

CHAPTER-5

AGGREGATE REVENUE REQUIREMENT FOR FY-22 :

The Hon'ble Commission has approved the estimation of ARR vide Order Dtd : 09.06.2021. It is submitted that HESCOM is not proposing any modifications for the approved figures for FY-22. HESCOM has revised the estimations, only in order to facilitate to make further projections for FY-23 required for filing.

ENERGY DETAILS

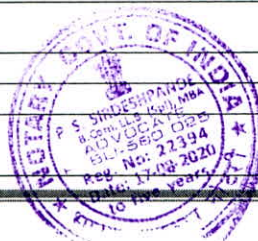
Particulars	FY-22	FY-22
	(As approved in Tariff Order 2021)	Revised projections
Energy at Generation Point (Mus)(Including HRECS and AEQU)	14532.65	14151.57
Energy at Generation Point (Mus) (HESCOM)	14184.30	13801.40
Transmission Loss (Mus)	422.41	411.01
Transmission Loss (%)	2.978%	2.978%
Energy at Interface Point (Mus)	13761.90	13390.40
Energy Sales (Mus)	11904.04	11629.56
Distribution Loss (%)	13.50%	13.15%

Capital Expenditure of HESCOM for the year 2020-21 (Up to Sept-21)

Sl. No.	Scheme	Capital Budget allotted for 2021-22	Expenditure up to Sept-21
	Mandatory works, Social obligation and other works		
1	Gangakalyan IP sets: Dr. B. R Ambedkar Development Corporation	21.57	6.79
2	Gangakalyan IP sets: Karnataka State Tribal Development Corporation	12.59	4.31
3	Gangakalyan IP sets: D.Devraju urs Backward Class Development Corporation	15.00	8.18
4	Gangakalyan IP sets :Karnataka Minority Development Corporation	8.00	1.82
5	Gangakalyan IP sets :Karnataka Vishwakarma Samudaya Development Corporation	1.73	0.28
6	Gangakalyan IP sets :Bhovi Development Corporation	0.92	0.00
	Gangakalyan total	59.82	21.40
	GOK Sponsered Works		
7	Special Development Plan for backward talukas under Nanjundappa scheme(SDP)	40.68	8.54
8	Rural Electrification under SCSP	7.51	2.33
9	Rural Electrification under TSP	1.87	0.57
10	Energisation of IP sets under Sheegra Samparka	25.20	9.31
11	Creating infrastructure to UAIP Sets (Before and after 2014 GOK circular)	296.00	39.11
11.a	Arranging Power Supply on HT basis (75:25)	0.00	0.00
12	Nirantar Jyoti Yojana.	1.74	1.26
12.a	Bifurcation of NJY Feeders	2.80	0.14
	Sub - total	375.79	61.26
	GOI Sponsered Works		
13	DDUGVY	5.67	3.64
14	IPDS	42.70	1.08
	Sub - total	48.37	4.72

Application for Approval of Annual Performance Review for FY-21 and Approval for ARR & ERC for MYT period FY-23 to 25 and Tariff Filing for FY-23.

15	Expansion of network and system improvement works.		
a	Additional DTCs	67.65	5.94
b	Enhancement of Distribution Transformers	6.57	1.84
c	Shifting of existing transformer to load centre	1.48	0.00
d	LT line conversion of 1Ph 2 wire or 1Ph 3 wire to 3ph 5 wire	5.90	2.21
e	Other E & I Works (DP & GOS)	2.05	2.53
f	Construction of new 11 KV lines for 33 KV / 110 KV sub-stations/ link lines for bifurcation of load	61.59	16.51
g	11 KV Re-conductoring.	41.97	9.68
h	LT Re-conductoring.	37.84	8.63
i	Providing covered conductor for villages to prevent Theft/ accident and hazardous condition	0.34	0.00
j	Rectification of Hazardous locations	3.96	0.00
	Sub - total	229.35	47.35
16	Construction of new 33 KV stations	7.28	2.10
	Construction of new 33 KV lines.	10.74	0.00
17	Augmentation of 33 KV stations.	9.00	0.14
18	Replacement of 33 KV lines Rabbit conductor by Coyote conductor.	4.63	1.03
19	Replacement of old and failed equipments and other works of existing 33 KV stations and lines.	17.99	2.35
	Sub - total	49.63	5.62
	UG Cable		
20	Replacement of OH by UG cable in Dharwad and Vijayapur cities	7.00	0.02
21	Commissioning of 3 Ph 4 wire HT Metering Cubicle with meter, CTs, PTs	10.50	11.15
22	Refurbishing works on HT/LT/DTC in O & M Divisions	1.59	0.88
	Sub-total	19.09	12.05
	Reduction of T & D and ATC loss		
23	Providing meters to un-metered BJ/KJ installations.	1.54	0.10
24	Replacement of faulty / MNR energy meters by static meters.	9.91	34.54
25	Replacement of electromechanical energy meters by static meters.	39.63	
26	DTC's metering (Other than APDRP)	4.22	2.12
	Sub - total	55.29	36.76
	General (In House)		
27	Service connections	25.74	2.85
28	Improvement Works at 5 Nos of Villages in each MLA Constituency & 5 Nos of Villages in each MP Constituency under MADARI VIDUYAT GRAM .	11.71	0.00
29	Providing numerical relays to provide power supply to farm houses	0.29	0.00
30	T&P materials.	5.00	0.45
	Sub - total	42.74	3.30
	New initiatives works		
31	IT initiatives, automation and call centre	25.10	0.06
32	Providing solar roof tops to HESCOM and other Government office buildings	0.72	2.92
33	IPDS IT initiative Phase II	30.00	0.13
34	Establishing ALDC & SCADA.	3.56	0.08
35	DSM Projects	1.00	0.00
	Sub - total	60.38	3.19
36	Replacement of failed distribution transformers.	10.00	91.31
37	Replacement of Power Transformers.	8.15	0.65
38	Preventive measures to reduce the accidents. (Providing intermediate poles, Restrtringing of sagging lines, providing guy & struds, providing guarding, DTC earthing)	73.72	10.18
99	Replacement of broken poles / Disaster Management Works	20.54	8.96
40	Flood Affected Works	56.88	24.01
	Sub - total	169.29	135.11
41	Civil Engineering works like Construction of new office buildings/ Sub station civil works, Mordenisaton/Repairs to existing buildings, regular maintainance to immovable properties	137.93	9.82
42	Shifting of IP set in NTPC area (B Bagewadi)	0.41	
	others		0.82
	Sub - total	138.34	10.64
	Total	1248.08	341.40



Power Purchase -Consumption and Amount FY-22(up to Sept-21)				
Sl. No.	Name of the IPPs	Grand Total 2021-22		Rate Per Unit
		CON.IN MU	AMT In Cr	
1	KPCL Hydel	778.98	103.8	1.33
	TBHE	0	0	0
2	KPCL Solar	0.77	0.46	6
4	KPCL Thermal	1,189.43	614.25	5.16
	RPCL	685.99	229.73	3.35
KPCL Total (1+2+3)		2,655.16	948.24	3.57
1	NLC	408.14	170.74	4.18
2	NTPC	714.89	376.67	5.27
3	NTPC VVNL (coal)	28.7	14.02	4.89
4	NTPC NSM	169.96	64.88	3.82
5	NTECL	71.04	45.36	6.39
6	MAPS (NPCIL)	5.14	1.14	2.21
7	Kaiga(NPCIL)	224.07	63.77	2.85
8	Damodar Valley Corporation	0	50.39	0
9	kudankulam (KKMPP)	336.93	110.26	3.27
10	Priyadrashini Jurala Hydro Project	10.13	5.74	5.67
11	& Deoghar Mega Power Ltd	0	0	0
12	PGCIL Tr. Charges	0	173.98	0
13	South western Railways(UI)	0	0	0
14	UI Charges	0	5.85	0
CGS Total (5 to 10)		1,969.00	1,082.80	5.5
1	Wind Mill (A)	1,324.20	549.13	4.15
2	Wind Mill MOA (B)	92.3	34.06	3.69
3	Mini Hydel	46.75	11.09	2.37
4	Co-Generation (With PPA)	0	0	0
5	Co-Generation Short term (NEW PPA)	15.32	7.59	4.95
6	Solar	837.17	365.17	4.36
7	Solar farmer scheme (1 to 3 MW) total	42.5	24.98	5.88
8	Banked Energy of W & B &	0	0	0
9	Infirm Energy	0	0	0
NCE Total (1+2+3+4+5)		2,358.24	992.02	4.21
1	Medium Term	0	0	
1	Short Term	0	0	0
2	Section 11	0	0	0
3	Major IPPs (UPCL)	302.29	258.17	8.54
4	KPTCL Tr,Charges	0	403.45	0
5	Sales	0	0	0
7	SLDC O&M Expenses	0	1.36	0
8	SPPCC/PCKL Adm. Exp	0	0	0
9	Open Access Charges	0	0	0
10	Tantransco	0	0.04	0
11	LC Charges Related to Purchase of Power	0	0	0
12	Inter-Eskom Energy Exchange	0	0	0
GRAND TOTAL		7,284.67	3,686.07	5.06
	Less:			
	M/s HRECS	159.52	85.97	5.39
	Rebate		7.33	0
NET TOTAL		7,125.15	3,592.78	5.04



