

**BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION  
GANDHINAGAR**



**CASE NO. 1912/2020**

**Determination of Aggregate Revenue Requirement  
and  
Tariff of 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:-**

**Dakshin Gujarat Vij Company Ltd.**

**Corp. Office:** Urja Sadan, Nana Varachha Road, Kapodara Char Rasta, Surat –395006.

**BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION  
GANDHINAGAR**



**Filing No:**

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**IN THE MATTER OF**

Filing of the Petition for determination of ARR & Tariff 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

AND

**IN THE MATTER OF**

Dakshin Gujarat Vij Company Limited,  
“Urja Sadan”, Nana Varachha Road,  
Kapodara Char Rasta,  
Surat - 395006.

**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**

1.	ARR	Aggregate Revenue Requirement
2.	DGVCL	Dakshin Gujarat Vij Company Limited
3.	FPPPA	Fuel and Power Purchase Price Adjustment
4.	FY	Financial Year
5.	GEB	Erstwhile Gujarat Electricity Board
6.	GERC	Gujarat Electricity Regulatory Commission
7.	GERC MYT Regulations, 2016	GERC (Multi Year Tariff) Regulations, 2016
8.	GETCO	Gujarat Energy Transmission Corporation Limited
9.	GoG	Government of Gujarat
10.	GoI	Government of India
11.	GSECL	Gujarat State Electricity Corporation Limited
12.	GUVNL	Gujarat Urja Vikas Nigam Limited
13.	kV	Kilo Volt
14.	kVA	Kilo Volt Ampere
15.	kVAh	Kilo Volt Ampere Hour
16.	kWh	Kilo Watt Hour
17.	MCLR	Marginal Cost of Funds based Lending Rate
18.	MGVCL	Madhya Gujarat Vij Company Limited
19.	MTR	Mid-Term Review
20.	MU	Million Units (Million kWh)
21.	MVA	Mega Volt Ampere
22.	MW	Mega Watt
23.	MYT	Multi Year Tariff
24.	MYT Control Period	FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 & FY 2020-21
25.	O&M	Operation & Maintenance
26.	PGVCL	Paschim Gujarat Vij Company Limited
27.	UGVCL	Uttar Gujarat Vij Company Limited

## SECTION 1. INTRODUCTION

### 1.1. PREAMBLE

1.1.1. This section presents the background and reasons for filing this Petition.

### 1.2. INTRODUCTION

1.2.1 The Government of Gujarat (hereinafter referred to as “GoG”) notified the Gujarat Electricity Industry (Reorganization and Regulation) Act 2003 (herein after called as “Act”) in May 2003 for the reorganization of the entire power sector in the State of Gujarat.

1.2.2 Pursuant to the above, Government of Gujarat in their letter vide GO / 19<sup>th</sup> August 2003 had directed GEB to form four Distribution Companies (Discoms) based on geographical location of the circles. Accordingly the four distribution companies had been incorporated with the Registrar of Companies (RoC) on September 15th, 2003. Dakshin Gujarat Vij Company Limited (DGVCL) is one of the distribution companies engaged in distribution of electricity in the south zone area of Gujarat.

1.2.3 The Dakshin Gujarat Vij Co. Ltd obtained its Certificate of Commencement of Business on the 15th October, 2003. However, the company did not commence its commercial operations during the financial year ending 31<sup>st</sup> March, 2005. The Company has started its commercial function w.e.f. 1<sup>st</sup> April 2005.

1.2.4 The Gujarat Electricity Regulatory Commission (hereinafter referred to as “GERC” or “Hon’ble Commission”), an independent statutory body constituted under the provisions of the Electricity Regulatory Commissions (ERC) Act, 1998 and is currently under purview of the Electricity Act, 2003. GERC is vested with the authority of regulating the power sector in the State inter alia including determination of Tariff for electricity consumers.

1.2.5 Determination of Tariff for supply of Electricity’ is one of the important functions of the State Electricity Regulatory Commission as provided in the Section-86 of the Electricity Act, 2003. The Act provides that:-

*“Section 86 (Functions of State Commission): --- (1) The State Commission shall discharge the following functions, namely: -*

*(a) Determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:*

*Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;*

1.2.6 Further, the Act also provides that-

*“Section 61 (Tariff regulations):*

*The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the ....”*

- 1.2.7 The Hon’ble Commission notified the Gujarat Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2016 (“GERC MYT Regulations, 2016”). Based on the petition filed by DGVCL, the Hon’ble Commission issued MYT order on 31<sup>st</sup> March, 2017 for determining the ARR for the Third Control Period i.e. FY 2016-17 to FY 2020-21 in line with provisions outlined in the GERC (MYT) Regulations, 2016. The GERC (MYT) Regulations, 2016 notified on 29<sup>th</sup> March, 2016 is in force till 31<sup>st</sup> March, 2021.
- 1.2.8 The process for framing the MYT Regulations for new Control Period of FY 2021-22 to FY 2025-26 was initiated by issuing public notice dated 10th October, 2020. However due to prevailing circumstances and reasons beyond the control of the Hon’ble Commission, the process related to framing of the MYT Regulations was delayed.
- 1.2.9 In the meantime, the Hon’ble Commission was in receipt of the requests from the Gujarat Urja Vikas Nigam Limited and Torrent Power Limited to provide necessary clarification/ guidance for preparation and submission of ARR and Tariff Determination for FY 2021-22.
- 1.2.10 The Hon’ble Commission has also noted that the procedure and process of framing new MYT Regulations required to be started afresh and accordingly it will not be possible to finalize the determination of tariff for FY 2021-22 within the reasonable time frame under the proposed MYT framework.
- 1.2.11 Further, the Hon’ble Commission is also of the opinion that it may be difficult for the utilities to make realistic projections and business plan for the 5 year control period in view of the prevailing circumstances at present.
- 1.2.12 In view of the above, it is proposed to defer the 5 year control period for new MYT Regulations for one year and consider the control period from FY 2022-23 to FY 2026-27. Accordingly, the Hon’ble Commission directed all the concerned utilities and licensees to file annual ARR for FY 2021-22 and application for determination of tariff for FY 2021-22 based on the principles and methodology as provided in the GERC (Multi-Year Tariff) Regulations, 2016.
- 1.2.13 The GERC (Multi-Year Tariff) Regulations, 2016 provides that:-

*“1.2 These Regulations shall come into effect from the date of their publication in the Official Gazette and shall remain in force till 31st March, 2021, unless otherwise reviewed/extended.*

..

#### *7. Saving of Inherent Power of the Commission*

*7.1 Nothing in these Regulations shall be deemed to limit or otherwise affect the inherent power of the Commission to make such orders as may be necessary for ends of justice or to prevent the abuse of the process of the Commission.*



*7.2 Nothing in these Regulations shall bar the Commission from adopting in conformity with the provisions of the Act, a procedure, which is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of a matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient for dealing with such a matter or class of matters.*

*7.3 Nothing in these Regulations shall, expressly or by implication, bar the Commission to deal with any matter or exercise any power under the Acts for which no Regulations have been framed, and the Commission may deal with such matters, powers and functions in a manner it thinks fit.*

..

#### **12. Power of Relaxation**

*The Commission, for reasons to be recorded in writing, may relax any of the provisions of these Regulations on its own motion or on an application made before it by an interested person.”*

- 1.2.14 In view of the background and reasons mentioned above and looking to the requirement and importance of timely determination of tariff for supply of electricity, the Hon’ble Commission has proposed to differ implementation of new MYT control period by one year and adopt the determination of annual ARR and determination of tariff for FY 2021-22. Further, the Hon’ble Commission has directed all the regulated Generating Stations, Transmission Licensee, SLDC and Distribution Licensees (including deemed Licensees) to file application/ petition for the determination of Annual ARR for FY 2021-22 and proposal for determination of tariff for FY 2021-22.
- 1.2.15 Accordingly, DGVCL is filing Aggregate Revenue Requirement and tariff for FY 2021-22 to the Hon’ble Commission.

## SECTION 2. EXECUTIVE SUMMARY

### 2.1. PREAMBLE

2.1.1. This section highlights the summary of the Petition of ARR & Tariff for FY 2021-22.

### 2.2. DETERMINATION OF ARR & TARIFF FOR FY 2021-22

2.2.1. The Aggregate Revenue Requirement for FY 2021-22 as per GERC MYT Regulations, 2016 is projected as below:

TABLE 1: PROJECTION OF ARR FOR FY 2021-22

		Rs in Crores
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Cost of Power Purchase	13,957.38
2	Operation & Maintenance Expenses	678.47
2.1	Employee Cost	598.23
2.2	Repair & Maintenance	74.70
2.3	Administration & General Charges	118.52
2.4	Other Debits	-
2.5	Extraordinary Items	-
2.6	Net Prior Period Expenses / (Income)	-
2.7	Other Expenses Capitalised	(112.98)
3	Depreciation	401.50
4	Interest & Finance Charges	144.69
5	Interest on Working Capital	-
6	Provision for Bad Debts	0.41
7	<b>Sub-Total [1 to 6]</b>	<b>15,182.44</b>
8	Return on Equity	200.26
9	Provision for Tax / Tax Paid	18.92
10	<b>Total Expenditure (7 to 9)</b>	<b>15,401.61</b>
11	Less: Non-Tariff Income	203.48
12	<b>Aggregate Revenue Requirement (10 - 11)</b>	<b>15,198.13</b>

2.2.2. DGVCL requests the Hon'ble Commission to approve MYT projections of ARR for FY 2021-22.

### 2.3. REVENUE GAP FOR FY 2021-22

2.3.1. DGVCL has projected sales of 22,079 MU for FY 2021-22.

2.3.2. Based on projected sales & existing retail tariff, revenue from sale of power works out to Rs. 10,996 Crore for FY 2021-22.

