

**BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION
GANDHINAGAR**



CASE NO. _____

**Determination of Aggregate Revenue Requirement
& Tariff for FY 2023-24 - Addendum to the Petition
for True Up for FY 2021-22**

**Under
GERC (Multi Year Tariff) Regulations, 2016 along with other Guidelines and
Directions issued by the GERC from time to time AND under Part VII (Section 61
to Section 64) of the Electricity Act, 2003 read with the relevant Guidelines**

Filed by:

Madhya Gujarat Vij Company Ltd.

Regd. & Corporate Office: Sardar Patel Vidyut Bhavan, Race Course, Vadodara – 390007



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Determination of Aggregate Revenue Requirement & Tariff for FY 2023-24 under GERC (Multi Year Tariff) Regulations, 2016 along with other Guidelines and Directions issued by the GERC from time to time AND under Part VII (Section 61 to Section 64) of the Electricity Act, 2003 read with the relevant Guidelines - Addendum to the Petition for True Up for FY 2021-22

AND

IN THE MATTER OF

Madhya Gujarat Vij Company Limited,
Sardar Patel Vidyut Bhavan, Race Course, Vadodara – 390007

PETITIONER

Gujarat Urja Vikas Nigam Limited
Sardar Patel Vidyut Bhavan,
Race Course,
Vadodara - 390 007

CO-PETITIONER

THE PETITIONER ABOVE NAMED RESPECTFULLY SUBMITS



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ABBREVIATIONS

ARR	Aggregate Revenue Requirement
DGVCL	Dakshin Gujarat Vij Company Limited
EA 2003	The Electricity Act 2003
FPPPA	Fuel and Power Purchase Price Adjustment
FY	Financial Year
GEB	Erstwhile Gujarat Electricity Board
GERC	Gujarat Electricity Regulatory Commission
MYT Regulations, 2016	GERC (Multi Year Tariff) Regulations, 2016
GETCO	Gujarat Energy Transmission Corporation Limited
GoG	Government of Gujarat
Gol	Government of India
GSECL	Gujarat State Electricity Corporation Limited
GUVNL	Gujarat Urja Vikas Nigam Limited
kV	Kilo Volt
kVA	Kilo Volt Ampere
kVAh	Kilo Volt Ampere Hour
kWh or "Unit"	Kilo Watt Hour
MCLR	Marginal Cost of Funds based Lending Rate
MGVCL	Madhya Gujarat Vij Company Limited
MTR	Mid-Term Review
MU	Million Units (Million kWh)
MVA	Mega Volt Ampere
MW	Mega Watt
MYT	Multi Year Tariff
O&M	Operation & Maintenance
PGVCL	Paschim Gujarat Vij Company Limited
UGVCL	Uttar Gujarat Vij Company Limited

SECTION 6. ADDENDUM TO THE EXECUTIVE SUMMARY

6.1. DETERMINATION OF ARR & TARIFF FOR FY 2023-24

6.1.1. The Aggregate Revenue Requirement for FY 2023-24 as per GERC MYT Regulations, 2016 is projected as below:

Table 1 : Projection of ARR for FY 2023-24

Sr. No.	Particulars	Rs. in Crores
		FY 2023-24 (Projected)
1	Cost of Power Purchase	8,119.57
2	Operation & Maintenance Expenses	961.52
2.1	Employee Cost	681.63
2.2	Repair & Maintenance	71.49
2.3	Administration & General Charges	104.45
2.4	RDSS Metering Opex	172.20
2.5	Extraordinary Items	-
2.6	Net Prior Period Expenses / (Income)	-
2.7	Other Expenses Capitalised	(68.25)
3	Depreciation	291.28
4	Interest & Finance Charges	50.49
5	Interest on Working Capital	-
6	Provision for Bad Debts	0.00
7	Sub-Total [1 to 6]	9,422.87
8	Return on Equity	173.51
9	Provision for Tax / Tax Paid	21.68
10	Total Expenditure (7 to 9)	9,618.05
11	Less: Non-Tariff Income	218.55
12	Aggregate Revenue Requirement (10 - 11)	9,399.50

6.1.2. MGVCL requests the Hon'ble Commission to approve Aggregate Revenue Requirement for FY 2023-24.

6.2. REVENUE (GAP) / SURPLUS FOR FY 2023-24

6.2.1. MGVCL has projected sales of 12,491.07 MU for FY 2023-24. Based on projected sales & existing retail tariff, revenue from sale of power works out to Rs. 5,813.45 Crore for FY 2023-24.

6.2.2. In the Order for True up for FY 2020-21 and Determination of Tariff for FY 2022-23 dated 31st March, 2022, the Hon'ble Commission has considered the base power purchase cost at Rs. 4.57/unit and base FPPPA at Rs. 1.90/unit. As per approved FPPPA formula, any increase in power purchase cost during the year, over and above base power purchase cost of Rs. 4.57/unit is to be recovered through FPPPA, over and above base FPPPA of Rs. 1.90/unit on quarterly basis. As per the projected ARR for FY 2023-24, the weighted average power purchase cost is worked out to Rs. 5.17/unit which is higher than the cost for FY 2022-23.

6.2.3. Thus, as there is a change in power purchase cost for FY 2023-24, accordingly there is a consequent change in base FPPPA also. Therefore, estimated revenue from FPPPA for FY 2023-24 is considered at Rs. 2.60/kWh (i.e. grossing up by approved losses), as shown

below.

Table 2 : FPPPA Computation for FY 2023-24

		Rs. in Crores
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Projected Sales (MU)	12,491.07
2	FPPPA Rate (Rs./kWh)	2.60
3	Revenue from FPPPA (Rs. Crore)	3,247.68

6.2.4. The income under the head “Other Consumer Related Income” has been considered the same as of FY 2021-22 excluding the meter rent, which has been abolished by the Hon’ble Commission. The agriculture subsidy for FY 2023-24 has been projected on the basis of the projected agricultural sales for FY 2023-24.

6.2.5. Based on the above projections, the total revenue of the company comprises of revenue from sale of power at existing tariff, FPPPA charges, other consumer related income and Agriculture Subsidy. Total revenue for FY 2023-24 is as shown below:

Table 3: Total Projected Revenue for FY 2023-24 at Existing Tariff

		Rs. in Crores
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Revenue with Existing Tariff	5,813.45
2	FPPPA Charges @ Rs. 2.6/ unit	3,247.68
3	Other Income (Consumer related)	99.42
4	Agriculture Subsidy	70.81
5	Total Revenue including subsidy (1 to 4)	9,231.35

6.2.6. The Revenue (Gap) / Surplus of Rs. 45.30 crores after true up exercise of FY 2021-22 and the past claim for uncontrollable impact of implementation of the 7th Pay revision of Rs. 23.26 Crore not claimed in FY 2020-21 is also considered for estimating Revenue (Gap) / Surplus for FY 2023-24.

6.2.7. Based on the above projections, the total revenue of the company comprises of revenue from sale of power at existing tariff, FPPPA charges, other consumer related income and Agriculture Subsidy. Total revenue for FY 2023-24 is as shown below:

Table 4: Estimated Revenue (Gap) / Surplus for FY 2023-24 at Existing Tariff

Rs. in Crores		
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Aggregate Revenue Requirement	9,399.50
2	Add: Past claim for uncontrollable impact of implementation of 7th Pay revision not claimed in FY 2020-21	23.26
2	Less: Revenue (Gap)/ Surplus from True up of FY 2021-22	45.30
3	Total Aggregate Revenue Requirement	9,377.46
4	Revenue with Existing Tariff	5,813.45
5	FPPPA Charges @ Rs. 2.6/ unit	3,247.68
6	Other Income (Consumer related)	99.42
7	Agriculture Subsidy	70.81
8	Total Revenue including subsidy (4 to 7)	9,231.35
9	Revenue (Gap) / Surplus (8 - 3)	(146.11)

6.2.8. The Hon'ble Commission is requested to approve the above-mentioned Revenue (Gap) / Surplus.

6.3. PROPOSED CHANGES IN THE TARIFF STRUCTURE FOR FY 2023-24

6.3.1. The consolidated resultant Revenue (Gap) / Surplus for all four distribution companies is Rs. (1,207) Crores which can be met through efficiency improvement measures.

6.3.2. In view of the above, the distribution companies have not proposed any increase in tariff rates or any modifications in current tariff structure.



SECTION 7. DETERMINATION OF ARR & TARIFF FOR FY 2023-24

7.1. PREAMBLE

7.1.1. This section outlines the ARR Determination of MGVCL as per the GERC MYT Regulations, 2016 for FY 2023-24 covering the following projections:

- Sales, No. of Consumers and Connected load
- Energy requirement and Energy balance
- Power purchase cost
- Bulk supply tariff
- Aggregate Revenue Requirement for FY 2023-24

7.2. PROJECTION OF ENERGY REQUIREMENT FOR FY 2023-24

7.2.1. Approach for Sales Projection

It has been observed from past experience that the historical trend method has proved to be a reasonably accurate and well accepted method for estimating the load, number of consumers and energy consumption. Considering the above, MGVCL has estimated the above for various customer categories primarily based on the CAGR trends during past years. DISCOM has worked out the growth rates considering FY 2021-22 as base year and the same has been applied on FY 2023-24. Wherever the trend has seemed unreasonable or unsustainable, the growth rates have been corrected by the company, to arrive at more realistic projections.

7.2.2. Summary of Growth & Projections

The growth rates observed in the energy sold to each consumer category has been analysed for the purpose of sales projections for FY 2023-24. The analysis of the growth rate lends insight into the behaviour of each category and hence forms the basis of forecasting the sales for each category.

7.2.3. Category-wise Units Sold

The break-up of the category wise past sales and the CAGR growth rates for different periods (5 years, 4 years, 3 years, 2 years and year on year) are provided in the tables below. The CAGR has been computed for each consumer category for the past 5-year period FY 2016-17 to FY 2021-22, the 4-year period FY 2017-18 to FY 2021-22, the 3-year period FY 2018-19 to FY 2021-22, and the 2-year period FY 2019-20 to FY 2021-22, along with the y-o-y growth rate of FY 2021-22 over FY 2020-21 and the growth rate is applied on actual sales of FY 2021-22 as summarised in the table below:

Table 5 : Historical Trend in Category-wise Units sold (MUs)

Sr. No.	Category	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Low Tension								
1	RGP	2,287	2,331	2,475	2,609	2,720	2,930	2,777
2	GLP	120	124	123	124	135	87	105
3	Non-RGP & LTMD	1,326	1,390	1,465	1,543	1,604	1,471	1,681
4	Public Water Works	220	235	286	302	314	354	379
5	Agriculture - Unmetered	472	471	475	475	474	469	468
6	Agriculture - Metered	710	695	753	857	739	911	808
7	Electric Vehicle Charging	-	-	-	-	-	-	-
Sub Total		5,134	5,245	5,577	5,910	5,987	6,222	6,218
High Tension								
1	Industrial HT	3,250	3,046	3,703	4,094	3,767	3,734	5,323
2	Railway Traction	291	39	-	-	-	-	-
3	Electric Vehicle Charging	-	-	-	-	-	-	-
Sub Total		3,541	3,085	3,703	4,094	3,767	3,734	5,323
Total		8,675	8,330	9,281	10,004	9,754	9,956	11,541

Table 6 : Category-wise CAGR of Units Sold

Sr. No.	Category	5 Year	4 Year	3 Year	2 Year	1 Year
Low Tension						
1	RGP	3.57%	2.92%	2.10%	1.05%	-5.20%
2	GLP	-3.24%	-3.84%	-5.40%	-11.72%	20.82%
3	Non-RGP & LTMD	3.87%	3.50%	2.90%	2.35%	14.23%
4	Public Water Works	10.01%	7.33%	7.84%	9.87%	7.19%
5	Agriculture - Unmetered	-0.10%	-0.37%	-0.49%	-0.61%	-0.12%
6	Agriculture - Metered	3.06%	1.76%	-1.95%	4.52%	-11.37%
7	Electric Vehicle Charging	0.00%	0.00%	0.00%	0.00%	0.00%
Sub Total		3.46%	2.76%	1.71%	1.92%	-0.06%
High Tension						
1	Industrial HT	11.81%	9.49%	9.15%	18.87%	42.56%
2	Railway Traction	-100.00%	0.00%	0.00%	0.00%	0.00%
3	Electric Vehicle Charging	0.00%	0.00%	0.00%	0.00%	0.00%
Sub Total		1.07%	4.89%	0.27%	-4.50%	-0.89%
Total		2.79%	4.56%	2.37%	-0.24%	2.07%

7.2.4. Consumer Profile

The break-up of the category-wise number of consumers and the CAGR growth rates for different periods (5 year, 4 year, 3 year, 2 year and year on year) are as follows:

Table 7 : Category-wise No. of Consumers

Sr. No.	Category	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Low Tension								
1	RGP	24,44,117	24,93,036	25,58,658	26,30,978	26,93,137	27,50,115	27,89,510
2	GLP	29,038	30,527	31,722	32,760	33,458	33,944	34,563
3	Non-RGP & LTMD	2,77,150	2,95,298	3,03,531	3,17,951	3,37,387	3,44,647	3,55,463
4	Public Water Works	17,071	18,749	20,441	22,228	23,856	25,159	26,263
5	Agriculture - Unmetered	25,856	25,745	26,145	26,015	25,818	25,732	25,482
6	Agriculture - Metered	98,641	1,15,189	1,27,508	1,39,777	1,53,055	1,64,875	1,75,959
7	Electric Vehicle Charging	-	-	-	-	-	-	-
Sub Total		28,91,873	29,78,544	30,68,005	31,69,709	32,66,711	33,44,472	34,07,240
High Tension								
1	Industrial HT	1,841	1,956	2,067	2,222	2,292	2,391	2,562
2	Railway Traction	1	1	-	-	-	-	-
3	Electric Vehicle Charging	-	-	-	-	-	-	-
Sub Total		1,842	1,957	2,067	2,222	2,292	2,391	2,562
Total		28,93,715	29,80,501	30,70,072	31,71,931	32,69,003	33,46,863	34,09,802

Table 8 : CAGR of no. of Consumers

Sr. No.	Category	5 Year	4 Year	3 Year	2 Year	1 Year
Low Tension						
1	RGP	2.27%	2.18%	1.97%	1.77%	1.43%
2	GLP	2.51%	2.17%	1.80%	1.64%	1.82%
3	Non-RGP & LTMD	3.78%	4.03%	3.79%	2.64%	3.14%
4	Public Water Works	6.97%	6.47%	5.72%	4.92%	4.39%
5	Agriculture - Unmetered	-0.21%	-0.64%	-0.69%	-0.65%	-0.97%
6	Agriculture - Metered	8.84%	8.38%	7.98%	7.22%	6.72%
7	Electric Vehicle Charging	0.00%	0.00%	0.00%	0.00%	0.00%
Sub Total		2.73%	2.66%	2.44%	2.13%	1.88%
High Tension						
1	Industrial HT	5.55%	5.51%	4.86%	5.73%	7.15%
2	Railway Traction	-100.00%	0.00%	0.00%	0.00%	0.00%
3	Electric Vehicle Charging	0.00%	0.00%	0.00%	0.00%	0.00%
Sub Total		5.36%	5.13%	4.97%	3.73%	4.32%
Total		2.95%	2.94%	2.92%	2.72%	2.38%

7.2.5. Connected Load Profile

The Break-up of the connected load profile and the CAGR growth rates for different periods (5 years, 4 year, 3 year, 2 year and year on year) thereof are as follows:

Table 9 : Category-wise Connected Load (MW/MVA)

Sr. No.	Category	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Low Tension								
1	RGP	2,267	2,421	2,573	2,733	2,878	3,018	3,154
2	GLP	76	87	93	100	105	109	86
3	Non-RGP & LTMD	1,206	1,286	1,379	1,480	1,576	1,667	1,763
4	Public Water Works	107	145	156	166	174	212	144
5	Agriculture - Unmetered	207	206	209	208	207	206	204
6	Agriculture - Metered	726	743	811	877	955	1,019	1,078
7	Electric Vehicle Charging	-	-	-	-	-	-	0
Sub Total		4,590	4,888	5,220	5,564	5,894	6,231	6,429
High Tension								
1	Industrial HT	1,321	1,229	1,400	1,533	1,643	1,796	1,805
2	Railway Traction	15	18	-	-	-	-	-
3	Electric Vehicle Charging	-	-	-	-	-	-	-
Sub Total		1,336	1,247	1,400	1,533	1,643	1,796	1,805
Total		5,926	6,135	6,620	7,097	7,537	8,027	8,234

Table 10 : CAGR of Connected Load

Sr. No.	Category	5 Year	4 Year	3 Year	2 Year	1 Year
Low Tension						
1	RGP	5.43%	5.23%	4.89%	4.70%	4.53%
2	GLP	-0.30%	-2.00%	-4.83%	-9.78%	-21.49%
3	Non-RGP & LTMD	6.51%	6.33%	5.99%	5.76%	5.72%
4	Public Water Works	-0.24%	-1.95%	-4.69%	-9.06%	-32.05%
5	Agriculture - Unmetered	-0.19%	-0.55%	-0.65%	-0.62%	-0.97%
6	Agriculture - Metered	7.74%	7.37%	7.11%	6.25%	5.77%
7	Electric Vehicle Charging	0.00%	0.00%	0.00%	0.00%	0.00%
Sub Total		5.63%	5.35%	4.93%	4.44%	3.17%
High Tension						
1	Industrial HT	7.99%	6.56%	5.60%	4.82%	0.48%
2	Railway Traction	-100.00%	0.00%	0.00%	0.00%	0.00%
3	Electric Vehicle Charging	0.00%	0.00%	0.00%	0.00%	0.00%
Sub Total		6.10%	9.55%	8.66%	8.25%	9.33%
Total		6.26%	6.95%	6.64%	6.35%	6.50%

7.2.6. Growth Projections for FY 2023-24

This section discusses in detail the basis for taking the growth projections for various categories of consumers as enumerated above. DISCOM has worked out the growth rates considering FY 2021-22 as base year and the same has been applied on FY 2021-22 to work out projections for FY 2023-24. The category wise approach adopted is outlined in the subsequent paragraphs.