RPO for the financial for the month Apr-21 to September-21(Provisional)

a. Non-solar RPO			
No.	Particulars	Quantum in MU	Cost- Rs. Crs.
1	Total Power Purchase Quantum	3697.33	2797.37
2	Non- Solar Renewable Energy Purchased under PPA route at Generic Tariff including Non-Solar RE purchased from KPCL	1048.93	431.41
3	Non- Solar Short - Term purchase from RE sources only	10.38	5.20
4	Non -solar Short-Term purchase from RE sources under sec-11	0.00	0.00
5	Non - Solar RE purchase under APPPC	70.33	25.95
6	Non - Solar RE purchase pertaining to green energy sold to consumers under green tariff	0.00	0.00
7	Non - Solar RE purchased from other ESCOMs	0.00	0.00
8	Non - Solar RE sold to other ESCOMs	0.00	0.00
9	Non - Solar RE purchased from any other source (Banked energy & Infirm enrgy)	0.00	0.00
10	Total Non-Solar RE Energy Purchased [No 2+ No3+No4+No5+No7+No9]	1129.64	462.56
11	Non-Solar RE accounted for the purpose of RPO [No 10-No5-No6-No8]	1059.31	436.61
12	Non-Solar RPO complied in % [No 11/No 1]*100	28.65	15.61
b. Solar RPO			
No.	Particulars	Quantum in MU	Cost- Rs. Crs.
1	Total Power Purchase Quantum from all sources	3697.33	2797.37
2	Solar Energy Purchased under PPA route at Generic Tariff including Solar Energy purchased from KPCL	647.17	275.68
3	Solar energy purchased under Short-Term, excluding sec-11 purchase		
4	Solar Short-Term purchase from RE under sec-11		
5	Solar Energy Purchased under APPPC		
6	Solar Energy pertaining to green energy sold to consumers under green tariff		
7	Solar Energy purchase from other ESCOMs		
8	Solar Energy sold to other ESCOMs		
9	Solar Energy purchased from NTPC as bundled power	126.86	66.03
10	Solar energy purchased from any other source like banked energy & Infirm energy purchased at 85% of Generic tariff	0.00	0.00
11	Total Solar Energy Purchased [No 2+ No.3+No.4+No.5+No7+No9+No+10]	774.03	341.71
12	Solar Energy accounted for the purpose of RPO [No 11-No5-No6-No8]	774.03	341.71
13	Solar RPO complied in % [No 12/No 1]*100	20.93	12.22



**CONTROLLER (A&R)
HESCOM, HUBLI.**

DIVISION-WISE ENERGY BALANCE STATEMENT OF HESCOM

FY-22 (APRIL -2021 TO Sep-2021):

SI No	Name of the Company	Total Input Energy of the ESCOM in MU			Metered Sales in MU			Unmetered sales in MU (BJ/KJ + IP sets)	Total Sales in MU	Total Energy Loss including EHT		Losses excluding EHT sales	
		Other than EHT	EHT	Total	Other than EHT	EHT	Total			in MU	in %	in MU	in %
1	2	3	4	5=3+4	6	7	8=6+7	9	10=8+9	11= (5-10)	12= (11/5) *100	13= [3-(6+9)]	14= [13/3]] *100
1	Hubli Urban	205.32	6.82	212.13	192.42	6.82	199.24	0.00	199.24	12.89	6.08	12.89	6.28
2	Hubli Rural	66.17	1.05	67.22	47.93	1.77	49.70	6.63	56.33	10.89	16.20	11.61	17.54
3	Dharwad Urban	91.58	0.00	91.58	83.27	0.00	83.27	0.00	83.27	8.31	9.07	8.31	9.07
4	Dharwad Rural	144.77	4.35	149.12	102.23	4.35	106.58	24.83	131.41	17.71	11.88	17.71	12.23
5	Gadag	196.80	17.51	214.31	116.02	17.51	133.52	56.63	190.15	24.16	11.27	24.16	12.28
6	Ron	58.24	0.00	58.24	32.49	0.00	32.49	15.68	48.17	10.08	17.30	10.08	17.30
7	Haveri	208.35	0.53	208.88	102.91	0.53	103.44	84.45	187.89	20.99	10.05	20.99	10.07
8	Ranebenur	245.33	2.08	247.40	107.51	2.08	109.59	104.69	214.28	33.12	13.39	33.12	13.50
9	Sirsi	96.73	0.00	96.73	73.89	0.00	73.89	13.17	87.06	9.67	10.00	9.67	10.00
10	Dandeli	56.03	0.00	56.03	35.12	0.00	35.12	16.49	51.61	4.42	7.89	4.42	7.89
11	Karwar	71.75	22.20	93.95	66.15	22.20	88.35	0.00	88.35	5.60	5.96	5.60	7.81
12	Honnavar	106.36	0.00	106.36	100.79	0.00	100.79	0.00	100.79	5.57	5.24	5.57	5.24
13	Belagavi U	232.30	44.66	276.96	213.29	44.66	257.95	0.00	257.95	19.01	6.86	19.01	8.18
14	Belagavi R	306.70	2.46	309.16	220.31	2.46	222.77	48.35	271.12	38.04	12.30	38.04	12.40
15	Bailhongal	358.39	0.00	358.39	109.56	0.00	109.56	197.43	306.99	51.40	14.34	51.40	14.34
16	Ranmdurg	193.46	0.40	193.86	24.75	0.40	25.15	144.09	169.25	24.61	12.70	24.61	12.72
17	Ghataprabha	389.39	19.20	408.59	84.51	19.20	103.71	255.67	359.37	49.21	12.04	49.21	12.64
18	Chikkodi	337.97	0.00	337.97	101.54	0.00	101.54	192.64	294.18	43.79	12.96	43.79	12.96
19	Athani	393.10	48.68	441.78	77.97	48.68	126.65	260.46	387.12	54.66	12.37	54.66	13.91
20	Raibag	423.56	0.00	423.56	31.15	0.00	31.15	333.24	364.39	59.16	13.97	59.16	13.97
21	Vijayapura	428.00	0.00	428.00	146.84	0.00	146.84	238.52	385.36	42.64	9.96	42.64	9.96
22	Indi	467.53	0.00	467.53	74.55	0.00	74.55	327.20	401.75	65.78	14.07	65.78	14.07
23	B.Bagewadi	269.22	56.89	326.11	81.11	50.26	131.37	149.69	281.06	45.05	13.81	38.42	14.27
24	Bagalkot	407.25	27.93	435.18	148.44	27.93	176.37	197.78	374.15	61.03	14.02	61.03	14.99
25	Jamakhandi	439.46	27.70	467.16	80.46	27.70	108.16	304.57	412.73	54.44	11.65	54.44	12.39
26	Mudhol	447.53	9.09	456.63	71.03	9.09	80.12	322.61	402.73	53.89	11.80	53.89	12.04
	HESCOM	6641.29	291.53	6932.82	2526.25	285.62	2811.88	3294.81	6106.69	826.13	11.92	820.22	12.35



**CONTROLLER (A&R)
HESCOM, HUBLI.**

CONSOLIDATED TOWN ENERGY ANALYSIS (16 TOWNS) OF HESCOM for FY-22 (upto august-2021)