2.3.3. In the True up for FY 2018-19 and Determination of Tariff Order for FY 2020-21 dated 31<sup>st</sup> March, 2020, the Hon'ble Commission has considered the base power purchase cost at Rs. 4.30/unit and base FPPPA at Rs. 1.59/unit. As per approved FPPPA formula, any increase in power purchase cost during the year over and above base power purchase cost of Rs. 4.30/unit is to be recovered through FPPPA over and above base FPPPA of Rs. 1.59/unit on quarterly basis. As per projected ARR for FY 2021-22, the weighted average power purchase cost is worked out to Rs. 4.47/unit as against base

power purchase cost of Rs. 4.30/unit. Thus, the incremental power purchase cost of Rs. 0.20/unit for FY 2021-22 (i.e. (Rs. 4.47 – Rs. 4.30) grossed up by Distribution Losses) will be recovered through FPPPA over and above base FPPPA of Rs. 1.59/unit. Therefore, estimated revenue from FPPPA for FY 2021-22 is considered at Rs. 1.79/unit (i.e. grossing up by approved losses), as shown below.

TABLE 2 : FPPPA COMPUTATION FOR FY 2021-22

No.	Particulars	FY 2020-21	FY 2021-22
1	Fixed Cost (Rs. Crore)	12,173	11,592
2	Variable Cost (Rs. Crore)	26,105	27,750
3	GETCO Cost (Rs. Crore)	4,502	4,480
4	GUVNL Cost (Rs. Crore)	423	418
5	PGCIL Charges (Rs. Crore)	2,181	2,443
6	SLDC Charges (Rs. Crore)	33	21
7	Total Power Purchase Cost (Rs. Crore)	45,417	46,704
8	Total Energy Requirement (MU)	105,652	104,536
9	<b>Power Purchase Cost (Rs./kWh)</b>	<b>4.30</b>	<b>4.47</b>
10	Increase in Power Purchase Cost (Rs./ kWh)		0.17
11	Additional FPPPA Charges (Grossed up by Distribution Loss) (Rs./kWh)		0.20
12	Existing FPPPA Charges (Rs./kWh)		1.59
13	<b>Revised FPPPA Charges (Rs./kWh)</b>		<b>1.79</b>

2.3.4. The income under the head “Other Consumer Related Income” has been considered the same as of FY 2019-20. The Agriculture subsidy for FY 2021-22 has been projected on the basis of the projected Agricultural sales for FY 2021-22.

2.3.5. 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 2021-22 is as shown below:

TABLE 3: TOTAL PROJECTED REVENUE FOR FY 2021-22 AT EXISTING TARIFF

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Revenue with Existing Tariff	10,995.65
2	FPPPA Charges	3,952.21
3	Other Income (Consumer related)	286.97
4	Agriculture Subsidy	53.85
5	<b>Total Revenue including subsidy (1 to 4)</b>	<b>15,288.68</b>

2.3.6. The revenue gap/(surplus) of Rs. 299.22 crores after true up exercise of FY 2019-20 is also considered for estimating revenue gap/(surplus) for FY 2021-22.

2.3.7. Based on the above, the estimated revenue gap/ (surplus) for FY 2021-22 at existing tariff is as outlined in the table below:

TABLE 4: ESTIMATED REVENUE GAP/ (SURPLUS) FOR FY 2021-22 AT EXISTING TARIFF

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Aggregate Revenue Requirement	15,198.13
2	Revenue Gap from True up of FY 2019-20	299.22
3	<b>Total Aggregate Revenue Requirement</b>	<b>15,497.35</b>
4	Revenue with Existing Tariff	10,995.65
5	FPPPA Charges	3,952.21
6	Other Income (Consumer related)	286.97
7	Agriculture Subsidy	53.85
8	<b>Total Revenue including subsidy (4 to 7)</b>	<b>15,288.68</b>
9	<b>Gap / (Surplus) (3 - 8)</b>	<b>208.67</b>

2.3.8. The Hon’ble Commission is requested to approve the above mentioned gap.

**2.4. PROPOSED CHANGES IN THE TARIFF STRUCTURE FOR FY 2021-22**

- 2.4.1. The consolidated resultant revenue gap for all four distribution companies is Rs. 853 Crores which can be met through efficiency improvement measures.
- 2.4.2. In view of the above, the distribution companies have neither proposed any increase in tariff rates nor proposed any modifications in current tariff structure.

## SECTION 3. DETERMINATION OF ARR & TARIFF FOR FY 2021-22

### 3.1. PREAMBLE

3.1.1. This section outlines the ARR Determination of DGVCL as per the GERC MYT Regulations, 2016 for FY 2021-22 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 2021-22

### 3.2. PROJECTION OF ENERGY REQUIREMENT FOR FY 2021-22

#### 3.2.1. 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. In light of the above, DGVCL has estimated the above for various customer categories primarily based on the CAGR trends during past years. Wherever the trend has seemed unreasonable or unsustainable, the growth factors have been corrected by the company, to arrive at more realistic projections.

#### 3.2.2. 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 2021-22. 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.

#### 3.2.3. Category-wise Units Sold

The Break-up of the past sales and the CAGR growth rates for different periods (5 years, 4 year, 3 year, 2 year and year on year) thereof are as follows. CAGR has been computed for each consumer category for the past 5-year period FY 2014-15 to FY 2019-20, the 4-year period FY 2015-16 to FY 2019-20, the 3-year period FY 2016-17 to FY 2019-20, and the 2-year period FY 2017-18 to FY 2019-20, along with the y-o-y growth rate of FY 2018-19 over FY 2019-20, as summarised in the table below:

TABLE 5 : HISTORICAL TREND IN CATEGORY-WISE UNITS SOLD (MUs)

Sr. No.	Category	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
	<b>Low Tension</b>						
1	RGP	2345	2543	2649	2887	3011	3195
2	GLP	88	98	107	113	114	121
3	Non-RGP & LTMD	4196	4670	4848	5162	5350	5924
4	Public Water Works	164	168	183	220	234	243
5	Agriculture - Unmetered	421	420	418	417	417	416
6	Agriculture - Metered	332	345	350	385	491	466
	<b>Sub Total</b>	<b>7546</b>	<b>8244</b>	<b>8555</b>	<b>9184</b>	<b>9616</b>	<b>10365</b>
	<b>High Tension</b>						
1	Industrial HT	7691	7826	7727	8274	9454	9321
2	Railway Traction	335	266	9	9	10	6
	<b>Sub Total</b>	<b>8026</b>	<b>8092</b>	<b>7736</b>	<b>8283</b>	<b>9464</b>	<b>9327</b>
	<b>Total</b>	<b>15572</b>	<b>16336</b>	<b>16291</b>	<b>17467</b>	<b>19080</b>	<b>19692</b>

TABLE 6 : CATEGORY-WISE CAGR OF UNITS SOLD

Sr. No.	Category	5 Year	4 Year	3 Year	2 Year	1 Year
	<b>Low Tension</b>					
1	RGP	6.38%	5.87%	6.45%	5.20%	6.12%
2	GLP	6.58%	5.41%	4.18%	3.48%	6.31%
3	Non-RGP & LTMD			6.91%	7.13%	10.73%
4	Public Water Works	8.18%	9.67%	9.91%	5.10%	4.02%
5	Agriculture - Unmetered	-0.24%	-0.24%	-0.16%	-0.12%	-0.17%
6	Agriculture - Metered	7.02%	7.81%	10.01%	10.02%	-5.09%
	<b>Sub Total</b>	<b>6.55%</b>	<b>5.89%</b>	<b>6.61%</b>	<b>6.24%</b>	<b>7.79%</b>
	<b>High Tension</b>					
1	Industrial HT	3.92%	4.47%	6.45%	6.14%	-1.41%
2	Railway Traction	-55.27%	-61.25%	-12.64%	-18.35%	-38.08%
	<b>Sub Total</b>	<b>3.05%</b>	<b>3.61%</b>	<b>6.43%</b>	<b>6.12%</b>	<b>-1.45%</b>
	<b>Total</b>	<b>4.81%</b>	<b>4.78%</b>	<b>6.52%</b>	<b>6.18%</b>	<b>3.21%</b>