RGP- Residential

The company has witnessed a growth in the units sold in the last four years in this category. The 3-year CAGR growth rate between FY 2018-19 and FY 2021-22 is 2.10%. The company expects this trend to continue in FY 2023-24.

The number of consumers added in the category has witnessed a 3-year CAGR of 1.97% between FY 2018-19 and FY 2021-22. The company expects this trend to continue going forward.

The connected load added in the category has witnessed a 3-year CAGR of 4.89% between FY 2018-19 and FY 2021-22. The company expects this trend to continue going forward.

GLP-General Lighting Purpose

The 3-year and 5-year CAGR of the units sold between FY 2018-19 & FY 2021-22 and FY 2016-17 & FY 2021-22 is -5.40% and -3.24% respectively. However, the year-on-year growth in FY 2021-22 over the previous year is 20.82% which is very high. The company does not expect such high growth rate to sustain in the future and hence has considered a 5% growth rate in FY 2023-24.

As regards the number of consumers added in the category, a 3-year CAGR of 1.80% was observed between FY 2018-19 and FY 2021-22. The company expects this trend to continue going forward.

The connected load added in the category has witnessed a 3-year CAGR of -4.83% between FY 2018-19 and FY 2021-22. It is submitted that the reduction observed in FY 2021-22 as compared to previous years was significant and hence the CAGR is showing a negative trend over various time period, however, if the year-on-year growth is seen for the past period excluding the FY 2021-22, it has been in the range of 3.68% to 7.00%. Hence, the company has considered that an escalation rate of 5% for the purpose of estimation of connected load for FY 2023-24.

Non- RGP & LTMD

For the purpose of projection of units sold a 3-year CAGR between FY 2018-19 and FY 2021-22 has been considered which is 2.90%. The company expects this trend to continue in FY 2023-24.

The number of consumers added in the category has witnessed a 3-year CAGR of 3.79%

between FY 2018-19 and FY 2021-22. The company expects this trend to continue going forward.

The connected load added in the category has witnessed a 3-year CAGR of 5.99% between FY 2018-19 and FY 2021-22. The company expects this trend to continue going forward.

Public Water Works

The 3-year CAGR for this category has showed a CAGR of 7.84%. The company does not expect a significant growth of sales in this category and hence for the purpose of projection of units, the company has considered the 3-year CAGR growth in FY 2023-24.

Similarly, for the purpose of projections, the growth rate for the number of consumers in the category has been considered as 5.72% which is the 3 year CAGR between FY 2016-17 and FY 2019-20. The company expects this trend to continue going forward.

The connected load for this category witnessed a 3-year CAGR of -4.69% during the period FY 2018-19 to FY 2021-22. It is submitted that the reduction observed in FY 2021-22 as compared to previous years was significant and hence the CAGR is showing a negative trend over various time period, however, if the year-on-year growth is seen for the past period excluding the FY 2021-22, it has been in the range of 4.67% to 21.72%. Hence, considering the vast variation, the company has deemed it appropriate to consider an escalation rate of 5% for the purpose of estimation of connected load for FY 2023-24.

Agriculture

It is submitted that MGVCL, based on Government & internal targets, is planning to release new connections under this category but only under the metered category. For the unmetered category the company has decided not to release any new connections therefore has assumed a growth rate of 0% to project the sales, no. of consumers and connected load during the control period.

Regarding the metered category, the company has planned to add new connections under this category. The year wise addition of new metered connections during the control period in the serving area of the company has been presented in the table below:

Table 11 : MGVCL – New Connections to Agriculture Consumers

Sr. No.	Agriculture Metered	No. of Connections
1	FY 2022-23	7,000
2	FY 2023-24	11,925

In order to estimate the consumption of this category, MGVCL has adopted the same methodology as followed by the Hon'ble Commission in its previous tariff orders i.e. estimating the overall consumption assuming an average consumption, calculated based on the weighted average consumption of the metered category during the past years. MGVCL has calculated the weighted average consumption based on the data available

for the last five years in order to achieve a more reasonable consumption estimate. This approach is same as adopted and approved by the Hon'ble Commission in Past Orders. Thus, based on the figures arrived from above, the total sales for FY 2023-24 has been calculated based on the average connected load per consumer for metered and unmetered categories combined worked out considering the period of 5 years i.e. FY 2017-18 to FY 2021-22 and the number of new connection to be added during each year.

Table 12 : MGVCL – Sales to agriculture consumers (metered)

Sr. No.	Agriculture Metered	No. of Connections	Average HP of Discom	HP Increase	MW Increase	Per HP Consumption	Additional Sale (MU)
1	FY 2022-23	7,000	9	60,880	45	640	39
2	FY 2023-24	11,925	9	1,03,713	77	640	66

The number of connections, unit sales and the load as estimated above have been added to the FY 2021-22 details to arrive at an estimate of the sales projections from this category for FY 2023-24.

Industrial HT

Constant variation in sales has been observed in the Industrial HT category in the last five years due to presence of open access, slowdown in the economy, etc. The year-on-year growth observed in FY 2021-22 over the previous year was significantly high at 42.56%. The company does not expect this growth to be sustainable as this growth was driven by industrial open access and captive consumers using the company power as the cost of alternative source was significantly high due to the situation existing in the country and internationally. This may not continue in the future. Hence a growth rate of 5% has been considered in FY 2023-24.

A 3-year CAGR of 4.86% was observed during the period FY 2018-19 to FY 2021-22 with regards to the increase in number of consumers. Similarly, the 5 year CAGR was 5.55% and accordingly, the Company has considered a growth rate of 5% in FY 2023-24 for estimating the number of consumers in FY 2023-24.

Similar is the case with the increase in the load growth, a 3 year CAGR of 5.60% is observed in the Industrial HT category. Considering the same, a growth rate of 5% has considered in FY 2023-24 for estimating the load.

Electric Vehicle Charging category (LT & HT)

It is submitted that the load pertaining to the EVC category is very low in most of the Discoms in the State. However, the Govt. of Gujarat has been encouraging use of Electric vehicles in the state and has notified the Gujarat State Electric Vehicle Policy - 2021. The company has considered the impact of this policy while projecting the consumption, consumers and load during FY 2023-24. The company has considered the data available regarding the EV charging stations applications received / connections released by the company upto September 2022 as well as the discom wise loads likely to come under the govt. policy. These have been used to estimate the likely sales, number of consumers and load during FY 2023-24. It is submitted that considering that the past trends are not available, the projections are based on certain assumptions and may undergo change in

reality.

The growth rate for sales, number of consumers and connected load considered for the purpose of projections is summarised below:

Table 13 : Growth Rate for Sales, No. of Consumers and Connected Load

Sr. No.	Category	Sales	Consumers	Connected Load
	Low Tension			
1	RGP	2.10%	1.97%	4.89%
2	GLP	5.00%	1.80%	5.00%
3	Non-RGP & LTMD	2.90%	3.79%	5.99%
4	Public Water Works	7.84%	5.72%	5.00%
5	Agriculture - Unmetered	0.00%	0.00%	0.00%
6	Agriculture - Metered	Based on no. of connection release		
7	Electric Vehicle Charging	Estimation based on available information		
	High Tension			
1	Industrial HT	5.00%	5.00%	5.00%
2	Railway Traction	0.00%	0.00%	0.00%
3	Electric Vehicle Charging	Estimation based on available information		

The estimated sales, number of consumers and connected load based on the above growth rates and the methodology used for projection of the agriculture metered category are summarised in the table below:

Table 14 : Projection of Sales (MUs)

Sr. No.	Category	FY 2023-24
	Low Tension	
1	RGP	2,895
2	GLP	116
3	Non-RGP & LTMD	1,780
4	Public Water Works	441
5	Agriculture - Unmetered	468
6	Agriculture - Metered	913
7	Electric Vehicle Charging	5
	Sub Total	6,618
	High Tension	
1	Industrial HT	5,869
2	Railway Traction	-
3	Electric Vehicle Charging	4
	Sub Total	5,873
	Total	12,491

Table 15 : Projection of No. of Consumers

Sr. No.	Category	FY 2023-24
	Low Tension	
1	RGP	29,00,470
2	GLP	35,820
3	Non-RGP & LTMD	3,82,899
4	Public Water Works	29,352
5	Agriculture - Unmetered	25,482
6	Agriculture - Metered	1,94,884
7	Electric Vehicle Charging	41
	Sub Total	35,68,948
	High Tension	
1	Industrial HT	2,825
2	Railway Traction	-
3	Electric Vehicle Charging	2
	Sub Total	2,827
	Total	35,71,774

Table 16 : Projection of Connected Load (MW/MVA)

Sr. No.	Category	FY 2023-24
	Low Tension	
1	RGP	3,470
2	GLP	95
3	Non-RGP & LTMD	1,980
4	Public Water Works	158
5	Agriculture - Unmetered	204
6	Agriculture - Metered	1,201
7	Electric Vehicle Charging	2
	Sub Total	7,111
	High Tension	
1	Industrial HT	1,990
2	Railway Traction	-
3	Electric Vehicle Charging	1
	Sub Total	1,991
	Total	9,102

7.3. DISTRIBUTION LOSSES

7.3.1. The company has constantly through its endeavours tried to reduce its losses in the past. These efforts shall continue and will be enhanced.

7.3.2. Though MGVCL has achieved lower distribution losses in FY 2021-22, it is not possible to maintain such low level of distribution losses due to various factors which include some of the following:

- Day by day Open access consumers are increasing and probability of increase in Open access consumers for FY 2023-24 is also high which will mainly impact HT consumption which has lower loss levels.
- Losses in Urban & JGY categories are showing an increasing trend in the FY 2022-23.
- Day time power supply to AG consumers under KSY scheme started in phased manner, which lead to increase in losses.

- More than 8 hours of power supply to Ag consumers on account of delayed/poor monsoon due to global warming effect & unpredictable rain in Gujarat has also led to predict higher losses.
- Increase in Solar Roof Top penetration in the Grid.

7.3.3. Accordingly, considering the above reasons, MGVCL has projected slightly higher distribution losses for FY 2023-24 as compared to actual losses in FY 2021-22. The projection of distribution losses for FY 2023-24 is given in the table below:

Table 17 : Distribution Loss for FY 2023-24

Particulars	FY 2023-24 (Projected)
Distribution Loss	9.00%

7.4. ENERGY BALANCE ENERGY REQUIREMENT PROJECTION FOR MGVCL

7.4.1. To arrive at the total energy requirement for MGVCL, the total sales in MUs as projected above have been grossed up with transmission and distribution losses. Further, the intra-state transmission losses are assumed as per the projection by GETCO in its ARR Petition for FY 2023-24. Moreover, the inter-state transmission losses viz. PGCIL pooled losses are assumed at same level (%) as in FY 2021-22. Further, the distribution losses are considered as per the projections above.

7.4.2. Discom has signed PPAs under Small-scale Distributed Solar Projects (SSDSP) and power generation will be available at Distribution level over and above power purchase from GUVNL. Based on the information provided above, Energy Balance of MGVCL for FY 2023-24 is as shown below:

Table 18 : Energy Balance for FY 2023-24

S.No.	Particulars	Unit	FY 2023-24 (Projected)
1	Energy Sales	MUs	12,491.07
2	Distribution Losses	MUs	1,235.38
		%	9.00%
3	Energy Requirement	MUs	13,726.45
4	Less: Power Purchase from SSDSP	MUs	14.68
5	Power Purchase required from GUVNL	MUs	13,711.77
6	Transmission Losses	MUs	512.06
		%	3.60%
7	Total Energy to be input to Transmission System	MUs	14,223.83
8	Pooled Losses in PGCIL System	MUs	230.98
9	Add: Power Purchase from SSDSP	MUs	14.68
10	Total Energy Requirement	MUs	14,469.49

7.4.3. It is submitted that the power purchase is assumed to be carried out in a consolidated manner and hence, energy requirement of all four distribution companies has been aggregated to arrive at consolidated energy requirement for all the four distribution companies is as shown below:

Table 19 : Consolidated Energy Requirement for FY 2023-24

Sr.No.	Details	DGVCL	MGVCL	PGVCL	UGVCL	MUs
						Total
1	Power Purchase from SSDSP	0.83	14.68	291.04	294.67	601.22
2	Power Purchase from GUVNL	30,913	14,455	42,066	31,947	1,19,381
3	Total Power Purchase	30,913	14,469	42,357	32,242	1,19,982

7.5. ESTIMATION OF ARR FOR FY 2023-24

7.5.1. The components for the calculation of total expenses for determination of ARR for FY 2023-24 are as follow:

- Power Purchase Cost
- Operation & Maintenance Cost
- Interest on Loan and Financial Charges
- Interest on Working Capital
- Provision for Bad Debts
- Return on Equity
- Provision for Tax

7.6. POWER PURCHASE COST FOR FY 2023-24

7.6.1. Power Purchase from Small-Scale Distributed Solar Projects

It is submitted that the State Government has notified policy for development of small scale distributed solar projects vide GR dated 6th March, 2019 referred to allowing any individuals, company or body corporate or association or body of individuals, cooperative society of individual / farmers or artificial juridical persons for setting up of solar plant of 0.5 MW to 4 MW capacity for sale of energy to the Discoms.