Name of the Town	Input to the Town in MUs as per Format-1A	Metered Energy as per DCB	wheeled energy	Unmetered Energy	Total Energy Sold(4+5)	Billing Efficiency (6/3x100)	Energy Un-accounted(3-7)	Distribution Loss in % (8/3*100)	Demand (Rs.In Lakhs)	Collection (Rs.In Lakhs)	Collection Efficiency 11/10*100	Business Efficiency (7x12/100)	AT&C Loss (in%) (100-/10) as per conventional method
Hubli	178.03	165.97	2.27	0.00	168.24	94.50	9.79	5.50	15392.86	15041.30	97.72	92.34	7.66
Dharwad(U)	79.40	68.62	3.46	0.00	72.08	90.78	7.32	9.22	6364.51	6248.25	98.17	89.13	10.87
Gadag	29.83	26.91	0.00	0.00	26.91	90.22	2.92	9.78	2483.97	2365.45	95.23	85.92	14.08
Haveri	13.70	12.43	0.00	0.00	12.43	90.68	1.28	9.32	1178.90	1052.94	89.32	80.99	19.01
Ranebennur	18.71	17.20	0.00	0.00	17.20	91.94	1.51	8.06	1523.60	1449.07	95.11	87.44	12.56
Sirsi	15.12	13.69	0.00	0.00	13.69	90.56	1.43	9.44	1233.13	1199.80	97.30	88.12	11.88
Dandeli	10.55	9.95	0.00	0.00	9.95	94.27	0.60	5.73	810.74	723.61	89.25	84.14	15.86
Karwar	21.69	20.65	0.00	0.00	20.65	95.21	1.04	4.79	1856.10	1781.22	95.97	91.37	8.63
Belagavi	184.73	152.46	15.55	0.00	168.01	90.95	16.72	9.05	14941.44	14875.61	99.56	90.55	9.45
Gokak	17.21	15.75	0.00	0.00	15.75	91.54	1.46	8.46	1297.70	1347.27	103.82	95.04	8.46
Nippani	14.81	13.61	0.00	0.00	13.61	91.89	1.20	8.11	1219.02	1006.10	82.53	75.84	24.16
Bagalkote	34.62	30.68	0.00	0.00	30.68	88.62	3.94	11.38	2808.01	2600.45	92.61	82.07	17.93
Ilakal	21.17	18.98	0.00	0.00	18.98	89.66	2.19	10.34	1705.67	1587.70	93.08	83.46	16.54
Jamakhandi	13.09	11.59	0.00	0.00	11.59	88.59	1.49	11.41	1019.81	1084.05	106.30	94.17	11.41
Rabakavi Banahatti +	10.84	9.61	0.00	0.00	9.61	88.59	1.24	11.41	801.04	733.06	91.51	81.07	18.93
Vijaypur	99.21	88.77	0.00	0.00	88.77	89.47	10.45	10.53	8070.02	7603.04	94.21	84.29	15.71
HESCOM	762.72	676.88	21.28	0.00	698.16	91.54	64.56	8.46	62706.52	60698.91	96.80	88.60	11.40

Note:

1. This analysis is made using input of present month and metered sales as per subsequent month DCB as the present month sales reflects in subsequent month DCB.
2. If collection efficiency is more than 100% it is limited to 100% then ATC loss is equal to T&D

Distribution Loss :

The Hon'ble commission in its tariff order Dtd : 09.06.2021 has approved distribution loss of 13.50% (Upper limit-13.75 %, lower limit 13.25%, average-13.50%) for FY-22.

Particulars	FY-22 (Up to Sep-21)
Input Energy inclusive of EHT sales in MU	6932.82
EHT sales	291.53
Input Energy exclusive of EHT sales in MU	6641.287
Total sales including EHT sales in MU	6106.687
Total sales excluding EHT sales in MU	5821.064
Distribution loss as a percentage of input energy inclusive of EHT sales in %	11.91
Distribution loss as a percentage of input energy exclusive of EHT sales in %	12.35
Reduction in loss over previous year	1.34



The distribution loss of HESCOM for FY-22(up to Sept-21) is 11.91 % which is 1.59 % less recorded than the approved figure for FY -22.

ANNUAL REVENUE REQUIREMENT-FY-22

Rs. In Crs

Ref. Form	Particulars	(As approved in Tariff Order 2021)	Revised Projection
D-1	Energy at Generation Point (Mus) (Including HRECS and AEQUS)	14532.65	14151.57
	Energy at Generation Point (Mus)(HESCOM)	14184.30	13801.40
	Transmission Loss (units)	422.41	411.01
	Transmission Loss (%)	2.978%	2.978%
D-1	Energy at Interface Point (Mus)	13761.90	13390.40
D-2	Energy Sales (Mus)	11904.04	11629.56
	Distribution Loss (%)	13.50%	13.15%
INCOME:			
D-2	Revenue from sale of power	4736.13	4147.78
D-3	Revenue subsidies & grants	4426.34	4499.31
TOTAL INCOME		9162.47	8647.09
EXPENDITURE:			
D-1	Purchase of Power	6705.64	6705.64
	Tr. Charges (PGCIL & POSOCO)	541.89	541.89
	Tr. Charges (KPTCL & SLDC) Charges	797.31	797.31
	Total Power Purchase Cost	8044.84	8044.84
D-5	Repairs & maintenance		99.98
D-6	Employee Costs	1379.23	1032.79
D-7	Administrative & General expenses		167.91
	Total O&M expenses	1379.23	1300.68
D-8	Depreciation & related debits	285.66	327.24
D-9	Interest & Finance charges		
	Interest on loan capital	342.65	280.94
	Interest on working capital	189.83	325.57
	Interest on consumer deposit	40.84	40.36
	Other interest and finance charges	-	-
	Interest on belated payments of IPPs	-	-
D-10	LESS: Int. & Fin. charges capitalized	-	-
	Total Interest and Finance Charges	573.32	646.87
D-11	Other debits (incl. Bad debts)	-	22.02
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	0.50
A-4	Return on Equity		
	Pension and Gratuity Trust arrears		
	LESS: Excess RoE		
	LESS: Other Income	290.07	307.04
	ARR	9993.48	10035.10
	REVENUE SURPLUS / (DEFICIT):	-831.01	
	Add Regulatory Asset	144.07	
	Previous years' surplus/deficit carried forward	- 617.95	
	Add Distribution loss incentive-		
	Carrying cost on Regulatory Asset @12%		
	Dis allowance-Capex		
	Net ARR	9519.60	10035.10

HESCOM is not proposing any modifications in the approved ARR for FY22 as ordered in the Tariff Order 2021.

HESCOM has made the projections for FY-22, only in order to facilitate for further projections of FY-23.

CHAPTER-6

SALES FORECAST FOR MYT FY-23 TO 25

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-16 to FY-21. 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-22 & MYT FY-23 to 25 based on the lower of the CAGRs for the period FY 16-FY 21 and for the period FY 18 to FY 21:

No. of installations from FY-16 to FY-21:

Tariff	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
LT1 - 18/40 units	5,94,773	6,22,737	7,20,063	718179	715523	712285
LT1 above 18/40 units	1,67,789	1,40,645	39,871	42349	44160	47124
Total BJ KJ	7,62,562	7,63,382	7,59,934	760528	759683	759409
LT-2a (i)	11,30,060	12,04,845	12,53,329	1305596	1362524	1426350
LT-2a (ii)	11,93,193	12,21,446	12,84,018	1376517	1485178	1522079
LT-2(b)(i)	3,650	4,061	4,434	4629	4644	4839
LT-2(b)(ii)	2,008	2,148	2,219	2378	2489	2512
LT-3(i)	2,18,641	2,33,475	2,46,372	258052	269607	286115
LT-3(ii)	1,00,194	1,03,375	1,08,631	113655	120034	124842
LT-4(a)	6,37,907	6,63,011	6,96,647	930551	957838	974820
LT - 4b	832	1,276	856	842	849	863
LT- 4c(i)	236	249	273	302	325	350
LT- 4c(ii)	72	78	83	92	107	115
LT-5	1,01,446	1,07,801	1,13,582	117989	120661	125803
LT-6	33,051	38,229	42,618	46004	49941	52049
LT-6	20,206	21,545	22,823	23831	24952	26315
LT-7	40,371	43,369	66,658	85289	127166	157530
LT Total	42,44,429	44,08,290	46,02,477	50,26,255	52,85,998	54,63,991
HT-1	245	275	318	364	384	418
HT-2(a)	1,287	1,421	1,586	1760	1902	2026
HT - 2(b)	486	514	578	629	675	712
HT-2 (C)(i)	168	190	190	208	222	235
HT-2 (C) (ii)	77	83	109	117	133	138
HT - 3 (a)(i)	108	114	126	140	158	168
HT - 3 (a)(ii)	92	100	121	124	137	143
HT - 3 (a)(iii)	10	10	10	12	12	12
HT-3(b)	2	2	2	2	2	3
HT-4	31	30	32	30	32	32
HT-5	55	52	49	59	65	84
HT	2,561	2,791	3,121	3,445	3,722	3,971
LT+HT	42,46,990	44,11,081	46,05,598	50,29,700	52,89,720	54,67,962



The Hon'ble KERC has approved total No of installations of 56,95,962 for FY-22 vide Tariff Order Dtd 09.06.2021.

Number of installations is worked out for FY-22 based on CAGR for the period FY 16 - FY 21 and for the period FY 18 - FY 21. The estimates based on the lower of the CAGRs for the period FY 16 - FY 201 and for the period FY 18 - FY 21 is considered for projection.

CAGR is calculated as under:

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

For estimating CAGR for the period FY 16 - FY 21,

Y_n is the data pertaining to FY-21.

Y_i is the data pertaining to FY-16 and n=6.

For estimating CAGR for the period FY 18 - FY 21.

Y_n is the data pertaining to FY-21.

Y_i is the data pertaining to FY-18 and n=4.



