars	No. of Installations
1	Total No. of installations in FY-15	142905
2	Total No. of installations in FY-19	42349
3	Decrease in no of installations	100556
4	No. of installations projected for FY-20	42349
5	No. of installations projected for FY-21	42349

Note: As there is no new scheme for BJ/KJ proposed by GOK, the growth is not projected.

LT-2(a) (i) Domestic installations (Urban) :

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	1065830
2	No. of installations in FY-19	1305596
3	Increase in no of installations	239766
4	Increase in growth as per CAGR	5.20%
5	No. of installations projected for FY-20	1373533
6	No. of installations projected for FY-21	1445005

LT-2(a) (ii) Domestic installations (Rural) :

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	1165916
2	No. of installations in FY-19	1376517
3	Increase in no of installations	210601
4	Increase in growth as per CAGR	4.24%
5	No. of installations projected for FY-20	1434862
6	No. of installations projected for FY-21	1495680

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LT-2(b)(i) Professional Educational Institutions (Urban):

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	3258
2	No. of installations in FY-19	4629
3	Increase in no of installations	1371
4	Increase in growth as per CAGR	9.18%
5	No. of installations projected for FY-20	5054
6	No. of installations projected for FY-21	5518

LT-2(b)(ii) Professional Educational Institutions (Rural):

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	1941
2	No. of installations in FY-19	2378
3	Increase in no of installations	437
4	Increase in growth as per CAGR	5.21%
5	No. of installations projected for FY-20	2502
6	No. of installations projected for FY-21	2632

LT-3 (i) Commercial Installations (Urban):

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	204085
2	No. of installations in FY-19	258052
3	Increase in no of installations	53967
4	Increase in growth as per CAGR	6.04%
5	No. of installations projected for FY-20	273641
6	No. of installations projected for FY-21	290172

LT-3 (ii) Commercial Installations (Rural):

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	99032
2	No. of installations in FY-19	113655
3	Increase in No. of installations	14623
4	Increase in growth as per CAGR	3.50%
5	No. of installations projected for FY-20	117636
6	No. of installations projected for FY-21	121757

LT-4(a) IP Sets up to and inclusive of 10 HP :

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	601939
2	No. of installations in FY-19	930551
3	Increase in No. of installations	328612
4	Increase in growth as per CAGR	11.51%
5	No. of installations projected for FY-20	987531
6	No. of installations projected for FY-21	1045411

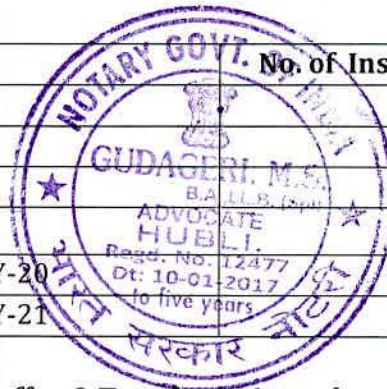
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Note : The Hon'ble KERC has approved total No of installations of 769399 & 805775 under LT-4(a) for FY-20 & FY-21 respectively, vide Tariff Order Dtd 30.05.2019. The projections made by HESCOM is more than the Approved by KERC, HESCOM due to regularisation of unauthorised IP sets and desires to retain the No. of installations as projected by HESCOM in view of on-going works under NJY, creating infrastructure to Un authorised IP Sets and enumeration. As per 5 year CAGR, the growth rate is 11.51%, which is very huge compared to previous years. 28,490 number of installations are added from 1st April 2019 to 30 th September 2019. Considering, approximately, the same number of installations that may be serviced in the next six months projection is made for FY-20 and similarly projection is made for FY-21.

LT-4(b) IP Sets - Above 10 HP :

SI No.	Particulars	No. of Installations
1	No. of installations in FY-15	813
2	No. of installations in FY-19	842
3	Increase in No. of installations	29
4	Increase in growth as per CAGR	0.88%
5	No. of installations projected for FY-20	849
6	No. of installations projected for FY-21	857



LT-4(c) (i) IP Sets - Pvt Horticultural, Nurseries, Coffee & Tea plantations above 10HP:

SI No.	Particulars	No. of Installations
1	No. of installations in FY-15	172
2	No. of installations in FY-19	302
3	Increase in no of installations	130
4	Increase in growth as per CAGR	15.11%
5	No. of installations projected for FY-20	348
6	No. of installations projected for FY-21	400

LT-4(c) (ii) IP Sets - Pvt Hortil. Nurseries, Coffee & Tea plantations above 10HP:

SI No.	Particulars	No. of Installations
1	No. of installations in FY-15	60
2	No. of installations in FY-19	92
3	Increase in no of installations	32
4	Increase in growth as per CAGR	11.28%
5	No. of installations projected for FY-20	102
6	No. of installations projected for FY-21	114

LT-5 Heating & Motive Power

SI No.	Particulars	No. of Installations
1	No. of installations in FY-15	96255
2	No. of installations in FY-19	117989
3	Increase in no of installations	21734
4	Increase in growth as per CAGR	5.22%
5	No. of installations projected for FY-20	124150
6	No. of installations projected for FY-21	130632

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LT-6 Water Supply :

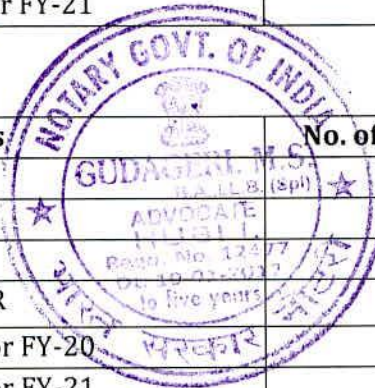
Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	31354
2	No. of installations in FY-19	46004
3	Increase in no of installations	14650
4	Increase in growth as per CAGR	10.06%
5	No. of installations projected for FY-20	50632
6	No. of installations projected for FY-21	55725

LT-6 Public Lighting :

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	19665
2	No. of installations in FY-19	23831
3	Increase in no of installations	4166
4	Increase in growth as per CAGR	4.92%
5	No. of installations projected for FY-20	25004
6	No. of installations projected for FY-21	26234

LT-7 Temporary Supply:

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	35739
2	No. of installations in FY-19	85289
3	Increase in no of installations	49550
4	Increase in growth as per CAGR	24.29%
5	No. of installations projected for FY-20	106006
6	No. of installations projected for FY-21	131755



HT-1 Water Supply, Sewerage Pumping :

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	224
2	No. of installations in FY-19	364
3	Increase in no of installations	140
4	Increase in growth as per CAGR	12.91%
5	No. of installations projected for FY-20	411
6	No. of installations projected for FY-21	464

HT-2 (a) Industrial:

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	1187
2	No. of installations in FY-19	1760
3	Increase in no of installations	573
4	Increase in growth as per CAGR	10.35%
5	No. of installations projected for FY-20	1942
6	No. of installations projected for FY-21	2143

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HT-2 (b) Commercial:

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	464
2	No. of installations in FY-19	629
3	Increase in no of installations	165
4	Increase in growth as per CAGR	7.90%
5	No. of installations projected for FY-20	679
6	No. of installations projected for FY-21	732

HT-2 (c) (i) Hospitals.

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	144
2	No. of installations in FY-19	208
3	Increase in no of installations	64
4	Increase in growth as per CAGR	9.63%
5	No. of installations projected for FY-20	228
6	No. of installations projected for FY-21	250

HT-2 (c) (ii) Hospitals.

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	69
2	No. of installations in FY-19	117
3	Increase in no of installations	48
4	Increase in growth as per CAGR	14.11%
5	No. of installations projected for FY-20	134
6	No. of installations projected for FY-21	152



HT-3 (a) (i) Irrigation.

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	103
2	No. of installations in FY-19	140
3	Increase in no of installations	37
4	Increase in growth as per CAGR	7.97%
5	No. of installations projected for FY-20	151
6	No. of installations projected for FY-21	163

HT-3 (a) (ii) Irrigation

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	71
2	No. of installations in FY-19	124
3	Increase in no of installations	53
4	Increase in growth as per CAGR	14.96%
5	No. of installations projected for FY-20	143
6	No. of installations projected for FY-21	164

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HT-3 (a) (iii) Irrigation

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	12
2	No. of installations in FY-19	12
3	Increase in no of installations	0.00
4	Increase in growth as per CAGR	0.00
5	No. of installations projected for FY-20	12
6	No. of installations projected for FY-21	12

HT-3 (b) : Irrigation & agricultural farms, horticultural nurseries coffee tea plantations coconut & arecanut plantations..

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	2
2	No. of installations in FY-19	2
3	Increase in no of installations	0.00
4	Increase in growth as per CAGR	0.00
5	No. of installations projected for FY-20	2
6	No. of installations projected for FY-21	2

HT-4 Resident. Apartments :

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	33
2	No. of installations in FY-19	30
3	Increase in no of installations	-3
4	Increase in growth as per CAGR	-2.35%
5	No. of installations projected for FY-20	30
6	No. of installations projected for FY-21	30

Note : There is negative CAGR, hence growth not considered for projection.

HT- 5 Temporary Supply (above 67 HP) :

Sl No.	Particulars	No. of Installations
1	No. of installations in FY-15	47
2	No. of installations in FY-19	59
3	Increase in no of installations	12
4	Increase in growth as per CAGR	5.85%
5	No. of installations projected for FY-20	62
6	No. of installations projected for FY-21	66


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Accordingly the No. of installations projected for FY-20 and FY-21 is as noted below.

Details of growth of Installations as per CAGR

Tariff	FY-15	FY-19	Yn= FY-19	Yi=FY-15	n=5	CAGR	FY-20	FY-21
			$1/(n-1)$	Y_n/Y_i	$Y_n/Y_i^{1/(n-1)}$	$[(Y_n/Y_i)^{1/(n-1)} - 1] * 100$		
LT1 - 18/40 units	618729	718179	0.25	1.161	1.038	3.80	718179	718179
LT1 above 18/40 units	142905	42349	0.25	0.296	0.738	-26.22	42349	42349
BJ KJ	761634	760528					760528	760528
LT-2a (i)	1065830	1305596	0.25	1.225	1.052	5.20	1373533	1445005
LT-2a (ii)	1165916	1376517	0.25	1.181	1.042	4.24	1434862	1495680
LT-2(b)(i)	3258	4629	0.25	1.421	1.092	9.18	5054	5518
LT-2(b)(ii)	1941	2378	0.25	1.225	1.052	5.21	2502	2632
LT-3(i)	204085	258052	0.25	1.264	1.060	6.04	273641	290172
LT-3(ii)	99032	113655	0.25	1.148	1.035	3.50	117636	121757
LT-4(a)	601939	930551	0.25	1.546	1.115	11.51	987531	1045411
LT - 4b	813	842	0.25	1.036	1.009	0.88	849	857
LT- 4c(i)	172	302	0.25	1.756	1.151	15.11	348	400
LT- 4c(ii)	60	92	0.25	1.533	1.113	11.28	102	114
LT-5	96255	117989	0.25	1.226	1.052	5.22	124150	130632
LT-6(a)	31354	46004	0.25	1.467	1.101	10.06	50632	55725
LT-6(b)	19665	23831	0.25	1.212	1.049	4.92	25004	26234
LT-7	35739	85289	0.25	2.386	1.243	24.29	106006	131755
LT Total	4087693	5026255	0.25	1.230	1.053	5.30	5262378	5512420
HT-1	224	364	0.25	1.625	1.129	12.91	411	464
HT-2(a)	1187	1760	0.25	1.483	1.103	10.35	1942	2143
HT - 2(b)	464	629	0.25	1.356	1.079	7.90	679	732
HT-2 (C)(i)	144	208	0.25	1.444	1.096	9.63	228	250
HT-2 (C) (ii)	69	117	0.25	1.696	1.141	14.11	134	152
HT - 3 (a)(i)	103	140	0.25	1.359	1.080	7.97	151	163
HT - 3 (a)(ii)	71	124	0.25	1.746	1.150	14.96	143	164
HT - 3 (a)(iii)	12	12	0.25	1.000	1.000	0.00	12	12
HT-3(b)	2	2	0.25	1.000	1.000	0.00	2	2
HT-4	33	30	0.25	0.909	0.976	-2.35	30	30
HT-5	47	59	0.25	1.255	1.058	5.85	62	66
HT	2356	3445	0.25	1.462	1.100	9.96	3794	4178
LT+HT	4090049	5029700	0.25	1.230	1.053	5.31	5266172	5516598



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Details of Mid-Year Installations for FY-20 is as noted below :

Tariff	FY-19	FY-20	FY-21 Projected
LT1 - 18 units	711224	718179	718179
LT1 above 18 units	48222	42349	42349
Total BJ KJ	759446	760528	760528
LT-2a (i)	1281649	1339564	1409269
LT-2a (ii)	1323734	1405690	1465271
LT-2(b)(i)	4526	4841	5286
LT-2(b)(ii)	2266	2440	2567
LT-3(i)	252201	265847	281906
LT-3(ii)	110091	115646	119697
LT-4(a)	714835	959041	1016471
LT - 4b	856	846	853
LT- 4c(i)	284	325	374
LT- 4c(ii)	88	97	108
LT-5	115642	121069	127391
LT-6	43893	48318	53178
LT-6	23195	24417	25619
LT-7	75243	95648	118881
LT Total	4707949	5144317	5387399
HT-1	340	387	437
HT-2(a)	1684	1851	2043
HT - 2(b)	597	654	706
HT-2 (C)(i)	202	218	239
HT-2 (C) (ii)	112	125	143
HT - 3 (a)(i)	137	146	157
HT - 3 (a)(ii)	122	133	153
HT - 3 (a)(iii)	13	12	12
HT-3(b)	2	2	2
HT-4	32	30	30
HT-5	49	61	64
HT	3290	3619	3986
LT+HT	4711239	5147936	5391385




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The power supply during FY 19 & FY-20-21 is generally arranged as noted below.

Hours of Power supply arranged in hrs							
Feeder Category	Urban	NJY/semi urban	Rural		EIP		Industrial/HT/EHT/Water Supply
			3ph	1 ph	3ph	open delta	
FY-19	24	24	07	04	07	04	24
Hours of Power supply assumed to be arranged in hrs							
FY-20	24	24	07	04	07	04	24
FY-21	24	24	07	04	07	04	24



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Sales from FY-15 to FY-19 :

Tariff	2014-15	2015-16	2016-17	2017-18	2018-19
LT1 - 18 / 40 units	91.92	90.41	87.01	201.2	199.94
LT1 above 18 / 40 units	72.12	86.7	85.12	44.28	43.91
Total BJ KJ	164.04	177.11	172.13	245.48	243.85
LT-2a (i)	852.71	914.05	938.45	966.06	976.86
LT-2a (ii)	390.53	431.32	446.11	446.27	467.03
LT-2(b)(i)	10.66	11.22	13.23	14.61	14.99
LT-2(b)(ii)	3.02	3.38	3.58	3.88	4.34
LT-3(i)	265.74	291.41	303.3	318.33	322.27
LT-3(ii)	105.37	122.27	122.41	129.4	142.60
LT-4(a)	5,289.92	5,927.78	5,981.13	6,054.12	6729.14
LT- 4(b)	17.02	16.47	16.01	17.43	16.27
LT- 4c(i)	0.88	0.65	0.6	0.69	0.54
LT- 4c(ii)	0.19	0.12	0.18	0.15	0.18
LT-5	315.81	313.34	316.34	320.43	328.55
LT-6 Ws	203.28	216.19	271.86	277.19	311.69
LT-6 St	133.13	128.84	146.73	149.38	149.79
LT-7	22.61	24.28	26.03	28.25	32.74
LT Total	7,774.90	8,578.45	8,758.09	8,971.68	9,740.81
HT-1	195.96	210.62	215.44	234.01	270.96
HT-2(a)	926.07	930.32	843.88	1,005.39	1160.05
HT - 2(b)	114.55	119.56	120.62	121.8	129.88
HT-2 (C)(i)	23.13	28.39	47.51	53.45	56.27
HT-2 (C) (ii)	24.18	29.58	18.81	20.69	21.67
HT - 3 (a)(i)	120.65	107.52	141.15	171.09	209.40
HT - 3 (a)(ii)	11.44	52.46	71.09	81.65	123.68
HT - 3 (a)(iii)	5.15	3.69	2.7	3.09	3.75
HT-3(b)	0.14	0.23	0.09	0.05	0.07
HT-4	15.7	14.63	14.5	14.59	14.43
HT-5	19.67	16.58	31.67	21.81	29.02
HT	1,456.65	1,513.58	1,507.46	1,727.60	2,019.18
LT+HT	9,231.54	10,092.02	10,265.54	10,699.28	11,759.99

Energy sales :

Energy sales to BJ KJ -LT-1 (Up to 40 Units):

Sl No.	Particulars	In MU
1	Energy sold in FY-15	91.92
2	Energy sold in FY-19	199.94
3	Increase in the Sales	108.02
4	Energy projected for FY-20	199.94
5	Energy projected for FY-21	199.94



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Energy sales to BJ KJ –LT-1 (Above 40 Units):

Sl No.	Particulars	In MU
1	Energy sold in FY-15	72.12
2	Energy sold in FY-19	43.91
3	Increase in the Sales	-28.21
4	Energy projected for FY-20	43.91
5	Energy projected for FY-21	43.91

Note: As there is no new scheme for BJ/KJ proposed by GOK, the growth is not projected.