Therefore, Discom has signed PPAs under Small-scale Distributed Solar Projects (SSDSP) and power generation will be available at Distribution level. Based on the quantum of PPA signed, expected Commercial Operations Date (CoD) and Capacity Utilisatiob Factor (CUF), power generation from SSDSP is worked out as under:

Table 20: Power Purchase under SSDSP

Sr. No.	Details	Unit	DGVCL	MGVCL	PGVCL	UGVCL
1	MW Capacity tie up under SSDSP	MW	0.50	8.98	173.49	177.04
2	Likely CoD	mm/yy	Expected CoD - 15.11.2022	3.5 MW commissioned. 5.475 MW to be commissioned in Feb 2023	95.05 MW already commissioned. 78.44 MW likely to be commissioned in Nov. 2022	Expected CoD - 27.11.2022
3	Expected CUF	%	19%	19%	19%	19%
4	Expected Generation from SSDSP	MU	0.83	14.68	291.04	294.67
5	Power Purchase Rate	Rs. / kWh	2.83	2.83	2.83	2.83

Sr. No.	Details	Unit	DGVCL	MGVCL	PGVCL	UGVCL
6	Power Purchase Cost	Rs. Crore	0.23	4.15	82.36	83.39

7.6.2. Power Purchase Sources of GUVNL

The various sources of power purchase by GUVNL on behalf of four Distribution Companies consists of (i) Generating Plants of GSECL (ii) Central Sector Power Plants- NTPC, NPC and SSNNL (iii) Renewable sources of power – Solar, Wind, Other RE Sources (iv) IPP's and (v) Power tied up through competitive bidding etc. The power purchase sources have been differentiated into existing capacity and additional capacity envisaged during the control period.

i. Existing capacity with GUVNL

The contracted capacity tied up by GUVNL as on 1 October, 2022 is **30,166 MW**. Names of the existing power plants, operational parameters, capacity allocated to GUVNL, fixed cost along with the variable cost of generation per unit considered for the purpose of projection of power purchase cost for FY 2023-24 are shown below. For GSECL plant, the fixed cost as approved for FY 2022-23 approved by the Hon'ble Commission has been considered with necessary adjustments and the variable cost is considered as per the actual cost incurred in FY 2021-22. For the central generating stations, the fixed cost incurred in October 2022 is considered with appropriate adjustments of PAF and variable cost is considered same as the actual cost incurred in FY 2021-22. In case of IPP generating stations, the actual fixed and variable cost incurred in FY 2021-22 is considered. For the competitively bid generating stations, the actual fixed cost and variable cost for FY 2022-23 has been considered with appropriate adjustments for PAF.

Table 21: Existing Capacity Allocation with GUVNL

Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumption (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)
GSECL						
1	GSECL Gandhinagar - 5	210	9.50%	85.00%	142	3.87
2	GSECL Wanakbori - 7	210	9.50%	67.08%	148	4.07
3	GSECL Utran Expan	375	3.00%	1.00%	275	7.67
4	GSECL Dhuvaran - 7	107	4.00%	1.00%	82	8.38
5	GSECL Dhuvaran - 8	112	3.00%	1.00%	135	6.06
6	GSECL Ukai	610	9.00%	80.00%	383	3.81
7	GSECL Ukai Expan	500	6.00%	53.80%	294	3.46
8	GSECL Gandhinagar 3-4	420	9.50%	59.64%	276	4.03
9	GSECL Wanakbori 1-6	1,260	9.00%	48.08%	432	4.05
10	GSECL Sikka Expansion	500	9.00%	70.00%	493	3.78
11	GSECL Kutch Lignite	75	12.00%	68.99%	136	3.22
12	GSECL Kutch Lignite Exp unit 4	75	12.00%	80.00%	201	2.90
13	GSECL Ukai Hydro	305	0.60%	25.84%	30	-
14	GSECL Kadana Hydro	242	1.00%	15.49%	60	-
15	GSECL Dhuvaran CCPP III	376	3.00%	1.00%	153	6.66
16	GSECL BLTPS	500	11.00%	60.00%	440	2.68
17	GSECL Wanakbori - 8	800	5.25%	65.53%	585	3.47
	Sub Total	6,677				
IPP's						
1	Gujarat State Energy Generation	156	2.90%	1.00%	53	11.02



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Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumption (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)
2	Gujarat State Energy Generation Expansion	351	3.00%	1.00%	134	10.24
3	Gujarat Industries Power Co Ltd (165 MW) ¹	-	0.00%	1.00%	-	10.63
4	Gujarat Industries Power Co Ltd (SLPP)	250	10.00%	80.00%	128	1.81
5	Gujarat Mineral Development Corp.	250	11.00%	80.00%	182	1.54
6	Gujarat Industries Power Co Ltd (145 MW)	28	2.90%	1.00%	1	8.91
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	250	10.00%	80.00%	214	2.06
8	GPPC Pipavav	702	3.00%	1.00%	320	10.31
	Sub Total	1,987				
	Central Sector					
1	NPC-Tarapur 1 & 2	160	10.00%	85.00%	-	2.40
2	NPC-Tarapur 3 & 4	274	9.00%	85.00%	-	3.55
3	NPC-Kakrapar	125	8.00%	85.00%	-	2.30
4	NTPC-Vindhyachal - I	247	9.00%	85.00%	150	1.74
5	NTPC-Vindhyachal - II	252	7.05%	85.00%	134	1.62
6	NTPC-Vindhyachal - III	279	6.25%	85.00%	204	1.59
7	NTPC-Korba	380	7.04%	85.00%	195	1.46
8	NTPC-Korba -III	130	6.25%	85.00%	123	1.42
9	NTPC-Kawas	187	2.75%	1.00%	92	12.39
10	NTPC-Jhanor	237	2.75%	1.00%	147	9.03
11	NTPC-Sipat-I	577	6.25%	85.00%	515	1.54
12	NTPC-Sipat - II	286	6.25%	85.00%	197	1.60
13	NTPC-Kahlagaon I	141	9.00%	85.00%	100	2.45
14	NTPC-Vindhyachal - IV	258	6.25%	85.00%	282	1.58
15	NTPC-Mauda	460	6.25%	85.00%	593	3.35
16	NTPC-Vindhyachal - V	103	7.25%	85.00%	119	1.64
17	NTPC-Mauda II	530	6.25%	85.00%	550	3.46
18	NTPC-Solapur	24	6.25%	85.00%	29	3.67
19	NTPC-Gadarwara	333	6.25%	85.00%	484	3.14
20	NTPC-LARA	186	6.25%	85.00%	218	2.16
21	NTPC-Khargone	270	6.25%	85.00%	342	2.98
22	NTPC-Farakka - 3	58	6.25%	85.00%	60	2.80
23	NTPC-Kahalgaoon II	146	6.25%	85.00%	111	2.65
24	NTPC-Farakka - 1 & 2	255	6.78%	85.00%	146	2.83
25	NTPC-Talcher	24	7.05%	85.00%	16	1.82
26	NTPC-Darlipalli	14	6.25%	85.00%	16	1.05
27	NTPC-Unchahar - 1	63	9.00%	85.00%	44	3.29
28	NTPC-Tanda - 2	44	5.75%	85.00%	91	2.78
29	NTPC-Barah - 1	139	6.25%	85.00%	236	2.65
30	NTPC-Dadri - 1	577	9.00%	85.00%	383	3.88
31	Sardar Sarovar Narmada Nigam Ltd	232	0.70%	30.00%	-	2.05
32	Nabinagar Power Generating Co Ltd	50	6.25%	85.00%	76	2.01
	Sub Total	7,042				
	Others					
1	Captive Power	8	0.00%	83.13%	-	2.15

¹ The Hon'ble Commission has approved procurement of 130 MW power by the GUVNL from the GIPCL (Unit) – II (165 MW capacity) on "As and When required basis" at the fortnightly rate conveyed by the Respondent without any liability towards Take or Pay charges for gas non off-take under the Respondent's fuel supply agreement. Hence, while the procurement is approved, presently GUVNL has not considered any off-take from this plant. It will be despatched, if deemed necessary, during real time operations based on the need.



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Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumption (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)
Renewable						
1	Wind Farms	4,280	0.00%	22.02%	-	3.52
2	Solar	3,582	0.00%	17.14%	-	5.11
3	Small/Mini Hydel	22	0.00%	45.20%	-	3.95
4	Waste to Energy	8	0.00%	1.93%	-	3.61
Competitive Bidding						
1	Adani Power Ltd Bid 1	1,200	0.00%	80.00%	661	7.18
2	Adani Power Ltd Bid 2	1,234	0.00%	80.00%	725	7.52
3	Essar Power Gujarat Ltd	1,122	0.00%	40.00%	258	6.41
4	ACB India Ltd	200	0.00%	80.00%	121	0.66
5	Coastal Gujarat Power Co Ltd	1,805	0.00%	50.00%	555	5.27
6	MTOA	1,000	0.00%	28.33%	376	1.65
Sub Total		14,460				
Total		30,166				

ii. Capacity Addition

No additional capacity addition is envisaged during FY 2023-24.

iii. Renewable Purchase Obligation

In accordance with GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 and its First, Second and Third Amendments in 2014, 2018 and 2022 respectively, the Discoms are obligated to procure electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of its consumers including T&D losses during a year. For FY 2023-24, the Hon'ble Commission in its Third Amendment of RPO Regulations has defined RPO of 9.50% from solar, 8.40% from wind, 0.75% from other sources like Biomass, Bagasse, MSW, small/mini hydel etc. and 0.05% from hydro power.

To meet the RPO targets, GUVNL/Discoms proposes to purchase renewable power from the following sources:

- RE capacity already tied up – existing capacity
- RE capacity envisaged in FY 2023-24 – new capacity
- Local power purchase by DISCOM from SSDSP
- Wheeled energy eligible for DISCOM RPO Obligation as per Regulation/Order of Hon'ble Commission. The energy wheeled by consumers for captive/ third party consumption without claiming RE attributes and consumption of rooftop consumers as per the Regulation/ Order of the Hon'ble Commission is considered towards fulfilment of RPO of DISCOMs.

It is submitted that the quantum of the eligible wheeled energy considered by GUVNL/Discom is based on the actual data for the period April 2022 to September 2022 which has been annualised for the year.

Based in the above, the estimated purchase from new RE capacity for FY 2023-24 has been detailed as follows.

Table 22: Additional RE Capacity envisaged for FY 2023-24

Particular	Solar	Wind	Others	HPO	Total
Additional Power Purchase (MW)	2,860	-	60	162	3,082
Additional Power Purchase (MU)	4,067	-	29	348	4,444
Power Purchase Cost (Rs./kwh)	2.25	-	6.31	5.00	2.49
Power Purchase Cost (Rs. Crore)	914	-	18	174	1,106

Based on the purchase from various RE sources for FY 2023-24, status of meeting Renewable Purchase Obligation is as under:

Table 23: Procurement from RE for meeting projected RPO

Particulars	FY 2023-24				
	Solar	Wind	Others	HPO	Total
Total Power Purchase (MU)	1,19,381				
RPO Target (%)	9.50%	8.40%	0.75%	0.05%	18.70%
RE Purchase Target (MU)	11,341	10,028	895	60	22,324
RE Purchase					
RE Purchase Capacity (MU)	5,394	8,278	87	-	13,759
New Capacity - Power Purchase (MU)	4,067	-	29	348	4,444
RE Purchase under SSDSP (MU)	601	-	-	-	601
Wheeled energy eligible for DISCOM RPO Obligation as per Order of Hon'ble GERC (MU)	1,278	1,750	779	-	3,808
RE Purchase (MU)	11,341	10,028	895	348	22,612
Unmet RPO obligation (MU)	-	-	-	-	-

As per the above table, it is envisaged that the DISCOMs will be able to meet the RPO requirements specified under the Regulations for FY 2023-24.

7.6.3. Methodology for Forecasting Power Purchase Cost of GUVNL

It is submitted that in order to optimise the power purchase cost, comprehensive Merit Order Dispatch (MOD) has been worked out to determine the dispatch required from tied up generating capacities. The dispatch from individual generating stations is worked out based on the merit order of the variable cost of each generating unit as follows:

- The NPC power plants, renewable and hydro plants have been considered as must run power plants.
- During merit order despatch, at least 7% availability of each plant has been considered to take care of the peak loads and peak season requirements except for gas based generating stations whose load factor is considered 1% in view of the cost of generation which is impact due to prevailing gas prices.
- Availability of Thermal Stations has been considered at 85% / 80% as defined in regulations (CERC/GERC) and performance in previous years. Wherever required, the availability has been changed to reflect the likely scenario based on past trends or other factors.
- The basis of the Fixed & Variable Cost for existing GSECL, IPP, renewable, central sector plants and competitively bid plants is discussed in the earlier section and has been considered as the base power purchase cost.

7.6.4. Power purchase costs of GUVNL

The plant-wise dispatchable energy and costs of purchase submitted by GUVNL from various plants of GSECL, Central Generating Stations, IPPs and other sources consists of



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fixed and variable cost as shown in the table. The dispatched MUs based on the merit order stacking consists of power for supplying to the Discoms as well as for the purpose of trading (elaborated in subsequent sub-sections).

Table 24 : Power Purchase Cost for the FY 2023-24

Sr. No.	Name of the Station	Available (MU)	Dispatch (MU)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)	Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)
GSECL							
1	GSECL Gandhinagar - 5	1,419	1,419	142	3.87	549	691
2	GSECL Wanakbori - 7	1,120	1,120	148	4.07	456	604
3	GSECL Utran Expan	32	32	275	7.67	25	300
4	GSECL Dhuvaran - 7	9	9	82	8.38	8	89
5	GSECL Dhuvaran - 8	10	10	135	6.06	6	141
6	GSECL Ukai	3,901	3,901	383	3.81	1,484	1,868
7	GSECL Ukai Expan	2,221	2,221	294	3.46	768	1,062
8	GSECL Gandhinagar 3-4	1,991	1,991	276	4.03	802	1,078
9	GSECL Wanakbori 1-6	4,842	4,842	432	4.05	1,963	2,395
10	GSECL Sikka Expansion	2,798	2,798	493	3.78	1,058	1,550
11	GSECL Kutch Lignite	400	400	136	3.22	129	265
12	GSECL Kutch Lignite Exp unit 4	464	464	201	2.90	135	336
13	GSECL Ukai Hydro	688	688	30	-	-	30
14	GSECL Kadana Hydro	326	326	60	-	-	60
15	GSECL Dhuvaran CCPP III	32	32	153	6.66	21	174
16	GSECL BLTPS	2,345	2,345	440	2.68	630	1,070
17	GSECL Wanakbori - 8	4,363	4,363	585	3.47	1,514	2,098
	Sub Total	26,960	26,960	4,265		9,545	13,811
IPP's							
1	Gujarat State Energy Generation	13	13	53	11.02	15	67
2	Gujarat State Energy Generation Expansion	30	30	134	10.24	31	164
3	Gujarat Industries Power Co Ltd (165 MW)	-	-	-	10.63	-	-
4	Gujarat Industries Power Co Ltd (SLPP)	1,581	1,581	128	1.81	287	415
5	Gujarat Mineral Development Corp.	1,564	1,564	182	1.54	241	424
6	Gujarat Industries Power Co Ltd (145 MW)	2	2	1	8.91	2	3
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	1,581	1,581	214	2.06	325	539
8	GPPC Pipavav	60	60	320	10.31	62	382
9	Adani Power Ltd Bid 1	8,433	738	661	7.18	529	1,191
10	Adani Power Ltd Bid 2	8,672	759	725	7.52	571	1,295
11	Essar Power Gujarat Ltd	3,942	690	258	6.41	442	701
12	ACB India Ltd	1,405	1,405	121	0.66	92	213
13	Coastal Gujarat Power Co Ltd	7,928	5,985	555	5.27	3,154	3,709
14	MTOA	2,489	2,489	376	1.65	411	787
15	Power Exchange	7,500	7,500	-	5.20	3,899	3,899
16	Short term power purchase	4,800	4,800	-	3.07	1,472	1,472
	Sub Total	49,999	29,197	3,728		11,533	15,261
Central Sector							
1	NPC-Tarapur 1 & 2	1,075	1,075	-	2.40	258	258
2	NPC-Tarapur 3 & 4	1,862	1,862	-	3.55	661	661
3	NPC-Kakrapar	859	859	-	2.30	197	197
4	NTPC-Vindhyachal - I	1,680	1,680	150	1.74	292	442
5	NTPC-Vindhyachal - II	1,751	1,751	134	1.62	284	418
6	NTPC-Vindhyachal - III	1,955	1,955	204	1.59	310	514