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-21	712285
2	Total No. of installations in FY-16	594773
3	Increase in no of installations	117512
4	Total No. of installations in FY-18	720063
5	Increase in no of installations	(-) 7778
6	No. of installations projected for FY-22	712285
7	No. of installations projected for FY-23	712285
8	No. of installations projected for FY-24	712285
9	No. of installations projected for FY-25	712285

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

Sl No.	Particulars	No. of Installations
1	Total No. of installations in FY-21	47124
2	Total No. of installations in FY-16	167789
3	Increase in no of installations	(-) 120665
4	Total No. of installations in FY-18	39871
5	Increase in no of installations	7253
6	No. of installations projected for FY-22	47124
7	No. of installations projected for FY-23	47124
8	No. of installations projected for FY-24	47124
9	No. of installations projected for FY-25	47124

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

LT-2(a) Domestic installations

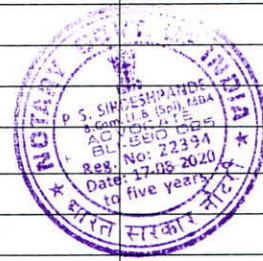
Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	2948429
2	Number of installations in FY-16	2323253
3	Increase in number of installations	625176
4	Increase in growth as per CAGR FY-16 to FY-21	4.88%
5	Number of installations in FY-18	2537347
6	Increase in number of installations	411082
7	Increase in growth as per CAGR FY-18 to FY-21	5.13%
8	Number of installations projected for FY-22	3092356
9	Number of installations projected for FY-23	3243309
10	No. of installations projected for FY-24	3401631
11	No. of installations projected for FY-25	3567681

LT-2(b) Private & Professional Educational Institutions, Private Hospitals and Nursing Homes:

Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	7351
2	Number of installations in FY-16	5658
3	Increase in number of installations	1693
4	Increase in growth as per CAGR FY-16 to FY-21	5.37%
5	Number of installations in FY-18	6653
6	Increase in number of installations	698
7	Increase in growth as per CAGR FY-18 to FY-21	3.38%
8	Number of installations projected for FY-22	7600
9	Number of installations projected for FY-23	7857
10	No. of installations projected for FY-24	8123
11	No. of installations projected for FY-25	8396

LT-3 Commercial Installations:

Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	410957
2	Number of installations in FY-16	318835
3	Increase in number of installations	92122
4	Increase in growth as per CAGR FY-16 to FY-21	5.21%
5	Number of installations in FY-18	355003
6	Increase in number of installations	55954
7	Increase in growth as per CAGR FY-18 to FY-21	5.00%
8	Number of installations projected for FY-22	431504
9	Number of installations projected for FY-23	453078
10	No. of installations projected for FY-24	475730
11	No. of installations projected for FY-25	499515



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

Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	974820
2	Number of installations in FY-16	637907
3	Increase in number of installations	336913
4	Increase in growth as per CAGR FY-16 to FY-21	8.85%
5	Number of installations in FY-18	696647
6	Increase in number of installations	278173
7	Increase in growth as per CAGR FY-18 to FY-21	11.85%
8	Number of installations projected for FY-22	981244
9	Number of installations projected for FY-23	1006244
10	No. of installations projected for FY-24	1031244
11	No. of installations projected for FY-25	1056244

Note: As per CAGR for FY-16 to FY-21, the growth rate is 8.85%, which is very huge compared to previous years. 8316 number of installations are added from 1st April 21 to 31st July 2021. Considering the same, HESCOM has projected 25,000 numbers of installations that may be serviced in each year for FY-22 to FY-25. Considering 18,576 number of dried-up installations as on 31.03.2021, HESCOM has projected 9,81,244 (9,74,820-18,576+25,000) number of installations for FY-22. 10,06,244 (9,81,244+25,000) number of installations for FY-23, 10,31,244 (10,06,244 +25,000) number of installations FY-24 and 10,56,244 (10,31,244 +25,000) number of installations are projected for FY-25.

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

Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	863
2	Number of installations in FY-16	832
3	Increase in number of installations	31
4	Increase in growth as per CAGR FY-16 to FY-21	0.73%
5	Number of installations in FY-18	856
6	Increase in number of installations	07
7	Increase in growth as per CAGR FY-18 to FY-21	0.27%
8	Number of installations projected for FY-22	865
9	Number of installations projected for FY-23	868
10	No. of installations projected for FY-24	870
11	No. of installations projected for FY-25	872

LT-4(c) IP Sets - Pvt Horticultural. Nurseries, Coffee, Tea & Rubber plantations

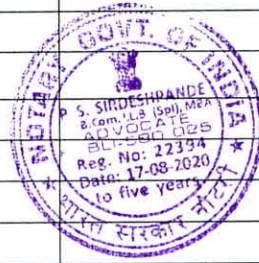
Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	465
2	Number of installations in FY-16	308
3	Increase in number of installations	157
4	Increase in growth as per CAGR FY-16 to FY-21	8.59%
5	Number of installations in FY-18	356
6	Increase in number of installations	109
7	Increase in growth as per CAGR FY-18 to FY-21	9.31%
8	Number of installations projected for FY-22	505
9	Number of installations projected for FY-23	548
10	No. of installations projected for FY-24	595
11	No. of installations projected for FY-25	647

LT-5 LT Industries

Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	125803
2	Number of installations in FY-16	101446
3	Increase in number of installations	24357
4	Increase in growth as per CAGR FY-16 to FY-21	4.40%
5	Number of installations in FY-18	113582
6	Increase in number of installations	12221
7	Increase in growth as per CAGR FY-18 to FY-21	3.47%
8	Number of installations projected for FY-22	130162
9	Number of installations projected for FY-23	134672
10	No. of installations projected for FY-24	139339
11	No. of installations projected for FY-25	144167

LT-6 (a) Water Supply:

Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	52049
2	Number of installations in FY-16	33051
3	Increase in number of installations	18998
4	Increase in growth as per CAGR FY-16 to FY-21	9.51%
5	Number of installations in FY-18	42618
6	Increase in number of installations	9431
7	Increase in growth as per CAGR FY-18 to FY-21	6.89%
8	Number of installations projected for FY-22	55636
9	Number of installations projected for FY-23	59469
10	No. of installations projected for FY-24	63567
11	No. of installations projected for FY-25	67947



LT-6 (b) Public Lighting:

Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	26315
2	Number of installations in FY-16	20206
3	Increase in number of installations	6109
4	Increase in growth as per CAGR FY-16 to FY-21	5.43%
5	Number of installations in FY-18	22823
6	Increase in number of installations	3492
7	Increase in growth as per CAGR FY-18 to FY-21	4.86%
8	Number of installations projected for FY-22	27594
9	Number of installations projected for FY-23	28935
10	No. of installations projected for FY-24	30341
11	No. of installations projected for FY-25	31816

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LT-7 Temporary Supply & Permanent supply to Advertising Hoardings:

SI No.	Particulars	No. of Installations
1	Number of installations in FY-21	157530
2	Number of installations in FY-16	40371
3	Increase in number of installations	117159
4	Increase in growth as per CAGR FY-16 to FY-21	31.30%
5	Number of installations in FY-18	66658
6	Increase in number of installations	90872
7	Increase in growth as per CAGR FY-18 to FY-21	33.20%
8	Number of installations projected for FY-22	206834
9	Number of installations projected for FY-23	271569
10	No. of installations projected for FY-24	356566
11	No. of installations projected for FY-25	468164

HT-1 Water Supply, Sewerage Installations:

SI No.	Particulars	No. of Installations
1	Number of installations in FY-21	418
2	Number of installations in FY-16	245
3	Increase in number of installations	173
4	Increase in growth as per CAGR FY-16 to FY-21	11.28%
5	Number of installations in FY-18	318
6	Increase in number of installations	100
7	Increase in growth as per CAGR FY-18 to FY-21	9.54%
8	Number of installations projected for FY-22	458
9	Number of installations projected for FY-23	502
10	No. of installations projected for FY-24	549
11	No. of installations projected for FY-25	602



HT-2 (a) Industrial:

SI No.	Particulars	No. of Installations
1	Number of installations in FY-21	2026
2	Number of installations in FY-16	1287
3	Increase in number of installations	739
4	Increase in growth as per CAGR FY-16 to FY-21	9.50%
5	Number of installations in FY-18	1586
6	Increase in number of installations	440
7	Increase in growth as per CAGR FY-18 to FY-21	8.50%
8	Number of installations projected for FY-22	2198
9	Number of installations projected for FY-23	2385
10	No. of installations projected for FY-24	2588
11	No. of installations projected for FY-25	2808

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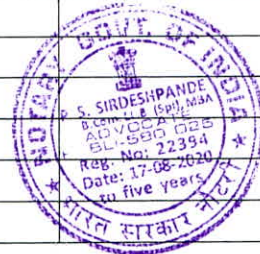
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HT-2 (b) Commercial:

Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	712
2	Number of installations in FY-16	486
3	Increase in number of installations	226
4	Increase in growth as per CAGR FY-16 to FY-21	7.94%
5	Number of installations in FY-18	578
6	Increase in number of installations	134
7	Increase in growth as per CAGR FY-18 to FY-21	7.20%
8	Number of installations projected for FY-22	763
9	Number of installations projected for FY-23	818
10	No. of installations projected for FY-24	877
11	No. of installations projected for FY-25	940

HT-2 (c) Hospitals and Educational Institutions:

Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	373
2	Number of installations in FY-16	245
3	Increase in number of installations	128
4	Increase in growth as per CAGR FY-16 to FY-21	8.77%
5	Number of installations in FY-18	299
6	Increase in number of installations	74
7	Increase in growth as per CAGR FY-18 to FY-21	7.65%
8	Number of installations projected for FY-22	402
9	Number of installations projected for FY-23	432
10	No. of installations projected for FY-24	465
11	No. of installations projected for FY-25	501



HT-3 Lift Irrigation Schemes under Govt. Departments/Govt. owned Corporations/ Pvt. Societies:

Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	326
2	Number of installations in FY-16	212
3	Increase in number of installations	114
4	Increase in growth as per CAGR FY-16 to FY-21	8.99%
5	Number of installations in FY-18	259
6	Increase in number of installations	67
7	Increase in growth as per CAGR FY-18 to FY-21	7.97%
8	Number of installations projected for FY-22	351
9	Number of installations projected for FY-23	380
10	No. of installations projected for FY-24	410
11	No. of installations projected for FY-25	442

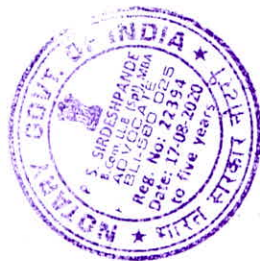
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HT-4 Resident. Apartments/Colonies:

Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	32
2	Number of installations in FY-16	31
3	Increase in number of installations	1
4	Increase in growth as per CAGR FY-16 to FY-21	0.64%
5	Number of installations in FY-18	32
6	Increase in number of installations	0
7	Increase in growth as per CAGR FY-18 to FY-21	0 %
8	Number of installations projected for FY-22	32
9	Number of installations projected for FY-23	32
10	No. of installations projected for FY-24	33
11	No. of installations projected for FY-25	33

HT- 5 Temporary Supply (above 67 HP):

Sl No.	Particulars	No. of Installations
1	Number of installations in FY-21	84
2	Number of installations in FY-16	55
3	Increase in number of installations	29
4	Increase in growth as per CAGR FY-16 to FY-21	8.84%
5	Number of installations in FY-18	49
6	Increase in number of installations	35
7	Increase in growth as per CAGR FY-18 to FY-21	19.68%
8	Number of installations projected for FY-22	91
9	Number of installations projected for FY-23	100
10	No. of installations projected for FY-24	108
11	No. of installations projected for FY-25	118



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Details of growth of Installations as per CAGR for the period FY 16-FY 21

Tariff	FY-16	FY-21	Yn= FY- 21	Yi=FY -16	n=6	CAGR	FY-22	FY-23	FY-24	FY-25
			$1/(n-1)$	Y_n/Y_i	Y_n/Y_i $^{1/(n-1)}$	$[(Y_n/Y_i)^{1/(n-1)} - 1] * 100$				
LT1 - 18/40 units	594773	712285	0.20	1.198	1.037	3.67	712285	712285	712285	712285
LT1 above 18/40 units	167789	47124	0.20	0.281	0.776	-22.43	47124	47124	47124	47124
BJ KJ	762562	759409					759409	759409	759409	759409
LT-2a	2323253	2948429	0.20	1.269	1.049	4.88	3092356	3243309	3401631	3567681
LT-2(b)	5658	7351	0.20	1.299	1.054	5.37	7746	8162	8601	9063
LT-3	318835	410957	0.20	1.289	1.052	5.21	432357	454871	478558	503478
LT-4(a)	637907	974820	0.20	1.528	1.089	8.85	1061104	1155025	1257259	1368542
LT - 4b	832	863	0.20	1.037	1.007	0.73	869	876	882	889
LT- 4c	308	465	0.20	1.510	1.086	8.59	505	548	595	647
LT-5	101446	125803	0.20	1.240	1.044	4.40	131336	137111	143141	149436
LT-6(a)	33051	52049	0.20	1.575	1.095	9.51	56998	62417	68352	74850
LT-6(b)	20206	26315	0.20	1.302	1.054	5.43	27743	29248	30835	32507
LT-7	40371	157530	0.20	3.902	1.313	31.30	206834	271569	356566	468164
LT Total	4244429	5463991	0.20	1.287	1.052	5.18	5777257	6122545	6505829	6934666
HT-1	245	418	0.20	1.706	1.113	11.28	465	518	576	641
HT-2(a)	1287	2026	0.20	1.574	1.095	9.50	2218	2429	2660	2913
HT - 2(b)	486	712	0.20	1.465	1.079	7.94	769	830	895	895
HT-2 (C)	245	373	0.20	1.522	1.088	8.77	406	441	480	522
HT - 3	212	326	0.20	1.538	1.090	8.99	355	387	422	460
HT-4	31	32	0.20	1.032	1.006	0.64	32	32	33	33
HT-5	55	84	0.20	1.527	1.088	8.84	91	100	108	118
HT	2561	3971	0.20	1.551	1.092	9.17	4336	4737	5174	5582
LT+HT	4246990	5467962	0.20	1.287	1.052	5.18	5781593	6127282	6511003	6940248

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Details of growth of Installations as per CAGR for the period FY 18-FY 21

Tariff	FY-18	FY-21	Yn= FY- 21	Yi=FY -18	n=4	CAGR	FY-22	FY-23	FY-24	FY-25
			$1/(n-1)$	Y_n/Y_i	Y_n/Y_i $^{1/(n-1)}$	$[(Y_n/Y_i)^{1/(n-1)} - 1] * 100$				
LT1 - 18/40 units	720063	712285	0.33	0.989	0.996	-0.36	712285	712285	712285	712285
LT1 above 18/40 units	39871	47124	0.33	1.182	1.057	5.73	47124	47124	47124	47124
BJ KJ	759934	759409					759409	759409	759409	759409
LT-2a	2537347	2948429	0.33	1.162	1.051	5.13	3099757	3258852	3426112	3601956
LT-2(b)	6653	7351	0.33	1.105	1.034	3.38	7600	7857	8123	8396
LT-3	355003	410957	0.33	1.158	1.050	5.00	431504	453078	475730	499515
LT-4(a)	696647	974820	0.33	1.399	1.119	11.85	1090339	1219548	1364068	1525715
LT - 4b	856	863	0.33	1.008	1.003	0.27	865	868	870	872
LT- 4c	356	465	0.33	1.306	1.093	9.31	508	556	607	664
LT-5	113582	125803	0.33	1.108	1.035	3.47	130162	134672	139339	144167
LT-6(a)	42618	52049	0.33	1.221	1.069	6.89	55636	59469	63567	67947
LT-6(b)	22823	26315	0.33	1.153	1.049	4.86	27594	28935	30341	31816
LT-7	66658	157530	0.33	2.363	1.332	33.20	209830	279493	372284	495882
LT Total	4602477	5463991	0.33	1.187	1.059	5.89	5813204	6202737	6640450	7136339
HT-1	318	418	0.33	1.314	1.095	9.54	458	502	549	602
HT-2(a)	1586	2026	0.33	1.277	1.085	8.50	2198	2385	2588	2808
HT - 2(b)	578	712	0.33	1.232	1.072	7.20	763	818	877	940
HT-2 (C)	299	373	0.33	1.247	1.076	7.65	402	432	465	501
HT - 3	259	326	0.33	1.259	1.080	7.97	351	380	410	442
HT-4	32	32	0.33	1.000	1.000	0.00	32	32	32	32
HT-5	49	84	0.33	1.714	1.197	19.68	101	120	144	172
HT	3121	3971	0.33	1.272	1.084	8.36	4305	4669	5065	5497
LT+HT	4605598	5467962	0.33	1.187	1.059	5.89	5817509	6207406	6645515	7141836



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Details of Mid-Year Installations for FY-23 to FY-25 is as noted below :