### 3.2.4. Consumer Profile

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

TABLE 7 : CATEGORY-WISE NO. OF CONSUMERS

Sr. No.	Category	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
	<b>Low Tension</b>						
1	RGP	2228197	2315961	2411598	2487569	2572762	2659744
2	GLP	20097	22005	24127	25585	26590	27414
3	Non-RGP & LTMD	329371	351702	380621	404515	429938	453747
4	Public Water Works	20008	22615	25362	27185	29062	31494
5	Agriculture - Unmetered	45171	44842	44528	44184	43845	43519
6	Agriculture - Metered	86770	97254	109827	120808	130982	143766
	<b>Sub Total</b>	<b>2729614</b>	<b>2854379</b>	<b>2996063</b>	<b>3109846</b>	<b>3233179</b>	<b>3359684</b>
	<b>High Tension</b>						
1	Industrial HT	3156	3341	3495	3704	3942	4176
2	Railway Traction	6	6	1	1	1	1
	<b>Sub Total</b>	<b>3162</b>	<b>3347</b>	<b>3496</b>	<b>3705</b>	<b>3943</b>	<b>4177</b>
	<b>Total</b>	<b>2732776</b>	<b>2857726</b>	<b>2999559</b>	<b>3113551</b>	<b>3237122</b>	<b>3363861</b>

TABLE 8 : CAGR OF NO. OF CONSUMERS

Sr. No.	Category	5 Year	4 Year	3 Year	2 Year	1 Year
	<b>Low Tension</b>					
1	RGP	3.60%	3.52%	3.32%	3.40%	3.38%
2	GLP	6.41%	5.65%	4.35%	3.51%	3.10%
3	Non-RGP & LTMD			6.03%	5.91%	5.54%
4	Public Water Works	9.50%	8.63%	7.49%	7.63%	8.37%
5	Agriculture - Unmetered	-0.74%	-0.75%	-0.76%	-0.76%	-0.74%
6	Agriculture - Metered	10.63%	10.26%	9.39%	9.09%	9.76%
	<b>Sub Total</b>	<b>4.24%</b>	<b>4.16%</b>	<b>3.89%</b>	<b>3.94%</b>	<b>3.91%</b>
	<b>High Tension</b>					
1	Industrial HT	5.76%	5.74%	6.11%	6.18%	5.94%
2	Railway Traction	-30.12%	-36.11%	0.00%	0.00%	0.00%
	<b>Sub Total</b>	<b>5.73%</b>	<b>5.69%</b>	<b>6.11%</b>	<b>6.18%</b>	<b>5.93%</b>
	<b>Total</b>	<b>4.24%</b>	<b>4.16%</b>	<b>3.89%</b>	<b>3.94%</b>	<b>3.92%</b>

### 3.2.5. 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 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
	<b>Low Tension</b>						
1	RGP	1965	2171	2281	2539	2726	2920
2	GLP	55	63	65	82	88	95
3	Non-RGP & LTMD	2045	2225	1958	2643	2869	3086
4	Public Water Works	104	118	115	136	149	162
5	Agriculture - Unmetered	185	184	185	183	183	182
6	Agriculture - Metered	361	423	473	523	567	627
	<b>Sub Total</b>	<b>4716</b>	<b>5183</b>	<b>5077</b>	<b>6106</b>	<b>6581</b>	<b>7073</b>
	<b>High Tension</b>						
1	Industrial HT	2407	2489	2646	2908	3156	3354
2	Railway Traction	83	44	4	5	5	5
	<b>Sub Total</b>	<b>2489</b>	<b>2533</b>	<b>2650</b>	<b>2913</b>	<b>3161</b>	<b>3359</b>
	<b>Total</b>	<b>7206</b>	<b>7716</b>	<b>7727</b>	<b>9019</b>	<b>9742</b>	<b>10432</b>

TABLE 10 : CAGR OF CONNECTED LOAD

Sr. No.	Category	5 Year	4 Year	3 Year	2 Year	1 Year
	<b>Low Tension</b>					
1	RGP	8.24%	7.69%	8.58%	7.24%	7.11%
2	GLP	11.45%	10.85%	13.53%	8.01%	8.42%
3	Non-RGP & LTMD			16.38%	8.06%	7.58%
4	Public Water Works	9.27%	8.33%	12.21%	9.19%	9.05%
5	Agriculture - Unmetered	-0.29%	-0.16%	-0.49%	-0.13%	-0.20%
6	Agriculture - Metered	11.66%	10.34%	9.85%	9.47%	10.58%
	<b>Sub Total</b>	<b>8.44%</b>	<b>8.08%</b>	<b>11.69%</b>	<b>7.63%</b>	<b>7.47%</b>
	<b>High Tension</b>					
1	Industrial HT	6.87%	7.74%	8.23%	7.40%	6.28%
2	Railway Traction	-42.96%	-41.94%	7.72%	0.00%	0.00%
	<b>Sub Total</b>	<b>6.18%</b>	<b>7.31%</b>	<b>8.23%</b>	<b>7.39%</b>	<b>6.27%</b>
	<b>Total</b>	<b>7.68%</b>	<b>7.83%</b>	<b>10.52%</b>	<b>7.55%</b>	<b>7.08%</b>

### 3.2.6. Growth Projections for FY 2021-22

This section discusses in detail the basis for taking the growth projections for various categories of consumers as enumerated above. For projecting the sales, no. of consumers and connected load for FY 2021-22, the base number of FY 2019-20 is considered.

#### **RGP- Residential**

The company has witnessed a growth in the units sold in the last five years in this category. The 5 year CAGR growth rate between FY 2014-15 and FY 2019-20 is 6.38%. The company expects this trend to continue in FY 2021-22.

The number of consumers added in the category has witnessed a 5 year CAGR of 3.60% between FY 2014-15 and FY 2019-20. The company expects this trend to continue going forward.

The connected load added in the category has witnessed a 5 year CAGR of 8.24% between FY 2014-15 and FY 2019-20. The company expects this trend to continue going forward.

#### **GLP-General Lighting Purpose**

The 3 year CAGR for the purpose of projection on the units sold between FY 2016-17 and FY 2019-20 is 4.18%. The company expects this trend to continue in FY 2021-22.

Similarly, the number of consumers added in the category has witnessed a 3 year CAGR of 4.35% between FY 2016-17 and FY 2019-20. The company expects this trend to continue going forward.

The connected load added in the category has witnessed a 3 year CAGR of 13.53% between FY 2016-17 and FY 2019-20. The company expects this trend to continue going forward.

#### **Non- RGP & LTMD**

For the purpose of projection of units sold a 3 year CAGR between FY 2016-17 and FY 2019-20 has been considered which is 6.91%. The company expects this trend to continue in FY 2021-22.

The number of consumers added in the category has witnessed a 3 year CAGR of 6.03% between FY 2016-17 and FY 2019-20. The company expects this trend to continue going forward.

The connected load added in the category has witnessed a 3 CAGR of 16.38% between FY 2016-17 and FY 2019-20. The company expects this trend to continue going forward.

#### **Public Water Works**



For the purpose of projection of units sold a 3 year CAGR for the category is coming out to be 9.91 %. The company expects this trend to continue going forward.

Similarly, the growth rate for the number of consumers in the category has been considered as 7.49% 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 added has also been considered to be growing at 3 year CAGR of 12.21% going forward.

### Agriculture

It is submitted that DGVCL, 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.

In regard to 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 : DGVCL – NEW CONNECTIONS TO AGRICULTURE CONSUMERS

Sr. No.	Agriculture Metered	No. of connections
1	FY 2020-21	10,344
2	FY 2021-22	20,329

In order to estimate the consumption of this category, DGVCL has gone with 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. DGVCL 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 MYT Order. Thus based on the figures arrived from above the total sales for each year has been calculated based on the average connected load per consumer for metered and unmetered categories combined in FY 2019-20 and the number of new connection to be added during each year.

TABLE 12 : DGVCL – 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 2020-21	10,344	6	59,939	45	581	35
2	FY 2021-22	20,329	6	117,798	88	581	68

The number of connections, unit sales and the load as estimated above have been added to the FY 2019-20 details to arrive at an estimate of the sales projections from this category for FY 2020-21 and FY 2021-22.

### Industrial HT

The category has observed a constant variation in sales in the last five years due to presence of open access, slowdown in the economy, etc. For the purpose of projection of units sold a 3 year CAGR between FY 2016-17 and FY 2019-20 which is 6.45% is normally considered. As the Covid-19 pandemic has affected the sales of this category the company expects a lower growth rate. Hence a growth rate of 5% has been considered in FY 2021-22.

A 3-year CAGR of 6.11% for the number of consumers is normally considered for projection. As the Covid-19 pandemic has affected the consumer addition of this category the company expects a lower growth rate. Hence a growth rate of 5% has been considered in FY 2021-22.

A 3-year CAGR of 8.23% for the number of consumers is normally considered for projection. As the Covid-19 pandemic has affected the consumer addition of this category the company expects a lower growth rate. Hence a growth rate of 5% has been considered in FY 2021-22.

### Railway Traction

No growth projection has been done for sales, consumers and connected load for the FY 2021-22 and sales, no. of consumers and connected load is considered same as of FY 2019-20.

Thus the following table summarises the growth rate assumptions and the resultant projected numbers of the sales, number of consumers and connected load within various tariff categories for control period FY 2021-22.