Energy sales to IP Sets 10 HP & below –LT-4(a) :

Sl No.	Particulars	In MU
1	Energy sold in FY-15	5,289.92
2	Energy sold in FY-19	6729.14
3	Increase in the Sales	1439.22
4	Increase in growth as per CAGR	6.20%
5	Energy projected for FY-20	7146.40
6	Energy projected for FY-21	7589.53

Note : The Hon'ble KERC has approved total Sales of 6619.47 MU & 6892.58 under LT-4(a) for FY-20 & FY-21 respectively, vide Tariff Order Dtd 30.05.2019. Though the projections made by HESCOM is more than the Approved by KERC, HESCOM desires to retain the sales as projected by HESCOM, in view of on-going works under NJY and regularisation of Un authorised IP Sets and enumeration.

Actual Consumption for previous 5 years and projection for FY-20 and FY-21.:

Tariff	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
LT-4(a)	5,289.92	5,927.78	5,981.13	6,054.12	6729.14	7146.40	7589.53

Other than BJ KJ & IP Sets (10 HP & Below.)

LT-2a(i) Domestic installations :

Sl No.	Particulars	In MU
1	Energy sold in FY-15	852.71
2	Energy sold in FY-19	976.86
3	Increase in the Sales	124.15
4	Increase in growth as per CAGR	3.46%
5	Energy projected for FY-20	1010.62
6	Energy projected for FY-21	1045.55



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LT-2a(ii) Domestic installations :

Sl No.	Particulars	In MU
1	Energy sold in FY-15	390.53
2	Energy sold in FY-19	467.03
3	Increase in the Sales	76.50
4	Increase in growth as per CAGR	4.57%
5	Energy projected for FY-20	488.39
6	Energy projected for FY-21	510.72

LT-2b(i) Professional Educational Institutions :

Sl No.	Particulars	In MU
1	Energy sold in FY-15	10.66
2	Energy sold in FY-19	14.99
3	Increase in the Sales	4.33
4	Increase in growth as per CAGR	8.90%
5	Energy projected for FY-20	16.33
6	Energy projected for FY-21	17.78

LT-2b(ii) Professional Educational Institutions :

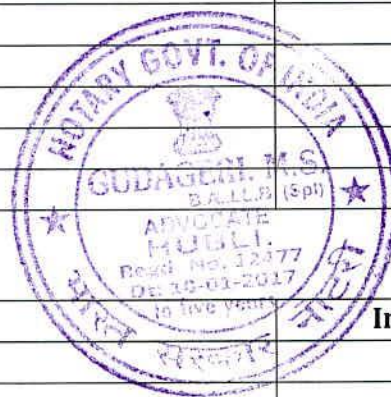
Sl No.	Particulars	In MU
1	Energy sold in FY-15	3.02
2	Energy sold in FY-19	4.34
3	Increase in the Sales	1.32
4	Increase in growth as per CAGR	9.47%
5	Energy projected for FY-20	4.75
6	Energy projected for FY-21	5.20

LT-3(i) Commercial Installations (Urban):

Sl No.	Particulars	In MU
1	Energy sold in FY-15	265.74
2	Energy sold in FY-19	322.27
3	Increase in the Sales	56.53
4	Increase in growth as per CAGR	4.94%
5	Energy projected for FY-20	338.19
6	Energy projected for FY-21	354.89

LT-3(ii) Commercial Installations (Rural):

Sl No.	Particulars	In MU
1	Energy sold in FY-15	105.37
2	Energy sold in FY-19	142.60
3	Increase in the Sales	37.23
4	Increase in growth as per CAGR	7.86%
5	Energy projected for FY-20	153.80
6	Energy projected for FY-21	165.88



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LT-4(b) IP Sets - Above 10 HP :

Sl No.	Particulars	In MU
1	Energy sold in FY-15	17.02
2	Energy sold in FY-19	16.27
3	Increase in the Sales	-0.75
4	Increase in growth as per CAGR	-1.13%
5	Energy projected for FY-20	16.45
6	Energy projected for FY-21	16.63

Note : Negative CAGR, hence growth of Absolute % considered

LT-4c(i) IP Sets - Pvt Horticultural. Nurseries, Coffee & Tea plantations up to 10HP:

Sl No.	Particulars	In MU
1	Energy sold in FY-15	0.88
2	Energy sold in FY-19	0.54
3	Increase in the Sales	-0.34
4	Increase in growth as per CAGR	-11.45%
5	Energy projected for FY-20	0.60
6	Energy projected for FY-21	0.67

Note : Negative CAGR, hence growth of Absolute % considered

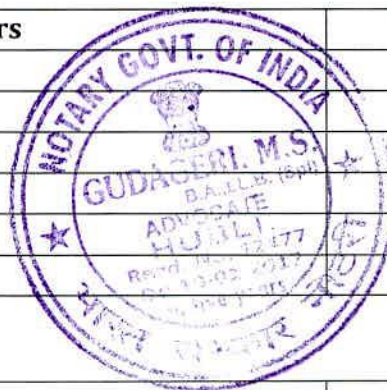
LT-4c(ii) IP Sets - Pvt Horticultural. Nurseries, Coffee & Tea plantations above 10HP:

Sl No.	Particulars	In MU
1	Energy sold in FY-15	0.19
2	Energy sold in FY-19	0.18
3	Increase in the Sales	-0.04
4	Increase in growth as per CAGR	-1.66%
5	Energy projected for FY-20	0.18
6	Energy projected for FY-21	0.88

Note : Negative CAGR, hence growth of Absolute % considered

LT-5 Heating & Motive Power :

Sl No.	Particulars	In MU
1	Energy sold in FY-15	315.81
2	Energy sold in FY-19	328.55
3	Increase in the Sales	12.74
4	Increase in growth as per CAGR	0.99
5	Energy projected for FY-20	331.81
6	Energy projected for FY-21	335.11



LT-6 (a) Water Supply :

Sl No.	Particulars	In MU
1	Energy sold in FY-15	203.28
2	Energy sold in FY-19	311.69
3	Increase in the Sales	108.41
4	Increase in growth as per CAGR	11.28%
5	Energy projected for FY-20	346.84
6	Energy projected for FY-21	385.95

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LT-6 (b) Public Lighting :

SI No.	Particulars	In MU
1	Energy sold in FY-15	133.13
2	Energy sold in FY-19	149.79
3	Increase in the Sales	16.66
4	Increase in growth as per CAGR	2.99%
5	Energy projected for FY-20	154.27
6	Energy projected for FY-21	158.89

LT-7 Temporary Supply:

SI No.	Particulars	In MU
1	Energy sold in FY-15	22.61
2	Energy sold in FY-19	32.74
3	Increase in the Sales	10.13
4	Increase in growth as per CAGR	9.69%
5	Energy projected for FY-20	35.91
6	Energy projected for FY-21	39.39

HT-1 Water Supply, Sewerage Pumping :

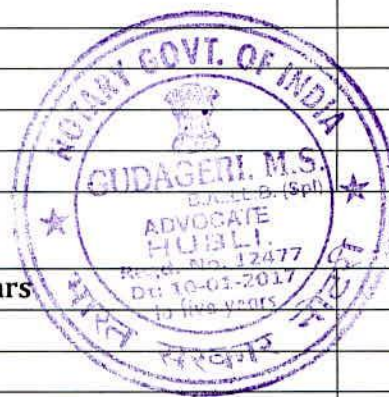
SI No.	Particulars	In MU
1	Energy sold in FY-15	195.96
2	Energy sold in FY-19	270.96
3	Increase in the Sales	75.00
4	Increase in growth as per CAGR	8.44%
5	Energy projected for FY-20	293.83
6	Energy projected for FY-21	318.62

HT-2 (a) Industrial :

SI No.	Particulars	In MU
1	Energy sold in FY-15	926.07
2	Energy sold in FY-19	1005.39
3	Increase in the Sales	79.32
4	Increase in growth as per CAGR	5.79%
5	Energy projected for FY-20	1227.26
6	Energy projected for FY-21	1298.35

HT-2 (b) Commercial :

SI No.	Particulars	In MU
1	Energy sold in FY-15	114.55
2	Energy sold in FY-19	129.88
3	Increase in the Sales	15.33
4	Increase in growth as per CAGR	3.19%
5	Energy projected for FY-20	134.02
6	Energy projected for FY-21	138.29



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HT-2 c(i) Hospitals.

Sl No.	Particulars	In MU
1	Energy sold in FY-15	23.13
2	Energy sold in FY-19	56.27
3	Increase in the Sales	33.14
4	Increase in growth as per CAGR	24.89%
5	Energy projected for FY-20	70.28
6	Energy projected for FY-21	87.77

HT-2c(ii) Hospitals.

Sl No.	Particulars	In MU
1	Energy sold in FY-15	24.18
2	Energy sold in FY-19	21.67
3	Increase in the Sales	-2.51%
4	Increase in growth as per CAGR	-2.70%
5	Energy projected for FY-20	22.26
6	Energy projected for FY-21	22.86

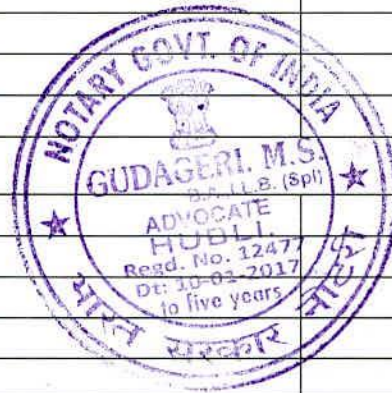
Note : Negative CAGR, hence growth of Absolute % considered

HT-3 a(i) Lift Irrigation:

Sl No.	Particulars	In MU
1	Energy sold in FY-15	120.65
2	Energy sold in FY-19	209.40
3	Increase in the Sales	88.75
4	Increase in growth as per CAGR	14.78%
5	Energy projected for FY-20	240.35
6	Energy projected for FY-21	275.88

HT-3 a(ii) Lift Irrigation:

Sl No.	Particulars	In MU
1	Energy sold in FY-15	11.44
2	Energy sold in FY-19	123.68
3	Increase in the Sales	200.99
4	Increase in growth as per CAGR	81.33%
5	Energy projected for FY-20	142.18
6	Energy projected for FY-21	163.45



Note : CAGR is very high compared to previous years and hence CAGR of installations, i.e, 14.96% is considered for projection for FY-20 & FY-21.

HT-3 a(iii) Lift Irrigation:

Sl No.	Particulars	In MU
1	Energy sold in FY-15	5.15
2	Energy sold in FY-19	3.75
3	Increase in the Sales	-1.40
4	Increase in growth as per CAGR	-7.60%
5	Energy projected for FY-20	4.04
6	Energy projected for FY-21	4.35

Note : Negative CAGR, hence growth of Absolute % considered

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HT-3 (b) Farms Nurseries:

SI No.	Particulars	In MU
1	Energy sold in FY-15	0.14
2	Energy sold in FY-19	0.07
3	Increase in the Sales	-0.07%
4	Increase in growth as per CAGR	-16.93%
5	Energy projected for FY-20	0.08
6	Energy projected for FY-21	0.09

Note : Negative CAGR, hence growth of Absolute % considered

HT-4 Resident. Apartments:

SI No.	Particulars	In MU
1	Energy sold in FY-15	15.70
2	Energy sold in FY-19	14.43
3	Increase in the Sales	-1.27
4	Increase in growth as per CAGR	-2.09%
5	Energy projected for FY-20	14.73
6	Energy projected for FY-21	15.04

Note : Negative CAGR, hence growth of Absolute % considered

HT-5 Temporary :

SI No.	Particulars	In MU
1	Energy sold in FY-15	19.67
2	Energy sold in FY-19	29.02
3	Increase in the Sales	9.35
4	Increase in growth as per CAGR	10.21%
5	Energy projected for FY-20	31.98
6	Energy projected for FY-21	35.24



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Details of growth of Sales as per CAGR

Tariff	FY-15	FY-19	Yn= FY-18	Yi=FY- 14	n=5 Yn/Yi ⁿ (1/(n-1))	CAGR [(Yn/Yi) ^{1/(n-1)}]-1*100	FY-20	FY-21
LT1 - 18/40 units	91.92	199.94	0.25	2.18	1.21	21.44	199.94	199.94
LT1 above 18/40 units	72.12	43.91	0.25	0.61	0.88	-11.67	43.91	43.91
BJ KJ	164.04	243.85	0.25	1.49	1.10	10.42	243.85	243.85
LT-2a (i)	852.71	976.86	0.25	1.15	1.03	3.46	1045.55	1045.55
LT-2a (ii)	390.53	467.03	0.25	1.20	1.05	4.57	510.72	510.72
LT-2(b)(i)	10.66	14.99	0.25	1.41	1.09	8.90	17.78	17.78
LT-2(b)(ii)	3.02	4.34	0.25	1.44	1.09	9.47	5.20	5.20
LT-3(i)	265.74	322.27	0.25	1.21	1.05	4.94	354.89	354.89
LT-3(ii)	105.37	142.60	0.25	1.35	1.08	7.86	165.88	165.88
LT-4(a)	5289.92	6,729.14	0.25	1.27	1.06	6.20	7589.53	7589.53
LT - 4b	17.02	16.27	0.25	0.96	0.99	-1.13	16.63	16.63
LT- 4c(i)	0.88	0.54	0.25	0.61	0.89	-11.45	0.67	0.67
LT- 4c(ii)	0.19	0.18	0.25	0.94	0.98	-1.66	0.18	0.18
LT-5	315.81	328.55	0.25	1.04	1.01	0.99	335.11	335.11
LT-6	203.28	311.69	0.25	1.53	1.11	11.28	385.95	385.95
LT-6	133.13	149.79	0.25	1.13	1.03	2.99	158.89	158.89
LT-7	22.61	32.74	0.25	1.45	1.10	9.69	39.39	39.39
LT Total	7774.90	9,740.81	0.25	1.25	1.06	5.80	10870.24	10870.24
HT-1	195.96	270.96	0.25	1.38	1.08	8.44	318.62	318.62
HT-2(a)	926.07	1,160.05	0.25	1.25	1.06	5.79	1298.35	1298.35
HT - 2(b)	114.55	129.88	0.25	1.13	1.03	3.19	138.29	138.29
HT-2 (C)(i)	23.13	56.27	0.25	2.43	1.25	24.89	87.77	87.77
HT-2 (C)(ii)	24.18	21.67	0.25	0.90	0.97	-2.70	22.86	22.86
HT - 3 (a)(i)	120.65	209.40	0.25	1.74	1.15	14.78	275.88	275.88
HT - 3 (a)(ii)	11.44	123.68	0.25	10.81	1.81	81.33	163.45	163.45
HT - 3 (a)(iii)	5.15	3.75	0.25	0.73	0.92	-7.60	4.35	4.35
HT-3(b)	0.14	0.07	0.25	0.48	0.83	-16.93	0.09	0.09
HT-4	15.70	14.43	0.25	0.92	0.98	-2.09	15.04	15.04
HT-5	19.67	29.02	0.25	1.48	1.10	10.21	35.24	35.24
HT	1456.65	2,019.18	0.25	1.39	1.09	8.51	2359.94	2359.94
LT+HT	9231.54	11,759.99	0.25	1.27	1.06	6.24	13230.18	13230.18

Distribution Loss :

HESCOM proposes the Distribution Loss for FY20 and FY 21 as noted below.

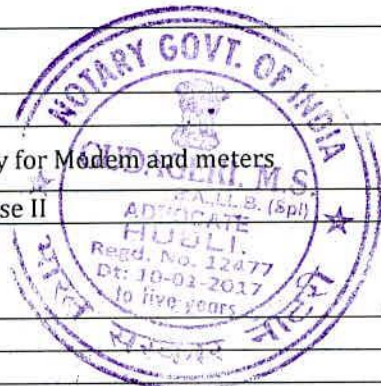
Particulars	FY-20 (Revised)	FY-21
Energy Sales (Mus)	12469.38	13230.18
Distribution Loss (%)	14.40	14.20
Energy at interface point (Mus)	14567.03	15419.78
Transmission Loss (%)	3.162	3.132
Energy Required to meet the sales of HESCOM	15042.68	15918.35
HRECS Hukkeri (Including Transmission loss) in MUs)	347.77	364.49
AEQUS (Including Transmission loss) in MUs)	25.61	29.80
Total	15416.06	16312.64

The Hon'ble KERC has approved distribution loss of 14.40% for FY-20 and 14.20% for FY-21 vide Tariff Order Dtd: 30.05.2019.