Tariff	FY-21	FY-22	FY-23 Projected	FY-24 Projected	FY-25 Projected
LT1 - 18 units	715523	712285	712285	712285	712285
LT1 above 18 units	44160	47124	47124	47124	47124
Total BJ KJ	759683	759409	759409	759409	759409
LT-2a (i)	1396555	1461164	1532490	1607298	1685758
LT-2a (ii)	1522273	1559229	1635343	1715172	1798897
LT-2(b)(i)	4754	4921	5087	5259	5437
LT-2(b)(ii)	2548	2554	2641	2730	2822
LT-3(i)	276310	293267	307930	323326	339491
LT-3(ii)	123018	127963	134361	141078	148131
LT-4(a)	971482	978032	993744	1018744	1043744
LT - 4b	853	864	867	869	871
LT- 4c	453	485	527	572	621
LT-5	122970	127983	132417	137006	141753
LT-6	52268	53842	57552	61518	65757
LT-6	25561	26954	28264	29638	31079
LT-7	145540	182182	239202	314068	412365
LT Total	5404268	5578849	5829834	6116687	6436135
HT-1	406	438	480	526	576
HT-2(a)	1996	2112	2292	2487	2698
HT - 2(b)	701	738	791	848	909
HT-2 (C)(i)	232	244	263	283	304
HT-2 (C)(ii)	139	143	154	166	179
HT - 3 (a)(i)	166	175	189	204	220
HT - 3 (a)(ii)	144	149	161	173	187
HT - 3 (a)(iii)	13	12	13	15	16
HT-3(b)	2	3	3	4	4
HT-4	32	32	32	32	33
HT-5	67	88	95	104	113
HT	3898	4134	4473	4840	5239
LT+HT	5408166	5582983	5834307	6121527	6441374



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The power supply during FY 21 & FY-22-23 is generally arranged as noted below.

Feeder Category	Urban	NJY	EIP		Industrial/HT/EHT/Water Supply
			3ph	open delta	
FY-21	24	24	07	04	24
Hours of power supply assumed to be arranged in hrs					
FY-22	24	24	07	08	24
FY-23	24	24	07	08	24

Sales from FY-16 to FY-21 :

Tariff	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
LT1 - 18 / 40 units	090.41	87.01	201.2	199.94	194.55	198.98
LT1 above 18 / 40 units	86.7	85.12	44.28	43.91	50.23	70.49
Total BJ KJ	177.11	172.13	245.48	243.85	244.78	269.47
LT-2a (i)	914.05	938.45	966.06	976.86	1,011.22	1,057.35
LT-2a (ii)	431.32	446.11	446.27	467.03	501.02	581.20
LT-2(b)(i)	11.22	13.23	14.61	14.99	16.56	11.37
LT-2(b)(ii)	3.38	3.58	3.88	4.34	4.90	3.46
LT-3(i)	291.41	303.3	318.33	322.27	340.33	300.58
LT-3(ii)	122.27	122.41	129.4	142.60	152.56	161.93
LT-4(a)	5,439.15	5,981.13	6,054.12	6,726.87	5,985.90	5938.82
LT- 4(b)	16.47	16.01	17.43	16.27	15.62	14.64
LT- 4c(i)	0.65	0.6	0.69	0.54	0.58	0.60
LT- 4c(ii)	0.12	0.18	0.15	0.18	0.24	0.25
LT-5	313.34	316.34	320.43	328.55	324.29	311.10
LT-6 Ws	216.19	271.86	277.19	311.69	328.33	335.62
LT-6 St	128.84	146.73	149.38	149.79	148.53	152.20
LT-7	24.28	26.03	28.25	32.74	33.08	31.73
LT Total	8,089.82	8,758.09	8,971.68	9738.54	9,107.94	9170.34
HT-1	210.62	215.44	234.01	270.96	280.39	331.99
HT-2(a)	930.32	843.88	1,005.39	1160.05	1,102.46	945.43
HT - 2(b)	119.56	120.62	121.8	129.88	130.12	101.71
HT-2 (C)(i)	28.39	47.51	53.45	56.27	48.54	35.83
HT-2 (C) (ii)	29.58	18.81	20.69	21.67	28.65	23.84
HT - 3 (a)(i)	107.52	141.15	171.09	209.40	187.55	214.86
HT - 3 (a)(ii)	52.46	71.09	81.65	123.68	94.18	106.09
HT - 3 (a)(iii)	3.69	2.7	3.09	3.75	0.73	0.62
HT-3(b)	0.23	0.09	0.05	0.07	0.05	0.01
HT-4	14.63	14.5	14.59	14.43	15.93	16.72
HT-5	16.58	31.67	21.81	29.02	26.80	26.93
HT	1,513.58	1,507.46	1,727.60	2,019.18	1,915.40	1,804.02
LT+HT	9,603.39	10,265.54	10,699.28	11,757.72	11,023.34	10,974.35

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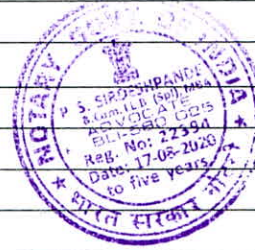
Energy sales :

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

Sl No.	Particulars	In MU
1	Energy sold in FY-16	90.41
2	Energy sold in FY-21	198.98
3	Increase in the Sales FY-16 to FY-21	108.57
4	Energy sold in FY-18	201.20
5	Increase in the Sales FY-18 to FY-21	(-) 2.22
6	Energy projected for FY-22	198.98
7	Energy projected for FY-23	198.98
8	Energy projected for FY-24	198.98
9	Energy projected for FY-25	198.98

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

Sl No.	Particulars	In MU
1	Energy sold in FY-16	86.70
2	Energy sold in FY-21	70.49
3	Increase in the Sales FY-16 to FY-21	(-)16.21
4	Energy sold in FY-18	44.28
5	Increase in the Sales FY-18 to FY-21	26.21
6	Energy projected for FY-22	70.49
7	Energy projected for FY-23	70.49
8	Energy projected for FY-24	70.49
9	Energy projected for FY-25	70.49



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	Year	No. of IP Set installations less than 10 HP (LT4 (a))	Mid-year number of installations	Specific consumption in units/installation/annum approved as per Tariff Order 2021	Projected sales in MU
1	FY 20-21	974820			
Projection					
2	FY 21-22	981244	978032	6394.25	6253.78
3	FY 22-23	1006244	993744	6394.25	6354.25
4	FY 23-24	1031244	1018744	6394.25	6514.10
5	FY 24-25	1056244	1043744	6394.25	6673.96

Sl No.	Particulars	In MU
1	Energy sold in FY-16	5439.15
2	Energy sold in FY-21	5938.82
3	Increase in the Sales FY-16 to FY-21	499.67
4	Increase in growth as per CAGR FY-16 to FY-21	1.77%
5	Energy sold in FY-18	6054.12

6	Increase in the Sales FY-18 to FY-21	(-) 115.30
7	Increase in growth as per CAGR FY-18 to FY-21	(-) 0.64%
8	Energy projected for FY-22	6253.78
9	Energy projected for FY-23	6354.25
10	Energy projected for FY-24	6514.40
11	Energy projected for FY-25	6673.96

Actual Consumption for previous 5 years and projection for FY-22 to FY-25:

Tariff	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
LT-4(a)	5,981.13	6,054.12	6726.87	5985.90	5938.82	6253.78	6354.25	6514.10	6673.96

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

LT-2a Domestic installations :

SI No.	Particulars	In MU
1	Energy sold in FY-16	1345.38
2	Energy sold in FY-21	1638.55
3	Increase in the Sales FY-16 to FY-21	293.17
4	Increase in growth as per CAGR FY-16 to FY-21	4.02%
5	Energy sold in FY-18	1412.32
6	Increase in the Sales FY-18 to FY-21	226.23
7	Increase in growth as per CAGR FY-18 to FY-21	5.08%
8	Energy projected for FY-22	1704.44
9	Energy projected for FY-23	1772.99
10	Energy projected for FY-24	1844.29
11	Energy projected for FY-25	1918.46

LT-2(b) Private & Professional Educational Institutions, Private Hospitals and Nursing Homes:

SI No.	Particulars	In MU
1	Energy sold in FY-16	14.60
2	Energy sold in FY-21	14.83
3	Increase in the Sales FY-16 to FY-21	0.23
4	Increase in growth as per CAGR FY-16 to FY-21	0.30%
5	Energy sold in FY-18	18.50
6	Increase in the Sales FY-18 to FY-21	(-) 3.67
7	Increase in growth as per CAGR FY-18 to FY-21	(-) 7.11%
8	Increase in growth as per CAGR FY-15 to FY-20	9.43 %
9	Energy projected for FY-22	16.23
10	Energy projected for FY-23	17.76
11	Energy projected for FY-24	19.43
12	Energy projected for FY-25	21.26

Note : Growth rate is very low as per CAGR FY-16 to FY-21 and CAGR FY-18 to FY-21. Hence, CAGR FY-15 to FY-20 is considered for projection.