Determination of ARR & Tariff for FY 2023-24 - Addendum to the Petition for True-up for FY 2021-22

Sr. No.	Name of the Station	Available (MU)	Dispatch (MU)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)	Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)
7	NTPC-Korba	2,637	2,637	195	1.46	386	581
8	NTPC-Korba -III	912	912	123	1.42	129	252
9	NTPC-Kawas	16	16	92	12.39	20	112
10	NTPC-Jhanor	20	20	147	9.03	18	165
11	NTPC-Sipat-I	4,035	4,035	515	1.54	621	1,136
12	NTPC-Sipat - II	1,999	1,999	197	1.60	320	517
13	NTPC-Kahlagaon I	958	958	100	2.45	234	334
14	NTPC-Vindhyachal - IV	1,808	1,808	282	1.58	286	568
15	NTPC-Mauda	3,222	3,222	593	3.35	1,081	1,674
16	NTPC-Vindhyachal - V	711	711	119	1.64	117	235
17	NTPC-Mauda II	3,710	3,710	550	3.46	1,284	1,834
18	NTPC-Solapur	170	170	29	3.67	62	92
19	NTPC-Gadarwara	2,334	2,334	484	3.14	734	1,218
20	NTPC-LARA	1,304	1,304	218	2.16	282	499
21	NTPC-Khargone	1,889	1,889	342	2.98	562	904
22	NTPC-Farakka - 3	402	402	60	2.80	113	173
23	NTPC-Kahalgaon II	1,022	1,022	111	2.65	271	382
24	NTPC-Farakka - 1 & 2	1,775	1,775	146	2.83	502	648
25	NTPC-Talcher	167	167	16	1.82	30	46
26	NTPC-Darlipalli	98	98	16	1.05	10	27
27	NTPC-Unchahar - 1	428	428	44	3.29	141	185
28	NTPC-Tanda - 2	310	310	91	2.78	86	177
29	NTPC-Barah - 1	975	975	236	2.65	258	494
30	NTPC-Dadri - 1	3,920	3,920	383	3.88	1,520	1,903
31	Sardar Sarovar Narmada Nigam Ltd	607	607	-	2.05	124	124
32	Nabinagar Power Generating Co Ltd	349	349	76	2.01	70	146
	Sub Total	44,961	44,961	5,650		11,267	16,917
	Others						
1	Captive Power	58	58	-	2.15	13	13
	Renewable						
1	Wind Farms	8,278	8,278	-	3.52	2,911	2,911
2	Solar	5,394	5,394	-	5.11	2,757	2,757
3	Small/Mini Hydal	86	86	-	3.95	34	34
4	Biomass	-	-	-	-	-	-
5	Waste to Energy	1	1	-	3.61	0	0
6	HPO	-	-	-	-	-	-
7	Solar (New)	4,079	4,067	-	2.25	914	914
8	Wind (New)	-	-	-	-	-	-
9	Others (New)	29	29	-	6.31	18	18
10	HPO (New)	349	348	-	5.00	174	174
11	Solar (Exchange)	-	-	-	-	-	-
12	Wind (Exchange)	-	-	-	-	-	-
13	Others (Exchange)	-	-	-	-	-	-
14	HPO (Exchange)	-	-	-	-	-	-
	Sub Total	18,274	18,262	-		6,821	6,821
	TOTAL	140,195	119,381	13,643		39,167	52,811

Transmission and Other Costs:

The total power purchase cost for the company for FY 2023-24 also consists of Transmission Charges, GUVNL charges and SLDC Fees & charges in addition to the above mentioned fixed and variable charges. The details of the same are highlighted in the following paragraphs.

A. Transmission Charges

- The transmission charges of GETCO have been considered as per the Draft Tariff Petition of GETCO for FY 2023-24.
- PGCIL charges for FY 2023-24 are considered based on average of the actual payment made in first six months of FY 2022-23.
- SLDC Fees & Charges also have been considered as per the Draft Tariff Petition of SLDC for FY 2023-24.

Based on the transmission costs of PGCIL, GETCO & SLDC, the total transmission costs to be included in the overall power purchase costs has been shown as below:

Table 25 : Transmission Charges from FY 2023-24

Sr. No.	Particulars	FY 2023-24
1	PGCIL Charges (Rs. Crore)	3,320
2	Annual Transmission charges of GETCO (Rs. Crore)	5,205
3	SLDC Charges (Rs. Crore)	41

B. GUVNL Cost

GUVNL is entrusted with the function of Bulk Power Purchase on behalf of four Distribution Companies and Bulk Supply to Distribution Companies for onwards retail supply to consumers, trading of surplus power on behalf of Distribution Companies and activities related to overall coordination between its subsidiary companies. GUVNL is procuring power on behalf of all Discoms to have an economical and optimised power purchase cost. It also undertakes the function of raising and managing the overall loan portfolio of GUVNL and its subsidiaries. GUVNL is charging Rs. 0.04 for every unit transacted. The total cost has been arrived upon after considering the total dispatchable units required to be served to all the four Discoms during FY 2023-24.

Table 26 : GUVNL Cost from FY 2023-24

Sr. No.	Particulars	FY 2023-24
1	GUVNL Cost at 4.00 Paisa per Unit (Rs.Crore)	478

7.6.5. Summary of total Power Purchase Cost of GUVNL

Fixed Cost

The table below shows the total fixed cost FY 2023-24:

Table 27: Fixed Cost for DISCOM for FY 2023-24

Fixed cost	GETCO Cost	PGCIL Charges	SLDC Charges	Total Fixed Cost	Rs. Crore	
					Discom Fixed Cost	
13,643	5,205	3,320	41	22,209	22,209	

Variable Cost

The table below shows the total variable cost for FY 2023-24:

Table 28: Variable Cost of Discoms for FY 2023-24

Variable cost (Rs. Crore)	GUVNL Cost (Rs. Crore)	Total Variable Cost (Rs. Crore)	Dispatched (MU)	Variable Cost (Rs./kWh)	DISCOM (MU)	Variable Cost (Rs. Crore)
39,167	478	39,645	1,19,381	3.32	1,19,381	39,645

7.6.6. The Net Power Purchase cost of GUVNL

The net power purchase cost is shown below:

Table 29: GUVNL Net Power Purchase Cost for FY 2023-24

Rs. Crore		
Discom Fixed cost	Discom Variable Cost	Total Power Purchase Cost
22,209	39,645	61,854

7.6.7. Bulk Supply Tariff (BST)

The objective of the differentiation of the BST between Discoms is due to the fact that the revenues from tariff for each Discom are different due to different consumer mix and therefore, it is necessary to build a mechanism in the projections to bring them to a level playing field. The basic objective of Bulk Supply Tariff is that:

- GUVNL shall purchase power from various sources in bulk and supply power in DISCOMs for onward retail supply.
- To ensure uniform retail consumer tariffs in the four DISCOMs.
- Since each of the DISCOM was incorporated based on earlier zonal system, the consumer mix and consumption mix are different for each DISCOM. Consequently, the revenue earning capability of each DISCOM is different.
- It is necessary to build a mechanism to bring them to a level playing field in their paying capacity for power purchase and it is proposed to be achieved by different Bulk Supply Tariff (BST) to each of the DISCOMs.

By undertaking the BST method, it would be possible to ensure uniform retail consumer tariffs in the four DISCOMs.

It is submitted that when the erstwhile GEB was unbundled into seven entities, it was decided by the State Government that GUVNL shall purchase the entire power requirement from GSECL, Central Generating Companies, Traders, MPPs, IPPs and any other source available to meet the demand of the DISCOMs and shall perform the activity of bulk supplier of power to all the four Distribution Companies at Bulk supply Tariff. In accordance with this arrangement related to power procurement, the Distribution Licensee has entered into bulk supply arrangement / agreement with GUVNL to meet its supply obligations.

The State Government has envisaged uniform retail supply tariff in the four Discoms (of the unbundled GEB), so that the consumers belonging to the similar categories within the State could have a similar tariff and there may not be any discrimination between the consumers which is also the objective of the Electricity Act 2003.

It is submitted that since more than 80% of the total cost incurred by DISCOM is towards Power Purchase, the same plays a major role in determining the Annual Revenue Requirement as well as Revenue (Gap) /Surplus for the DISCOM for a particular year. Since, the consumer profile and consumption profiles are different in the four Distribution Companies, the revenue earning capabilities of each of the DISCOM differs resulting in different Annual Revenue Requirement. Therefore, it is necessary to build a mechanism in the projections to bring them to a level playing field. This is proposed to

be achieved by differential Bulk Supply tariff (BST) to each of the DISCOMs which was already adopted by the Hon'ble Commission in the previous Tariff Orders. In this way, it would be possible to ensure uniform retail consumer tariffs in the four DISCOMs.

7.6.8. Allocation of Power Purchase Cost under BST mechanism

The Net Power Purchase cost worked out in the above section has been allocated for FY 2023-24 based on the methodology adopted by the Hon'ble Commission in the MYT Order dated 31st March, 2017. As per this methodology, the amount available to Discom for power purchase is computed by deducting other expenses (other than power purchase expenses) from total revenue of Discom i.e. revenue from sale of power to consumers, Non-Tariff income, Agricultural subsidy and FPPPA.

Table 30: Allocation of Power Purchase Cost

Rs. Crore					
Sr.No.	Particulars	DGVCL	MGVCL	PGVCL	UGVCL
1	Sales (MUs)	27,425	12,491	33,704	27,464
2	Revenue from Existing Tariff	13,246	5,813	13,744	9,810
3	Revenue from FPPPA @ Rs. 2.6/ unit	7,131	3,248	8,763	7,141
4	Other Income (Consumer Related)	251	99	264	174
5	Agricultural Subsidy	54	71	430	545
6	Total	20,681	9,231	23,201	17,670
7	Expense other than Power Purchase	1,355	1,258	4,746	2,607
8	Power Purchase Cost of SSDSP	0	4	82	83
9	Amount Available with Discom for Power purchase from GUVNL	19,325	7,969	18,373	14,980

Table 31: Total Revenue (Gap) / Surplus

Rs. Crore		
Sr.No.	Particulars	FY 2023-24
1	Power Purchase Cost of GUVNL	61,854
2	Aggregate Amount available for power purchase from GUVNL	60,648
3	Revenue (Gap) / Surplus	(1,207)

Table 32: Bulk Supply Tariff for FY 2023-24

Sr.No.	Details	FY 2023-24			
		DGVCL	MGVCL	PGVCL	UGVCL
1	Revenue (Gap) / Surplus (Rs. Crore)	(1207)			
2	Ratio of allocation of Revenue (Gap) / Surplus	26%	12%	35%	27%
3	Revenue (Gap)/ Surplus allocation (Rs. Crore)	(312)	(146)	(425)	(323)
4	Amount Available with Discom for Power purchase from GUVNL (Rs. Crore)	19,325	7,969	18,373	14,980
5	Power purchase cost of GUVNL (Rs. Crore)	19,638	8,115	18,798	15,303
6	Power purchase cost of SSDSP (Rs. Crore)	0	4	82	83
7	Power purchase cost of DISCOM (Rs. Crore)	19,638	8,120	18,880	15,387
8	Energy Purchase in DISCOM (MU)	30,913	14,469	42,357	32,242
9	Bulk Supply Tariff (Rs./kWh)	6.35	5.61	4.46	4.77

7.7. CAPITAL EXPENDITURE FOR FY 2023-24

7.7.1. The comparison of the scheme-wise projected capital expenditure for the FY 2023-24 is as shown below:

Table 33: Capital Expenditure Plan for FY 2023-24

Rs. in Crores

	Particulars	FY 2023-24 (Projected)
A	Distribution Schemes	
	Normal Development Scheme	50.00
	Distribution Infra & Shifting Schemes(DISS)	20.00
	Electrification of hutments	2.50
	Kutir Jyoti Scheme	1.80
	Others Harijan Basti – Petapara	0.30
	System Improvement	9.00
	Total	83.60
B	Rural Electrification Schemes	
	TASP(Wells & Petapara)	65.35
	Special Component plan	1.35
	RE Wells(OA +SPA)	90.24
	Dark Zone	
	Surya Shakti Kishan Yojana	4.50
	Total	161.44
C	Central Government Scheme - Plan	
	PSDF	-
	RDSS	-
	Total	-
D	Other New Schemes	
	Sagar Khedu	1.50
	Energy Conservation(HVDS)	4.50
	Vehicle	-
	Sardar Krushi Jyoti Yojna	6.90
	Misc Civil + Electrical Works	30.49
	Furniture	
	Total	43.39
	Capital Expenditure Total	288.43

7.7.2. The scheme-wise details for the projected capital expenditure for FY 2023-24 are as follows:

Normal Development

Under the head Normal Development Scheme, generally expenses are incurred to meet with the Supply Obligation. During the year, major shifting of electrical lines work will be taken up for projects like NHRCL, etc. Also, now as per Gamtal circular NRG/ LTMD connection situated outside Gamtal and if demand is on Agriculture land, then full cost is required to be recovered from the applicant. Hence, total Rs. 50 Crore of capital expenditure is projected.

System Improvement

The prime objectives of MGVCL's operations are to reduce Distribution and Commercial losses, to enhance revenue collection efficiency, to improve quality of power supply and to attain utmost consumer satisfaction. Keeping the above core values at the centre, the competent authority has approved the fund under the SI scheme to incur capital expenditure for various system improvement and innovative Projects such as Feeder Bifurcation work having higher ampere loading and %HT VR beyond limit, Link line from

new 66 kV S/s, providing Aerial Bunched Conductors, High voltage Distribution System (HVDS), AG-JGY crossing at theft prone area, etc. Hence, total Rs. 9 Crore of capital expenditure is projected.

High Voltage Distribution System (HVDS)

HVDS is a High Voltage Distribution System of installing smaller size of Distribution Transformers and thereby reducing LT Lines up to negligible level by converting it into HT Line. To improve voltage profile in rural area, the small capacity of Distribution Transformers are to be installed by extending 11 kV Line as near to the load as possible and Distribution Transformer of the capacity of 10, 16, 25, 63 kVA are erected and supply is released to consumer through a short length of LT Lines to provide quality power supply. Out of Rs. 4.50 Crore GOG grant, Rs. 0.50 Crore is to be utilized for energy conservation and Rs. 4.00 Crore is to be utilized under HVDS. Hence, total Rs. 4.50 Crore of capital expenditure is projected.

Distribution Infrastructure Shifting Scheme: (DISS)

Fund is booked under the scheme as per the proposal from Municipal Corporation and Nagar Palika which is essential as per the stipulation of the scheme. Based on proposal received from NP, MNP and GP, funds are booked. Hence, total Rs. 20 Crore of capital expenditure is projected.

Sardar Krushi Jyoti Yojna (SKJY)

Funds are booked as per DPR, in which 80% is GOG grant while 20% is DISCOM fund. The scope includes replacement of the conductors having completed useful life of 35 years and more with associated materials. The aim of these schemes is to provide reliable and quality power supply to consumers. Hence, total Rs. 6.90 Crore of capital expenditure is projected.

Sagarkhedu

In coastal area, since the lines are overhead and open to the atmosphere, the salinity, wind pressure, and the variations in atmospheric temperature, etc., affects the conductor life. This causes deterioration and corrosion of the conductor. According to DPR, funds have been booked as 100% grant availed from GOG. Hence, total Rs. 1.50 Crore of capital expenditure is projected.

TASP (Wells & Petapara)

This is Government of Gujarat grant funded scheme in Tribal Area and Petaparas covered under MGVCL for electrification of Agriculture wells. Target in CAPEX is projected on the basis of average cost of Line, however, actual CAPEX is booked based on actual line work done, which may increase/decrease depending upon the Geographical area, ROW Constraints for line erection work and material Cost. Accordingly, expenditure under this scheme is projected as Rs. 65.35 Crore for FY 2023-24.