Executive Engineer (FI)

Revised Capital Budget Proposal for FY 21

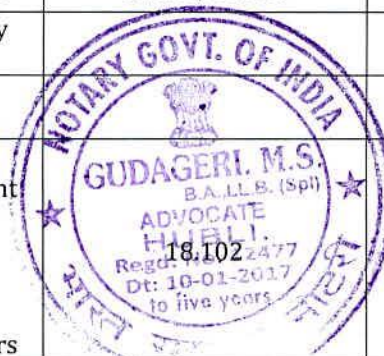
Sl. No.	Scheme	A/c Head	Revised Capital Budget Proposal for FY 21 (Rs in crs)
	Mandatory works, Social obligation and other works		
1	Gangakalyan IP sets: Dr. B. R Ambedkar Development Corporation	47.310, 14.182,14.334	100
2	Gangakalyan IP sets: Karnataka State Tribal Development Corporation	47.315,14.335	
3	Gangakalyan IP sets: D.Devraju urs Backward Class Development Corporation	47.308,14.336	
4	Gangakalyan IP sets :Karnataka Minority Development Corporation	47.309,14.337	
5	Gangakalyan IP sets :Karnataka Vishwakarma Samudaya Development Corporation	14.338 (47.310)	
	Gangakalyan total		100.00
	GOK Sponsered Works		
6	Special Development Plan for backward talukas under Nanjundappa scheme(SDP)	14.191,14.192,14.193,14.194	25
7	Rural Electrification under SCSP (Not covered under RGGVY)	14.304, 14.305,14.306	7
8	Rural Electrification under TSP (Not covered under RGGVY)	14.307,14.308, 14.309	3
9	Energisation of IP sets under Sheegra Samparka	14.331, 14.332,14.333,14.1887	10
10	Creating infrastructure to UAIP Sets (Before and after 2014 GOK circular)	14.167	88
11	Nirantar Jyoti Yojana.	14.1627,14.1626	17
11.a	Bifurcation of IP Sets for completed NJY Feeders		26
	Sub - total		176.00
	GOI Sponsered Works		
12	RGGVY	14.367,	0
13	DDUGVY	14.420,14.421,14.422,14.423,14.424,14.425	23
14	R- APDRP.	14.1787,14.1797,	1
14.a	R-APDRP exclusively for Modem and meters		0.5
15	IPDS IT initiative Phase II		10.57
16	IPDS	14.410,14.411,14.412,14.413,14.414,14.415,14.416,14.417	65.08
17	Soubhagya Yojane		20
	Sub - total		120.15
18	Expansion of network and system improvement works.		
a	Additional DTCs	14.1517, 14.1497	50
b	Enhancement of Distribution Transformers	14.1697	5
c	Shifting of existing transformer to load centre	14.1497	2
d	LT line conversion of 1Ph 2 wire or 1Ph 3 wire to 3ph 5 wire	14.1407	5
e	Providing new link lines for bifurcation of load	14.1607	30
19	Construction of new 33 KV stations	14.1206, 14.122,14.123,14.126,14.200,14.161,	25
19.a	Construction of new 33 KV lines.	14.1106,14.1166,14.1136,14.141,14.163,14.165,	15
20	Augmentation of 33 KV stations.	14.1296,14.121	15
21	Construction of 11 KV lines for 33 KV / 110 KV sub-stations.	14.1457	35



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Application for Approval of Annual Performance Review for FY-19 and Approval for ARR & ERC FY-21 and Tariff Filing for FY-21.

22	Replacement of 33 KV lines Rabbit conductor by Coyote conductor.	14.1686	25
23	11 KV Re-conductoring.	14.1467	35
24	LT Re-conductoring.	14.174	40
25	HVDS		0
26	NEF (REC) for replacing 11 KV OH feeders by UG Cables in Hubli and Belgaum cities.	14.1907	3
26. a	Replacing 11 KV OH feeders by UG Cables in Gokak Town		5
27	Commissioning of 3 Ph 4 wire HT Metering Cubicle with meter, CTs, PTs		30.86
28	Refurbishing works on HT/LT/DTC in O & M Divisions	14.189	100
	OTM		6.5
	Sub-total (i+ii+iii+iv+v+vi)		427.36
	Reduction of T & D and ATC loss		
29	Providing meters to un-metered IP sets.	14.401	0
30	Providing meters to un-metered BJ/KJ installations.	14.351,14.361	1
31	Replacement of faulty / MNR energy meters by static meters.	14.1587	10
32	Replacement of more than 10 year old electromechanical energy meters by static meters.		61.152
33	DTC's metering (Other than APDRP)	14.1717, 14.1727	3
	Sub - total		75.15
	General (In House)		
34	Rural Electrification (General)(Not covered under RGGVY)	14.3007	1
35	Electrification of BPL Households (General) (Not covered under RGGVY)	14.3607	1
36	Water works	47.35	0
37	Other E & I Works (DP & GOS)		5
38	Energisation of IP sets under general.	14.320,14.324, 14.321,14.323, 14.325	5
39	Service connections other than IP/BJ/KJ/Water works.	14.4007, 47.3057,14.155, 14.142	15
40	Improvement Works at 5 Nos of Villages in each MLA Constituency & 5 Nos of Villages in each MP Constituency under MADARI VIDUYAT GRAM .		26
41	Providing prepaid meters to temporary installations	14.184, 14.185	8.95
42	Providing numerical relays to provide power supply to farm houses		2
43	Providing 16KVA Transformers for A/P/S to farm houses in Chikodi Division		5
44	The work of Supply of Hardware, Supervisory Manpower (for Technical Support) and Development of Software (End to End Solution including Google Map Subscription for 2 Years, if applicable) to Support Enumeration of IP Sets in HESCOM Jurisdiction (except Bailhongal O & M Division) through GIS Application and Maintenance for 2 Years	18.102	0.7
45	Replacement of old and failed equipments and other works of existing 33 KV stations and lines.	14.1176,14.1286	15
46	T&P materials.	10.7117 to 10.9847, 14.8107	5
	Sub - total		89.65
	New initiatives works		
47	IT initiatives, automation and call centre	14.183	4
48	Providing solar roof tops to HESCOM and other Government office buildings	14.502	2
49	Establishing ALDC & SCADA.	14.1306,14.1307	4
50	Special pilot project for Statergic Business Centre at		2



Application for Approval of Annual Performance Review for FY-19 and Approval for ARR & ERC FY-21 and Tariff Filing for FY-21.

	Gadag Division		
51	Smart Metering		9.2
52	DSM Projects		1
	Sub - total		22.20
	Immediate Execution (Planned/Unplanned)		
53	Replacement of failed distribution transformers.	14.1697, 14.1707	10
54	Replacement of Power Transformers.	14.187	5
55	Preventive measures to reduce the accidents. (Providing intermediate poles, Restraining of sagging lines, providing guy & struds, providing guarding, DTC earthing)	14.152, 14.175	70
56	Replacement of broken poles / Disaster Management Works	14.147, 14.150	20
57	Restoration of Power Supply in Flood Affected Areas	14.376	50
	Sub - total		155.00
58	Civil Engineering works like Construction of new office buildings/ Sub station civil works, Mordenisaton/Repairs to existing buildings, regular maintainance to immovable properties	14.502, 14.503, 14.504	40
59	Corporate Office Reserve for Emergency		
	Sub - total		40.00
	Total (i+ii+iii+iv+v)		1205.51

The Capital Budget approved by the Hon'ble KERC for HESCOM for FY 21 in Tariff Order 2019 is **Rs. 1025 Crores.**

However the Budget proposed for FY21 was **Rs. 1567 Crores** and now the same has been revised to **Rs. 1205.51 Crores.**

The details of Annual Investment Plan is appended below:

- ❖ Annual Investment Plan includes all the planned and Non Plan works
- ❖ Capital budget provision is made for commissioned works, on going works and works that have been proposed to be taken up.
- ❖ Since most of the schemes such as DDUGJY, IPDS, Replacement of OH by UG cable in Hubli & Belagavi city, Saubhagya are on verge of completion , the entire balance Capital budget has been allotted in FY 21.
- ❖ GoK scheme called Model Electricity Village (MEV) which mainly focuses on development / strengthening of distribution network in the selected villages is included in the Budget plan for FY-21 with full allocation to complete it.
- ❖ Prioritization is made for Replacement of old meters by Static meters which in turn ends up in reduction in Technical and Commercial losses and also supports in Energy Auditing in more technical way.
- ❖ Appropriate provision is made for Social obligatory works such as Ganga Kalyan works, SDP, TSP, SCSP.
- ❖ Budget provision for the projects such as NJY III Phase, which are under completion and bifurcation of IP Sets from these NJY Feeders are included for FY-21.
- ❖ Capital Budget provision is made for Refurbishing works on HT/LT/DTC and OTM works in O & M Divisions. The objective of this work is to have reliable, quality supply with intention of enabling stable distribution network and accident free network.


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- ❖ Investment provision is made on System strengthening works such as Reconductoring, linklines, Preventive Measure works will be taken in order to improve tail end voltage and reduction of losses and prevents Accidents.
- ❖ Investment provision is made on E & I works like additional DTCs, feeder bifurcation, line conversion, shifting of transformer to load centre, enhancement of transformers etc are considered for energy saving and Quality supply and reduction of over load thus improving voltage
- ❖ Investment is made on New Stations/ Agumentation and also replacement works in Stations are to be taken up in order to improve quality power supply and reduce distribution losses and to cater load growth.

Considering all the above factors Annual Investment plan for FY-21 is proposed to a tune of **Rs. 1205.51 crores** and prayed before Hon'ble Commission to consider the revised proposal for FY 21 and accord approval.

Segregation of accounts in to distribution business and retail supply business.

As per Regulation 2.2, the accounts of licensee shall be segregated between Distribution and Retail Supply Business. It is provided in the regulation that till such time there is complete segregation, the ARR of the licensee shall be apportioned between the distribution business and retail supply business by appropriate methodology.

Considering the above, as per the Tariff Order Dtd : 30.03.2016, the expenditure is segregated between DB and RSB as furnished below.

Particulars	Distribution Business	Retail Supply Business
O &M	63%	37%
Depreciation	84%	16%
Interest on Loans	100%	0%
Interest on consumer Deposits	0%	100%
RoE	82%	18%
GFA	84%	16%
Non-Tariff Income	0%	100%

The main business of HESCOM is distribution of power in 7 districts of North Karnataka. As per Regulation, HESCOM has to forecast the annual revenue requirement for FY-21 and furnish in application under MYT Framework. The details of estimation of ARR for FY-21 is explained in the following Paras.

ATTESTED

NOTARY

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B.A.LL.B. (Spl.).
Advocate & Notary Public, Govt. of India
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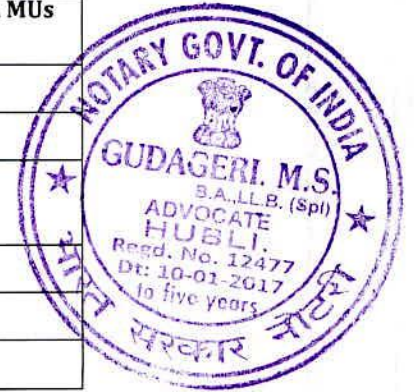


PROJECTED ENERGY AVAILABILITY & COST FOR FINANCIAL YEAR 2020-21

1.0 The energy required by ESCOMs of Karnataka for the Financial Year 2020-21 is 75404.69 MUs considering STU transmission losses of 3.13%. The ESCOM wise energy requirement is shown in as **Table-1**.

Table-1

ESCOMs	Energy requirement in MUs
BESCOM	35121.13
GESCOM	9366.47
HESCOM including Hukkeri Society & AEQUS	16312.64
MESCOM Including MSEZ	6453.45
CESC, Mysore	8151.00
Total	75404.69



2.0 Energy being purchased by ESCOMs from different sources viz., KPCL Hydrel, KPCL Thermal & Gas based power Projects, Central Generating Stations, DVC, Priyadarshini Jurala Hydro Electric scheme, IPPs and Non-Conventional Energy source including solar projects.

3.0 Hydro and Thermal Stations of KPCL

The Energy availability of Hydrel and Thermal stations of State Owned Power plants are considered as per the details furnished by KPCL in its letter dated 08.11.2019. The energy projected by KPCL in respect of hydro stations is based on average energy generated in last 10 years 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. The Raichur Power Corporation Ltd (RPCL) furnished the projected energy and cost details for FY 2020-21 through email on 7.11.2019. KPCL has projected the Yelahanka Combined Cycle power projects is available for the FY 2020-21.

During the year 2020-21, Energy availability from different sources is more than the quantum required by ESCOMs, considering the following factors;

- i) The energy availability from KPCL stations, RPCL and KSPDCL as per the details furnished by Generating Stations.
- ii) Energy availability from CGS stations as per generation data received through email from SRPC applicable for the FY 2020-21.
- iii) The energy availability of DVC stations as per the data furnished through email dated 5.11.2019
- iv) 85% of the 90% of the installed capacity has been considered for UPCL project

- v) NCE projects commissioned and energy actual supplied during year 2018-19 has been considered for 2020-21 onwards.
- vi) Solar projects selected through bidding route for which cumulative utilization factor as per the PPA is considered.
- vii) In respect of Taluka wise, 1 to 3 MW farmers category is likely to be commission during 2019-20 onwards is as per the scheduled CoD date as furnished by ESCOMs/KREDL.
- viii) The energy availability from Jurala Priyadarshini is as per energy supplied for the year 2019-20 and in respect of TBHES, the energy availability is as per the energy supplied for the year 2018-19 is considered.
- ix) The energy availability from Medium term cogeneration plants of 637 MW at 60% PLF is considered.

Generating Stations	Energy in Mus	Source
KPCL Hydro	11567.03	KPCL
KPCL Thermal:		
RTPS - 1 & 7	8623.16	KPCL
RTPS 8	1600.69	KPCL
BTPS		
Unit I	3447.48	KPCL
Unit II	3503.38	KPCL
Unit III	4900.22	KPCL
Yelahanka Combined Cycle gas Power projects	2502.00	KPCL
Raichur Power Corporation ltd		
Yermarus TPS - 1& 2	11288.57	RPCL
CGS	16134.04	Generation data submitted by generator to SRPC for 2020-21
Kudigi	8520.52	85% of 2400 MW (Karnataka share 50%)
DVC	2614.05	As per DVC
UPCL	7522.99	90% of 85% installed capacity
NCE Projects	21326.35	As per actuals of ESCOMs for the FY 2018-19 with proposed solar projects likely commissioned during the year 2019-20 & 2020-21
TBHE & Jurala projects	183.60	Actuals of 19-20(Jurala) and 2018-19(TBHE)
Medium Term procurement of Co-generation Plants	1285.06	60% of Exportable capacity
Total	104959.13	


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The 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 Despatch is as detailed below;

Sources	Available quantum in Mus	Quantum offtake by ESCOMs in Mus	Difference in Mus	Justification
RTPS 8	1600.69	963.06	637.63	Due to higher variable cost, Offtake of power from these power plants is reduced. The full Fixed cost is considered for tariff filing.
BTPS Uni1	3447.48	1216.34	2231.14	
BTPS Unit-2	3503.38	1320.18	2183.20	
BTPS Unit-3	4900.22	4278.79	621.43	
RTPS Unit1 to 8	8623.16	6033.41	2589.75	
Yelahanka Combined Cycle gas Power projects	2502.00	428.46	2073.54	Plant is expected to available during the month of Nove-2020 and energy would be scheduled for the month of Feb-2021 and March-2021 @ 60%
Yermarus TPS - 1 & 2	11228.57	3030.18	8198.39	The capacity charges considered for full. However energy considered for One unit of 800 MW @ 85%
Kudigi Units 1,2 & 3	8520.52	1272.96	7247.55	Due to higher variable cost, Offtake of power from these power plants is reduced. The full Fixed cost is considered for tariff filing.
UPCL	7522.99	3751.19	3771.8	Due to higher variable cost, Offtake of power from the power plants is reduced. The full Fixed cost is considered for tariff filing.
Total	51849.00	22294.56	29554.44	

3.1 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 project (Sharavathy, Linganamakki & Chakra Projects)	5003.18
2	Kali Valley projects (Nagajari & Supa Projects)	3119.00
3	Varahi Valley projects (Varahi & Mani Projects)	1008.51
4	Bhadra & Bhadra Right Bank	47.86
5	Ghataprabha (GDPH)	68.06
6	Mallapur & Others	0
7	Kadra Dam	370.69
8	Kodasalli Dam	347.07
9	Gerusoppa/STRP	525.41
10	Almatti Dam Power House	434.56
12	Shiva & Shimsa	291.47
13	Munirabad	91.44
14	MGHE-Jog	259.79
	Total KPCL Hydel	11567.03

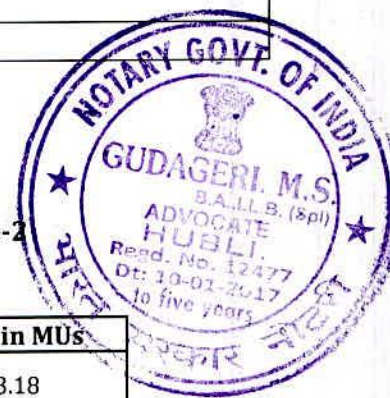


Table-3

THERMAL POWER STATIONS

Sl. No.	Stations	Installed Capacity in MW	Net generation in MUs
1	RTPS I & 7	1470	6033.41
2	RTPS Unit 8	250	963.06
3	BTPS Unit I	500	1216.34
4	BTPS Unit II	500	1320.18
5	BTPS UNIT-III	700	4278.79
6	Yelahanka Combined Cycle	370	428.46
7	Yermarus TPS - 1 & 2	1600	3030.18
Total			17270.41

3.2 Total Hydel generation would be 11567.03 MUs and Thermal is around 17270.41 MUs for 2020-21, totaling to 28837.44 MUs from KPCL Station and Raichur Power Corporation Ltd.