TABLE 13 : GROWTH RATE FOR SALES, NO. OF CONSUMERS AND CONNECTED LOAD

Sr. No.	Category	Sales	Consumers	Connected Load
	<b>Low Tension</b>			
1	RGP	6.38%	3.60%	8.24%
2	GLP	4.18%	4.35%	13.53%
3	Non-RGP & LTMD	6.91%	6.03%	16.38%
4	Public Water Works	9.91%	7.49%	12.21%
5	Agriculture - Unmetered	0.00%	0.00%	0.00%
6	Agriculture - Metered	0.00%	0.00%	0.00%
	<b>High Tension</b>			
1	Industrial HT	5.00%	5.00%	5.00%
2	Railway Traction	0.00%	0.00%	0.00%

The estimated Sales, No. of consumers and Connected load based on the above growth rates and as per the methodology used for agriculture metered category are projected in the table below:

TABLE 14 : PROJECTION OF SALES (MUs)

Sr. No.	Category	FY 2021-22
	<b>Low Tension</b>	
1	RGP	3,616
2	GLP	131
3	Non-RGP & LTMD	6,771
4	Public Water Works	294
5	Agriculture - Unmetered	416
6	Agriculture - Metered	569
	<b>Sub Total</b>	<b>11,797</b>
	<b>High Tension</b>	
1	Industrial HT	10,276
2	Railway Traction	6
	<b>Sub Total</b>	<b>10,282</b>
	<b>Total</b>	<b>22,079</b>

TABLE 15 : PROJECTION OF NO. OF CONSUMERS

Sr. No.	Category	FY 2021-22
	<b>Low Tension</b>	
1	RGP	2,854,923
2	GLP	29,851
3	Non-RGP & LTMD	510,146
4	Public Water Works	36,385
5	Agriculture - Unmetered	43,519
6	Agriculture - Metered	174,439
	<b>Sub Total</b>	<b>3,649,262</b>
	<b>High Tension</b>	
1	Industrial HT	4,604
2	Railway Traction	1
	<b>Sub Total</b>	<b>4,605</b>
	<b>Total</b>	<b>3,653,867</b>

TABLE 16 : PROJECTION OF CONNECTED LOAD (MW/MVA)

Sr. No.	Category	FY 2021-22
	<b>Low Tension</b>	
1	RGP	3,421
2	GLP	123
3	Non-RGP & LTMD	4,180
4	Public Water Works	205
5	Agriculture - Unmetered	182
6	Agriculture - Metered	672
	<b>Sub Total</b>	<b>8,782</b>
	<b>High Tension</b>	
1	Industrial HT	3,698
2	Railway Traction	5
	<b>Sub Total</b>	<b>3,703</b>
	<b>Total</b>	<b>12,485</b>

### 3.3. DISTRIBUTION LOSSES

The company has constantly through its endeavours tried to reduce its losses in the past. These efforts shall continue and will be enhanced. However, loss reduction is a slow process and becomes increasingly difficult as the loss levels come down. Though DGVCL has achieved lower distribution losses in FY 2019-20, it is not possible to

maintain such low level of distribution losses considering pandemic and hence it has projected higher distribution losses for FY 2021-22. Projection of distribution losses for FY 2021-22 are shown below:

TABLE 17 : DISTRIBUTION LOSS FOR FY 2021-22

Particulars	FY 2021-22 (Projected)
Distribution Loss	9.45%

### 3.4. ENERGY BALANCE ENERGY REQUIREMENT PROJECTION FOR DGVCL

To arrive at the total energy requirement, the total sales in MUs as projected above have been grossed up by factoring in transmission and distribution losses. It may be noted that intra-state transmission losses are assumed as per the projection by GETCO in its Tariff Petition for FY 2021-22. The inter-state transmission losses viz. PGCIL pooled losses are assumed at same level as in FY 2019-20 for FY 2021-22. Further, the distribution losses are taken as per the projections above. Based on the information provided above, Energy Balance of the Company for FY 2021-22 is as shown below:

TABLE 18 : ENERGY BALANCE FOR FY 2021-22

S.No.	Particulars	Unit	FY 2021-22 (Projected)
1	Energy Sales	MUs	22,079.37
2	Distribution Losses	MUs	2,304.25
		%	9.45%
3	Energy Requirement	MUs	24,383.62
4	Transmission Losses	MUs	1,003.00
		%	3.95%
5	Total Energy to be input to Transmission System	MUs	25,386.62
6	Pooled Losses in PGCIL System	MUs	196.66
7	<b>Total Energy Requirement</b>	<b>MUs</b>	<b>25,583.28</b>

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 for four distribution companies is as shown below:

TABLE 19 : CONSOLIDATED ENERGY REQUIREMENT FOR FY 2021-22 (MUs)

S.No.	Discom	2021-22
1	DGVCL	25,583
2	MGVCL	12,700
3	PGVCL	37,421
4	UGVCL	28,832
5	<b>Total Requirement at four Discoms</b>	<b>104,536</b>

### 3.5. ESTIMATION OF ARR FOR FY 2021-22

The components for the calculation of total expenses for determination of ARR for FY 2021-22 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

### 3.6. POWER PURCHASE COST FOR FY 2021-22

#### 3.6.1. Power Purchase Sources

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 and NPC, (iii) Renewable sources of power - Hydro, 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 existing contracted capacity tied up by GUVNL as on 31<sup>st</sup> March 2020 is **24,821 MW**. Given below are the names of the existing power plants, their operational parameters, capacity allocated to GUVNL, their fixed cost along with the variable cost of generation per unit as per actual of FY 2019-20.

TABLE 20: 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)
	<b>GSECL</b>					
1	GSECL Gandhinagar - 5	210	9.50%	52.75%	71	4.02
2	GSECL Wanakbori - 7	210	9.50%	58.26%	63	3.87
3	GSECL Utran Expan	375	3.00%	22.66%	240	3.52
4	GSECL Dhuvaran - 7	107	4.00%	19.95%	50	2.87
5	GSECL Dhuvaran - 8	112	3.00%	9.19%	29	3.14
6	GSECL Ukai	610	9.00%	54.89%	278	3.67
7	GSECL Ukai Expan	500	6.00%	64.62%	493	3.24
8	GSECL Gandhinagar 3-4	420	9.50%	19.55%	229	4.19
9	GSECL Wanakbori 1-6	1,260	9.00%	35.82%	560	3.93
10	GSECL Sikka Expansion	500	12.50%	63.96%	602	3.58
11	GSECL Kutch Lignite	215	12.00%	28.94%	79	2.70
12	GSECL Kutch Lignite Exp unit 4	75	12.00%	45.18%	57	2.52
13	GSECL Ukai Hydro	305	0.60%	28.82%	41	-
14	GSECL Kadana Hydro	242	1.00%	21.21%	69	-
15	GSECL Dhuvaran CCPP III	376	3.00%	16.85%	118	3.41
16	GSECL BLTPS	500	11.00%	12.43%	110	2.89
17	GSECL Wanakbori - 8	800	5.25%	7.62%	142	3.31
	<b>Sub Total</b>	<b>6,817</b>				
	<b>IPP's</b>					
1	Gujarat State Energy Generation	156	2.90%	3.15%	31	4.03



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%	18.83%	169	3.67
3	Gujarat Industries Power Co Ltd (165 MW)	-	0.00%	0.00%	-	4.10
4	Gujarat Industries Power Co Ltd (SLPP)	250	10.00%	72.20%	134	1.44
5	Gujarat Mineral Development Corp.	250	11.00%	28.05%	62	1.32
6	Gujarat Industries Power Co Ltd (145 MW)	42	2.90%	34.48%	6	2.99
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	250	10.00%	77.62%	261	1.41
8	GPPC Pipavav	702	3.00%	8.76%	313	3.57
	<b>Sub Total</b>	<b>2,001</b>				
	<b>Central Sector</b>					
1	NPC-Tarapur 1 & 2	160	10.00%	80.39%	-	5.09
2	NPC-Tarapur 3 & 4	274	9.00%	87.96%	-	4.51
3	NPC-Kakrapar	125	12.50%	90.70%	-	1.48
4	NTPC-Vindhyachal - I	230	9.00%	82.56%	134	1.88
5	NTPC-Vindhyachal - II	239	7.05%	79.82%	115	1.79
6	NTPC-Vindhyachal - III	266	6.25%	87.21%	194	1.77
7	NTPC-Korba	360	7.04%	87.54%	174	1.46
8	NTPC-Korba -II	96	6.25%	86.99%	94	1.42
9	NTPC-Kawas	187	2.75%	30.69%	115	3.04
10	NTPC-Jhanor	237	2.75%	9.21%	181	3.55
11	NTPC-Sipat-I	540	6.25%	85.43%	492	1.52
12	NTPC-Sipat - II	273	6.25%	88.12%	239	1.57
13	NTPC-Kahlagaon	141	6.25%	69.60%	106	2.08
14	NTPC-Vindhyachal - IV	240	6.25%	89.45%	265	1.74
15	NTPC-Mauda	240	6.25%	76.06%	317	3.28
16	NTPC-Vindhyachal - V	94	7.25%	94.31%	112	1.80
17	NTPC-Mauda II	294	6.25%	61.53%	308	3.22
19	NTPC-Gadarwara	152	6.25%	17.30%	154	2.58
20	NTPC-LARA	78	6.25%	37.41%	55	2.55
21	NTPC-Khargone	246	6.25%	5.01%	30	2.97
22	Sardar Sarovar Nigam Ltd	216	0.70%	34.00%	-	2.05
	<b>Sub Total</b>	<b>4,688</b>				
	<b>Others</b>					
1	Captive Power	8	0.00%	8.43%	-	2.15
	<b>Renewable</b>					
1	Wind Farms	4,170	0.00%	22.50%	-	3.65
2	Solar	1,682	0.00%	18.33%	-	7.82
3	Small/Mini Hydal	21	0.00%	48.26%	-	4.65
4	Biomass	30	0.00%	62.93%	-	5.86
	<b>Competitive Bidding</b>					
1	Essar Power Gujarat Ltd	1,000	0.00%	49.38%	493	1.93
2	Adani Power Ltd - (Unit 1 - 4)	1,200	0.00%	79.62%	810	2.92
3	Adani Power Ltd - (Unit 5 - 6)	1,200	0.00%	25.52%	133	3.12
4	ACB India Ltd.	200	0.00%	72.47%	179	0.67
5	Coastal Gujarat Power Co Ltd	1,805	0.00%	74.03%	1,144	1.89
6	Power Exchange		0.00%	100.00 %	-	3.53
7	Short term bilateral		0.00%	100.00 %	-	3.17
	<b>Sub Total</b>	<b>11,316</b>				
	<b>Total</b>	<b>24,821</b>				