Revamped Distribution Sector Scheme (RDSS)

The Government of India has approved Reformed based and Result Linked, Revamped Distribution Sector Scheme. The key objectives of the scheme are (i) to improve the quality, reliability and affordability of power supply to consumers through a financially sustainable and operationally efficient Distribution Sector; (ii) Reduce the AT&C losses



to pan-India levels of 12-15% by 2024-25; and (iii) Reduce ACS-ARR gap to zero by FY 2024-25.

The Scheme is structured into following parts -

- **Part A**
 - Component I: Metering
 - Component II: Distribution Infrastructure Works
 - Component III: Project Management
- **Part B :**
 - Training, Capacity Building and other Enabling & Supporting Activities.

For fund release pre-qualifying criteria must be mandatorily met by the DISCOM and a DISCOM needs to score a minimum of 60 marks in the Evaluation Matrix. The Results Evaluation Framework has two components. (i) Pre-qualifying Criteria; (ii) Result Evaluation Matrix.

The Scheme was sanctioned by Ministry of Power (MoP) in March 2022. MoP appointed Power Finance Corporation (PFC) as a nodal agency for financial assistance in this project. In the case of MGVCL, the implementation of this scheme has been planned in the following phases.

- **Phase – 1 (December - 2023)**
 - Smart Prepaid Meter – 15,19,508 Nos.
 - DT Meter – 56,129 Nos.
- **Phase – 2 (March – 2025)**
 - Smart Prepaid Meter – 17,80,483 Nos.

Other activities include the following:

Items	Unit	QTY TOTAL
LOSS REDUCTION		
Removal of 11kV feeders' crossings	Kms	2,500
Conversion of 11KV Overhead line to HT AB Cable	Kms	90
Feeder Reconfiguration	Kms	450
11 kV Line: New Feeder	Kms	700
Fault Passage Indicator (FPI)	No.	8,000
RMU	No.	800
Conversion of LT overhead to LT ABC		
i. On Rural areas	Kms	2,500
ii. On Urban area	Kms	600
iii. At Road Crossing-safety related	Kms	3,000
HVDS	No.	2,565
Special Design Transformers (SDT)	No.	250
Installation of NEW Transformer to improve voltage	No.	9,639
DTR AUGEMENTATION	No.	800
Armoured cable for service line	No.	10,000
Re-conductoring of feeder		
11 kV Line: Augmentation/Reconductoring	Kms	350
LT Line: Augmentation/Reconductoring	Kms	500
Billing software & ERP UPGRADATION	LS	1

Items	Unit	QTY TOTAL
1KV Under Ground cabling		
Length as PER GEO URBAN CAT FDR	Kms	200
Length as PER GEO IND/GIDC/HT EXP CAT FDR	Kms	100
Length as per JGY ALL	Kms	880
BASIC SCADA	No.	44
SYSTEM FEEDER MONITORING SYSTEM	LS	1
DTC/LT MAINTENANCE/RENOVATION	No.	700
HRC fuse	No.	10,207
Cage type Earthing	No.	14,999
Cable kit	No.	12
SMC/THERMOSTATIC LT DISTRIBUTION BOXES	No.	3,600
R/P OF PORCELIN INSULATOR BY POLYMERIC INSULATOR (PIN TYPE)	No.	1,00,000
R/P OF PORCELIN INSULATOR BY POLYMERIC INSULATOR (DISC TYPE)	No.	50,000
LT Underground cabling	Kms	100

The DPR for the project has been approved by the nodal agency and the proposed funding is as per the following table:

Table 34: Estimated project cost for RDSS project

(Rs. in Crore)

Particulars	Approved Project Cost	GoI Grant Sanctioned	Additional Incentive (GoI Grant)
Smart Prepaid Meter	2,109.09	316.36	68.38
PMA	7.91	4.75	-
Total	2,117.00	321.11	68.38
Distribution Infrastructure Work – Loss Reduction Work	1,636.56	981.94	-
PMA	24.55	14.73	-
Total	1,661.11	996.67	-
Grand Total	3,778.11	1,317.78	68.38

It is submitted that as seen from the proposed phasing of the project, certain activities have to be completed by MGVCL by December 2023 and remaining by March 2025. The project is to be implemented as per the guidelines provided by the Power Finance Corporation. Accordingly, MGVCL is in the process of implementation. Considering the same, it is proposed that MGVCL will undertake the activities envisaged under the scheme as per the finalised plan and the associated expenditure will be claimed during the truing up of the relevant years. Accordingly, the capitalisation and associated expenses towards this scheme has not been presently included in the ARR for the FY 2023-24 and will be claimed during the truing up for the year.

7.8. FUNDING OF CAPITALISATION

7.8.1. For Distribution business, schemes are of shorter duration and hence capitalization is considered same as above-mentioned Capital Expenditure. Funding of capitalisation is envisaged through various sources categorised under four headings namely: Consumer Contribution, Grants, Equity and Debt. The remaining capital expenditure after deducting consumer contribution and grants is proposed to be funded through debt and equity in the ratio of 70:30. The detailed breakup of approved and projected funding of capitalisation for FY 2023-24 is mentioned below.

Table 35: Funding Plan of Capital Expenditure

Rs. in Crores		
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Capitalisation	288.43
2	Less : Consumer Contribution	160.00
3	Less: Grants	21.20
4	Balance Capitalization	107.23
5	Debt @ 70%	75.06
6	Equity @ 30%	32.17

7.9. OPERATION & MAINTENANCE EXPENSES

7.9.1. The O&M expenses consist of Employee cost, Administration & General Expenses, Repair and Maintenance expenses, RDSS Metering Opex, Extraordinary Items, and Net Prior Period Income/Expenses.

7.9.2. Under normal circumstances, the Commission would have revised the O&M norms based on analysis of actual O&M expenses of FY 2020-21, while framing the GERC MYT Regulations for the next Control Period and allowed escalation rate of 5.72% for future years including FY 2023-24. However, due to unavoidable circumstances, there is a delay in framing the GERC MYT Regulations for the next Control Period, and hence, the applicability of the GERC MYT Regulations, 2016 has been extended to include FY 2023-24 also.

7.9.3. In the previous Tariff Order, the Hon'ble Commission has adopted the principles stated in the GERC MYT Regulations, 2016 for determining the O&M expenses for the base year (FY 2018-19) and thereafter escalating the base year expenses using the year-on-year escalation factor of 5.72% to arrive at the O&M expenses for the future years.

7.9.4. Considering the same, MGVCL has also estimated the O&M expenses for FY 2023-24 by applying escalation rate of 5.72% (as approved by the Hon'ble Commission in the GERC MYT Regulations, 2016) on the O&M expenses of FY 2022-23 as approved in Tariff Order dated 31st March, 2022.

7.9.5. **RDSS Metering Opex:** Ministry of Power, New Delhi, have announced Revamped Distribution Sector Scheme (RDSS) vide Office Memorandum dtd. 20th July, 2021 with financial outlay of Rs.3,03,758 crore and an estimated gross budgetary support (GBS) of Rs.97,631 crore from Central Government. The Scheme formulated with the aim of large scale reforms in Distribution Sector that would enable the DISCOMs to reduce

losses to make them financially sustainable and operationally efficient in a time bound manner by providing financial assistance to DISCOMs for strengthening of supply infrastructure based on meeting pre-qualifying criteria and achieving basic minimum benchmarks in reforms.

- 7.9.6. The Scheme has two parts. Part-A includes Component I: Metering (Consumer Metering & Feeder and DTR Metering), Component II: Distribution Infrastructure Works (Infrastructure works for loss reduction & Infrastructure works for Modernization & network strengthening) & Component III: Project Management. Part-B includes Training, Capacity Building and other Enabling & Supporting Activities.
- 7.9.7. Metering Component includes installation of prepaid smart meters for all consumers along with associated AMI, communicable meters for DTs & Feeders, ICT including Artificial Intelligence (AI), Machine Learning (ML), etc. based solutions for power Sector and a unified billing and collection system. Funding under this Part will be available only if the DISCOM agrees to the operation of smart meters in prepayment mode for consumers, and in accordance with the uniform approach indicated by the Central Government, with implementation in TOTEX mode. DISCOMs have to pay monthly charges as per unit rate for 1-Ph and 3-Ph meters to the agency. Smart Meter project undertaken by M/s PowerGrid wherein they will provide consultancy assignment to implement end to end project in MGVCL. The smart meters shall be procured & installed by PowerGrid. Tender for MGVCL has been floated by PowerGrid and the outcome is awaited. However, for the purpose of the present petition, the discoms have considered this cost to be Rs. 85/meter/month for 1-Phase and Rs. 110/meter/month for 3-Phase i.e. same as approved by the Hon'ble Commission for FY 2022-23. This cost will be incurred over and above the regular O&M expenses as approved by the Hon'ble Commission in the past Tariff Order dated 31st March, 2022.
- 7.9.8. Based on the smart meter release target, additional operational cost under RDSS Metering Opex for FY 2023-24 will be as shown below:

Table 36: Additional operational cost under RDSS Metering for FY 2023-24

Sr. No.	Particular	Number of meters	Annual Rate (Rs.)	Cost (Rs. Crore)
a	b	c	d	e=c*d
1	Target for single phase meters (New + Existing)	1,300,000	1,020	132.60
2	Target for Three phase meters (New + Existing)	300,000	1,320	39.60

- 7.9.9. Other expenses capitalised are also estimated by escalating the approved expenses capitalised for FY 2022-23 by using the escalation factor of 5.72%.
- 7.9.10. Accordingly, the O&M expenses projected for FY 2023-24 are as below:

Table 37: Proposed O&M Expenses for FY 2023-24

Rs. in Crores		
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Employee Cost	681.63
2	Repair & Maintenance	71.49
3	Administration & General Charges	104.45
4	RDSS Metering Opex	172.20
5	Other Expenses Capitalised	(68.25)
6	Operation & Maintenance Expenses	961.52

7.9.11. The Hon'ble Commission is requested to approve the above submission on the O&M expenses projections for FY 2023-24.

7.10. DEPRECIATION

7.10.1. MGVCCL has considered the closing Gross block of fixed assets of FY 2021-22 as the opening Gross block of fixed assets of FY 2022-23. The addition during the FY 2022-23 is considered as approved capitalisation approved by the Commission in the Order dated 31st March, 2022.

7.10.2. Accordingly, the closing balance of GFA for FY 2022-23 thus worked out which has been considered as opening balance of GFA for FY 2023-24. Addition for FY 2023-24 has been projected considering projected capitalisation during the year. Depreciation has been calculated taking into consideration the opening balance of assets in the beginning of the year and the projected capitalisation during the year. The average rate of depreciation considered is same as that worked out for FY 2021-22. The projected depreciation for FY 2023-24 is as shown below:

Table 38: Depreciation for FY 2023-24

Rs. in Crores		
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Gross Block in Beginning of the year	6,796.07
2	Additions during the Year (Net)	288.43
3	Gross Block in closing of the year	7,084.50
4	Average Gross Block of the year	6,940.29
5	Depreciation for the Year	291.28
6	Average Rate of Depreciation	4.20%

7.11. INTEREST ON LOAN

7.11.1. The interest expenditure on account of long-term loans depends on the outstanding loan, repayments, and prevailing interest rates on the outstanding loans. Further, the projected capital expenditure and the funding of the same also have a major bearing on the long-term interest expenditure.

7.11.2. The closing balance of loan portfolio for FY 2021-22 as calculated in this Petition is taken as opening balance of FY 2022-23. Addition and repayment during FY 2022-23 is considered same as approved by the Hon'ble Commission in its Tariff Order dated 31st March, 2022 to work out closing balance of FY 2022-23. Considering that the opening

loan balance for FY 2022-23 is nil and the approved depreciation is higher than the approved loan additions during the year, the closing balance of loans works out to nil for FY 2022-23 as well. Closing balance of FY 2022-23 thus work out has been considered as opening balance of normative loan for FY 2023-24.

7.11.3. The loan addition for FY 2023-24 is considered as 70% of the capitalisation excluding consumer contribution and grants which has been worked out in earlier section and repayment during the year is equivalent to the estimated depreciation for FY 2023-24. The rate of interest has been taken as the weighted average rate of interest on the actual loan portfolio for FY 2021-22 that is 4.97%.

7.11.4. Interest rate on Security deposit by consumers is taken at the RBI bank rate of 4.25%.

7.11.5. Other bank charges have been considered same as of FY 2021-22.

7.11.6. The Interest and Finance Charges for FY 2023-24 is projected as tabulated below:

Table 39: Interest & Financial Charges for FY 2023-24

Rs. in Crores		
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Opening Loans	-
2	Loan Additions during the Year	75.06
3	Repayment during the Year	75.06
4	Closing Loans	-
5	Average Loans	-
6	Weighted average rate of interest	11.88%
7	Interest on Loan	-
8	Interest in Security Deposit	48.10
9	Other Bank Charges	2.40
10	Total Interest & Financial Charges	50.49

7.12. INTEREST ON WORKING CAPITAL

7.12.1. The interest on working capital has been calculated based on the normative working formula given by the Hon'ble Commission in its GERC MYT Regulations, 2016.

7.12.2. Since the estimated Security deposit by the consumer with the utility (considered same as the actual for FY 2021-22) is more than its total normative working capital requirement therefore MGVCL is not projecting any interest on working capital for FY 2023-24.

Table 40: Interest on Working Capital for FY 2023-24

Rs. in Crores		
Sr. No.	Particulars	FY 2023-24 (Projected)
1	O & M expenses	80.13
2	Maintenance Spares	67.96
3	Receivables	769.28
4	Less : Security Deposit	1,131.67
5	Total Working Capital	(214.30)
6	Rate of Interest on Working Capital	9.50%
7	Interest on Working Capital	-

7.13. RETURN ON EQUITY

7.13.1. The closing balance of equity for FY 2021-22 as calculated in this Petition is taken as opening balance of FY 2022-23. Addition during FY 2022-23 is considered same as approved by the Hon'ble Commission in its Tariff Order dated 31st March, 2022 to work out closing balance of FY 2022-23. Closing balance of FY 2022-23 thus worked out has been considered as opening balance of equity for FY 2023-24.

7.13.2. The equity addition for FY 2023-24 has been arrived at by considering 30% of the Capitalization net of consumer contribution and grants as funded from equity as already explained above.

7.13.3. As per the GERC MYT Regulations, 2016, return @ 14% on the equity base is allowed by the Hon'ble Commission. Accordingly, MGVCL has computed the Return on Equity considering a rate of return at 14%.

7.13.4. Accordingly, the normative return on equity for FY 2023-24 is as shown below:

Table 41: Return on Equity for FY 2023-24

Rs. in Crores		
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Opening Equity Capital	1,223.25
2	Equity Additions during the Year	32.17
3	Closing Equity	1,255.42
4	Average Equity	1,239.34
5	Rate of Return on the Equity	14%
6	Return on Equity	173.51

7.14. PROVISION FOR BAD AND DOUBTFUL DEBTS

7.14.1. Provision for bad & doubtful debts is considered same as actuals of FY 2021-22. It is a very legitimate expenditure which is associated with the business risk and is a consumer related expense as MGVCL is in a distribution business. MGVCL accordingly, has projected Provision for Bad & Doubtful Debts for FY 2023-24 as follows:

Table 42: Bad and Doubtful Debts for FY 2023-24

Rs. in Crores		
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Provision for Bad Debts	0.001

7.15. TAXES

7.15.1. The Income tax for FY 2023-24 has been taken as per the actual income tax paid in FY 2021-22 as per Annual Audited Accounts.