4.0 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 25.02.2015 determined the tariff for KPCL Hydro Stations of Shiva and Shimsha, Munirabad & MGHE upto 2019. The tariff proposed by KPCL in its letter dated 8.11.2019 is considered for above hydro stations. The rate details furnished by the KPCL is as shown in Table-4.

Table-4

Sl. No.	Source	Design energy in MUs	Paise per Unit
A	KPCL - Hydel		
1	Sharavathy valley project (Sharavathy, Linganamakki & Chakra Projects)	3737.95	47.26
2	Kali Valley projects	2058.77	74.57
3	Varahi Valley projects (Varahi & Mani Projects)	848.69	140.31
4	Varahi 3 & 4	848.69	37.79
5	Bhadra & Bhadra Right Bank	50.49	545.66
6	Ghataprabha (GDPH)	84.97	256.69
7	Mallapur & Others	0	0
8	Kadra Dam	419.9	258.88
9	Kodasalli Dam	372.48	177.02
11	Gerusoppa/STRP	442.62	176.97
12	Almatti	384	174.12
13	Shiva & Shimsa	252	52.48
14	Munirabad	65	360.50
15	MGHE-Jog	119	71.06

Note: Paise 4 as royalty charges is considered for the actual generation

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KPCL Thermal Stations:

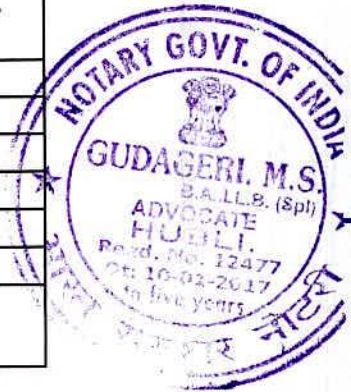
The tariff rates worked out by KPCL based on various parameters of tariff orders in respect of thermal stations RTPS units 1 to 7, RTPS-8, BTPS unit-I, II & III is considered. The Yelahanka Combined Cycle Power Plant is yet to be declared commercial operation by KPCL and tariff is to be determined by KERC and hence the tariff proposed in the letter dated 8.11.2019 is considered. The KERC in its order dated 25.02.2015 determined capacity charges in respect of BTPS unit 2 and RTPS Unit-8 from the date of commission to end of 31.03.2019. Hence, tariff proposed in the letter dated 8.11.2019 by KPCL is considered for the following units;

Sl. No.	Stations	Capacity charges applicable for 2020-21 (Amount in Rs. crore)
1	BTPS Unit-2	456.55
2	RTPS Unit-8	214.74

The average variable cost for the month of July -2019, Aug-2019 and Sep-2019 is considered for energy charges for FY 2020-21;

Table-5

Sl. No.	Stations	2020-21	
		Fixed cost Rs in Crores	Variable cost Paise per Kwh
1	RTPS unit 1 to 7	1014.26	362.37
2	RTPS unit-8	214.74	342.20
3	BTPS unit-1	365.86	392.47
4	BTPS unit-II	456.55	366.85
5	BTPS Unit-III	1004.88	346.27
6	Yelahanka Combined Cycle	197.08	475.08
	Total	3253.37	



The average cost of hydel stations works out to 93.80 Paise per unit and thermal units is around 698.97 paise per unit. The Income tax has been shown separately, the amount as indicated by KPCL in the letter dated 8.11.2019.

Raichur Power Corporation Ltd has furnished the capacity charges, energy charges and Income tax applicable for their station for the financial year 2020-21 is considered.

Table 5a

Raichur Power Corporation Ltd	Fixed charges Rs/Crores	Variable cost (Ps/unit)
Yermarus TPS - 1 & 2	2240.00	381.17

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5.0 Central Generating Stations:

5.1 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.

5.2. 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). The net energy available at ex-bus generation details furnished by Central Generating Stations to SRPC for proposed to preparation of LGBR for the year 2020-21 is considered. Out of the total month wise energy available at Ex-bus, the share of Karnataka including unallocated share for the month of October 2019 (cumulative) is taken to arrive the energy available to Karnataka for FY 2020-21. In order to arrive energy available at Karnataka Periphery, POC losses of injection (State/Power station wise) and losses of withdrawal of the state for the week 18.11.2019 to 24.11.2019 as notified by the NLDC is taken. The scheduled energy available at ex-bus and share of Karnataka is shown in **Table-6** and net energy available at KPTCL periphery after considering the POC losses is shown in **Table-7**.

The energy from new NLC Thermal Power Project of 1000 MW is expected to available during FY 2021. Out of 1000 MW installed capacity Karnataka, having a share of 70 MW.

Table - 6

Sl No.	Stations	Total Energy scheduled at EX-bus in MUs	Share of Karnataka in %	Karnataka Share in MUs
1	RSTP-I&II	12487	18.29	2284.25
2	RSTP-III	3250	18.92	614.93
3	RSTP-Talcher	13085	17.78	2326.25
4	Simhadri station II	5570	18.66	1039.31
5	Vallur unit-I & II	7419	10.31	765.12
6	NLC II Stage-1	3351	22.71	761.05
7	NLC II Stage-2	4602	22.98	1057.59
8	NLC expansion I	3096	25.79	798.49
9	New NLC Thermal power project	2421	8.07	625.15
10	NLC expansion Stage II(Unit-1)	5844	25.82	471.57
11	NTPL-2X 500 MW	5786	20.48	1185.09
12	MAPS	1039	8.50	88.32
13	Kaiga Unit-1& 2	2788	31.57	880.17
14	Kaiga Unit-3&4	2628	34.07	895.36
15	Kudamkulam Unit-1	6718	23.29	1312.70
16	Kudamkulam Unit-2	7008	22.10	1548.77
17	Kudigi Station(3X800 MW)	4845	52.02	1316.03
18	DVC- Maija (unit 7 &8)	5944	20.00	1188.90
19	DVC- Koderma (unit 1 & 2)	5944	25.00	1486.12
	Total			20645.16

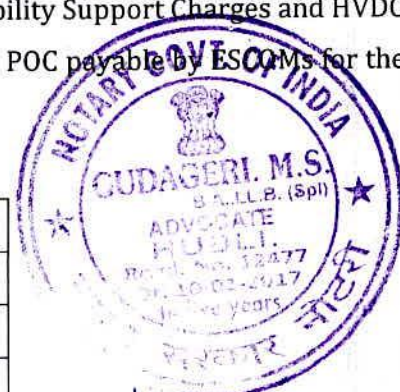
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Table-7

Stations	Energy scheduled @ generators Ex-bus in MUs	Injecti on loss in %	With drawl loss in %	Injection state POC loss in MUs	Energy scheduled after Injection state loss	withdraw al state POC loss in MUs	Energy @ KPTCL periphery
N.T.P.C-RSTP-I&II	2284.25	1.40	1.65	31.98	2252.27	37.16	2215.11
NTPC-III	614.93	1.40	1.65	8.61	606.32	10.00	596.32
NTPC-Talcher	2326.25	1.14	1.65	26.52	2299.73	37.95	2261.79
NLC TPS2-Stage 1	761.05	1.40	1.65	10.65	750.39	12.38	738.01
NLC TPS2-Stage 2	1057.59	1.40	1.65	14.81	1042.78	17.21	1025.57
NLC TPS1-Expn	798.49	1.40	1.65	11.18	787.31	12.99	774.32
NLC II expansion I	625.15	1.40	1.65	8.75	616.40	10.17	606.23
NLC Thremal Projects	471.57	1.40	1.65	6.60	464.97	7.67	457.30
MAPS	88.32	1.15	1.65	1.02	87.30	1.44	85.86
Kaiga Unit 1&2	880.17	2.40	1.65	21.12	859.05	14.17	844.87
Kaiga Unit 3 &4	895.36	2.40	1.65	21.49	873.87	14.42	859.45
Simhadri Unit -1 &2	1039.31	1.15	1.65	11.95	1027.35	16.95	1010.40
NTPLUnit-2X 500 MW	1185.09	1.90	1.65	22.52	1162.57	19.18	1143.39
KudamKulam	1312.70	1.65	1.65	21.66	1291.04	21.30	1269.74
KudamKulam	1548.77	1.65	1.65	25.55	1523.21	25.13	1498.08
Vallur TPS Sg 1,2 &3	765.12	0.65	1.65	4.97	760.15	12.54	747.61
Kudigi(3X800 MW)	1316.03	1.65	1.65	21.71	1294.32	21.36	1272.96
DVC - Mejja thermal Power Station	1188.90	0.64	1.65	7.61	1181.29	19.49	1161.80
DVC - Koderma Thermal Power Station	1486.12	0.64	1.65	9.51	1476.61	24.36	1452.25
Total	20645.16						20021.05

5.3 The power drawl from the Central Sector Generating Stations either through the PGCIL lines or any lines constructed by developer selected through competitive bidding route from the generating plants. ESCOMs will pay POC (Transmission charges) to PGCIL/Independent Power Transmission Utility for Transmitting the CGS power and other states power. The POC charges as per RTA for the month of October-2019 is considered for FY 2020-2021 which includes POC, Reliability Support Charges and HVDC Charges. Considering the POC of October 2019, the total POC payable by ESCOMs for the year 2020-21 is works out to Rs.2356.71 crore.

ESCOMs	POC Charges Rs.Crs.
BESCOM	1304.43
GESCOM	275.18
HESCOM	363.73
MESCOM	192.92
CESC	220.45
Total	2356.71



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CERC has notified CERC(Sharing of Inter-State Transmission Charge and Losses) Regulation,2019 for which Hon'ble CERC invited comments/suggestion to be submitted

before 2nd December 2019. The new Regulation does not specify the POC charges applicable for Karnataka State. Any changes in the existing POC charges, the same will be intimated to Hon'ble Commission after notified new Regulation and applicability of period along with POC Charges.

5.4 The CERC yet to be determined POSOCO-SRLDC charges for the control period 2019 to 2024. However, charges in the order dated 29.12.2016 has been considered. Subsequently, CERC revise the O& Charges, Certificate linked incentive, Additional HR expenses and Performance linked incentive in the CERC order dated 10.6.2019, 27.06.2019 and 28.06.2019. The applicable charges considering the above orders, the share of Karnataka works out to Rs. 2.48 crore.

5.5 The Tariff in respect of Central Generating Stations like NTPC, NLC and DVC stations for the Control period 2019 to 2024 is yet to be determined by CERC for the stations belonging to Generators, Similarly, Transmission Charges of PGCIL owned transmission lines for the next control period is also to be determined by the CERC. Under the above circumstances, the Capacity charges applicable for the period 2018-19 is considered for FY 2020-21. The capacity charge considered based on various orders are as detailed below;

Sl. No.	Stations	Date of order	Capacity charges applicable for 2020-21 (Amount in Rs. Crore)
1	RSTP-I&II	24.1.2017	1068.28
2	RSTP-III	8.11.2016	272.45
3	RSTP-Talcher	16.02.2017	1012.59
4	Simhadri station II	29.7.2016	1081.69
5	Vallur unit-I & II	11.7.2017	1858.96
6	NLC II Stage-1	12.6.2017	299.80
7	NLC II Stage-2	12.06.2017	414.29
8	NLC expansion I	18.10.2016	276.18
9	NLC expansion Stage II (U-1)	24.7.2017	728.06
10	New NLC Thermal projects	As per the petition	1381.72
11	NTPL-2X 500 MW	11.7.2017	1090.17
12	Kudigi	As per the petition	2613.67
13	DVC-Mejia	3.10.2016	1019.21
14	DVC-Koderma	28.2.17	1175.74

The average variable cost for the month of Aug-2019, Sep-2019 and Oct-2019 is considered for energy charges for FY 2020-2021. In case of Kaiga, and Kundamkulam, average rate per unit for the months of Aug-2019, Sep-2019 and October -2019 is considered. The applicable rate in respect of MAPS station for the FY 2020-21 as per their letter dated 14.11.2019 is considered


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Particulars	MAPS	Kaiga Units 1 to 4	Kudamkulam Unit -1	Kudamkulam Unit -2
Base Price	2.626	3.465	3.545	3.545
Heavy Water adjustment charges	0.000	0.000	0.420	0.420
Heavy Water lease adjustment charges	0.000	0.014	0.000	0.000
Insurance	0.098	0.150	0.041	0.041
Decommissioning Levy	0.020	0.020	0.020	0.020
Forex Variation Adjustment Charges	0.000	0.000	0.039	0.039
Nuclear Liability & Forex adjustment	0.050	0.000	0.050	0.050
Others			0.000	0.000
Total tariff	2.794	3.649	4.115	4.115

5.6 The capacity charges (Fixed Cost) and variable cost considered for 2020-21 is shown in Table-9.

Table-9

Central Projects	Fixed Cost (Rs in Cr)	Variable Cost (Paise per Kwh)
N.T.P.C-Ramagundam	195.42	261.57
NTPC-VII	51.55	257.40
NTPC-Talcher	180.02	223.17
NLC TPS2-Stage 1	68.09	268.57
NLC TPS2-Stage 2	95.21	268.57
NLC TPS1-Expn	71.23	246.33
NLC II Expansion-1	188.00	252.10
New NLC Thermal Power project	111.50	219.60
MAPS	0.00	279.39
Kaiga unit I &II	0.00	364.90
Kaiga Unit 3 &4	0.00	364.90
Simhadri Unit -1 &2	201.83	324.23
Vallur TPS Stage I &2 &3	191.71	373.03
NTPL	223.29	289.40
KudamKulam Unit1	0.00	411.53
KudamKulam Unit2	0.00	411.53
Kudigi	1359.74	407.40
DVC- Mejia thermal Power Station	203.84	295.67
DVC Kodemmma thermal Power Station	293.93	272.73

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


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6.0 Independent Power Producers

6.1. 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 5.25% 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 27.06.2019 for FY 2013-14 excluding cost of secondary fuel is considered for FY 2020-21. The average variable cost for the month from August-2019, Sep-2019 and Oct-2019 is considered.

The energy and cost details are shown in Table-10.

Table-10

Stations	Energy (in Mus)	Fixed cost (Rs in Cr)	Variable cost (Paise per Kwh)
UPCL	3751.19	1229.35	368.67

7.0 Non conventional Energy Source (NCE source)

7.1 The actual generation of NCE projects for the year 2018-19 has been considered for 2020-21 including Solar, Co-generation, Bio-mass, Wind Mills and Mini Hydel projects.

7.2 Project which are expected to be commissioned during 2019-20 is based on scheduled CoD of the projects in respect of 1 to 3 Farmer scheme, Talukwise solar and Bidding by KREDL is considered for FY 2020-21. The rate is as per the revised order issued by Commission in respect of 1 to 3 farmer scheme. The rates for other projects are as per the bidding rates.