ii. Capacity Addition from FY 2021-22

The capacity addition plan which includes capacity additions of Central stations is

presented in the table below with details of the capacity allocated to GUVNL and their unit wise tentative commissioning schedule. It is submitted that the PPA is already signed for the stations listed below and are expected to get commission during the FY 2021-22. PPA signed with Adani Power Ltd. for 1200 MW is terminated and hence reduction in the capacity is envisaged for FY 2021-22 from the existing capacity.

**TABLE 21: NEW CAPACITY ADDITION FROM FY 2021-22**

Sr. No.	Name of the Station	Ownership	Fuel Type	Capacity allocated to GUVNL (MW)	Date of Commissioning
1	NTPC-Gadarwara Stage-I U#2	Central	Coal	152	Dec-21
2	NTPC-Lara U#2	Central	Coal	78	Oct-21
3	Adani Power Ltd - (Unit 5 - 6)		Coal	1,200	Decommission

The capacity addition envisaged during FY 2021-22 is around 230 MW and decommissioned capacity is 1200 MW. The operational parameters, annual fixed cost and variable cost per unit for these plants is given below. The Annual Fixed Cost and the availability from the envisaged capacity during FY 2021-22 have been considered on pro-rata basis depending upon the tentative date of commissioning.

**TABLE 22: ADDITIONAL CAPACITY ENVISAGED FY 2021-22**

Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumption (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)
1	NTPC-Gadarwara Stage-I U#2	152	6.25%	80.00%	152	2.58
2	NTPC-Lara U#2	78	6.25%	80.00%	110	2.55

### iii. Renewable Purchase Obligation

In accordance with GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 and its First and Second Amendments in 2014 and 2018 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. The percentage of procurement is defined from FY 2017-18 to FY 2021-22. The minimum Renewable Energy purchase in FY 2019-20 is 2.48% from Solar, 7.75% from Wind and 0.23% from others sources like Biomass, Bagasse, MSW, etc.

As per the clause 6.4 of the National Tariff Policy 2016 dated 28th January 2016 requires the states to achieve the target of 8% solar RPO targets by FY 2021-22. The relevant extract from the Tariff Policy has been showcased below:

*“6.4 Renewable sources of energy generation including Co-generation from renewable energy sources:*

*(i) Within the percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification of this policy which shall be such that it reaches 8% of total consumption of energy, excluding Hydro Power, by March 2022 or as notified by the Central Government from time to time.*

While the Hon’ble Commission has defined the RPO targets for FY 2017-18 to FY 2021-



22 through the Second Amendment to the RPO Regulations, GUVNL/Discoms proposes to purchase renewable power up to the tied up RE capacity only for each of the respective years as per the PPA price. It is very difficult to meet such high level of RPO targets and it will not be appropriate to show RE purchase in absence of any firm PPA. Hence, GUVNL/ Discom has only considered RE purchase based on actual tied up capacity only.

The year wise purchase from RE sources based on actual tied up capacity has been detailed as follows.

**TABLE 23: PROCUREMENT FROM RE FOR MEETING PROJECTED RPO**

Particulars	FY 2021-22			
	Solar	Wind	Others	Total
Available Capacity up to FY 2019-20 (MU)	2,702	8,217	252	11,171
Total Requirement (MU)	104,536	104,536	104,536	313,608
RPO Obligation fulfilled	2.58%	7.86%	0.24%	3.56%
RPO Target	8.00%	8.25%	0.75%	17.00%
RPO Target (MU)	8,363	8,624	784	17,771
Unmet Target (MU)	5,661	407	532	6,600
<b>Additional Capacity based on PPA executed</b>				
Additional Power Purchase (MU)	4976	599	340	5915
Power Purchase Cost (Rs./kwh)	2.62	2.80	6.67	2.87
<b>Power Purchase Cost (Rs. Crore)</b>	<b>1305</b>	<b>168</b>	<b>227</b>	<b>1699</b>
<b>Unmet Capacity (MU)</b>	<b>685</b>	<b>(192)</b>	<b>191</b>	<b>685</b>

### 3.6.2. Methodology for Forecasting Power Purchase Cost

In order to optimise the power purchase cost, comprehensive Merit Order Dispatch (MOD) has been worked out from the dispatch available 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 5% availability of each plant has been considered to take care of the peak loads and peak season requirements.
- Availability of Thermal Stations has been considered at 85% / 80% as defined in regulations (CERC/GERC) and performance in previous years.
- The Fixed & Variable Cost for existing GSECL, IPP, renewable and central sector plants is taken as per actuals of FY 2019-20 as base power purchase cost.

### 3.6.3. Power Purchase and Costs

The plant-wise dispatchable energy and costs of purchase by GUVNL from various plants of GSECL, Central Generating Stations, IPPs and other sources consists of fixed and variable cost. The dispatched MUs based on merit order stacking consists both for supplying power to Discoms as well as for trading purpose (elaborated in subsequent sub-sections).



TABLE 24 : POWER PURCHASE COST FOR THE FY 2021-22

S No.	Name of the Station	Available (MU)	Dispatch (MU)	Fixed Cost (Rs. Cr.)	Variable Cost (Rs./kwh)	Variable Cost (Rs.Cr.)	Total Cost (Rs. Cr.)
	<b>GSECL</b>						
1	GSECL Gandhinagar - 5	878	83	71	4.02	33	105
2	GSECL Wanakbori - 7	970	83	63	3.87	32	95
3	GSECL Utran Expan	722	722	240	3.52	254	494
4	GSECL Dhuvaran - 7	179	179	50	2.87	52	101
5	GSECL Dhuvaran - 8	87	87	29	3.14	27	57
6	GSECL Ukai	2,669	2,580	278	3.67	947	1,225
7	GSECL Ukai Expan	2,660	2,660	493	3.24	861	1,354
8	GSECL Gandhinagar 3-4	651	166	229	4.19	70	299
9	GSECL Wanakbori 1-6	3,598	502	560	3.93	198	757
10	GSECL Sikka Expansion	2,451	2,451	602	3.58	877	1,479
11	GSECL Kutch Lignite	261	261	79	2.70	71	150
12	GSECL Kutch Lignite Exp unit 4	261	261	57	2.52	66	122
13	GSECL Ukai Hydro	765	765	41	-	-	41
14	GSECL Kadana Hydro	445	445	69	-	-	69
15	GSECL Dhuvaran CCPP III	538	538	118	3.41	184	302
16	GSECL BLTPS	1,169	1,169	503	2.89	338	841
17	GSECL Wanakbori - 8	5,644	5,644	818	3.31	1,866	2,685
	<b>Sub Total</b>	<b>23,952</b>	<b>18,601</b>	<b>4,300</b>		<b>5,876</b>	<b>10,176</b>
	<b>IPP's</b>						
1	Gujarat State Energy Generation	42	42	31	4.03	17	48
2	Gujarat State Energy Generation Expansion	562	149	169	3.67	55	224
3	Gujarat Industries Power Co Ltd (165 MW)	13	13	-	4.10	5	5
4	Gujarat Industries Power Co Ltd (SLPP)	1,423	1,423	134	1.44	204	338
5	Gujarat Mineral Development Corp.	547	547	62	1.32	72	134
6	Gujarat Industries Power Co Ltd (145 MW)	123	123	6	2.99	37	42
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	1,530	1,530	261	1.41	216	477
8	GPPC Pipavav	522	522	313	3.57	187	500
9	Essar Power Gujarat Ltd	7,008	7,008	645	1.77	1,239	1,884
10	Adani Power Ltd - (Unit 1 - 4)	8,369	8,369	810	2.92	2,446	3,256
11	ACB India Ltd.	1,270	1,270	179	0.67	85	263
12	Coastal Gujarat Power Co Ltd	12,649	12,649	1,144	1.86	2,358	3,503
13	Power Exchange	1,744	1,744	-	3.53	616	616
14	Short term Bilateral	3,353	3,353	-	3.17	1,062	1,062
	<b>Sub Total</b>	<b>39,154</b>	<b>38,742</b>	<b>3,753</b>		<b>8,600</b>	<b>12,353</b>
	<b>Central Sector</b>						
1	NPC-Tarapur 1 & 2	631	631	-	2.07	130	130
2	NPC-Tarapur 3 & 4	1,921	1,921	-	3.07	591	591
3	NPC-Kakrapar	869	869	-	2.48	215	215
4	NTPC-Vindhyachal - I	1,514	1,514	134	1.88	285	419
5	NTPC-Vindhyachal - II	1,553	1,553	115	1.79	277	393
6	NTPC-Vindhyachal - III	1,905	1,905	194	1.77	338	532
7	NTPC-Korba	2,566	2,566	174	1.46	375	550
8	NTPC-Korba -II	686	686	94	1.42	97	191
9	NTPC-Kawas	489	489	115	3.04	149	264
10	NTPC-Jhanor	186	186	181	3.55	66	247
11	NTPC-Sipat-I	3,788	3,788	492	1.52	578	1,070
12	NTPC-Sipat - II	1,976	1,976	239	1.57	310	550
13	NTPC-Kahlagaoon	984	984	106	2.08	204	311