Table 43: Taxes for FY 2023-24

		Rs. in Crores
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Provision for Tax / Tax Expenses	21.68

7.16. NON-TARIFF INCOME

7.16.1. MGCVCL has considered the Non-Tariff Income for FY 2023-24 same as actual figures of FY 2021-22, however, the amount of Rs. 9.42 Crores which was pertaining to the interest converted to grant and passed on to the consumers through the non-tariff income in FY 2021-22 has not been considered as it is not a recurring income. Accordingly, the non-tariff income projected by MGCVCL is given in the table below

Table 44: Non-Tariff Income for FY 2023-24

		Rs. in Crores
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Total Non-Tariff Income	218.55

7.17. PROJECTED ARR FOR FY 2023-24

7.17.1. The table below shows projection of Aggregate Revenue Requirement by MGCVCL for FY 2023-24.

Table 45: Projected ARR for FY 2023-24

		Rs. in Crores
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Cost of Power Purchase	8,119.57
2	Operation & Maintenance Expenses	961.52
2.1	Employee Cost	681.63
2.2	Repair & Maintenance	71.49
2.3	Administration & General Charges	104.45
2.4	RDSS Metering Opex	172.20
2.5	Extraordinary Items	-
2.6	Net Prior Period Expenses / (Income)	-
2.7	Other Expenses Capitalised	(68.25)
3	Depreciation	291.28
4	Interest & Finance Charges	50.49
5	Interest on Working Capital	-
6	Provision for Bad Debts	0.00
7	Sub-Total [1 to 6]	9,422.87
8	Return on Equity	173.51
9	Provision for Tax / Tax Paid	21.68
10	Total Expenditure (7 to 9)	9,618.05
11	Less: Non-Tariff Income	218.55
12	Aggregate Revenue Requirement (10 - 11)	9,399.50

7.17.2. MGCVCL requests the Hon'ble Commission to approve the above-mentioned Aggregate Revenue Requirement for FY 2023-24.

SECTION 8. DETERMINATION OF REVENUE (GAP) / SURPLUS FOR FY 2023-24

8.1. PREAMBLE

8.1.1. This chapter deals with the Determination of Tariff for FY 2023-24 and Revenue (Gap)/ Surplus at existing tariff for FY 2023-24.

8.2. REVENUE FOR FY 2023-24 WITH EXISTING TARIFF

8.2.1. Based on projected sales & existing retail tariff, revenue from sale of power works out to Rs. 5,813.45 Crore for FY 2023-24. The consumer category wise revenue for FY 2023-24 estimated by MGVCL is as given in the following table:

Table 46: Revenue at Existing Tariff for FY 2023-24

S.No.	Particulars	Revenue excluding FPPPA (Rs. in Crores)
A	LT Consumers	
1	RGP	1,263.84
2	GLP	48.19
3	Non-RGP & LTMD	993.47
4	Public Water Works	157.54
5	Agriculture-Unmetered	65.66
6	Agriculture-Metered	93.55
7	Electric Vehicle Charging	2.09
	LT Total (A)	2,624.34
B	HT Consumers	
8	Industrial HT	3,187.39
9	Railway Traction	-
10	Electric Vehicle Charging	1.72
	HT Total (B)	3,189.11
	Grand Total (A + B)	5,813.45

8.3. REVENUE FROM FPPPA CHARGES

8.3.1. In the Order for True up for FY 2020-21 and Determination of Tariff for FY 2022-23 dated 31st March, 2022, the Hon'ble Commission has considered the base power purchase cost at Rs. 4.57/unit and base FPPPA at Rs. 1.90/unit. As per approved FPPPA formula, any increase in power purchase cost during the year, over and above base power purchase cost of Rs. 4.57/unit is to be recovered through FPPPA, over and above base FPPPA of Rs. 1.90/unit on quarterly basis. As per the projected ARR for FY 2023-24, the weighted average power purchase cost is worked out to Rs. 5.17/unit.

8.3.2. Thus, the change in power purchase cost is Rs. 0.60/unit for FY 2023-24 and accordingly there is a change in base FPPPA also. Therefore, estimated revenue from FPPPA for FY 2023-24 is considered at Rs. 2.60/unit (i.e. grossing up by approved losses), as shown below.

Table 47: FPPA Computation for FY 2023-24

No.	Particulars	FY 2022-23	FY 2023-24
1	Fixed Cost (Rs. Crore)	13,182	13,643
2	Variable Cost (Rs. Crore)	27,956	39,338
3	GETCO Cost (Rs. Crore)	4,597	5,205
4	GUVNL Cost (Rs. Crore)	428	478
5	PGCIL Charges (Rs. Crore)	3,075	3,320
6	SLDC Charges (Rs. Crore)	25	41
7	Total Power Purchase Cost (Rs. Crore)	49,263	62,024
8	Total Energy Requirement (MU)	1,07,835	1,19,982
9	Power Purchase Cost (Rs./kWh)	4.57	5.17
10	Increase in Power Purchase Cost (Rs./KWh)		0.60
11	Additional FPPPA Charges (Grossed up by Distribution Loss) (Rs./kWh)		0.70
12	Existing FPPPA Charges (Rs./kWh)		1.90
13	Revised FPPPA Charges (Rs./kWh)		2.60

Table 48: Revenue from FPPPA Charges for the FY 2023-24

		Rs. in Crores
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Projected Sales (MU)	12,491.07
2	FPPPA Rate (Rs./kWh)	2.60
3	Revenue from FPPPA (Rs. Crore)	3,247.68

8.4. REVENUE PROJECTION FOR OTHER CONSUMER RELATED INCOME

8.4.1. The revenue from Other Consumer Related Income comprises of revenue on account of charges other than the basic charges applicable to the Consumers. These include income on account of wheeling charges, inspection charges and miscellaneous charges. MGVCL has projected its Other Consumer related Income for FY 2023-24 same as actuals of FY 2021-22 excluding the meter rent, which has been abolished by the Hon'ble Commission. The same is outlined in the table below:

Table 49: Other Consumer related Income for FY 2023-24

		Rs. in Crores
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Other Consumer related Income	99.42

8.5. AGRICULTURE SUBSIDY

8.5.1. Regarding agriculture subsidy, it is submitted that the agricultural subsidy that was received by the erstwhile GEB from the State Government will continue to be received by the four DISCOMs i.e. Rs. 1,100.00 Crores. The share of agricultural subsidy for FY 2023-24 is considered on pro-rata basis of agriculture consumption.

Table 50: Agriculture Subsidy for FY 2023-24

		Rs. in Crores
Particulars	FY 2023-24 (Projected)	
Share of Agriculture Subsidy		70.81

8.6. TOTAL REVENUE FOR FY 2023-24

8.6.1. Based on the above projections, the total revenue of the company comprises of revenue from sale of power at existing tariff, FPPPA charges, other consumer related income and Agriculture Subsidy. Total revenue for FY 2023-24 is as shown below:

Table 51: Total Revenue for FY 2023-24

Rs. in Crores		
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Revenue with Existing Tariff	5,813.45
2	FPPPA Charges @ Rs. 2.6/ unit	3,247.68
3	Other Income (Consumer related)	99.42
4	Agriculture Subsidy	70.81
5	Total Revenue including subsidy (1 to 4)	9,231.35

8.7. ESTIMATED REVENUE (GAP)/ SURPLUS FOR FY 2023-24

8.7.1. Based on the above, the estimated Revenue (Gap) / Surplus for FY 2023-24 at existing tariff is as outlined in the table below:

Table 52: Estimated Revenue (Gap)/ Surplus for FY 2023-24 at Existing Tariff

Rs. in Crores		
Sr. No.	Particulars	FY 2023-24 (Projected)
1	Aggregate Revenue Requirement	9,399.50
2	Add: Past claim for uncontrollable impact of implementation of 7th Pay revision not claimed in FY 2020-21	23.26
2	Less: Revenue (Gap)/ Surplus from True up of FY 2021-22	45.30
3	Total Aggregate Revenue Requirement	9,377.46
4	Revenue with Existing Tariff	5,813.45
5	FPPPA Charges @ Rs. 2.6/ unit	3,247.68
6	Other Income (Consumer related)	99.42
7	Agriculture Subsidy	70.81
8	Total Revenue including subsidy (4 to 7)	9,231.35
9	Revenue (Gap) / Surplus (8 - 3)	(146.11)

8.7.2. The Hon'ble Commission is requested to approve the above-mentioned Revenue (Gap) / Surplus for FY 2023-24.

8.8. PROPOSED CHANGES IN THE TARIFF STRUCTURE FOR FY 2023-24

8.8.1. The consolidated resultant Revenue (Gap) / Surplus for all four distribution companies is Rs. (1,207) Crores which would be met through efficiency improvement measures.

8.8.2. In view of the above, the distribution companies have not proposed any increase in tariff rates or any modifications in current tariff structure.



SECTION 9. AMENDED PRAYER

MGVCL respectfully prays to the Hon'ble Commission:

1. To admit this Petition seeking True up of FY 2021-22, Aggregate Revenue Requirement for FY 2023-24 and Tariff Proposal for FY 2023-24.
2. To approve the True up for FY 2021-22 and allow sharing of gains/ (losses) with the Consumers as per sharing mechanism prescribed in the MYT Regulations, 2016.
3. To allow recovery of Revenue (Gap)/ Surplus of FY 2021-22 as part of Tariff determination for FY 2023-24.
4. To approve Aggregate Revenue Requirement for FY 2023-24 as submitted by the Petitioner.
5. To consider approved True up parameters & ARR of GSECL, GETCO and SLDC while finalizing Tariff of the Petitioner.
6. Pass suitable orders for implementation of Tariff Proposal for FY 2023-24 for making it applicable from 1st April, 2023 onwards
7. To grant any other relief as the Hon'ble Commission may consider appropriate.
8. The Petitioner craves leave of the Hon'ble Commission to allow further submissions, addition and alteration to this Petition as may be necessary from time to time.
9. Pass any other Order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.

Declaration that the subject matter of the Petition has not been raise by the Petitioner before any other competent forum, and that no other competent forum is currently seized of the matter or has passed any Orders in relation thereto.

Signature of the Petitioner

Place: Vadodara

Mr. K. B. Dhebar

Date: 21 December, 2022

Additional Chief Engineer (RA&C)



BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION

GANDHINAGAR

Filing No:

Case No:

IN THE MATTER OF

Determination of Aggregate Revenue Requirement & Tariff for FY 2023-24 under GERC MYT Regulations, 2016 along with other Guidelines and Directions issued by the GERC from time to time AND under Part VII (Section 61 to Section 64) of the Electricity Act, 2003 read with the relevant Guidelines - Addendum to the Petition for True Up for FY 2021-22

AND

IN THE MATTER OF

Madhya Gujarat Vj Company Limited,
Sardar Patel Vidyut Bhavan,
Race Course, Vadodara – 390007

PETITIONER

Gujarat Urja Vikas Nigam Limited
Sardar Patel Vidyut Bhavan,
Race Course,
Vadodara - 390 007

CO-PETITIONER

THE PETITIONER ABOVE NAMED RESPECTFULLY SUBMITS



Affidavit verifying the Petition

I, Kalpesh Bipinchandra Dhebar, son of Mr. Bipinchandra Dhebar, aged 56, residing at Vadodara, do solemnly affirm and say as follows:

- I. I am the Additional Chief Engineer (RA&C) of the Madhya Gujarat Vij Company Limited (MGVCL), the Petitioner in the above matter and am duly authorized by the said the Petitioner to make this affidavit.
- II. The Statements made in the Petition application herein above are true to my knowledge and belief, which I believe them to be true.

Solemnly affirmed at Vadodara on this 21 December, 2022 that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

Mr. K. B. Dhebar

Additional Chief Engineer (RA&C)

Identified before me

Place: Vadodara

Date: 21 December, 2022



SECTION 10. ANNEXURE 1: TARIFF SCHEDULE FOR FY 2023-24

TARIFF FOR SUPPLY OF ELECTRICITY AT LOW TENSION, HIGH TENSION, AND EXTRA HIGH TENSION

Effective from 1st April, 2023

GENERAL

1. The tariff figures indicated in this tariff schedule are the tariff rates payable by the consumers of Distribution Licensees viz. DGVCL, MGVCL, PGVCL and UGVCL.
2. These tariffs are exclusive of Electricity Duty, tax on sale of electricity, taxes and other charges levied by the Government or other competent authorities from time to time which are payable by the consumers, in addition to the charges levied as per the tariff.
3. All these tariffs for power supply are applicable to only one point of supply.
4. The charges specified are on monthly basis. Distribution Licensee may decide the period of billing and adjust the tariff rate accordingly.
5. Except in cases where the supply is used for purposes for which a lower tariff is provided in the tariff schedule, the power supplied to any consumer shall be utilized only for the purpose for which supply is taken and as provided for in the tariff.
6. The various provisions of the GERC (licensee's power to recover expenditure incurred in providing supply and other miscellaneous charges) Regulations, except Meter Charges, will continue to apply.
7. Conversion of Ratings of electrical appliances and equipment from kilowatt to B.H.P. or vice versa will be done, when necessary, at the rate of 0.746 kilowatt equal to 1 B.H.P.
8. The billing of fixed charges based on contracted load or maximum demand shall be done in multiples of 0.5 (one half) Horse Power, kilo watt or kilo volt ampere (HP, kW, kVA) as the case may be. The fraction of less than 0.5 shall be rounded off to next 0.5. The billing of energy charges will be done on complete one kilo-watt-hour (kWh).
9. The Connected Load for the purpose of billing will be taken as the maximum load connected during the billing period.
10. The Fixed charges, minimum charges, demand charges, and the slabs of consumption of energy for energy charges mentioned shall not be subject to any adjustment on account of existence of any broken period within billing period arising from consumer supply being connected or disconnected any time within the duration of billing period for any reason.
11. Contract Demand shall mean the maximum kW / kVA for the supply of which licensee undertakes to provide facilities to the consumer from time to time.
12. Fuel Cost and Power Purchase Adjustment Charges shall be applicable in accordance with the Formula approved by the Gujarat Electricity Regulatory Commission from time to time.
13. Payment of penal charges for usage in excess of contract demand / load for any billing period does not entitle the consumer to draw in excess of contract demand / load as a matter of right.
14. The payment of power factor penalty does not exempt the consumer from taking steps to improve the power factor to the levels specified in the Regulations notified under the Electricity



Act, 2003 and licensee shall be entitled to take any other action deemed necessary and authorized under the Act.

15. Delayed payment charges for all consumers:

- No delayed payment charges shall be levied if the bill is paid within ten days from the date of billing (excluding date of billing).
- Delayed payment charges will be levied at the rate of 15% per annum in case of all consumers except Agricultural category for the period from the due date till the date of payment if the bill is paid after due date. Delayed payment charges will be levied at the rate of 12% per annum for the consumer governed under Rate AG from the due date till the date of payment if the bill is paid after due date.
- For Government dues, the delayed payment charges will be levied at the rate provided under the relevant Electricity Duty Act.



PART - I
SCHEDULE OF TARIFF FOR SUPPLY OF ELECTRICITY
AT LOW AND MEDIUM VOLTAGE

1. RATE: RGP

This tariff is applicable to all services in the residential premises which are not covered under 'Rate: RGP (Rural)' Category.

- Single Phase Supply – Aggregate load up to 6 kW
- Three Phase Supply – Aggregate load above 6 kW

1.1. FIXED CHARGES / MONTH:

Range of Connected Load: (Other than BPL Consumers)

(a)	Up to and including 2 kW	Rs. 15/- per month
(b)	Above 2 to 4 kW	Rs. 25/- per month
(c)	Above 4 to 6 kW	Rs. 45/- per month
(b)	Above 6 kW	Rs. 70/- per month

For BPL Household Consumers

(a)	Fixed Charges	Rs. 5/- per Month
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PLUS

1.2. ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION:

(OTHER THAN BPL CONSUMERS)

(a)	First 50 units	305 Paise per Unit
(b)	Next 50 Units	350 Paise per Unit
(c)	Next 150 Units	415 Paise per Unit
(d)	Above 250 Units	520 Paise per Unit

1.3. ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION

FOR THE CONSUMERS BELOW POVERTY LINE (BPL) **

(a)	First 50 units	150 Paise per Unit
(b)	For the remaining units	Rate as per RGP

**The consumer who wants to avail the benefit of the above tariff has to produce a copy of the Card issued by the authority concerned at the sub-division office of the Distribution Licensee. The concessional tariff is only for 50 units per month.