7.3. The KREDL in its letter dated 7.11.2019 furnished in the list of solar projects commissioned during the year 2019-20 and projects to be commissioned during FY 2020-21. The same is considered for energy projection during FY 2020-21

7.4. The PLF is based on tariff orders issued by KERC for control period from 2018-19 to 2020-21 is considered to arrive energy for FY 2020-21

7.5. 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. Accordingly, Ministry of Power, GOI, allocated 300 MW to Karnataka from unallocated power of coal based NTPC stations of Eastern Region and Western Region. The expected energy from bundled power of coal is around 2018.94 MUs (300 MW @85% PLF after considering the losses)


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7.7 ESCOM wise NCE energy projected for FY 2020-21 is shown in **Table 11.**

Energy in Mus

Existing NCE Projects	BESCOM	GESCOM	HESCOM	MESCOM	CESC	Total
Co-generation	0.00	86.02	430.25	0.00	44.65	560.92
Biomass	63.62	30.02	0.00	0.00	15.66	109.30
Mini Hydel	456.95	107.57	32.65	348.08	283.48	1228.73
Wind mill	2939.71	1495.88	2234.40	266.23	200.29	7136.51
KPCL wind mill	10.08	0.00	0.00	0.00	0.00	10.08
Solar	2528.94	635.24	1081.48	409.92	633.01	5288.59
Solar rooftop	92.18	0.00	0.00	0.00	54.88	147.06
KPCL Solar	3.50	2.19	3.13	0.00	0.00	8.82
NTPC Bundled power Coal	144.46	46.03	59.10	24.51	35.62	309.73
NTPC Bundled Power Solar-SR region	56.21	17.91	22.99	9.53	13.86	120.50
Captive/Banking energy	65.20	40.45	339.30	0.00	0.00	444.95
NTPC Bundled power Coal,WR region ,Pavagada	935.81	305.01	384.95	159.16	234.00	2018.94
NTPC Bundled Power Solar, Pavagada	579.59	188.91	237.39	98.58	144.93	1249.40
Total	7876.25	2955.22	4825.64	1316.01	1660.40	18633.51
New NCE Projects						0.00
Co-generation	0.00	0.00	0.00	0.00	0.00	0.00
Biomass	0.00	0.00	0.00	0.00	0.00	0.00
Mini Hydel	0.00	0.00	0.00	0.00	0.00	0.00
Wind mill	0.00	0.00	0.00	0.00	0.00	0.00
Solar Power @ Pavagada	1028.43	225.90	305.84	143.05	143.05	1846.27
Farmer 1 to 3	0.00	0.00	0.00	0.00	0.00	0.00
Solar Power Under VGF Scheme	0.00	0.00	0.00	0.00	0.00	0.00
Solar Power Under Talukwise scheme	472.07	108.19	133.15	91.54	41.61	846.56
Total	1500.50	334.09	438.99	234.59	184.66	2692.83
Grand Total	9376.75	3289.30	5264.63	1550.60	1845.06	21326.35

7.7 The average cost of the year 2018-19 is considered for existing Hydro and Wind projects.

7.8 In respect of Solar Power Projects, the rate obtained through tender is considered.

8.0 Jurala Project

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 2019-20 is considered for 2020-21. The TSERC vide tariff order dated 6.7.2017 determined the capacity charges for the project for the control period from 1.4.2014 to 31.3.2019. The 50% of the capacity charges applicable for the financial year 2018-19 is considered. The capacity Charges for the next control period is yet to be determined by TSERC hence capacity charges applicable for the year 2018-19 is considered for the year 2020-21 also.


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Table-13

	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Total
Energy in Mus	0	-0.032	-0.048	3.013	29.061	54.738	42.291	27.529	0	0	0	0	156.552
Amount in Rs Cr	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	58.66

9.0 The energy from T. B. Dam power is shared between AP/Telangana and Karnataka. The 1/5th share of revenue expenditure and energy has been shared between two states. The actual cost and energy supplied for the FY 2018-19 is considered for 2020-21. The power purchase cost and energy from T. B. Dam has been estimated to 27.05 MUs and Rs. 3.04 crore.

Table-14

	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Total
Energy in Mus	-0.07	-0.20	-0.35	2.91	9.38	5.28	4.31	0.42	1.84	1.69	0.38	1.46	27.05
Amount in Rs crore	1.04	0.33	0.09	0.15	0.16	0.12	0.14	0.09	0.10	0.09	0.10	0.64	3.04

10.0 Medium Term Power Purchase - Co generation power plant for a period of 5 years

GoK vide Order EN 16 PPT 2016 dated 11.11.2016 accorded approval to purchase power from Bagasse Based Co-generation Units of 28 Sugar factories with an exportable capacity of 501 MW during the season only in the State with the approval of KERC for a period of 5 (FIVE) years commencing from 2016-17 at the tariff determined by KERC. Subsequently, GoK accorded approval to procure power from additional 12 number with total capacity of 137 MW

KERC vide order dated 11th April 2017 has determined the final tariff for the co-generation units for the financial year 2016-17 to 2020-21. As per the KERC order, the tariff payable per unit for the energy supplied from the co-generation plants commissioned in different years during the period from 2005 or earlier to 2014 are as detailed below:

Year of Commissioning	FY17 (Rs. Ps.)	FY18 (Rs. Ps.)	FY19 (Rs. Ps.)	FY20 (Rs. Ps.)	FY21 (Rs. Ps.)
Variable Charges	3.14	3.32	3.51	3.71	3.92
2005 and Earlier	3.98	4.16	4.35	4.55	4.76
2006	3.96	4.14	4.33	4.53	4.74
2007	3.95	4.13	4.32	4.52	4.73
2008	4.01	4.19	4.38	4.58	4.79
2009	4.08	4.26	4.45	4.65	4.86
2010	4.58	4.76	4.95	5.15	5.36
2011	4.71	4.89	5.08	5.28	5.49
2012	4.85	5.03	5.22	5.42	5.63
2013	4.91	5.09	5.28	5.48	5.69
2014	4.96	5.14	5.33	5.53	5.74

BESCOM and other ESCOMs have filed Revision Petition No.9/2017 against the Commission order dated 11.4.2017 and prayed for reduction in the tariff of co-generation units determined by KERC. The hearing completed in April 2018 and reserved for orders. In the meantime, KERC desired to

apply the variable cost determined in the generic tariff order dated 14-05-2018 (considering the bagasse cost as free) to the tariff order dated 11-04-2017. A Writ petition No.31942 of 2018 was filed in the Hon'ble High Court and Court directed not to proceed in the matter. The above WP is not yet been listed in the Hon'ble High Court.

The rate applicable for FY 2020-21 as per the above table is considered with 60% of the energy generated from the exported capacity for a period of 140 days. The above rates are subject to final outcome of the review petition filed by ESCOMs before KERC. The details are indicated in Table-15.

Table -15

Sl. No.	NAME OF THE SELLER	Rate as per KERC order dated 11.4.2017 (Rs./kwh)	Energy @ 60% PLF in Mus	Amount in Rs. crore
1	Godavari biorefineries ltd. Unit-1	4.76	28.22	13.43
2	Godavari biorefineries ltd. Unit-2	5.36	28.22	15.13
3	Jamakhandi sugars ltd. -1	4.76	6.05	2.88
4	Jamakhandi sugars ltd. -2	5.74	22.18	12.73
5	Jamakhandi sugars ltd. -3	5.74	28.22	16.20
6	Nirani Sugars Ltd., -unit-2	5.36	22.18	11.89
7	Nirani Sugars Ltd., unit -3	5.49	32.26	17.71
8	NSL sugars ltd., Koppa,	4.76	21.57	10.27
9	NSL sugars ltd., Thungabhadra	5.49	33.87	18.59
10	NSL sugars ltd., Aland	5.63	38.30	21.57
11	Parry sugar industries ltd., haliyal	4.79	39.31	18.83
12	Parry sugar industries ltd., sadashiva units	4.79	18.14	8.69
13	Sri chamundeshwari sugars ltd.	4.79	36.29	17.38
14	Sri prabulingeshwar sugars & chemicals	4.76	50.40	23.99
15	Coregreen sugar & fuels pvt. ltd	5.49	30.24	16.60
16	Manali sugars ltd., malaghan, bijapur	5.74	20.16	11.57
17	Vijayanagara sugar pvt. Ltd.,	4.86	30.24	14.70
18	Bhalkeshwara sugars ltd	5.74	18.14	10.41
19	GM sugars ltd.	4.86	20.16	9.80
20	Gem sugars ltd.,	4.76	24.19	11.52
21	Shree renuka sugars ltd, Burlatti	4.74	50.40	23.89
22	Shree renuka sugars ltd, Havalga	4.86	40.32	19.60
23	Shree renuka sugars ltd, Munoli	4.76	30.24	14.39
24	KPR sugars ltd	5.63	36.29	20.43
25	Shivashakthi sugars ltd	5.63	48.38	27.24
26	Shiraguppi sugars ltd	5.48	24.19	13.26
27	Soubhagya Laxmi sugars ltd	5.48	33.38	18.29
28	Davanagere sugars	4.76	22.18	10.56
29	Indian cane power ltd	5.74	108.86	62.49
30	Viswaraj sugars	4.76	28.22	13.43
31	Athani Sugars Ltd	5.63	33.61	18.92
32	Satish Sugars	5.63	44.35	24.97
33	Doodh Ganga Krishna Sahakari Sakkare Kharkane U-1	4.76	21.17	10.08
34	Doodh Ganga Krishna Sahakari Sakkare Kharkane U-II	5.74	16.13	9.26
35	Ugar Sugar - Malli Nagarhalli, Jevargi	4.79	14.11	6.76
36	Ugar Sugar - Ugar, Athani Taluk	4.76	62.50	29.75
37	Bannari Aman - Alaganchi	5.74	24.19	13.89
38	Bannari Aman - Kuntur	4.76	25.60	12.19
39	Nandi Sahakari Sakkare Kharkane	4.76	24.19	11.52
40	Hiranakeshi Sahakri Sakkare Kharkane -Phase I	4.79	24.19	11.59
41	Hiranakeshi Sahakri Sakkare Kharkane -Phase II	5.49	24.19	13.28
	Total		1285.06	669.66


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11.0 The projected energy and cost allocated among the ESCOMs is as per GoK order dated 05.03.2019 and allocation of bundled power of NTPC Solar Park is as per PPA.

12.0 The ESCOMs wise energy and cost projected for the financial year 2020-21 is as below:

ESCOMs	Energy requirement in MUs	Power Purchase cost (Rs/Crores)	Average cost (Rs./unit)
BESCOM	35121.13	20240.23	5.76
GESCOM	9366.47	4246.31	4.53
HESCOM including Hukkeri Society & AEQUS	16312.64	6701.03	4.11
MESCOM Including MSEZ	6453.45	2945.89	4.56
CESC, Mysore	8151.00	3196.20	3.92
Total	75404.69	37329.66	4.95



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Operation and Maintenance Expenses:

For the purpose of determining the normative O & M expenses for FY-20 and FY-21. HESCOM has considered the inflation index of 8.2760% as per Tariff Order 2019.

HESCOM has calculated the O & M expenses for FY-20 and FY-21 as noted below.

- a) The actual O & M expenses for FY-19 inclusive of contribution to pension and Gratuity Trust -Rs.969.88.Crs.
- b) CGI based on 3 year CAGR as per Tariff Order 30.05.2019 (in %) - 4.51% and 4.52% for FY – 20 & FY-21 respectively.
- c) The WII at 8.2760% (as per Tariff Order 30.05.2019)
- d) Efficiency factor at 2% as considered in the earlier three control periods.

O & M expenses for FY-20 & FY-21 are calculated as follows.

Particulars	FY-19	FY-20	FY-21
No of installations as per audited accounts	5029700	5266172	5516598
Weighted Inflation Index as per Tariff Order dtd.30.05.2019 (in %)		8.276	8.276
CGI based on 3 year CAGR as per Tariff Order 30.05.2019 (in %)-		4.51	4.52
O &M expenses for FY-19 as per Audited Accounts Rs. Crs	969.88		
Less : pay arrears	37.13		
Actual O &M expenses for FY-19 Rs. Crs	932.75		
O & M Expenses : O & M (t-1)* (1+Wii+CGI-X) in Crs.		1033.37	1144.82

Based on the above the O & M Expenses are segregated as noted below on pro-rata basis considering the actual O & M Expenses of FY-19.

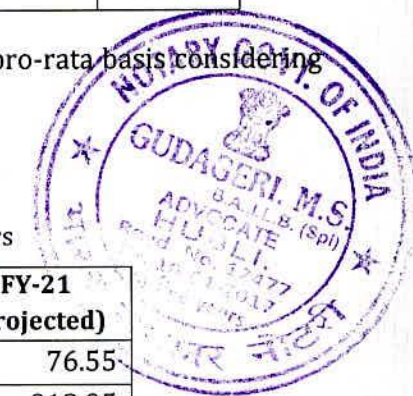
Details of Normative O & M expenses

Rs.in Crs

Particulars	FY-19 (Actual)	FY-20 (Projected)	FY-21 (Projected)
R&M cost	62.37	69.10	76.55
Employee cost	744.65	824.97	913.95
A&G expenses	125.73	139.30	154.32
pay arrears	37.13		
O&M cost	969.88	1033.37	1144.82
P&G Contribution difference (Provisional) payable for FY-21(revised from 42.53% to 57.30%) as per P&G Trust Order No:KEPGT/KCO123/P72019-20/CYS-13 dtd. 30.10.2019			36.00
Total O&M cost	969.88	1033.37	1180.82

HESCOM is proposing Rs. 1180.82.Crs for FY-21 as O & M expenses.

(HESCOM is not proposing any modification for FY-20 in this filing.)



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Depreciation:

Depreciation is calculated as per the CERC Regulations with effect from 01.04.2009.

Growth of fixed Assets:

The projected growth in the fixed assets is worked out on the basis of creation of assets out of the Capex proposed for the FY-20 & FY-21. 70% of the Capex is considered as the assets of the particular year. Accordingly the closing balance is worked out as noted below.

Particulars	FY-19 (Actual)	FY-20 (Proposed)	FY-21 (Proposed)
Capex(Rs. in Crs)	1299.02	2077.75	1205.51
Additions of Capex (Rs. in Crs)	1028.45	1454.43	843.86
Previous year closing balance of assets(Rs. in Crs)	5418.35	6204.78	7286.92
Total closing balance of Assets worked on Capex (Rs. in Crs)	6446.80	7659.21	8130.78
Less retirement of Assets(Rs. in Crs)	242.02	372.29	437.22
Balance of Assets in Crs	6204.78	7286.92	7693.56

The individual group wise assets are calculated on pro rata basis on the figures of FY-19 (as per Format D-15)

Rs. In Crores

Asset group	FY-19				FY-20			FY-21		
	OB	Addition	Retirement	CB	Projected Addition	Retirement	CB	Projected Addition	Retirement	CB
Land & Rights	13.56	1.22	(1.58)	16.36	1.73	0.98	19.21	1.00	1.15	20.29
Buildings	93.63	40.30	0.11	133.82	56.99	8.03	157.16	33.07	9.43	165.93
Hydraulics Works	3.61	1.16	-	4.77	1.64	0.29	5.60	0.95	0.34	5.91
Other Civil Works	3.61	1.74	-	5.35	2.46	0.32	6.28	1.43	0.38	6.63
Plant & Machinery	1,032.06	292.90	169.16	1,155.80	414.22	69.35	1,357.38	240.33	81.44	1,433.12
Lines Cable Networks	4,251.10	686.60	70.27	4,867.43	970.98	292.05	5,716.33	563.36	342.98	6,035.33
Vehicles	7.99	0.93	0.13	8.79	1.32	0.53	10.32	0.76	0.62	10.90
Furniture & Fixtures	7.25	0.22	0.09	7.38	0.31	0.44	8.67	0.18	0.52	9.15
Other Equipment's	5.54	3.38	3.84	5.08	4.78	0.30	5.97	2.77	0.36	6.30
Total	5,418.35	1,028.45	242.02	6,204.78	1,454.43	372.29	7,286.92	843.86	437.22	7,693.56
Assets created out of contributions & grants	1539.94			1738.60			1954.19			2196.51
Net Assets	3878.41	1028.45	242.02	4466.18	1454.43	372.29	5332.73	843.86	437.22	5497.05


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Based on the above closing balance of the assets, the depreciation is calculated as noted below (as per Format D-8).

Rs. In Crores

Particulars	FY-19 (As per audited A/c)				FY-20 (projected)			FY-21 (projected)		
	Balance of accumulated depreciation at the end of the year	Depreciation provided for the year	Withdrawal of depreciation	Balance of accumulated depreciation at the end of the year	Depreciation provided for the year	Withdrawal of depreciation	Balance of accumulated depreciation at the end of the year	Depreciation provided for the year	Withdrawal of depreciation	Balance of accumulated depreciation at the end of the year
Land and rights	-	0.00	-	0.00	-	-	0.00	-	-	0.00
Buildings	28.24	3.77	(0.11)	32.12	4.47	1.93	34.66	5.25	2.08	41.99
Hydraulic Works	1.55	0.22	(0.02)	1.79	0.25	0.11	1.93	0.30	0.12	2.11
Other Civil Works	0.91	0.16	-	1.06	0.18	0.06	1.18	0.21	0.07	1.31
Plant & Machinery	247.55	58.75	19.59	286.71	61.03	17.20	330.53	71.67	19.83	382.37
Lines, Cables, Networks	926.11	128.66	25.47	1,029.30	257.00	61.76	1,224.54	301.82	73.47	1,452.89
Vehicles	4.88	0.31	(0.00)	5.19	0.84	0.31	5.72	0.98	0.34	6.36
Furniture Fixtures	3.18	0.39	(2.24)	5.81	0.47	0.35	5.93	0.55	0.36	6.12
Office Equipment's	1.01	0.18	0.05	1.14	0.32	0.07	1.39	0.38	0.08	1.69
Intangible Assets- software		2.14		2.14	2.14		4.28	2.14		6.42
TOTAL	1,213.43	194.58	42.74	1,365.27	326.69	81.79	1,610.17	383.29	96.35	1,901.27
Assets (DCW & grants)		81.31		less	91.80			103.18		
Net Depreciation		194.58			234.89			280.11		

Note : Average of 5.28% of value of assets created out of grants is deducted in total depreciation in FY-20 & FY-21.