LT-3 Commercial Installations :

SI No.	Particulars	In MU
1	Energy sold in FY-16	413.68
2	Energy sold in FY-21	462.51
3	Increase in the Sales FY-16 to FY-21	48.83
4	Increase in growth as per CAGR FY-16 to FY-21	2.26%
5	Energy sold in FY-18	447.73
6	Increase in the Sales FY-18 to FY-21	14.78
7	Increase in growth as per CAGR FY-18 to FY-21	1.09%
8	Increase in growth as per CAGR FY-15 to FY-20	5.84 %
9	Energy projected for FY-22	489.52
10	Energy projected for FY-23	518.11
11	Energy projected for FY-24	548.37
12	Energy projected for FY-25	580.39

Note : Growth rate is very low as per CAGR FY-16 to FY-21 and CAGR FY-18 to FY-21. Hence, CAGR FY-15 to FY-20 is considered for projection.

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

SI No.	Particulars	In MU
1	Energy sold in FY-16	16.47
2	Energy sold in FY-21	14.64
3	Increase in the Sales FY-16 to FY-21	(-)1.83
4	Increase in growth as per CAGR FY-16 to FY-21	(-)2.33%
5	Energy sold in FY-18	17.43
6	Increase in the Sales FY-18 to FY-21	(-)2.79
7	Increase in growth as per CAGR FY-18 to FY-21	(-)5.65%
8	Energy projected for FY-22	14.68
9	Energy projected for FY-23	14.72
10	Energy projected for FY-24	14.76
11	Energy projected for FY-25	14.80

Note : As the growth rate is negative as per CAGR FY-18 to FY-21 and also as per CAGR FY-16 to FY-21 specific consumption of FY-21 is considered for projection.

LT-4(c) IP Sets - Pvt Horticultural, Nurseries, Coffee, Tea & Rubber plantations

SI No.	Particulars	In MU
1	Energy sold in FY-16	0.77
2	Energy sold in FY-21	0.85
3	Increase in the Sales FY-16 to FY-21	0.08
4	Increase in growth as per CAGR FY-16 to FY-21	1.90%
5	Energy sold in FY-18	0.84
6	Increase in the Sales FY-18 to FY-21	0.01
7	Increase in growth as per CAGR FY-18 to FY-21	0.25%
8	Energy projected for FY-22	0.92
9	Energy projected for FY-23	1.00
10	Energy projected for FY-24	1.09
11	Energy projected for FY-25	1.18



Note : As the growth rate is very low as per CAGR FY-16 to FY-21 and CAGR FY-18 to FY-21, specific consumption of FY-21 is considered for projection.

LT-5 LT Industries :

Sl No.	Particulars	In MU
1	Energy sold in FY-16	313.34
2	Energy sold in FY-21	311.10
3	Increase in the Sales FY-16 to FY-21	(-) 2.24
4	Increase in growth as per CAGR FY-16 to FY-21	(-) 0.14%
5	Energy sold in FY-18	320.43
6	Increase in the Sales FY-18 to FY-21	(-) 9.33
7	Increase in growth as per CAGR FY-18 to FY-21	(-) 0.98 %
8	Growth rate of FY-19	2.53 %
9	Energy projected for FY-22	318.98
10	Energy projected for FY-23	327.05
11	Energy projected for FY-24	335.32
12	Energy projected for FY-25	343.80

Note: Growth rate is negative as per CAGR FY-16 to FY-21 and CAGR FY-18 to FY-21. There is reduction in industrial sector consumption during FY-20 and FY-21 due to Covid-19 pandemic. Hence considering the present trend (consumption of 163.68 MU from Apr-21 to Sep-21), growth rate of FY-19, i.e. .2.53%, is considered for projection.

LT-6 (a) Water Supply :

Sl No.	Particulars	In MU
1	Energy sold in FY-16	216.19
2	Energy sold in FY-21	335.62
3	Increase in the Sales FY-16 to FY-21	119.43
4	Increase in growth as per CAGR FY-16 to FY-21	9.20%
5	Energy sold in FY-18	277.19
6	Increase in the Sales FY-18 to FY-21	58.43
7	Increase in growth as per CAGR FY-18 to FY-21	6.58%
8	Energy projected for FY-22	357.72
9	Energy projected for FY-23	381.27
10	Energy projected for FY-24	406.37
11	Energy projected for FY-25	433.13

LT-6 (b) Public Lighting :

Sl No.	Particulars	In MU
1	Energy sold in FY-16	128.84
2	Energy sold in FY-21	152.20
3	Increase in the Sales FY-16 to FY-21	23.36
4	Increase in growth as per CAGR FY-16 to FY-21	3.39%
5	Energy sold in FY-18	149.38
6	Increase in the Sales FY-18 to FY-21	2.82
7	Increase in growth as per CAGR FY-18 to FY-21	0.63%

8	Energy projected for FY-22	153.16
9	Energy projected for FY-23	154.12
10	Energy projected for FY-24	155.08
11	Energy projected for FY-25	156.05

LT-7 Temporary Supply & Permanent supply to Advertising Hoardings:

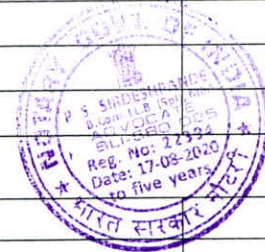
Sl No.	Particulars	In MU
1	Energy sold in FY-16	31.73
2	Energy sold in FY-21	24.28
3	Increase in the Sales FY-16 to FY-21	7.45
4	Increase in growth as per CAGR FY-16 to FY-21	5.50%
5	Energy sold in FY-18	28.25
6	Increase in the Sales FY-18 to FY-21	3.48
7	Increase in growth as per CAGR FY-18 to FY-21	3.95%
8	Energy projected for FY-22	32.99
9	Energy projected for FY-23	34.29
10	Energy projected for FY-24	35.65
11	Energy projected for FY-25	37.06

HT-1 Water Supply, Sewerage Installations:

Sl No.	Particulars	In MU
1	Energy sold in FY-16	210.62
2	Energy sold in FY-21	331.99
3	Increase in the Sales FY-16 to FY-21	121.37
4	Increase in growth as per CAGR FY-16 to FY-21	9.53%
5	Energy sold in FY-18	234.01
6	Increase in the Sales FY-18 to FY-21	97.98
7	Increase in growth as per CAGR FY-18 to FY-21	12.36%
8	Energy projected for FY-22	363.62
9	Energy projected for FY-23	398.26
10	Energy projected for FY-24	436.21
11	Energy projected for FY-25	477.77

HT-2 (a) Industrial:

Sl No.	Particulars	In MU
1	Energy sold in FY-16	930.32
2	Energy sold in FY-21	945.43
3	Increase in the Sales FY-16 to FY-21	15.11
4	Increase in growth as per CAGR FY-16 to FY-21	0.32%
5	Energy sold in FY-18	1005.39
6	Increase in the Sales FY-18 to FY-21	(-) 59.96
7	Increase in growth as per CAGR FY-18 to FY-21	(-) 2.03%
8	Growth rate of FY-19	15.38%
9	Energy projected for FY-22	1090.83
10	Energy projected for FY-23	1258.60
11	Energy projected for FY-24	1452.17
12	Energy projected for FY-25	1675.52



Note: Growth rate is very low as per CAGR FY-16 to FY-21 and is negative as per CAGR FY-18 to FY-21. There is reduction in industrial sector consumption during FY-20 and FY-21 due to Covid-19 pandemic. Hence considering the present trend (consumption of 607.61 MU from Apr-21 to Sep-21) and also assuming increase in sales in the 6th control period, due to incentive schemes approved by the Commission for utilization of available surplus power, growth rate of FY-19, i.e.15.38%, is considered for projection.

HT-2 (b) Commercial :

Sl No.	Particulars	In MU
1	Energy sold in FY-16	119.56
2	Energy sold in FY-21	101.71
3	Increase in the Sales FY-16 to FY-21	(-) 17.85
4	Increase in growth as per CAGR FY-16 to FY-21	(-) 3.18%
5	Energy sold in FY-18	121.80
6	Increase in the Sales FY-18 to FY-21	(-)20.09
7	Increase in growth as per CAGR FY-18 to FY-21	(-) 5.83%
8	Increase in growth as per CAGR FY-15 to FY-20	2.58%
9	Energy projected for FY-22	104.33
10	Energy projected for FY-23	107.02
11	Energy projected for FY-24	109.79
12	Energy projected for FY-25	112.62

Note : Growth rate is negative as per CAGR FY-16 to FY-21 and CAGR FY-18 to FY-21. Hence, CAGR FY-15 to FY-20 is considered for projection.

HT-2 (c) Hospitals and Educational Institutions.