1.4. MINIMUM BILL

Payment of fixed charges as specified in 1.1 above



2. RATE: RGP (RURAL)

This tariff will be applicable to all services for residential premises located in areas within Gram Panchayat as defined in the Gujarat Panchayats Act.

- Single Phase Supply – Aggregate load up to 6 kW
- Three Phase Supply – Aggregate load above 6 kW

2.1. **FIXED CHARGES**

Range of Connected Load: (Other than BPL Consumers)

(a)	Up to and including 2 kW	Rs. 15/- per month
(b)	Above 2 to 4 kW	Rs. 25/- per month
(c)	Above 4 to 6 kW	Rs. 45/- per month
(b)	Above 6 kW	Rs. 70/- per month

For BPL Household Consumers

Fixed Charges	Rs. 5/- per month
---------------	-------------------

PLUS

2.2. **ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION:**

(OTHER THAN BPL CONSUMERS)

(a)	First 50 units	265 Paise per Unit
(b)	Next 50 Units	310 Paise per Unit
(c)	Next 150 units	375 Paise per Unit
(d)	Above 250 units	490 Paise per Unit

2.3. **ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION:**

FOR THE CONSUMER BELOW POVERTY LINE (BPL)**

(a)	First 50 units	150 Paise per Unit
(b)	For remaining units	Rate as per RGP (Rural)

**The consumer who wants to avail the benefit of the above tariff has to produce a copy of the Card issued by the authority concerned at the sub-division office of the Distribution Licensee. The concessional tariff is only for 50 units per month.

2.4. **MINIMUM BILL**

Payment of fixed charges as specified in 2.1 above.

Note: If the part of the residential premises is used for non-residential (commercial) purposes by the consumers located within 'Gram Panchayat' as defined in Gujarat Panchayat Act, entire consumption will be charged under this tariff.



3. RATE: GLP

This tariff is applicable to

- (i) the educational institutes and other institutions registered with the Charity Commissioner or similarly placed authority designated by the Government of India for such intended purpose;
- (ii) research and development laboratories;
- (iii) Street Light*

(a)	Fixed charges	Rs. 70/- per Installation per Month
(b)	Energy charges	390 Paise per Unit

* Maintenance of street lighting conductor provided on the pole to connect the street light is to be carried out by Distribution Licensee. The consumer utilising electricity for street lighting purpose shall arrange for renewal, maintenance and replacement of lamp, associated Fixture, connecting wire, disconnecting device, switch including time switch etc. at his cost by person authorised by him in this behalf under Rule-3 of the Indian Electricity Rules, 1956/ Rules issued by CEA under the Electricity Act, 2003.

4. RATE: NON-RGP

This tariff is applicable to the services for the premises those are not covered in any other tariff categories and having aggregate load up to and including 40 kW.

Consumer under this category may opt to be charged as per category – ‘RATE: LTMD’

4.1. **FIXED CHARGES PER MONTH**

(a)	First 10 kW of connected load	Rs. 50/- per kW
(b)	For next 30 kW of connected load	Rs. 85/- per kW

PLUS

4.2. **ENERGY CHARGES:**

(a)	For installation having contracted load up to and including 10 kW: for entire consumption during the month	435 Paise per Unit
(b)	For installation having contracted load exceeding 10 kW: for entire consumption during the month	465 Paise per Unit

4.3. **MINIMUM BILL PER INSTALLATION FOR SEASONAL CONSUMERS**

4.3.1. “Seasonal Consumers”, shall mean a consumer who takes and uses power supply for ice factory, ice candy machines, ginning and pressing factory, oil mill, rice mill, huller, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fisheries industry), tapioca industries manufacturing starch, vegetable dehydration industries.



- 4.3.2.** Any consumer, who desires to be billed for the minimum charges on annual basis shall intimate to that effect in writing at least one month before commencement of billing period about the off-season during which energy consumption, if any, shall be mainly for overhauling of the plant and machinery. The off-season period at any time shall be a full calendar month/months. The total period of the off-season so declared and observed shall be not less than three calendar months in a calendar year.
- 4.3.3.** The total minimum amount under the head “Fixed and Energy Charges” payable by the seasonal consumer satisfying the eligibility criteria under sub-clause 4.3.1 above and complying with the provision stipulated under sub-clause 4.3.2 above shall be Rs. 1800 per annum per kW of the contracted load/ sanctioned load.
- 4.3.4.** The units consumed during the off-season period shall be charged for at a flat rate of 480 Paise per unit.
- 4.3.5.** The electricity bills related to the off-season period shall not be taken into account towards the amount payable against the annual minimum bill. The amount paid by the consumer towards the electricity bills related to the seasonal period only under the heads “Fixed Charges” and “Energy Charges”, shall be taken into account while determining the amount of short-fall payable towards the annual minimum bill as specified under sub-clause 4.3.3 above.
- 4.3.6.** Seasonal consumer is required to submit to the Distribution Licensee an irrevocable Bank Guarantee from a Nationalised or Scheduled Commercial Bank equal to the difference of amount/ Bank Guarantee lying with the Distribution Licensee as Security Deposit and minimum bill calculated at the rate shown in para 4.3.3 with the Contracted Load/ Sanctioned Load of such consumer. If the Contracted Load/ Sanctioned Load is revised upward during the calendar year, the consumer shall submit a revised Bank Guarantee or additional Bank Guarantee as calculated above to the Licensee. The cost of such Bank Guarantee/s shall be borne by the consumer. It shall be the responsibility of the consumer to keep the bank guarantee/s valid at all times and to renew the bank guarantee/s at least 1 months prior to its expiry

5. RATE: LTMD

This tariff is applicable to the services for the premises those are not covered in any other tariff categories and having aggregate load above 40 kW and up to 100 kW.

This tariff shall also be applicable to consumer covered in category- ‘Rate: Non-RGP’ so opts to be charged in place of ‘Rate: Non-RGP’ tariff.

5.1. DEMAND CHARGE:

	For billing demand up to the Contract demand	
(a)	(i) For first 40 kW of billing demand	Rs. 90/-per kW per month
	(ii) Next 20 kW of billing demand	Rs. 130/-per kW per month
	(iii) Above 60 kW of billing demand	Rs. 195/- per kW per month
(b)	For billing demand in excess of the contract demand	Rs. 265/- per kW

PLUS



5.2. ENERGY CHARGE:

For the entire consumption during the month	460 Paise per Unit
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PLUS

5.3. REACTIVE ENERGY CHARGES:

For all the reactive units (kVARh) during the month	10 Paise per kVARh
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5.4. BILLING DEMAND

The billing demand shall be highest of the following:

- Eighty-five percent of the contract demand
- Actual maximum demand registered during the month
- 6 kW

5.5. MINIMUM BILL

Payment of demand charges every month based on the billing demand.

5.6. SEASONAL CONSUMERS TAKING LTMD SUPPLY:

5.6.1 The expression, "Seasonal Consumer", shall mean a consumer who takes and uses power supply for ice factory, ice-candy machines, ginning and pressing factory, oil mill, rice mill, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fishery industry), tapioca industries manufacturing starch, pumping load or irrigation, white coal manufacturers, vegetable dehydration industries.

5.6.2 Any consumer, who desires to be billed for the minimum charges on annual basis shall intimate to that effect in writing at least one month before commencement of billing period about the off-season during which energy consumption, if any, shall be mainly for overhauling of the plant and machinery. The off-season period at any time shall be a full calendar month/months. The total period of the off-season so declared and observed shall be not less than three calendar months in a calendar year.

5.6.3 The total minimum amount under the head "Demand and Energy Charges" payable by a seasonal consumer satisfying the eligibility criteria under sub-clause 5.6.1 above and complying with provisions stipulated under sub-clause 5.6.2 above shall be Rs. 2970 per annum per kW of the billing demand.

5.6.4 The billing demand shall be the highest of the following:

- The highest of the actual maximum demand registered during the calendar year.
- Eighty-five percent of the arithmetic average of contract demand during the year.
- 6 kW



5.6.5 Units consumed during the off-season period shall be charged for at the flat rate of 470 Paise per unit.

5.6.6 Seasonal consumer is required to submit to the Distribution Licensee an irrevocable Bank Guarantee from a Nationalised or Scheduled Commercial Bank equal to the difference of amount/ Bank Guarantee lying with the Licensee as Security Deposit and minimum bill calculated at the rate shown in para 5.6.3 for the higher of Contract Demand or Billing Demand. If the Contract Demand is revised upward during the calendar year, the consumer shall submit a revised Bank Guarantee or additional Bank Guarantee as calculated above to the Licensee. The cost of such Bank Guarantee/s shall be borne by the consumer. It shall be the responsibility of the consumer to keep the bank guarantee/s valid at all times and to renew the bank guarantee/s at least 1 months prior to its expiry.

6. RATE: NON-RGP NIGHT

This tariff is applicable for aggregate load up to 40 kW and using electricity **exclusively during night hours** from 10:00 PM to 06:00 AM next day. (The supply hours shall be regulated through time switch to be provided by the consumer at his cost.)

6.1. FIXED CHARGES PER MONTH:

50% of the Fixed charges specified in Rate Non-RGP above
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PLUS

6.2. ENERGY CHARGES:

For the entire consumption during the month	260 Paise per unit
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NOTE:

1. 15% of the contracted load can be availed beyond the night hours prescribed as per para 6 above.
2. 10% of total units consumed during the billing period can be availed beyond the night hours prescribed as per para 6 above.
3. In case the consumer failed to observe condition no. 1 above during any of the billing month, then fixed charge during the relevant billing month shall be billed as per Non-RGP category fixed charge rates given in para 4.1 of this schedule.
4. In case the consumer failed to observe condition no. 2 above during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per Non-RGP category energy charge rates given in para 4.2 of this schedule.
5. In case the consumer failed to observe above condition no. 1 and 2 both during any of the billing month, then fixed charge and entire energy consumption during the relevant billing month shall be billed as per Non-RGP category fixed charge and energy charge rates given in para 4.1 and 4.2 respectively, of this schedule.
6. This tariff shall be applicable if the consumer so opts to be charged in place of Non-RGP tariff by using electricity exclusively during night hours as above.



7. This option can be exercised to shift from NON-RGP tariff category to NON-RGP NIGHT tariff or from NON-RGP NIGHT tariff category to NON-RGP tariff four times in a calendar year by giving not less than 15 days' advance notice in writing before commencement of billing period.

7. RATE: LTMD-NIGHT

This tariff is applicable for aggregate load above 40 kW and using electricity **exclusively during night hours** from 10.00 PM to 06.00 AM next day. (The supply hours shall be regulated through time switch to be provided by the consumer at his cost.)

7.1 DEMAND CHARGES PER MONTH:

50% of the Demand charges specified in Rate LTMD above

PLUS

7.2. ENERGY CHARGES:

For entire consumption during the month	260 Paise per unit
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PLUS

7.3. REACTIVE ENERGY CHARGES:

For all reactive units (kVARh) drawn during the month	10 Paise per kVARh
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NOTE:

- 15% of the contracted demand can be availed beyond the night hours prescribed as per para 7 above.
- 10% of total units consumed during the billing period can be availed beyond the night hours prescribed as per para 7 above.
- In case the consumer failed to observe condition no. 1 above during any of the billing month, then demand charge during the relevant billing month shall be billed as per LTMD category demand charge rates given in para 5.1 of this schedule.
- In case the consumer failed to observe condition no. 2 above during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per LTMD category energy charge rates given in para 5.2 of this schedule.
- In case the consumer failed to observe above condition no. 1 and 2 both during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per LTMD category demand charge and energy charge rates given in para 5.1 and 5.2 respectively, of this schedule.
- This tariff shall be applicable if the consumer so opts to be charged in place of LTMD tariff by using electricity exclusively during night hours as above.
- This option can be exercised to shift from LTMD tariff category to LTMD NIGHT tariff or from LTMD- NIGHT tariff category to LTMD tariff four times in a calendar year by giving not less than 15 days' advance notice in writing before commencement of billing period.



8. RATE: LTP- LIFT IRRIGATION

Applicable for supply of electricity to Low Tension Agricultural consumers contracting load up to 125 HP requiring continuous (twenty-four hours) power supply for lifting water from surface water sources such as canal, river, & dam and supplying water directly to the fields of farmers for agricultural irrigation only.

(a)	Fixed charges per month	Rs. 20/- per HP
PLUS		
(b)	Energy charges per month; For entire consumption during the month	80 Paise per Unit

9. RATE: WWSP

This tariff shall be applicable to services used for water works and sewerage pumping purposes.

9.1 **Type I-** Water works and sewerage pumps operated by other than local authority

(a)	Fixed charges per month	Rs. 25/- per HP
PLUS		
(b)	Energy charges per month; For entire consumption during the month	430 Paise per Unit

9.2 **Type II-** Water Works and sewerage pumps operated by local authority such as Municipal Corporation, Gujarat Water Supply & Sewerage Board located outside Gram Panchayat Area will also attract this tariff:

(a)	Fixed charges per month	Rs. 20/- per HP
PLUS		
(b)	Energy charges per month; For entire consumption during the month	410 Paise per Unit

9.3 **Type III-** Water Works and sewerage pumps operated by Municipalities/ Nagarpalikas/ and Gram Panchayats or Gujarat Water Supply & Sewerage Board for its installations located in Gram Panchayats:

Energy charges per month; For entire consumption during the month	320 Paise /Unit
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9.4 **TIME OF USE DISCOUNT:**

Applicable to all the water works consumers having connected load of 50 HP and above for the energy consumption during the Off-Peak Load Hours of the Day.

For energy consumption during the off-peak period, viz, 1100 Hrs to 1800 Hrs	40 Paise per Unit
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For energy consumption during night hours, viz, 2200 Hrs to 0600 Hrs next day	85 Paise per Unit
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10. RATE: AG

This tariff is applicable to services used for irrigation purposes only excluding installations covered under LTP- Lift Irrigation category.

10.1 The rates for following group are as under:

10.1.1 HP BASED TARIFF

For entire contracted load	Rs. 200 per HP per month
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ALTERNATIVELY

10.1.2 METERED TARIFF

Fixed Charges	Rs. 20 per HP per month
Energy Charges: For entire consumption during the month	60 Paise per Unit

10.1.3 TATKAL SCHEME

Fixed Charges	Rs. 20 per HP per month
Energy Charges: For entire consumption during the month	80 Paise per Unit

NOTE: The consumers under Tatkal scheme shall be eligible for normal metered tariff as above, on completion of five years period from the date of commencement of supply.

10.2 No machinery other than pump water for irrigation (and a single bulb or CFL up to 40 watts) will be permitted under this tariff. Any other machinery connected in the installation governed under this tariff shall be charged separately at appropriate tariff for which consumers shall have to take separate connection.

10.3 Agricultural consumers who desire to supply water to brick manufacturing units shall have to pay Rs. 100/HP per annum subject to minimum of Rs. 2000/- per year for each brick Mfg. Unit to which water is supplied in addition to existing rate of HP based / metered agricultural tariff.

10.4 Such Agricultural consumers shall have to pay the above charges for a full financial year irrespective of whether they supply water to the brick manufacturing unit for full or part of the Financial Year.

Agricultural consumers shall have to declare their intention for supply of the water to such brick manufacturing units in advance and pay charges accordingly before commencement of the financial year (i.e. in March every year).



11. RATE- TMP

This tariff is applicable to services of electricity supply for temporary period at the low voltage. A consumer not taking supply on regular basis under a proper agreement shall be deemed to be taking supply for temporary period.