Note: The Capital Grants received from Government contribution towards cost of capital assets is reduced from Gross Block. The Consumer contribution and Government grants towards cost of capital assets cannot be identified to relevant fixed assets. Hence, the same is treated as related to the Lines, Cables and Networks Assets group and deducted directly from the total Gross Fixed Assets. The corresponding depreciation on these assets provided at respective Accounting Units has been reduced from depreciation for the FY-21 @5.28% which works out to Rs. 280.11 Crs.

HESCOM is proposing Rs. 280.11.Crs for FY-21 as depreciation.

(HESCOM is not proposing any modification for FY-20 in this filing.)



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Interest and Finance Charges:

Capital Loan :

HESCOM proposes to draw loan and make the repayments and interest charges. The source wise details are furnished in D-9 statements. HESCOM has drawn capital loan Rs. 174.74 Crs during FY-19 and desires to draw capital loan of about Rs. 1415.52 Crs and Rs. 640.73 Crs for FY-20 & FY-21 respectively.

HESCOM is proposing the interest on loan capital as noted below. HESCOM has worked out individual source wise loan and interest which are indicated in D-9.

Particulars	FY-20	FY-21
Opening balance	2102.31	3256.82
Add new loans	1415.52	640.73
Less repayment	261.01	335.53
Closing balance loans	3256.82	3562.01
Average loans	2679.57	3409.42
Interest on loans	382.67	415.21

HESCOM is proposing Rs. 382.67 Crs & Rs. 415.21 Crs for FY-20, & FY-21 respectively as interest on loan capital.

(HESCOM is not proposing any modification for FY-20 in this filing.)

Interest on working capital: As per Regulation 3.1 the interest on working Capital is one of the Components for estimation of ARR of the Distribution Licensee. As per regulation 3.11.1, working capital comprises O & M expenses for one month, maintenance spares at 1% of the cost of the asset at the beginning of the year and two months average revenue. The details of calculation are as noted below.

Particulars	FY-20 (Projected)	FY-21 (Projected)
One -twelfth of the amount of O & M Exp	89.47	99.12
Opening GFA	6204.78	7286.92
Stores, materials and supplies 1% of opening balance of GFA	62.05	72.87
One-Sixth of the Revenue	1439.34	1525.50
Total Working Capital	1590.86	1697.49
Rate of Interest (% p.a) BPLR	11.00%	11.00%
Approved Interest on Working Capital	174.99	186.72

HESCOM is proposing Rs. 186.72 as interest on working capital for FY-21.

(HESCOM is not proposing any modification for FY-20 in this filing.)



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audited accounts for FY-19 are available. Considering the closing balance of security deposit held HESCOM proposes the interest on the security deposit of consumers as noted below.

HESCOM is considering Rs. 50 Crores each for FY-20 and FY-21 years as the additional security deposit likely to be collected as per Tariff Order dtd. 30.05.2019 and accordingly, the interest on consumer deposit is calculated as noted below.

Particulars	FY-19	FY-20	FY-21
	(Actual)	(Proposed)	(Proposed)
Opening balance of consumer security deposits	701.27	749.97	799.97
Closing balance of consumer security deposits	749.97	799.97	849.97
Average balance of consumer security deposit		774.97	824.97
Rate of Interest %		6.50%	6.50%
Interest payable to Consumers		50.37	53.62

HESCOM is proposing Rs. 53.62 Crs. as interest on consumer security deposit for FY-21.

(HESCOM is not proposing any modification for FY-20 in this filing.)

Other Debts :

Other expenses consist of asset decommissioning cost, value written off, loss relating to fixed assets, bad and doubtful debts written off, material Cost variance etc. HESCOM has continued the process of decommissioning of old assets and to identify old and obsolete materials /assets, scrap materials, which are not useful. Such assets/materials will be sold at accost less than written down value maintained in the book of accounts. There is a provision for payment of compensation payable to consumer for damages, injury caused etc, and also in pursuance with standard performance regulations. As per Tariff Order dtd. 30.05.2019 HESCOM has not projected the other debts for FY-20 and FY-21 and will be proposed as per actual based on the audited accounts at the time of APR.

Details of other debts :-

Rs. in Crs.

Sl. No.	Particulars	FY-19	FY-20	FY-21
		(As per Audited Accounts)	(Projected)	(Projected)
1	Asset Decommissioning cost	1.61	-	-
2	Small & Low value Items written off	-	-	-
3	Losses relating to fixed Assets	0.73	-	-
4	Gain on sale of assets	(0.00)	-	-
5	Material Cost Variance	12.72	-	-
6	Bad & Doubtful Debts written off/provided for	0.75	-	-
7	Miscellaneous losses and Write offs	6.49	-	-
8	Prior Period Expenses	82.73	-	-
	Grand Total	105.03		

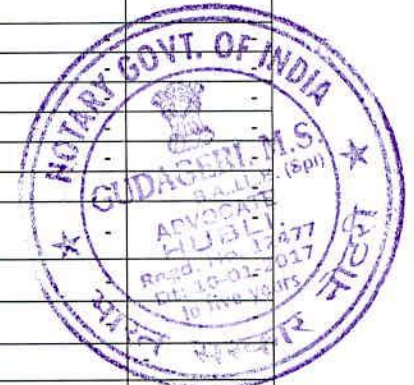
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Prior Period Charges: As per accounting principles, HESCOM has to take in to account both the income and expenses relating to the prior period. The Prior period income comprises interest, income tax, excess provision for depreciation, excess provision for interest and finance charges, receipt from consumer etc. The prior period expenses comprises power purchase cost, operating employee cost,

depreciation, interest and finance charges, material related cost variance etc. HESCOM has not estimated prior period charges for FY-20 and FY-21. However, the Hon`ble Commission is requested to allow such prior charges as pass through in case such charges accounted during relevant year.

Prior period expenses :

Sl. No	Particulars	FY-19	FY-20	FY-21
		(As per Audited Accounts)	(Projection)	(Projection)
Income relating to previous years:				
1	Receipts from consumers	-	-	-
2	Excess Provision for Depreciation	(8.31)	-	-
3	Income Tax prior period	-	-	-
4	Excess Provision for Interest and Fin. Charges	(0.62)	-	-
5	Other Excess Provision	(27.33)	-	-
6	Others Income	(84.87)	-	-
7	Prior period tariff / RE subsidy	-	-	-
8	Other Misclenouse from trading	-	-	-
TOTAL		(121.13)	-	-
Expenditure relating to previous years				
1	Power Purchase	0.41	-	-
2	Operating Expenses	0.05	-	-
3	Excise Duty on generation	-	-	-
4	Employee Cost	2.81	-	-
5	Depreciation	45.61	-	-
6	Interest and Finance Charges	0.50	-	-
7	Provision for Deferred tax liability / Income Tax	-	-	-
8	Admn. Expenses	0.00	-	-
9	Other	33.36	-	-
TOTAL		82.74	-	-
Grand Total		(38.39)	-	-



Return on Equity: Return on Equity (ROE) is considered as a component of ARR of distribution Licensee. As per regulation 3.9, ROE only is considered as component of ARR of Distribution licensee. As per the said regulation, ROE will be computed at 15.5% per annum on share capital, Share Deposit, reserves and surplus held by the company. In view of huge negative reserves and surplus and net-worth of HESCOM is negative, ROE for FY-21 is not proposed.

Details of ROE :

Sl. No	Particulars	Rs. in Crs		
		FY-19 (As per Actuals)	FY-20 (As per Projection)	FY-21 (As per Projection)
1a	Paid-up Share Capital at the beginning of the year	1211.07	1211.07	1411.07
1b	Share Application Money		200.00	200.00
1c	Capital Reserves at the beginning of the year	(2613.56)	(2613.56)	(2613.56)
1d	Equity Reserves & Surplus at the beginning of the year (1a+1b+1c)	(1402.49)	(1202.49)	(1002.49)
2	ROE 15.5% @(+MAT @19.377%) from FY-11)	-	-	-

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HESCOM is not proposing ROE for FY-20 and FY-21.

Provision for Taxation: As per regulation 3.1.2, taxes on income payable by Distribution Business is considered as one of the components of ARR. As HESCOM has huge amount accumulated loss of Rs. 1955.76 Crs. and depreciation, HESCOM is not proposing taxes for FY-21. The Hon'ble Commission is requested to approve the same.

Other Income : The other income component shall be deducted in total expenditure to arrive net ARR of HESCOM. Other income comprises interest on bank deposits and loan provided to employee societies, income from trading such as sale of stores/scrap, miscellaneous receipts such as rentals from staff quarters and miscellaneous recoveries made etc. HESCOM is proposing revised "other Income" as noted below based on 5 years CAGR from FY-15 to FY-19 :

(i) Other Income:

Sl. No.	Particulars	FY-19 (As per audited)	FY-20 (Projection)	FY-21 (Projection)
1	Interest on staff loans and advances	-		
2	Income from Investments:			
a	Interest on securities	-		
b	Interest on Bank fixed deposits & Others (62.222, 62.360)	1.16	1.42	1.74
c	Income on other investments			
d	Interest on loans/advances to suppliers/ Contractors			
e	Interest from Banks			
f	Interest on loans to Societies			
	Sub Total-2	1.16	1.42	1.74
3	Income from Trading:			
a	Profit on sale of fixed assets, hire etc of apparatus			
b	Hire charges from Contractors			
c	Profit on sale of stores (62.330)	0.55	0.67	0.83
d	Sale of Scrap (62.340)	0.71	0.87	1.07
e	Meter Readings and Calibration of Meter-Charges of Wind Mill Project (62.363)	0.67	0.82	1.01
f	Income relating to reactive energy charges (62.364)	0.36	0.44	0.54
g	Reactive energy charges demanded on IPPs (62.361)	0.01	0.01	0.02
h	Processing fees (62.625)	0.01	0.01	0.01
i	Other Misc Receipts from trading (62.360)	18.17	22.26	27.26
	Sub Total-3	20.48	25.08	30.72
4	Income/Fees collections against staff welfare activities:			
a	Recoveries for transport facilities	-	-	-
5	Miscellaneous Receipts:			
a	Income due to right of way granted for laying fibre optic cables/co-axial cables on T&D system			
b	Rental from Staff Quarters (62.901, 62.902)	1.22	1.49	1.83
c	Rental from others (62.903)	0.13	0.16	0.20
d	Leave contribution		-	-
e	Excess found on physical verification of cash		-	-
f	Excess found on physical verification of stock (62.905)		-	-
g	Sundry Credit balance written back (62.912)		-	-
h	Excess found on physical verification of Assets		-	-

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I	Recovery from transport & vehicle expenses		-	-
j	Commission for collection of electricity duty (62.916)	0.97	1.19	1.46
k	Misc. recoveries (62.917)	71.09	87.07	106.65
l	Prior Period items (Note -27(ii))		-	-
	Sub Total-5	73.41	89.92	110.13
	GRAND TOTAL:	95.05	116.42	142.59

(iii) Income from sale of power to HRECS & AEQUS :

The Hon'ble Commission has included the power purchase cost paid by HRECS, Hukkeri & AEQUS in the other income in MYT Filing for the period FY-20 to FY-22. Accordingly, HESCOM proposes the other income for FY-21 as noted below. HESCOM has supplied 346.63 MU to HRECS Hukkeri & AEQUS at the rate of Rs 4.66 per unit amounting to Rs. 161.56 Crs. for FY-19.

Sl No	Particulars	FY-20	FY-21	FY-20	FY-21
		(Projected Sales)	(Projected Sales)	(Projected Cost)	(Projected Cost)
(a)	Sale of Power to HRECS	347.77	364.49	162.06	169.85
(b)	Sale of Power to AEQUS	25.61	29.80	11.93	13.89
	Total	373.38	394.29	173.99	183.74

(iv) Total other income:

Sl No :	Particulars	FY-20	FY-21
		(Projected Cost)	(Projected Cost)
(a)	Other income from other items (including prior period income)	116.42	142.59
(b)	Sale of Power to HRECS & AEQUS	173.99	183.74
	Total other income	290.41	326.33

(HESCOM is not proposing any modification for FY-20 in this filing.)

HESCOM proposing 394.29 MU at the Power Purchase Cost of Rs. 183.74 Crs. for FY-21 (including transmission loss) to be supplied to HRECS Hukkeri & AEQUS at the rate of power purchase cost of Rs. 4.66 per unit.

Expected Revenue from Charges : HESCOM has been earning revenue as per tariff determined by the Honorable Commission from time to time. The new Tariff order came in to effect from 01.04.2019. HESCOM has estimated expected revenue charges for FY-20 on the basis of the new Tariff Order 2019 Dtd : 30.05.2019.

The Format D-21 is prepared as per the actual consumption and load pattern available as per FY-19. The Projections for FY-20 & FY-21 are made on the basis of CAGR from FY-15 to FY-19. Wherever the clear CAGR is not available, the trend is considered. The energy availability at generation point as provided by PCKL, approved transmission loss and the proposed distribution loss are considered for estimating the sales and thereby expected revenue from charges at existing rates as per tariff order 2019 Dtd : 30.05.2019.

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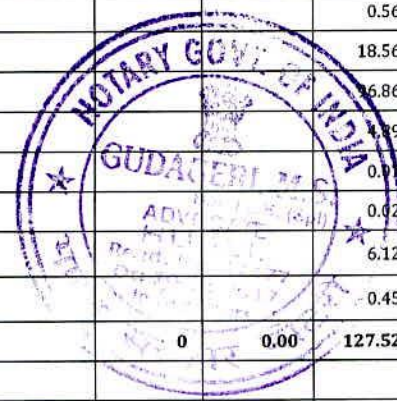
Navanagar, Hubballi - 580 025

Application for Approval of Annual Performance Review for FY-19 and Approval for ARR & ERC FY-21 and Tariff Filing for FY-21.

Expected Revenue from charges at existing tariff:

(From D2)

Sl. No.	Tariff Category	Category Description	FY-19 (ACTUAL)				FY-20 Projected						
			Instal. (No.s)	Energy Sales (Mus)	Revenue (Cr\$) Pr Act	Avg. Real. [Ps/Unit]	Instal. (No.s)	Energy Sales (Mus)	Revenue (Cr\$) Pr Act	Avg. Real. [Ps/Unit]			
			1	LT-1	BJ/KJ: =<40 units	718179	199.94	129.65	648.46	718179	199.94	141.36	707.01
					BJ/KJ: >40 units	42349	43.91	16.70	380.30	42349	43.91	26.55	604.67
2	LT-2 (a)	Domestic / AEH	2682113	1443.89	830.79	575.39	2808395	1499.01	1100.34	734.04			
3	LT-2 (b)		7007	19.33	16.67	862.45	7556	21.08	19.26	913.86			
4	LT-3	Commercial	371707	464.86	444.00	955.11	391277	491.99	488.87	993.67			
5	LT-4 (a)	IP sets - Less than 10 HP - General	930551	6729.14	4218.59	626.91	987531	7146.40	4638.01	649.00			
6	LT-4 (b)	Irrigation Pump sets - More than 10 HP	842	16.27	6.89	423.47	849	16.45	7.77	472.36			
7	LT-4 (c)	Private Horticulture Nurseries, Coffee & Tea Plantations	394	0.72	0.38	525.33	450	0.78	0.42	535.93			
8	LT-5	Industries	117989	328.55	249.23	758.58	124150	331.81	314.77	948.65			
9	LT-6 a	Water Supply	46004	311.69	196.26	629.69	50632	346.84	180.81	521.31			
10	LT-6 b	Street Lights	23831	149.79	113.27	756.19	25004	154.27	103.34	669.85			
11	LT-7	Temporary Power Supply	85289	32.74	62.73	1916.22	106006	35.91	38.19	1063.52			
	LT Total		5026255	9740.81	6285.16	645.24	5262378	10288.38	7059.69	686.18			
12	HT-1	Water Supply	364	270.96	161.07	594.45	411	293.83	168.60	573.81			
13	HT-2 (a)	Industries	1760	1160.05	798.95	688.72	1942	1227.26	990.77	807.31			
14	HT-2 (b)	Commercial	629	129.88	128.57	989.96	679	134.02	134.02	1000.01			
15	HT-2 (c)	Hospitals	325	77.94	58.51	750.70	362	92.53	74.62	806.40			
16	HT-3(a)	Irrigation & LI Societies	276	336.83	116.05	344.52	306	386.57	138.66	358.69			
17	HT-3 (b)	Irrigation & LI Societies	2	0.07	0.05	0.00	2	0.08	0.04	0.00			
18	HT-4	Residential Apartments	30	14.43	10.05	696.22	30	14.73	10.78	731.75			
19	HT-5	Temporary Power Supply	59	29.02	10.72	369.33	62	31.98	58.87	1840.97			
	HT Total		3445	2019.18	1283.96	635.88	3794	2180.99	1576.36	722.77			
	Total		5029700	11759.99	7569.13	643.63	5266172	12469.38	8636.05	692.58			
Other Operating revenues													
20		Reconnection fee (D&R) (61.901, 61.902)			0.54				0.56				
21		Service Connection (Supervision Charges) (61.904)			17.85				18.56				
22		Delayed payment charges from consumers (61.905)			93.13				96.86				
23		Other Receipts from consumers(61.906, 61.600)			4.70				4.89				
24		Registration fee towards SRTPV (61.907)			0.07				0.07				
25		Facilitation fee towards SRTPV (61.908)			0.02				0.02				
26		Supervision Charges for Self Execution works (61.909)			5.88				6.12				
27		Maintenance charges for the layouts created by the Developers (61.910)			0.43				0.45				
		Gross Revenue from Sale of Power (20 to 27)	0	0.00	122.62		0	0.00	127.52				
LESS: Rebate and Incentives													
28		Solar Rebate allowed to consumers (78.822)			3.36				3.49				
29		Incentives for prompt payment (78.823)			0.37				0.38				
30		Time of day (TOD) Tariff Incentive(78.826)			0.60				0.62				
		Total (28 to 30)			4.33				4.50				
31		Provision for withdrawal of Revenue Demand (83.830 to 83.832)			3.16				3.29				
		Total			7.49				7.79				
		GRAND TOTAL	5029700	11759.99	7684.26		5266172	12469.38	8755.79				



[Signature]
Executive Engineer (E)

Application for Approval of Annual Performance Review for FY-19 and Approval for ARR & ERC FY-21 and Tariff Filing for FY-21.