S No.	Name of the Station	Available (MU)	Dispatch (MU)	Fixed Cost (Rs. Cr.)	Variable Cost (Rs./kwh)	Variable Cost (Rs.Cr.)	Total Cost (Rs. Cr.)
14	NTPC-Vindhyachal - IV	1,763	1,763	265	1.74	307	573
15	NTPC-Mauda	1,499	1,499	317	3.28	492	808
16	NTPC-Vindhyachal - V	720	720	112	1.80	130	242
17	NTPC-Mauda II	1,486	1,486	308	3.22	479	787
18	NTPC-Gadarwara	2,122	2,122	334	2.58	547	881
19	NTPC-LARA	1,089	1,089	110	2.55	277	387
20	NTPC-Khargone	1,714	1,714	246	2.97	510	756
21	Sardar Sarovar Nigam Ltd	639	639	-	2.05	131	131
	<b>Sub Total</b>	<b>30,101</b>	<b>30,101</b>	<b>3,539</b>		<b>6,488</b>	<b>10,027</b>
	<b>Others</b>						
1	Captive Power	6	6	-	2.15	1	1
	Renewable						
1	Wind Farms	8,217	8,217	-	3.45	2,835	2,835
2	Solar	2,702	2,702	-	7.82	2,112	2,112
3	Small/Mini Hydal	87	87	-	4.65	40	40
4	Biomass	165	165	-	5.86	97	97
5	Solar (New)	4,976	4,976	-	2.62	1,305	1,305
6	Wind (New)	599	599	-	2.80	168	168
7	Others (New)	340	340	-	6.67	227	227
	<b>Sub Total</b>	<b>17,092</b>	<b>17,092</b>	<b>-</b>		<b>6,785</b>	<b>6,785</b>
	<b>TOTAL</b>	<b>110,299</b>	<b>104,536</b>	<b>11,592</b>		<b>27,750</b>	<b>39,342</b>

The total power purchase cost for the company for FY 2021-22 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 2021-22.
- PGCIL charges for FY 2021-22 are considered same as of FY 2019-20.
- SLDC Fees & Charges also have been considered as per the Draft Tariff Petition of SLDC for FY 2021-22.

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 2021-22

Sr.No.	Particulars	FY 2021-22
1	PGCIL Charges ( Rs. Crore)	2,443
2	Annual Transmission charges of GETCO ( Rs. Crore)	4,480
3	SLDC Charges ( Rs. Crore)	21

#### 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 2021-22.

**TABLE 26 : GUVNL COST FROM FY 2021-22**

Sr.No.	Particulars	FY 2021-22
1	GUVNL Cost at 4.00 Paisa per Unit ( Rs.Crore )	418

#### 3.6.4. Summary of total Power Purchase Cost

##### Fixed Cost

The table below shows the total fixed cost FY 2021-22:

**TABLE 27: FIXED COST FOR DISCOM FOR FY 2021-22**

Fixed cost	GETCO Cost	PGCIL Charges	SLDC Charges	Total Fixed Cost	Rs. Crore Discom Fixed Cost
11,592	4,480	2,443	21	18,536	18,536

##### Variable Cost

The table below shows the total variable cost for FY 2021-22:

**TABLE 28: VARIABLE COST OF DISCOMS FOR FY 2021-22**

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)
27,750	418	28,168	104,536	2.69	104,536	28,168

#### 3.6.5. The Net Power Purchase cost

The net power purchase cost is shown below:

**TABLE 29: GUVNL NET POWER PURCHASE COST FOR FY 2021-22**

Discom Fixed cost	Discom Variable Cost	Rs. Crore Total Power Purchase Cost
18,536	28,168	46,704

#### 3.6.6. Bulk Supply Tariff (BST)

The objective of the differentiation of the BST between Discoms is due to the fact that the revenues from tariffs 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 DISCOMs were incorporated on the basis of earlier zonal system, the consumer mix and consumption mix is 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 arrangements related to power procurement, the Distribution Licensee has entered into bulk supply arrangement / agreement with GUVNL to meets its supply obligations.

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

It is submitted that since more than 80% of the total cost incurred by DISCOM is for Power Purchase, the same plays a major role in determining the Annual Revenue Requirement as well as 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 DISCOMs 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.

#### **3.6.7. Allocation of Power Purchase Cost under BST mechanism**

The Net Power Purchase cost worked out in the above section has been allocated for FY 2021-22 based on the methodology adopted by the Commission in the MYT Order dated 31<sup>st</sup> March, 2017. As per this methodology, the amount available to Discoms for power purchase is computed by deducting other expenses (other than power purchase expenses) from total revenue of Discoms 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)	22,079	10,786	29,681	24,624
2	Revenue	10,996	4,907	12,247	8,526
3	FPPPA	3,952	1,931	5,313	4,408
4	Other Income (Consumer Related)	287	124	249	197
5	Agricultural Subsidy	54	73	418	554
6	<b>Total</b>	<b>15,289</b>	<b>7,035</b>	<b>18,227</b>	<b>13,685</b>
7	Expense other than Power Purchase	1,540	1,186	3,511	2,149
8	Amount Available with Discom for Power purchase	13,749	5,849	14,716	11,536

**TABLE 31: TOTAL REVENUE GAP/ (SURPLUS)**

Rs. Crore		
Sr.No.	Particulars	FY 2021-22
1	Total Power Purchase Cost	46,704
2	Aggregate Amount available for power purchase	45,851
3	<b>Gap/(Surplus)</b>	<b>853</b>

**TABLE 32: BULK SUPPLY TARIFF FOR FY 2021-22**

Sr.No.	Details	2021-22			
		DGVCL	MGVCL	PGVCL	UGVCL
1	<b>Gap/(Surplus) (Rs Crore)</b>	<b>853</b>			
2	Ratio of allocation of Gap/(Surplus)	24%	12%	36%	28%
3	Gap/(Surplus) allocation (Rs. Crore)	209	104	305	235
4	Amount Available with Discom for Power purchase	13,749	5,849	14,716	11,536
5	<b>Power purchase cost for DISCOM</b>	13,957	5,953	15,022	11,772
6	Energy Purchase in DISCOM ( MU )	25,583	12,700	37,421	28,832
7	<b>Bulk Supply Tariff ( Rs./kWh)</b>	<b>5.46</b>	<b>4.69</b>	<b>4.01</b>	<b>4.08</b>

### 3.7. CAPITAL EXPENDITURE FOR FY 2021-22

3.7.1. The comparison of the scheme-wise projected capital expenditure for the FY 2021-22 is as shown below:

TABLE 33: CAPITAL EXPENDITURE PLAN FOR FY 2021-22

		Rs in Crores
	Particulars	FY 2021-22 (Projected)
<b>A</b>	<b>Distribution Schemes</b>	
	Normal Development Scheme	312.00
	Distribution Infrastructure Shifting Scheme (DISS)	40.00
	SKJY	25.00
	<b>Total</b>	<b>377.00</b>
<b>B</b>	<b>Rural Electrification Schemes</b>	
	TASP Wells	437.85
	SC Wells	0.21
	SCSP	0.05
	Kutir Jyoti Scheme	3.37
	Zupadpatti	0.36
	AG wells scheme( Normal and Dark zone)	38.58
	HVDS(KHUSHI)	5.50
	Coastal	6.00
	PM Kusum- B	1.76
	<b>Total</b>	<b>493.68</b>
<b>C</b>	<b>System Improvement Scheme</b>	360.30
<b>D</b>	<b>IT</b>	3.12
<b>E</b>	<b>Civil</b>	18.25
	<b>Capital Expenditure Total</b>	<b>1,252.35</b>

3.7.2. The scheme-wise details for the projected capital expenditure for FY 2021-22 are as follows:

#### Normal Development:

Under the head Normal Development Scheme, generally expenses are incurred to meet with the Supply Obligation. Company has to lay distribution lines up to installations of LT/HT consumers. Considerable investment is required for laying / strengthening of LT/HT lines, service connection lines, meters, etc.