Sl No.	Particulars	In MU
1	Energy sold in FY-16	57.97
2	Energy sold in FY-21	59.67
3	Increase in the Sales FY-16 to FY-21	1.70
4	Increase in growth as per CAGR FY-16 to FY-21	0.58%
5	Energy sold in FY-18	74.14
6	Increase in the Sales FY-18 to FY-21	(-)14.47
7	Increase in growth as per CAGR FY-18 to FY-21	(-) 6.98%
8	Increase in growth as per CAGR FY-15 to FY-20	10.26%
9	Energy projected for FY-22	65.79
10	Energy projected for FY-23	72.54
11	Energy projected for FY-24	79.99
12	Energy projected for FY-25	88.19

Note : Growth rate is very low as per CAGR FY-16 to FY-21 and is negative as per CAGR FY-18 to FY-21. Hence considering the present trend, CAGR FY-15 to FY-20 is considered for projection.



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HT-3 Lift Irrigation Schemes under Govt. Departments/Govt. owned Corporations/ Pvt.

Societies:

Sl No.	Particulars	In MU
1	Energy sold in FY-16	163.90
2	Energy sold in FY-21	321.58
3	Increase in the Sales FY-16 to FY-21	157.68
4	Increase in growth as per CAGR FY-16 to FY-21	14.43%
5	Energy sold in FY-18	255.87
6	Increase in the Sales FY-18 to FY-21	65.71
7	Increase in growth as per CAGR FY-18 to FY-21	7.92%
8	Energy projected for FY-22	347.03
9	Energy projected for FY-23	374.51
10	Energy projected for FY-24	404.16
11	Energy projected for FY-25	436.15

HT-4 Resident. Apartments/Colonies :

Sl No.	Particulars	In MU
1	Energy sold in FY-16	14.63
2	Energy sold in FY-21	16.72
3	Increase in the Sales FY-16 to FY-21	2.09
4	Increase in growth as per CAGR FY-16 to FY-21	2.70%
5	Energy sold in FY-18	14.59
6	Increase in the Sales FY-18 to FY-21	2.13
7	Increase in growth as per CAGR FY-18 to FY-21	4.65%
8	Energy projected for FY-22	17.17
9	Energy projected for FY-23	17.63
10	Energy projected for FY-24	18.11
11	Energy projected for FY-25	18.60

HT- 5 Temporary Supply (above 67 HP) :

Sl No.	Particulars	In MU
1	Energy sold in FY-16	16.58
2	Energy sold in FY-21	26.93
3	Increase in the Sales FY-16 to FY-21	10.35
4	Increase in growth as per CAGR FY-16 to FY-21	10.19%
5	Energy sold in FY-18	21.81
6	Increase in the Sales FY-18 to FY-21	5.12
7	Increase in growth as per CAGR FY-18 to FY-21	7.28%
8	Energy projected for FY-22	28.89
9	Energy projected for FY-23	31.00
10	Energy projected for FY-24	33.25
11	Energy projected for FY-25	35.67



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Details of growth of Sales as per CAGR for the period FY 16-FY 21

Tariff	FY-16	FY-21	Yn=FY-21 1/(n-1)	Yi=FY-16 Yn/Yi	n=6 Yn/Yi ^ (1/(n-1))	CAGR [(Yn/Yi)^(1/(n-1))-1]*100	FY-22	FY-23	FY-24	FY-25
LT1 - 18/40 units	90.41	198.98	0.20	2.20	1.17	17.09	198.98	198.98	198.98	198.98
LT1 above 18/40 units	86.70	70.49	0.20	0.81	0.96	-4.06	70.49	70.49	70.49	70.49
BJ KJ	117.11	269.47					269.47	269.47	269.47	269.47
LT-2 (a)	1345.38	1638.55	0.20	1.22	1.04	4.02	1704.44	1772.99	1844.29	1918.46
LT-2(b)	14.60	14.83	0.20	1.02	1.00	0.30	14.87	14.92	14.96	15.00
LT-3	413.68	462.51	0.20	1.02	1.00	0.30	472.95	483.61	494.53	505.68
LT-4(a)	5439.15	5938.82	0.20	1.00	1.00	1.77	6044.13	6151.31	6260.39	6374.40
LT - 4b	16.47	14.64	0.20	0.89	0.98	-2.33	14.30	13.97	13.64	13.32
LT- 4c	0.77	0.85	0.20	1.10	1.02	1.90	0.86	0.88	0.90	0.91
LT-5	313.34	311.10	0.20	0.99	1.00	-0.14	310.66	310.21	309.77	309.33
LT-6a	216.19	335.62	0.20	1.55	1.09	9.20	366.49	400.19	436.99	477.17
LT-6b	128.84	152.20	0.20	1.18	1.03	3.39	157.36	162.69	168.21	173.91
LT-7	24.28	31.73	0.20	1.31	1.05	5.50	33.48	35.32	37.26	39.31
LT Total	8089.82	9170.32	0.20	1.07	1.01	1.34	9389.02	9615.58	9850.41	10093.98
HT-1	210.62	331.99	0.20	1.58	1.10	9.53	363.62	398.26	436.21	477.77
HT-2(a)	930.32	945.43	0.20	1.02	1.00	0.32	948.48	951.54	954.61	957.69
HT - 2(b)	119.56	101.71	0.20	0.85	0.97	-3.18	98.47	95.34	92.31	89.37
HT-2 (C)	57.97	59.67	0.20	1.03	1.01	0.58	60.02	60.36	60.71	61.07
HT - 3	163.90	321.58	0.20	1.96	1.14	14.43	367.98	421.08	481.85	551.38
HT-4	14.63	16.72	0.20	1.14	1.03	2.70	17.17	17.63	18.11	18.60
HT-5	16.58	26.93	0.20	1.62	1.10	10.19	29.68	32.70	36.03	39.70
HT	1513.58	1804.03	0.20	1.19	1.04	3.57	1885.42	1976.91	2079.83	2195.58
LT+HT	9603.39	10974.35	0.20	1.09	1.02	1.69	11274.44	11592.49	11930.24	12289.56



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Details of growth of Sales as per CAGR for the period FY 18-FY 21

Tariff	FY-18	FY-21	Yn= FY- 21	Yi=FY -18	n=4	CAGR	FY-22	FY-23	FY-24	FY-25
			$1/(n-1)$	Yn/Yi	$Yn/Yi^{1/(n-1)}$	$[(Yn/Yi)^{1/(n-1)} - 1] * 100$				
LT1 - 18/40 units	201.20	198.98	0.33	0.99	1.00	-0.37	198.98	198.98	198.98	198.98
LT1 above 18/40 units	44.28	70.49	0.33	1.59	1.17	16.76	70.49	70.49	70.49	70.49
BJ KJ	245.48	269.47					269.47	269.47	269.47	269.47
LT-2 (a)	1412.32	1638.55	0.33	1.16	1.05	5.08	1721.74	1809.16	1901.01	1997.53
LT-2(b)	18.50	14.83	0.33	0.80	0.93	-7.11	13.77	12.80	12.25	11.56
LT-3	447.73	462.51	0.33	1.03	1.01	1.09	467.55	472.64	477.78	482.99
LT-4(a)	6054.12	5938.82	0.33	0.98	0.99	-0.64	5900.87	5863.17	5825.71	5788.49
LT - 4b	17.43	14.64	0.33	0.84	0.94	-5.65	13.81	13.03	13.64	13.32
LT- 4c	0.84	0.85	0.33	1.01	1.00	0.25	0.85	0.85	0.85	0.86
LT-5	320.43	311.10	0.33	0.97	0.99	-0.98	308.06	305.04	302.05	299.09
LT-6a	277.19	335.62	0.33	1.21	1.07	6.58	357.72	381.27	406.37	433.13
LT-6b	149.38	152.20	0.33	1.02	1.01	0.63	153.16	154.12	155.08	156.05
LT-7	28.25	31.73	0.33	1.12	1.04	3.95	32.99	34.29	35.65	37.06
LT Total	8971.67	9170.32	0.33	1.02	1.01	0.73	9239.99	9315.84	9398.13	9487.27
HT-1	234.01	331.99	0.33	1.42	1.12	12.36	373.04	419.16	470.99	529.23
HT-2(a)	1005.39	945.43	0.33	0.94	0.98	-2.03	926.24	907.45	889.04	871.00
HT - 2(b)	121.80	101.71	0.33	0.84	0.94	-5.83	95.78	90.19	84.93	79.98
HT-2 (C)	74.14	59.67	0.33	0.80	0.93	-6.98	55.51	51.63	48.03	44.67
HT - 3	255.87	321.58	0.33	1.26	1.08	7.92	347.03	374.51	404.16	436.15
HT-4	14.59	16.72	0.33	1.15	1.05	4.65	17.49	18.31	19.16	20.05
HT-5	21.81	26.93	0.33	1.23	1.07	7.28	28.89	31.00	33.25	35.67
HT	1727.61	1804.03	0.33	1.04	1.01	1.45	1843.98	1892.25	1949.55	2016.76
LT+HT	10699.28	10974.35	0.33	1.03	1.01	0.85	11083.97	11208.09	11347.68	11504.02

ATTESTED
NOTARY



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