Expected Revenue from charges at proposed tariff:

(From D2)

Sl. No.	Tariff Category	Category Description	FY-21				FY-21			
			At Existing Tariff				At proposed Tariff			
			Instal. (No.s)	Energy Sales (Mus)	Revenue (Cr\$)	Avg. Real. [Ps/Unit]	Instal. (No.s)	Energy Sales (Mus)	Revenue (Cr\$)	Avg. Real. [Ps/Unit]
1	LT-1	BJ/K): =<40 units	718179	199.94	141.36	707.00	718179	199.94	150.37	752.06
		BJ/K): >40 units	42349	43.91	26.55	604.65	42349	43.91	28.53	649.71
2	LT-2 (a)	Domestic / AEH	2940685	1556.28	1144.78	735.59	2940685	1556.28	1263.04	811.58
3	LT-2 (b)		8150	22.98	20.96	912.35	8150	22.98	22.49	978.53
4	LT-3	Commercial	411929	520.78	517.01	992.76	411929	520.78	549.61	1055.37
5	LT-4 (a)	IP sets - Less than 10 HP - General	1045411	7589.53	4925.61	649.00	1045411	7589.53	5267.62	694.06
6	LT-4 (b)	Irrigation Pump sets - More than 10 HP	857	16.63	7.85	471.91	857	16.63	8.89	534.39
7	LT-4 (c)	Private Horticulture Nurseries, Coffee & Tea Plantations	514	0.86	0.46	542.46	514	0.86	0.53	618.08
8	LT-5	Industries	130632	335.11	322.48	962.33	130632	335.11	351.96	1050.29
9	LT-6 a	Water Supply	55725	385.95	200.95	599.67	55725	385.95	221.47	660.88
10	LT-6 b	Street Lights	26234	158.89	106.55	276.08	26234	158.89	114.53	296.75
11	LT-7	Temporary Power Supply	131755	39.39	41.92	263.84	131755	39.39	43.72	275.13
	LT Total		5512420	10870.24	7456.49	685.95	5512420	10870.24	8022.73	738.05
12	HT-1	Water Supply	464	318.62	183.53	576.02	464	318.62	198.74	623.75
13	HT-2 (a)	Industries	2143	1298.35	1053.38	811.32	2143	1298.35	1117.90	861.01
14	HT-2 (b)	Commercial	732	138.29	139.09	1005.80	732	138.29	146.13	1056.66
15	HT-2 (c)	Hospitals	402	110.63	88.27	797.93	402	110.63	93.61	846.18
16	HT-3(a)	Irrigation & LI Societies	339	443.67	157.37	354.70	339	443.67	179.62	404.84
17	HT-3 (b)	Irrigation & LI Societies	2	0.09	0.04	0.00	2	0.09	0.05	0.00
18	HT-4	Residential Apartments	30	15.04	11.00	731.38	30	15.04	11.75	781.55
19	HT-5	Temporary Power Supply	66	35.24	63.79	1810.08	66	35.24	66.39	1883.99
	HT Total		4178	2359.94	1696.48	718.87	4178	2359.94	1814.19	768.74
	Total		5516598	13230.18	9152.97	691.83	5516598	13230.18	9836.92	743.52
Other Operating revenues										
20		Reconnection fee (D&R) (61.901, 61.902)			0.58				0.58	
21		Service Connection (Supervision Charges) (61.904)			19.31				19.31	
22		Delayed payment charges from consumers (61.905)			100.73				100.73	
23		Other Receipts from consumers(61.906, 61.600)			5.08				5.08	
24		Registration fee towards SRTPV (61.907)			0.08				0.08	
25		Facilitation fee towards SRTPV (61.908)			0.02				0.02	
26		Supervision Charges for Self Execution works (61.909)			6.36				6.36	
27		Maintenance charges for the layouts created by the Developers (61.910)			0.47				0.47	
		Gross Revenue from Sale of Power (20 to 27)	0	0.00	125.80		0	0.00	125.80	
		LESS: Rebate and Incentives								
28		Solar Rebate allowed to consumers (78.822)			3.63				3.63	
29		Incentives for prompt payment (78.823)			0.40				0.40	
30		Time of day (TOD) Tariff Incentive(78.826)			0.65				0.65	
		Total (28 to 30)			4.68				4.68	
31		Provision for withdrawal of Revenue Demand (83.830 to 83.832)			3.42				3.42	
		Total			8.10				8.10	
		GRAND TOTAL	5516598	13230.18	9270.67		5516598	13230.18	9954.62	

HESCOM is not proposing any modification for FY-20.

[Signature]

Executive Engineer (E)

RA Section

Corporate Office, Hescocom

Revenue from Miscellaneous Charges: The income from reconnection fee, service connection charges, delayed payment charges and other receipts are shown under this Head. HESCOM has accounted miscellaneous charges of Rs. 115.13 Crs, for FY-19. The details are furnished below.

Details of from Miscellaneous Charges :

Particulars	(From D2) Rs. In Crs		
	FY-19 (Actual)	FY-20 Projected	FY-21 Projected
Reconnection fee (D&R)	0.54	0.56	0.58
Service Connection (Supervision Charges)	17.85	18.56	19.31
Delayed payment charges from consumers	93.13	96.86	100.73
Other Receipts from consumers	4.70	4.89	5.08
Registration fee towards SRTPV	0.07	0.07	0.08
Facilitation fee towards SRTPV	0.02	0.02	0.02
Supervision Charges for Self Execution works	5.88	6.12	6.36
Maintenance charges for the layouts created by the Developers	0.43	0.45	0.47
Total	122.62	127.52	125.80
LESS:			
Solar Rebate allowed to consumers	3.36	3.49	3.63
Incentives for prompt payment	0.37	0.38	0.40
Time of day (TOD) Tariff Incentive	0.60	0.62	0.65
Provision for withdrawal of Revenue Demand	3.16	3.29	3.42
Total	7.49	7.78	8.10
Net total	115.13	119.74	117.70

HESCOM is not proposing any modification for FY-20.

Net Revenue Expected: Considering the revenue from existing Tariff Order-2019 across the categories and revenue from miscellaneous charges duly deducting rebate to be allowed, the net revenue expected for FY-20 and FY-21 is furnished below.

Details of Net Revenue at existing Tariff :

Sl. No	Particulars	(From D2)	
		FY-20	FY-21
1	Revenue at existing tariff from all categories	8636.05	9152.97
2	Miscellaneous Charges	119.74	117.70
3.	Net Revenue Expected	8755.79	9270.67

HESCOM is not proposing any modification for FY-20.



[Signature]
Executive Engineer (E)
RA Section
Corporate Office, Hescom
Hubballi - 580 025

ANNUAL REVENUE REQUIREMENT for FY-21.

Ref. Form	Particulars	FY-21 At Existing tariff Projection
D-1	Energy at Generation Point (Mus)(Including HRECS and AEQUS)	16312.64
	Energy at Generation Point (Mus)(HESCOM)	15918.35
	Transmission Loss (units)	498.56
	Transmission Loss (%)	3.132%
D-1	Energy at Interface Point (Mus)	15419.78
D-2	Energy Sales (Mus)	13230.18
	Distribution Loss (%)	14.20%
INCOME:		
D-2	Revenue from sale of power	4203.71
D-3	Revenue subsidies & grants	5066.96
TOTAL INCOME		9,270.67
EXPENDITURE:		
D-1	Purchase of Power	6336.86
	Tr. Charges (PGCIL & POSCO)	364.17
	Tr. Charges (KPTCL & SLDC) Charges	704.33
	Total Power Purchase Cost	7405.36
D-5	Repairs & maintenance	76.55
D-6	Employee Costs	949.95
D-7	Administrative & General expenses	154.32
	Total O&M expenses	1180.82
D-8	Depreciation & related debits	280.11
D-9	Interest & Finance charges	
	Interest on loan capital	415.21
	Interest on working capital	186.72
	Interest on consumer deposit	52.74
	Other interest and finance charges	-
	Interest on belated payments of IPPs	-
D-10	LESS: Int. & Fin. charges capitalized	-
	Total Interest and Finance Charges	654.67
D-11	Other debits (incl. Bad debts)	-
D-12	Extraordinary Items (Exceptional Items : Adjustment of Excess Subsidy paid)	-
D-13	Net prior period (credits) / charges	-
	Provision for Taxes	-
	Funds towards consumer Relations	0.50
A-4	Return on Equity	-
	Pension and Gratuity Trust arrears	-
	LESS: Excess RoE	-
	LESS: Other income	326.33
	ARR	9195.13
	Add Regulatory Asset	
	Previous year's deficit of FY-18 carried forward to next year	759.49
	Add Distribution loss incentive-FY21	
	Carrying cost on Regulatory Asset @12%	
	Dis allowance-Capex	
	Net ARR	9954.63
	REVENUE SURPLUS / (DEFICIT):	-683.95



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Executive Engineer (EI)
 RA Section
 Corporate Office, Hescom
 Navanagar, Hubballi - 580 025

ARR for Distribution Business and Retails Supply Business. FY-21.

EXPENDITURE / ARR	Distribution Business	Retails Supply Business
	FY-21	FY-21
Power Purchase Cost	0.00	6336.86
Tr. Charges Cost(PGCIL & POSCO)	0.00	364.17
Tr. Charges Cost (KPTCL & SLDC) Charges	0.00	704.33
Total Power purchase Cost	0.00	7405.36
a) Repairs and Maintenance cost	48.23	28.32
b) Employee cost	598.47	351.48
c) Administration and General expenses	97.22	57.10
O & M Total	743.92	436.90
Depreciation	235.29	44.82
Interest on loan	415.21	0.00
Interest on working capital	46.68	140.04
Interest on security deposit	0.00	52.74
other interest and finance charges	0.00	0.00
Interest on belated payment of PPC	0.00	0.00
Less Interest & Other expenses capitalised	0.00	0.00
Total interest and Finance charges	461.89	192.78
Pension and Gratuity Trust arrears	0.00	0.00
Other expenses, if any	0.00	0.00
Extraordinary Items (Exceptional Items : Adjustment of Excess Subsidy paid)	0.00	0.00
Add Distribution loss incentive-FY19	0.00	0.00
funds towards consumer education	0.00	0.50
Prior Period Charges	0.00	0.00
Return on equity	0.00	0.00
Provision for Taxation	0.00	0.00
LESS: Non-Tariff income	62.00	264.33
ARR	1379.10	7816.03
Add Regulatory Asset & Carrying Cost	0.00	0.00
Previous years' deficit carried forward	759.49	0.00
Net ARR	2138.59	7816.03



[Signature]
Executive Engineer (EI)
RA Section
Corporate Office, Hesco
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Revenue Gap for FY-21:

Rs. in Crores

Sl No	Particulars	Amount
1	ARR for FY-21	9195.13
2	Add deficit for FY-19	759.49
3	Net ARR for FY-21	9954.62
4	ERC for FY-21 @ Current Tariff	9,270.67
5	Gap for FY-21 (3-4)	683.95

BRIDGING THE REVENUE GAP :

HESCOM proposes to bridge the Gap by Tariff revision for FY-21 as noted below and requests the Hon'ble Commission to consider the same.

Hike requirement for all categories:

- a. Total Gap - Rs. 6,83.95 Crs.
- b. Sales - Total sales of 13,230.18 (Mu)
- c. Hike required - Average increase of Rs.0.52/unit on total sales of 13,230.18 MU.

HESCOM is proposing recovery of additional revenue:

- A. Partly by uniform increase in fixed charges of Rs. 10 per KW/HP/KVA per month for all categories.
- B. Partly by uniform increase in Energy Charges Rs. 0.45/unit on total sales of 13,230.18 MU.



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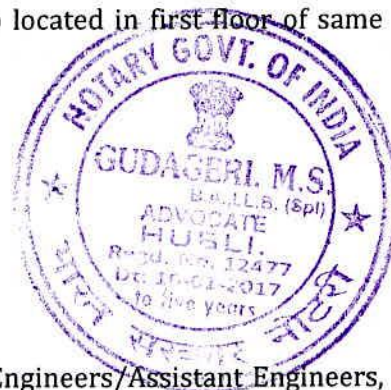
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HESCOM ACTIVITIES

Vigilance Activities : To prevent/minimize theft and misuse of electricity and thereby avoiding electrical accidents to the consumers a special Police set-up called vigilance cell is established in HESCOM covering 7 Districts' viz Dharwad, Belagavi, Uttara Kannada, Gadag, Bijapur, Bagalkot, &Haveri.

This unit is headed by Superintendent of Police, whose head quarter is located in first floor of o/o Chief Engineer (Ele), Hubli Zone, Shivaganga Layout, Keshwapur Hubli-23. One DSP & One Ex. Engineer (El) is also working under this office which is also located in first floor of same building. 8 No's of Vigilance police stations are located as below.

- | | |
|----------|-------------|
| 1)Hubli | 5) Belagavi |
| 2)Gadag | 6) Chikkodi |
| 3)Haveri | 7) Vijaypur |
| 4)Karwar | 8) Bagalkot |



Also in this Vigilance Wing Technically qualified Asst. Ex. Engineers/Assistant Engineers, they work under the guidance/supervision of One Executive Engineer who is also a part of Vigilance wing to look after and guide Technical issues under the guidance of GM (Tech) Corporate office.

The charge sheets of cognizable cases are submitted to the District Session courts which are in operation in respective 7 District Head Quarters viz Dharwad, Uttar Kannada, Gadag, Haveri, Belagavi, Bijapur and Bagalkot. In Belagavi District 2 No's of Vigilance police station are in operation viz. Belagavi and Chikkodi. Hence, the trials of cognizable electricity theft cases are addressed in Belagavi District Session Court.

Vigilance Activities:

1. Identify the theft prone area's at any Section/Sub-division and to conduct raid on the same periodically.
2. To obtain the list of Sub-normally consuming installation from Sub-Division and Conduct raids on the same.
3. Feeder wise and DTC wise energy audit is to be taken up and to conduct raids / verifications on the installations of DTC's on which more T &D losses found.
4. To create cordial relationship with the Sub-Division level employees such as Linemen, GVPs, meter reader, public also and to collect information regarding theft & misuse of electricity and to conduct raid based on information collected. Informants to be rewarded with incentives.
5. Create awareness between HESCOM, Gram Panchayat and Consumers regarding efficient usage of Street Light and water supply and also avoid theft/misuse of energy.
6. Any complaints/Petitions from the public & any work assigned by corporate office.

Progress achieved in booking of theft cases is as indicated below.

Vigilance Activities of Inspections of installations								
Vigilance Activities of Inspections of installations in (level-4 only), up to September 2019								
Sl. No	Period	Category	No of installations	No of cases identified under		Total units quantified	BBC Amount assessed (Cog & Non Cog) (Amt. in Rs)	Compounding charges
				Cog	Non Cog			(Amt. in Rs)
1	FY-19	LT-3	3536	97	499	251408.2	7414786	390200
		LT-5	1554	75	261	169558.7	3841731	834000
2	FY-20 Up to Sept-19	LT-3	1673	53	155	78675.89	2252431	257000
		LT-5	873	36	107	77950.5	2614118	534000

Year	No of installations checked	Cognizable cases booked			Total	Misc.		Total		Recovery			
		cases	BBC (in lakhs)	Compounding (in lakhs)		cases	BBC (in lakhs)	cases	BBC cog/Misc. & compounding (in lakhs)	Cog BBC (in lakhs)	Compounding (in lakhs)	Misc. BBC (in lakhs)	Total
2	3	4	5	6	7	8	9	10	11	12	13	14	15
FY-19	30558	2074	154.22	54.63	208.85	5916	858.25	7990	1067.10	119.81	50.11	719.01	888.93
FY-20 (Up to Sept-19)	16260	970	72.08	27.23	99.31	3275	413.79	4245	513.10	107.8	30.34	336.00	474.14

QUALITY OF SERVICE. : The power supply to Urban/Rural areas was regulated as per the direction of GoK. The durations of interruptions, in Urban & Rural areas for FY-19 & FY-20(Up to Sept-19) is as noted below.