11.1 FIXED CHARGE

Fixed Charge per Installation	Rs. 15 per kW per Day
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11.2 ENERGY CHARGE

A flat rate of	465 Paise per Unit
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Note: Payment of bills is to be made within seven days from the date of issue of the bill. Supply would be disconnected for non-payment of dues on 24 hours' notice.

12. RATE- LT ELECTRIC VEHICLE (EV) CHARGING STATIONS

This tariff is applicable to consumers who use electricity **exclusively** for Electric Vehicle Charging installations.

Other consumers can use their regular electricity supply for charging electric vehicle under same regular category i.e. RGP, RGP (RURAL), GLP, LTMD, NON-RGP NIGHT, LTMD-NIGHT, etc. as the case may be.

12.1 FIXED CHARGES

Fixed Charge	Rs. 25 per Installation per Month
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12.2 ENERGY CHARGES: FOR THE ENTIRE MONTHLY CONSUMPTION

Energy Charge	410 Paise per Unit
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PART - II

TARIFFS FOR SUPPLY OF ELECTRICITY AT HIGH TENSION

(3.3 KV AND ABOVE, 3-PHASE 50 HERTZ), AND EXTRA HIGH TENSION

The following tariffs are available for supply at high tension for large power services for contract demand not less than 100 kVA

13. RATE- HTP-1

This tariff will be applicable for supply of electricity to HT consumers contracted for 100 kVA and above for regular power supply and requiring the power supply for the purposes not specified in any other HT Categories.

13.1 DEMAND CHARGES:

13.1.1 For billing demand up to contract demand

(a)	For the first 500 kVA of billing demand	Rs. 150/- per kVA per month
(b)	For next 500 kVA of billing demand	Rs. 260/- per kVA per month
(c)	For billing demand in excess of 1000 kVA	Rs. 475/- per kVA per month

13.1.2 For billing Demand in Excess of Contract Demand

For billing demand in excess over the contract demand	Rs. 555 per kVA per month
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PLUS

13.2 ENERGY CHARGES

For entire consumption during the month		
(a)	Up to 500 kVA of billing demand	400 Paise per unit
(b)	For billing demand above 500 kVA and up to 2500 kVA	420 Paise per Unit
(c)	For billing demand above 2500 kVA	430 Paise per Unit

PLUS

13.3 TIME OF USE CHARGES

For energy consumption during the two peak periods, viz, 0700 Hrs to 1100 Hrs and 1800 Hrs. to 2200 Hrs.		
(a)	For Billing Demand up to 500 kVA	45 Paise per unit
(b)	For billing demand above 500 kVA	85 Paise per Unit

13.4 BILLING DEMAND

The billing demand shall be the highest of the following:

- Actual maximum demand established during the month
- Eighty-five percent of the contract demand
- One hundred kVA

13.5 MINIMUM BILLS:

Payment of "demand charges" based on kVA of billing demand.



13.6 POWER FACTOR ADJUSTMENT CHARGES:

13.6.1 Penalty for poor Power Factor:

- a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head “Energy Charges”, arrived at using tariff as per para 13.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.
- b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 13.2 of this schedule, will be charged.

13.6.2 Power Factor Rebate

If the power factor of the consumer’s installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 13.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

13.7 MAXIMUM DEMAND AND ITS MEASUREMENT:

The maximum demand in kW or kVA, as the case may be, shall mean an average kW/kVA supplied during consecutive 30/15 minutes or if consumer is having parallel operation with the grid and has opted for 3 minutes, period of maximum use where such meter with the features of reading the maximum demand in kW/kVA directly, have been provided.

13.8 CONTRACT DEMAND:

The contract demand shall mean the maximum kW/kVA for the supply, of which the supplier undertakes to provide facilities from time to time.

13.9 REBATE FOR SUPPLY AT EHV:

On Energy charges:		Rebate @
(a)	If supply is availed at 33/66 kV	0.75%
(b)	If supply is availed at 132 kV and above	1.25%

13.10 CONCESSION FOR USE OF ELECTRICITY DURING NIGHT HOURS:

For the consumer eligible for using supply at any time during 24 hours, entire consumption shall be billed at the energy charges specified above. However, the energy consumed during night hours of 10.00 PM to 06.00 AM next morning shall be eligible for concession at the rate of 43 Paise per unit.

13.11 SEASONAL CONSUMERS TAKING HT SUPPLY:

13.11.1 The expression, “Seasonal Consumer”, shall mean a consumer who takes and uses power supply for ice factory, ice-candy machines, ginning and pressing factory, oil mill, rice mill, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fishery industry), tapioca industries manufacturing starch, pumping load or irrigation, white coal manufacturers, vegetable dehydration industries.



- 13.11.2 Any consumer, who desires to be billed for the minimum charges on annual basis shall intimate to that effect in writing at least one month before commencement of billing period about the off-season during which energy consumption, if any, shall be mainly for overhauling of the plant and machinery. The off-season period at any time shall be a full calendar month/months. The total period of the off-season so declared and observed shall be not less than three calendar months in a calendar year.
- 13.11.3 The total minimum amount under the head “Demand and Energy Charges” payable by a seasonal consumer satisfying the eligibility criteria under sub-clause 13.11.1 above and complying with provisions stipulated under sub-clause 13.11.2 above shall be Rs. 4550 per annum per kVA of the billing demand.
- 13.11.4 The billing demand shall be the highest of the following:
- The highest of the actual maximum demand registered during the calendar year.
 - Eighty-five percent of the arithmetic average of contract demand during the year.
 - One hundred kVA
- 13.11.5 Units consumed during the off-season period shall be charged for at the flat rate of 430 Paise per unit.
- 13.11.6 Electricity Bills paid during off-season period shall not be taken into account towards the amount payable against the annual minimum bill. The amount paid by the consumer towards the electricity bills for seasonal period only under the heads “Demand Charges” and “Energy Charges” shall be taken into account while determining the amount payable towards the annual minimum bill.
- 13.11.7 Seasonal consumer is required to submit to the Distribution Licensee an irrevocable Bank Guarantee from a Nationalised or Scheduled Commercial Bank equal to the difference of amount/ Bank Guarantee lying with the Licensee as Security Deposit and minimum bill calculated at the rate shown in para 13.11.3 for the higher of Contract Demand or Billing Demand. If the Contract Demand is revised upward during the calendar year, the consumer shall submit a revised Bank Guarantee or additional Bank Guarantee as calculated above to the Licensee. The cost of such Bank Guarantee/s shall be borne by the consumer. It shall be the responsibility of the consumer to keep the bank guarantee/s valid at all times and to renew the bank guarantee/s at least 1 months prior to its expiry.

14. RATE- HTP-II

Applicability: This tariff shall be applicable for supply of energy to HT consumers contracting for 100 kVA and above, requiring power supply for Water Works and Sewerage pumping stations run by Local Authorities and GW & SB. GIDC Water Works.

14.1 DEMAND CHARGES:

14.1.1 For billing demand up to contract demand

(a)	For the first 500 kVA of billing demand	Rs. 115/- per kVA per month
(b)	For next 500 kVA of billing demand	Rs. 225/- per kVA per month
(c)	For billing demand in excess of 1000 kVA	Rs. 290/- per kVA per month



14.1.2 For billing demand in excess of contract demand

For billing demand in excess of contract demand	Rs. 360 per kVA per month
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PLUS

14.2 ENERGY CHARGES:

For entire consumption during the month		
(a)	Up to 500 kVA of billing demand	435 Paise per unit
(b)	For billing demand above 500 kVA and up to 2500 kVA	455 Paise per Unit
(c)	For billing demand above 2500 kVA	465 Paise per Unit

PLUS

14.3 TIME OF USE CHARGES:

For energy consumption during the two peak periods, viz, 0700 Hrs to 1100 Hrs and 1800 Hrs. to 2200 Hrs.		
(a)	For Billing Demand up to 500 kVA	45 Paise per unit
(b)	For billing demand above 500 kVA	85 Paise per Unit

14.4 Billing Demand

14.5 Minimum Bill

14.6 Maximum demand and its measurement

14.7 Contract Demand

14.8 Rebate for supply at EHV

14.9 Concession for use of electricity during night hours

} Same as HTP-I Tariff

14.10 POWER FACTOR ADJUSTMENT CHARGES

14.10.1 Penalty for poor Power Factor:

- a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head “Energy Charges”, arrived at using tariff as per para 14.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.
- b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 14.2 of this schedule, will be charged.



14.10.2 Power Factor Rebate:

If the power factor of the consumer's installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head "Energy Charges", arrived at using tariff as per para 14.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

15. RATE- HTP-III

This tariff shall be applicable to a consumer taking supply of electricity at high voltage, contracting for not less than 100 kVA for temporary period. A consumer not taking supply on regular basis under a proper agreement shall be deemed to be taking supply for temporary period.

15.1 DEMAND CHARGES:

For billing demand up to contract demand	Rs. 18/- per kVA per day
For billing demand in excess of contract demand	Rs. 20/- per kVA per day

15.2 ENERGY CHARGES:

For all units consumed during the month	660 Paise/Unit
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PLUS

15.3 TIME OF USE CHARGES:

Additional charge for energy consumption during two peak periods, viz, 0700 Hrs. to 1100 Hrs. and 1800 Hrs. to 2200 Hrs.	85 Paise per Unit
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15.4 Billing Demand

15.5 Minimum bill

15.6 Maximum demand and its measurement

15.7 Contract Demand

15.8 Rebate for supply at EHV

} Same as HTP-I Tariff

15.9 POWER FACTOR ADJUSTMENT CHARGES

15.9.1 Penalty for poor Power Factor:

- The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Energy Charges", arrived at using tariff as per para 15.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.



- b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 15.2 of this schedule, will be charged.

15.9.2 Power Factor Rebate:

If the power factor of the consumer’s installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 15.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

16. RATE- HTP-IV

This tariff shall be applicable for supply of electricity to HT consumers opting to use electricity exclusively during night hours from 10.00 PM to 06.00 AM next day and contracted for regular power supply of 100 kVA and above.

16.1 DEMAND CHARGES:

1/3 rd of the Fixed Charges specified in Rate HTP-I above
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PLUS

16.2 ENERGY CHARGES:

For all units consumed during the month	225 Paise/Unit
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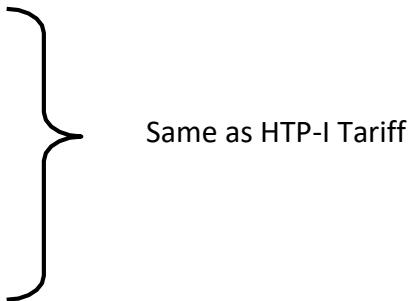
16.3 Billing Demand

16.4 Minimum Bill

16.5 Maximum demand and its measurement

16.6 Contract Demand

16.7 Rebate for supply at EHV



16.8 POWER FACTOR ADJUSTMENT CHARGES:

16.8.1 Penalty for poor Power Factor:

- a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head “Energy Charges”, arrived at using tariff as per para 16.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.
- b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 16.2 of this schedule, will be charged.



16.8.2 Power Factor Rebate:

If the power factor of the consumer’s installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 16.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

NOTE:

1. 15% of the contracted demand can be availed beyond the night hours prescribed as per para 16 above.
2. 10% of total units consumed during the billing period can be availed beyond the night hours prescribed as per para 16 above.
3. In case the consumer failed to observe condition no. 1 above during any of the billing month, then demand charge during the relevant billing month shall be billed as per HTP-I category demand charge rates given in para 13.1 of this schedule.
4. In case the consumer failed to observe condition no. 2 above during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per HTP-I category energy charge rates given in para 13.2 of this schedule.
5. In case the consumer failed to observe above condition no. 1 and 2 both during any of the billing month, then demand charge and entire energy consumption during the relevant billing month shall be billed as per HTP-I category demand charge and energy charge rates given in para 13.1 and 13.2 respectively, of this schedule.
6. This tariff shall be applicable if the consumer so opts to be charged in place of HTP-I tariff by using electricity exclusively during night hours as above.
7. This option can be exercised to shift from HTP-I tariff category to HTP-IV tariff or from HTP-IV tariff category to HTP-I tariff four times in a calendar year by giving not less than 15 days’ advance notice in writing before commencement of billing period

17. RATE- HTP-V

HT - Agricultural (for HT Lift Irrigation scheme only)

This tariff shall be applicable for supply of electricity to High Tension Agricultural consumers contracting for 100 kVA and above, requiring power supply for lifting water from surface water sources such as canal, river and dam, and supplying water directly to the fields of farmers for agricultural irrigation only.

17.1 DEMAND CHARGES:

Demand Charges Rs. 25 per kVA per month

PLUS

17.2 ENERGY CHARGES:

For all units consumed during the month	80 Paise/Unit
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|--|---|--------------------------|
| <p>17.3 Billing Demand</p> <p>17.4 Minimum bill</p> <p>17.5 Maximum demand and its measurement</p> <p>17.6 Contract Demand</p> <p>17.7 Rebate for supply at EHV</p> | } | Same as per HTP-I Tariff |
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17.8 POWER FACTOR ADJUSTMENT CHARGES

17.8.1 Penalty for poor power factor

- a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head “Energy Charges”, arrived at using tariff as per para 17.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.
- b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 17.2 of this schedule, will be charged

17.8.2 Power Factor Rebate

If the power factor of the consumer’s installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 17.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

18. RATE- RAILWAY TRACTION

This tariff is applicable for power supply to Railway Traction at 132 kV/66 kV.

18.1 DEMAND CHARGES:

(a)	For billing demand up to the contract demand	Rs. 180 per kVA per month
(b)	For billing demand in excess of contract demand	Rs. 425 per kVA per month

NOTE: In case of the load transfer for traction supply due to non-availability of power supply at preceding or succeeding point of supply or maintenance at Discom’s level, excess demand over the contract demand shall be charged at normal rate at appropriate point of supply.

Normal Demand Charges will also apply in case of bunching of trains. However, Discoms shall charge excess demand charges while raising the bills and Railways have to give convincing details and documentary proof of bunching of trains if they want to be charged at the normal demand charges. If satisfactory proof of bunching of trains is provided, Discom shall consider that occasion for normal demand charges, otherwise excess demand charges will be applicable specified as above at 18.1 (b).



PLUS

18.2 ENERGY CHARGES:

For all the units consumed during the month	500 Paise per Unit
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18.3 Billing Demand:

18.4 Minimum Bill

18.5 Maximum demand and its measurement

18.6 Contract Demand

18.7 Rebate for supply at EHV

} Same as HTP-I Tariff

18.8 POWER FACTOR ADJUSTMENT CHARGES

18.8.1 Penalty for poor Power Factor:

- a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head “Energy Charges”, arrived at using tariff as per para 18.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.
- b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 18.2 of this schedule, will be charged.

18.8.2 Power Factor Rebate:

If the power factor of the consumer’s installation in any month is above 95%, the consumer will be entitled to a rebate at the rate of 0.5% (half percent) in excess of 95% power factor on the total amount of electricity bill for that month under the head “Energy Charges”, arrived at using tariff as per para 18.2 of this schedule, for every 1% rise or part thereof in the average power factor during the month above 95%.

19. RATE-HT ELECTRIC VEHICLE (EV) CHARGING STATIONS

This tariff is applicable to consumers who use electricity **exclusively** for Electric Vehicle Charging installations.

Other consumers can use their regular electricity supply for charging electric vehicle under same regular category i.e. HTP-I, HTP-II, HTP-III, HTP-IV, HTP-V, RAILWAY TRACTION as the case may be.

19.1 DEMAND CHARGES:

(a)	For billing demand up to the contract demand	Rs. 25/- per kVA per month
(b)	For billing demand in excess of contract demand	Rs. 50/- per kVA per month



PLUS

19.2 ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION

ENERGY CHARGE	400 Paise per Unit
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19.3 BILLING DEMAND

The billing demand shall be the highest of the following:

- a) Actual maximum demand established during the month
- b) Eighty-five percent of the contract demand
- c) One hundred kVA



SECTION 11. ANNEXURE 2: TARIFF FILING FORMATS