According to historical trend, Company has proposed investment under this scheme for the remaining years of third control period.

#### System Improvement:

Under the head system Improvement Company carry out renovation/ replacement of old Distribution line, bifurcation of feeder, installation/ augmentation of Distribution Transformer etc. According to System Requirement, company has proposed investment under this scheme for the remaining years of third control period.

#### Electrification of Hutment:

The subject scheme is for electrification of hutments in certain areas situated in and around urban and rural areas with a view to support and help socially, economically and educationally weaker sections of society, who are living in the above hutments. The scheme involves energisation of single point power supply to the identified

beneficiaries in consultation with Local Body.

**Scheme for Meters:**

The scheme involves replacement of Meters at exiting consumers' premises by Static/electronics meters and also installation of Meters at Distribution Transformer level.

**RE Scheme:**

Under the head RE Schemes Company releases Agriculture Category connections. Following the directive of Hon'ble Commission, Company has maximised the targets for releasing the Connections of Agriculture category. Company has proposed 20,329 nos. of connections during each year of the Control Period and accordingly investment is proposed under the scheme.

**High Voltage Distribution System (HVDS):**

Company is having large nos. of Low Tension category consumers. To eliminate low voltage distribution and to have better voltage profile as well as for reduction of Technical loss and associated commercial loss company converts LT Distribution System to High Voltage Distribution System by erecting small capacity Transformer matching with the connected load of individual consumer or very small group of consumers. Company has decided to continue with the scheme during this control period and investment is proposed accordingly.

**Shunt Capacitor:**

Company operates HT, LT and Distribution Transformer network for supplying electricity to more than 33 Lacs consumers. Majority consumers are residential followed by Agriculture and remaining are from other categories. Because of nature of load used by consumer and also the characteristic of the network, Power factor of the system gets poor which ultimately affects to "Voltage Profile" "Network Capacity Utilisation factor", higher technical losses etc. For improving the profile, Company has proposed to install shunt capacitor over the HT line to improve the System Power factor.

**Coastal Area Scheme:**

DGVCL covers large costal area of the state. Majority of the Distribution network of the Company is having "Overhead" type. "Overhead" network is highly susceptible to environmental changes in general and particularly in "Costal" area. To provide better quality power supply in the costal belt, company undertakes various activities like renovation of Distribution network, Distribution Transformer review, providing Aerial Bunch Conductor, conversion of LT Distribution network into High Voltage Distribution System etc. Scope of work is planned depending on time to time requirement and exigency of work and accordingly investment is proposed under the scheme.

**Aerial Bunched Conductors:**

The Aerial Bunched Conductors (A.B.C.) are insulated conductors and are better replacement of overhead HT and LT lines in theft-prone, fault-prone areas and also increases the overall safety of the HT LT Network.



**Civil Work:**

Under this scheme, provision is proposed for Civil Works for new office buildings for various Circle Offices/ Division Offices and Sub division offices under Company's area.

**Distribution Infrastructure Shifting Scheme: (DISS)**

Under this scheme, Company shifts the network obstructing to Local bodies, Urban authorities in their development activities, road widening etc.

**Underground System:**

Under this scheme, Company has proposed to shift the existing overhead network in some of pilgrim places, GIDC areas for better power supply management, aesthetic views of the areas and also to increase the network safety.

**Integrated Power Development Scheme (IPDS)**

Scheme is applicable in the town/ urban areas having population 5000 and more as per Census 2011. Scheme involves strengthening of Sub-transmission and Distribution network in urban areas including provisioning of solar panels on Govt. buildings including Net-metering, Metering of feeders / distribution transformers / consumers in urban areas and, IT enablement of distribution sector and strengthening of distribution network, etc.

**Deen Dayal Upadhyay Gram Jyoti Yojna (DDUGJY):**

Scheme is applicable in the Rural areas of the Company. Scheme involves strengthening and augmentation of sub-transmission & distribution to ensure reliable and quality power supply in rural areas, Conversion of existing LV network to HV network, improving consumer level metering system, installation of meter at distribution transformers for proper energy accounting, identifying high loss pockets etc.

**Sardar Krushi Jyoti Yojna (SKJY)**

Under the head Sardar Krushi Jyoti Yojna (SKJY), DGVCL carries out replacement, strengthening, renovation etc. of Agriculture Dominant Distribution network under the financial assistance from the State Government. Main objective of the scheme is to improve reliability of power supply and also to reduce distribution loss. Company has proposed to continue with the scheme for the remaining years of current control period.

**Fencing to Distribution Transformers:**

In order to protect the human and animal lives and to prevent the access to Distribution Transformer, Company has proposed to provided fencing to the Distribution Transformers.

**Fault Passage Indicator (FPI) :**

Fault Passage Indicator is a device which glows when the feeder goes off. Therefore, it helps in early identification of the faulty section /part and expeditious restoration of Power Supply.



### 3.8. FUNDING OF CAPEX

3.8.1. The funding of above mentioned Capital Expenditure 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 2021-22 is mentioned below.

**TABLE 34: FUNDING PLAN OF CAPITAL EXPENDITURE**

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Capitalisation	1,252.35
2	Less : Consumer Contribution	156.00
3	Less: Grants	558.68
4	Balance CAPEX	537.67
5	Debt @ 70%	376.37
6	Equity @ 30%	161.30

### 3.9. OPERATION & MAINTENANCE EXPENSES

3.9.1. The O&M expenses consist of Employee cost, Administration & General Expenses, Repair and Maintenance expenses, Other Debits, Extraordinary Items, and Net Prior Period Income/Expenses.

3.9.2. Regulation 94.8 of GERC MYT Regulations, 2016 states the following methodology for projection of O&M expenses:

*“Operation and Maintenance expenses:*

*a) The Operation and Maintenance shall be derived on the basis of the average of the actual audited Operation and Maintenance expenses for the past three Years ending March 31, 2015, excluding abnormal Operation and Maintenance expenses, if any, subject to prudence check by the Commission:*

*The average of such operation and maintenance expenses shall be considered as operation and maintenance expenses for the financial year ended March 31, 2014 and shall be escalated year on year at the escalation factor of 5.72% to arrive at operation and maintenance expenses for subsequent years up to FY 2020-21.”*

3.9.3. To work out O&M expenses for FY 2021-22, actual O&M expenses for FY 2019-20 have been escalated by year-on-year escalation rate of 5.72%.

3.9.4. The O&M expenses projected for FY 2021-22 are as below:

**TABLE 35: PROPOSED O&M EXPENSES FOR FY 2021-22**

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Employee Cost	598.23
2	Repair & Maintenance	74.70
3	Administration & General Charges	118.52
4	Other Debits	-
5	Extraordinary Items	-
6	Net Prior Period Expenses / (Income)	-
7	Other Expenses Capitalised	(112.98)
8	<b>Operation &amp; Maintenance Expenses</b>	<b>678.47</b>

3.9.5. The Hon'ble Commission is requested to approve the above submission on the O&M expenses projections for FY 2021-22.

### 3.10. DEPRECIATION

3.10.1. DGVCL has considered the closing Gross block of fixed assets of FY 2019-20 as the opening Gross block of fixed assets of FY 2020-21. The addition during the FY 2020-21 and FY 2021-22 has been projected considering projected capitalisation for the same for each 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 projected depreciation for FY 2021-22 is as shown below:

**TABLE 36: DEPRECIATION FOR FY 2021-22**

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Gross Block in Beginning of the year	7,999.73
2	Additions during the Year (Net)	1,252.35
3	Gross Block in closing of the year	9,252.08
4	Average Gross Block of the year	8,625.90
3	<b>Depreciation for the Year</b>	<b>401.50</b>
4	<b>Average Rate of Depreciation</b>	<b>4.65%</b>

### 3.11. INTEREST ON LOAN

3.11.1. 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.

3.11.2. The closing balance of loan portfolio for FY 2019-20 is taken as opening balance of FY 2020-21. The normative loan addition in FY2020-21 to 2021-22 is computed as per the Capex funding plan discussed above.

3.11.3. The repayment for the year during FY 2020-21 and FY 2021-22 has been taken equal to depreciation calculated for the year.

3.11.4. The rate of interest has been taken as the weighted average rate of interest on the actual loan portfolio for FY 2019-20 that is 12.67%.

3.11.5. Interest rate on Security deposit by consumers is taken at the RBI bank rate of 6.65%.

3.11.6. Other bank charges have been considered same as of FY 2019-20.

3.11.7. The Interest and Finance Charges for FY 2021-22 is projected as tabulated below:

TABLE 37: INTEREST & FINANCIAL CHARGES FOR FY 2021-22

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Opening Loans	232.44
2	Loan Additions during the Year	376.37
3	Repayment during the Year	401.50
4	Closing Loans	207.32
5	<b>Average Loans</b>	<b>219.88</b>
6	Weighted average rate of interest	12.67%
7	Interest on Loan	27.86
8	Interest in Security Deposit	115.83
9	Other Bank Charges	1.00
10	<b>Total Interest &amp; Financial Charges</b>	<b>144.69</b>

### 3.12. INTEREST ON WORKING CAPITAL

3.12.1. 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.