Year	DISCOM	Name of Area	No. of 11kV feeders	No. of interruption (Excluding LS)	Duration of interruption in Hrs (Excluding LS)	No. of consumer	Avg. No. of interruptions per 11 KV feeder (Nos)	Avg. duration of interruptions per 11 KV feeder (Hrs)	Avg. No. of interruptions per consumer (Nos)	Avg. duration of interruptions per consumer (Hrs)
1		2	3	4	6	7	8=4/3	9=6/3	10=4/7	11=6/7
2018-19	Hubballi Zone	Rural feeders	702	450415	452190.15	1044668	641.62	644.15	0.43	0.43
		Urban feeders	255	99824	54900.91	799000	391.47	215.30	0.12	0.07
	Belgavi Zone	Rural feeders	2010	732690	648769.30	2702555	364.52	13.45	0.27	0.01
		Urban feeders	192	53148	19955.04	827603	276.81	4.33	0.06	0.00
2019-20 upto Sep-19	Hubballi Zone	Rural feeders	729	292372	333310.00	1044768	401.06	457.22	0.28	0.32
		Urban feeders	259	59873	34153.76	812618	231.17	131.87	0.07	0.04
	Belgavi Zone	Rural feeders	2060	465973	13048.70	3862483	226.20	10.42	0.12	0.01
		Urban feeders	196	57228	515233.87	1049529	291.98	2.77	0.05	0.00
2018-19	HESCOM	Rural feeders	2712	1183105	1100959.45	3747223	436.25	405.96	0.32	0.29
		Urban feeders	447	152972	74855.95	1626603	342.22	167.46	0.09	0.05
2019-20 upto Sep-19		Rural feeders	2789	758345	346358.70	4907251	271.91	124.19	0.15	0.07
		Urban feeders	479	117101	549387.63	1862147	244.47	1146.95	0.06	0.30

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HT LT Ratio : HESCOM has taken up improvement works under various schemes to reduce the LT to HT ratio. Details of LT/11 KV lines existing in company are as follows.

Details of 11KV/LT Lines

Year	Length in Km of		HT : LT Ratio
	11KV Line	LT Line	
2018-19	85094.15	135108.83	1:1.587
2019-20(upto-September-19)	86243.35	135812.77	1:1.574

DISTRIBUTION TRANSFORMER FAILURE:

Single phasing of power supply during peak hours and un-scheduled load shedding in the rural areas and to some extent running of un-authorized IP-sets are the major reasons for failure of most of the transformers. Remedial measures such as straightening of poles, restringing of loose spans, re-conductoring of DTC's earthing & regularization of un-authorized IP-sets and strengthening of network by creating infrastructure etc. are undertaken to prevent failure of distribution transformers.

The below mentioned table shows the failure Distribution Transformers for the period FY-19 & FY-20 (upto-Sept-19)

Fin. Year	2018-19	2019-20 (upto-September-19)
Existing Trfrs.	215873	219945
Trfrs. Failed	25204	14196
% of failure	11.68	6.45



Further, there are 46 local Transformer repair Centers in HESCOM i.e. 44 no of local repair Centers & 2 no of Mega repair Centers established in HESCOM for early repair and replacement of failed transformers, thus maintaining reliability.

Consumer Grievance Re-Dressal forums : District Consumer Grievance Re-Dressal forums are functioning at each district headquarters at Dharwad Haveri, Uttara Kannada, Belgaum, Bagalkot, Haveri, Bijapur and Gadag under HESCOM Jurisdiction. The Progress as on the quarter ending on 30th September 2019 is as noted below.

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**QUARTERLY PROGRESS REPORT ON FUNCTIONING OF DISTRICT LEVEL CONSUMER GRIEVANCE
REDRESSAL FORUMS (CGRFs):**

Name of CGRF of Revenue District	Number of grievances outstanding at the end of the previous quarter (30.06.2019)	Number of grievances received during the quarter	Number of grievances disposed during the quarter	Number of grievances Pending at the end of the present quarter Sept-19	Details of pendenc y					Number of sittings of CGRF in the quarter up to Sept-19	No of cases/Grievances where decision in favour of licensee (ESCOM)	No of cases grievances where decision favour of applicant (consumer)
					Within two months	More than two mnths and less than six months	More than six months and less than one year	More than one year and less than two years	More than two years			
Dharwad	0	2	1	1	1	0	0	0	0	3	1	0
Gadag	0	3	3	0	0	0	0	0	0	3	1	2
Haveri	0	0	0	0	0	0	0	0	0	1	0	0
Uttara Kannada	0	0	0	0	0	0	0	0	0	6	0	0
Belagavi	1	1	1	1	1	-	-	-	-	2	1	
Bagalakot	2	0	2	0	0	0	0	0	0	4	2	0
Vijayapur	0	1	0	1	1	0	0	0	0	3	0	0
Total	3	7	7	3	3	0	0	0	0	22	5	2

To create awareness about the functioning of CGRF among the public advertisement has been issued in Kannada newspapers. Further, it has been made mandatory to hold one sitting on 9th of every month in each district. Paper notification also issued in the newspapers for the benefit of consumers. All efforts are being made to give publicity to the CGRF, so that the consumers can get their HESCOM grievances solve at the earliest. The contact No. & address of the forum are printed on the backside of the consumer bill.



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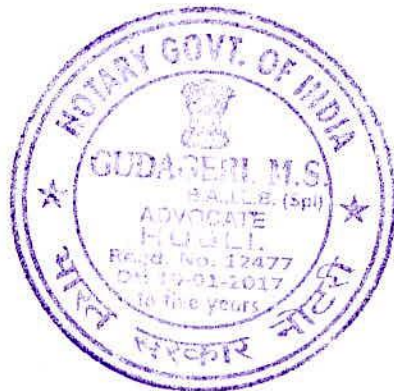
HRD ACTIVITIES:

In financial year 2018-19 various training programmes which have been arranged at ITC HESCOM, Electric Grid, Karwar Road, Hubballi are as follows:

1. As per Karnataka Govt. Apprenticeship Act-1961, one year Apprenticeship training was provided to 99 No. of ITI candidates.
2. As per the MOA dated: 27.02.2018 between HESCOM and CIRE/REC, training was provided to 204 No. of C&D employees of HESCOM under National Training Programme.
3. Pre-promotional training was conducted to 62 No. of employees of HESCOM for the cadre of MR/OS/ASK/Operator to be promoted as Junior Engineers.
4. Pre-promotional training was conducted to 29 No. of employees of HESCOM for the cadre of Lineman to be promoted as MR/OS/ASK/Operator.
5. Training on "Behavioral Skills" for 29 No. of Group A & B Officers sponsored by REC .
6. Two days non-residential training on "Safety Procedures and Prevention of Accidents" for 1552 No. of JPMs.

In financial year 2019-20 (Upto 05.11.2019) various training programmes which have been arranged at ITC HESCOM, Electric Grid, Karwar Road, Hubballi are as follows:

1. As per Karnataka Govt. Apprenticeship Act-1961, 104 Nos. of ITI passed candidates are undergoing one year Apprenticeship training from 15.06.2019.
2. Pre-Employment training was conducted to 14 Nos. of Junior Engineers appointed on Compassionate Grounds and 10% DR Quota.
3. Pre-Employment training was conducted to 22 Nos. of Junior Meter Readers.
4. Pre-promotional training was conducted to 79 Nos. of employees of HESCOM for the cadre of MR/OS/ASK/Operator to be promoted as Junior Engineers.




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IT INITIATIVES :

- a) **HESCOM Website:** The HESCOM Website is maintained by IT Section of HESCOM and www.hescom.co.in is running successfully. Website is updated regularly. HESCOM Website provides all the basic information regarding Company Profile and activities.
- b) **PLO (Paperless Office):** PLO is implemented w. e. f 08.01.2012 to reduce usage of paper and fast tracking of correspondence through software with minimal time. PLO is successfully implemented in Corporate Office, HESCOM. Major benefits of PLO are Cost & Space Management, Data Retrieval, access anywhere and security.
- c) **Bio Metric Devices:** Web based Bio Metric devices have been installed at 26 locations in 1st phase and at 97 locations in 2nd phase. This device captures the in-time, out-time of Employees by taking finger scan. The Attendance is available online. Various Reports can be taken from Biometric attendance software.
- d) **Customer Call Center:** Customer Call Center (CCC) was established under RAPDRP Part-A projects at Corporate Office, HESCOM, Hubballi. CCC is operational in HESCOM for proper monitoring of Customer Care Activity such as registration of consumer complaints and speedy redressal of consumer grievances. The helpline executives are working round the clock. The helpline Number is **1912**.

The Company is committed to provide best care to its Customers. Towards this, 24x7 Centralized Customer Care Centre has been established at Corporate Office of HESCOM for proper monitoring of Customer Care activity such as registration of consumer complaints and speedy redressal of consumer grievances.

To avoid call congestion No. of Call Center executives have been increased.

Men (Skilled) with vehicle provided for rendering 24x7 services in all Taluka Headquarters coming under the Jurisdiction of HESCOM.

- e) **E-procurement:** Government of Karnataka (GoK) through its Implementing Agency Center for E-Governance has implemented single, unified, end to end, E-procurement platform in Karnataka. The E-procurement system has been implemented in HESCOM from 19.07.2010 to procure goods, work contract and services through the e-procurement platform.
- f) **Government e-Marketplace (GEM):** GeM, the National Public Procurement Portal registered under the companies Act, 2013 for providing procurement of goods and services required by Central & State Government organizations.

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HESCOM has adopted this new concept and initiated to procure IT hardware through GeM Portal from Jan 2017. Purchase through GeM Portal has simplified the Procurement process and Provides transparency and ease of buying.

- g) **ATP (Any Time payment) counters:** Any Time Payment KIOSKS were installed in HESCOM for 55 no's of locations which is enabling HESCOM consumers to pay their electricity bills 24X7 days. Any Time Payment KIOSKS are providing following facilities to the consumers.
- Improved Service Levels for Consumers.
 - Consumers can pay the electricity bills through Cash/Cheque/DD/Debit/Credit Cards.
 - Can be used for collecting Electricity payments any time.
 - User friendly machines, elimination of human element for payment Process.
 - Reduction in time of payment for end users (no queuing!).
- h) **ECS (Electronic Clearing System):** ECS is being implemented in HESCOM. Under ECS facility, the consumer can make their bill payments through their bank account by giving a mandate to do so in respective accounting units.
- i) **Billing Activities & Online Payment facility:** HESCOM has provided a web based software solution to all the consumers in their jurisdiction for generation of bills and issue of receipts, collection of Electricity bills with various modes such as through online banking, BBPS/ ECS, Debit card/Credit Card/wallet/ATP/Karnataka one. etc.
- j) **Mobile Cash Counter (MCC):** provides services to the door step of Non RAPDRP areas consumers, which enables spot collection of payments and receipts, will be provided to its consumers. This service has been enabled in HESCOM from May 2017 in its Sub divisions/Accounting sections.
- k) **GIS and Thermography: The Broad scope of the work is as follows:**
- a. GIS survey of all distribution transformers and plot them on web based maps.
 - b. Carrying out thermal imaging survey of all transformers and upload the digital photographs of each DTC to the web based centralized software system for viewing by the users for rectification of hotspots.
 - c. Tracking of all assets from the time of purchase through commissioning till retirement of the asset.



etc

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SOLAR PROJECTS IN HESCOM:

➤ Solar Roof Top :

Solar power is considered as one of the alternative to augment the current source as it is a green source of Energy and to harness the potential of solar energy Govt. has issued Solar Policy 2014-2021.

The Solar Policy 2014-2021 promises Solar Power adoption in the Industrial/ Commercial and Residential segments for PV Roof Top Grid Connected System. The application is hosted on website of HESCOM along with the guidelines and formats. Paper Notification has been issued for the information to the public.

In HESCOM, 644 solar rooftop projects are commissioned with a capacity of 19.76 MW.

➤ Solar Pump Set (Off Grid) :

1. The Government of Karnataka Order No. EN-54 VSC-2014, Dtd: 28-02-2015 has announced Off Grid Solar IP Set scheme for 5 HP Pump sets.

2. This scheme has 3 Phases :

➤ Phase 1 : 300 Solar Pump sets are allotted to HESCOM as pilot project for Gokak and Muddebihal Talukas. Out of 299 Pump sets are installed and commissioned.

➤ Phase 2 : 450 Solar Pump sets are allotted to HESCOM distributed in 14 Talukas. Out of which only 142 beneficiaries are identified.

➤ Phase 3 : 534 Solar Pump sets are allotted to HESCOM distributed in 17 Talukas. Out of which only 30 beneficiaries are identified.

3. Very few applicants came forward to avail the benefit in the respective Talukas. Hence, KREDL decided to call online applications for entire ESCOMs. Total 1095 Solar IP Sets are commissioned in HESCOM Jurisdiction.

➤ 1 to 3 MW Land Owner Scheme.

As per the Solar Policy 2014-21 KREDL has called online application for installation of 1 to 3 MW for landowners, under this scheme, total 31 allottees of 62 MW have signed PPA with HESCOM out of which 29 Nos projects of 60 MW are commissioned.

➤ Installation of Solar RTPV Grid connected power plants on Govt office office buildings under 13th Finance Commission grant.

Phase-I:

a) In Belgaum zone, installation of Solar RTPV Grid connected power plants on 31 Nos of HESCOM office buildings to an extent of 136 KWp is awarded to M/s. Pratham Integrated Engineering Solutions (I) Pvt Ltd., Bangalore award cost Rs. 1.79 Crores. Progress achieved 31 No. of Buildings and 136KWp.

b) In Hubli Zone, installation of Solar RTPV Grid connected power plants on 29 Nos of HESCOM office buildings to an extent of 116KWp is awarded to spectrum

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consultants, Bangalore Award cost – Rs.1.09 Crores. Progress achieved 29No.of Buildings and 116Kwp.

Phase-II

- a. Belgaum zone, Design, Manufacture, Supply, Installation, Testing & commissioning of Solar RTPV Grid connected power plants to an extent of 1217 KWp on the Roof-tops of 224 nos of Government office buildings in Belgaum is awarded to M/s. Spectrum Consultants, Bangalore award cost Rs. 14.49 Crores. Progress achieved all buildings Installation completed and Commissioned.
- b. In Hubli Zone, Design, Manufacture, Supply, Installation, Testing & commissioning of Solar RTPV Grid connected power plants to an extent of 1175 KWp on the Roof-tops of 175 Nos of Government office buildings in Hubli is awarded to M/s. IC INDIA Pvt Ltd, Bangalore. Award cost – Rs. 10.29 Crores. Progress achieved 86 No.of Buildings and 818 Kwp.

➤ **Installation of Solar RTPV Grid connected power plants on Govt. office buildings under IPDS :**

- a. Belgaum zone, installation of Solar RTPV Grid connected power plants on the roof top of 127 Nos of HESCOM office buildings to an extent of 1045 KWp is awarded to M/s. Pratham Integrated Engineering Solutions (I) Pvt Ltd., Bangalore award cost Rs. 8.41 Crores. Progress achieved 127 No.of Buildings and 1045Kwp.
- b. In Hubli Zone, installation of Solar RTPV Grid connected power plants on the roof top of 109 Nos of Govt. office buildings to an extent of 775KWp is awarded to M/s. IC India, Bangalore. Award cost – Rs.6.2 Crores.
Progress achieved 108 No. of Buildings and 772Kwp.




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PRAYER before the Honorable Commission :

HESCOM with averments made in the respective paras of the ERC/ARR & Tariff Petition for FY-21 duly detailing the revenue requirement of HESCOM respectfully **prays the Hon'ble Commission to;**

Consider the Annual Performance of HESCOM for FY-19 and carry forward the revenue deficit of Rs. 759.49 Crs, to ARR of FY-21.

- A. Approve the net ARR of Rs.9954.62 Crs for FY-21.
- B. Approve the total revenue deficit of Rs.683.95 Crs as detailed in above paras and allow HESCOM to average increase the tariff to an extent of Rs.0.52 per unit, across all categories.
 - i. Partly by uniform increase in fixed charges of Rs. 10 per KW/HP/KVA per month for all categories.
 - ii. Partly by uniform increase in Energy Charges Rs. 0.45/unit on total sales of 13,230.18 MU.
- C. Approve the proposed purchase, sales, and losses, CAPEX, ARR and ERC for FY-21.
- D. Approve the wheeling charges cross subsidy charges and RPO Compliance.



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