3.12.2. Since the Security deposit by the consumer with the utility is more than its total normative working capital requirement therefore DGVCL is not projecting any interest on working capital for FY 2021-22.

TABLE 38: INTEREST ON WORKING CAPITAL FOR FY 2021-22

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	O & M expenses	56.54
2	Maintenance Spares	80.00
3	Receivables	1,274.06
4	Less : Security Deposit	1,741.87
5	<b>Total Working Capital</b>	<b>(331.28)</b>
6	Rate of Interest on Working Capital	0.10
7	<b>Interest on Working Capital</b>	<b>-</b>

### 3.13. RETURN ON EQUITY

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

3.13.2. The return on equity has been computed @ 14% on average equity based upon the

opening balance of equity and normative additions during the year, which has been arrived at by considering 30% of the Capitalization net of consumer contribution and grants as funded from equity as already explained above. Accordingly, the normative return on equity for FY 2021-22 is as shown below:

**TABLE 39: RETURN ON EQUITY FOR FY 2021-22**

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Opening Equity Capital	1,349.75
2	Equity Additions during the Year	161.30
3	Closing Equity	1,511.05
4	Average Equity	1,430.40
5	Rate of Return on the Equity	14%
6	<b>Return on Equity</b>	<b>200.26</b>

### 3.14. PROVISION FOR BAD AND DOUBTFUL DEBTS

3.14.1. Provision for bad & doubtful debts is considered same as actuals of FY 2019-20. It is a very legitimate expenditure which is associated with the business risk and is a consumer related expense as DGVCL is in a distribution business. DGVCL accordingly, has projected Provision for Bad & Doubtful Debts for FY 2021-22 as follows:

**TABLE 40: BAD AND DOUBTFUL DEBTS FOR FY 2021-22**

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Provision for Bad Debts	0.41

### 3.15. TAXES

3.15.1. The Income tax for FY 2021-22 has been taken as per the actual income tax paid in FY 2019-20 as per audited accounts.

**TABLE 41: TAXES FOR FY 2021-22**

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Provision for Tax / Tax Expenses	18.92

### 3.16. NON-TARIFF INCOME

3.16.1. DGVCL has considered the Non-Tariff Income for FY 2021-22 same as actual figures of FY 2019-20.

**TABLE 42: NON-TARIFF INCOME FOR FY 2021-22 (RS IN CRORES)**

Sr. No.	Particulars	FY 2021-22 (Projected)
1	Total Non-Tariff Income	203.48

### 3.17. PROJECTED ARR FOR FY 2021-22

3.17.1. The table below shows projection of Aggregate Revenue Requirement by DGVCL for FY 2021-22.

**TABLE 43: PROJECTED ARR FOR FY 2021-22**

		Rs in Crores
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Cost of Power Purchase	13,957.38
2	Operation & Maintenance Expenses	678.47
2.1	Employee Cost	598.23
2.2	Repair & Maintenance	74.70
2.3	Administration & General Charges	118.52
2.4	Other Debits	-
2.5	Extraordinary Items	-
2.6	Net Prior Period Expenses / (Income)	-
2.7	Other Expenses Capitalised	(112.98)
3	Depreciation	401.50
4	Interest & Finance Charges	144.69
5	Interest on Working Capital	-
6	Provision for Bad Debts	0.41
7	<b>Sub-Total [1 to 6]</b>	<b>15,182.44</b>
8	Return on Equity	200.26
9	Provision for Tax / Tax Paid	18.92
10	<b>Total Expenditure (7 to 9)</b>	<b>15,401.61</b>
11	Less: Non-Tariff Income	203.48
12	<b>Aggregate Revenue Requirement (10 - 11)</b>	<b>15,198.13</b>

3.17.2. DGVCL request the Hon'ble Commission to approve the above mentioned Aggregate Revenue Requirement for FY 2021-22.

## SECTION 4. DETERMINATION OF REVENUE GAP/ (SURPLUS) FOR FY 2021-22

### 4.1. PREAMBLE

4.1.1. This chapter deals with the Determination of Final ARR for FY 2021-22 and Revenue gap/ (surplus) at existing tariff for FY 2021-22.

### 4.2. REVENUE GAP/ (SURPLUS) FOR FY 2021-22 WITH EXISTING TARIFF

4.2.1. Based on projected sales & existing retail tariff, revenue from sale of power works out to Rs. 10,996 Crore for FY 2021-22. The consumer category wise revenue for FY 2021-22 estimated by DGVCL is as given in the following table:

TABLE 44: REVENUE AT EXISTING TARIFF FOR FY 2021-22

S.No.	Particulars	Revenue excluding FPPPA (Rs in Crores)
<b>A</b>	<b>LT Consumers</b>	
1	RGP	1,377
2	GLP	54
3	Non-RGP & LTMD	3,557
4	Public Water Works	105
5	Agriculture-Unmetered	59
6	Agriculture-Metered	56
7	Public Lighting	
	<b>LT Total (A)</b>	<b>5,207</b>
<b>B</b>	<b>HT Consumers</b>	
8	Industrial HT	5,785
9	Railway Traction	4
	<b>HT Total (B)</b>	<b>5,789</b>
	<b>Grand Total (A + B)</b>	<b>10,996</b>

### 4.3. REVENUE FROM FPPPA CHARGES

4.3.1. In the True up for FY 2018-19 and Determination of Tariff Order for FY 2020-21 dated 31<sup>st</sup> March, 2020, the Hon'ble Commission has considered the base power purchase cost at Rs. 4.30/unit and base FPPPA at Rs. 1.59/unit. As per approved FPPPA formula, any increase in power purchase cost during the year over and above base power purchase cost of Rs. 4.30/unit is to be recovered through FPPPA over and above base FPPPA of Rs. 1.59/unit on quarterly basis. As per projected ARR for FY 2021-22, the weighted average power purchase cost is worked out to Rs. 4.47/unit as against base power purchase cost of Rs. 4.30/unit. Thus, the incremental power purchase cost of Rs. 0.20/unit for FY 2021-22 (i.e. (Rs. 4.47 – Rs. 4.30) grossed up by distribution losses) will be recovered through FPPPA over and above base FPPPA of Rs. 1.59/unit. Therefore, estimated revenue from FPPPA for FY 2021-22 is considered at Rs. 1.79/unit (i.e. grossing up by approved losses), as shown below.

**TABLE 45: FPPPA COMPUTATION FOR FY 2021-22**

No.	Particulars	FY 2020-21	FY 2021-22
1	Fixed Cost (Rs. Crore)	12,173	11,592
2	Variable Cost (Rs. Crore)	26,105	27,750
3	GETCO Cost (Rs. Crore)	4,502	4,480
4	GUVNL Cost (Rs. Crore)	423	418
5	PGCIL Charges (Rs. Crore)	2,181	2,443
6	SLDC Charges (Rs. Crore)	33	21
7	Total Power Purchase Cost (Rs. Crore)	45,417	46,704
8	Total Energy Requirement (MU)	105,652	104,536
9	<b>Power Purchase Cost (Rs./kWh)</b>	<b>4.30</b>	<b>4.47</b>
10	Increase in Power Purchase Cost (Rs./ kWh)		0.17
11	Additional FPPPA Charges (Grossed up by Distribution Loss) (Rs./kWh)		0.20
12	Existing FPPPA Charges (Rs./kWh)		1.59
13	<b>Revised FPPPA Charges (Rs./kWh)</b>		<b>1.79</b>

**TABLE 46: REVENUE FROM FPPPA CHARGES FOR THE FY 2021-22**

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Projected Sales (MU)	22,079.37
2	FPPPA Rate (Rs./kWh)	1.79
3	Revenue from FPPPA (Rs. Crore)	3,952.21

#### 4.4. REVENUE PROJECTION FOR OTHER CONSUMER RELATED INCOME

4.4.1. 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. DGVCL has projected its Other Consumer related Income for FY 2021-22 same as actuals of FY 2019-20. The same is outlined in the table below:

**TABLE 47: OTHER CONSUMER RELATED INCOME FOR FY 2021-22**

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Other Consumer related Income	286.97

#### 4.5. AGRICULTURE SUBSIDY

4.5.1. 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. 1100.00 Crores. The share of agricultural subsidy for FY 2021-22 is considered on pro-rata basis of agriculture consumption.

**TABLE 48: AGRICULTURE SUBSIDY FOR FY 2021-22**

Rs in Crores	
Particulars	FY 2021-22 (Projected)
Share of Agriculture Subsidy	53.85

#### 4.6. TOTAL REVENUE FOR FY 2021-22

4.6.1. 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 2021-22 is as shown below:

**TABLE 49: TOTAL REVENUE FOR FY 2021-22**

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Revenue with Existing Tariff	10,995.65
2	FPPPA Charges	3,952.21
3	Other Income (Consumer related)	286.97
4	Agriculture Subsidy	53.85
5	<b>Total Revenue including subsidy (1 to 4)</b>	<b>15,288.68</b>

#### 4.7. ESTIMATED REVENUE GAP/ (SURPLUS) FOR FY 2021-22

4.7.1. Based on the above, the estimated revenue gap/ (surplus) for FY 2021-22 at existing tariff is as outlined in the table below:

**TABLE 50: ESTIMATED REVENUE GAP FOR FY 2021-22 AT EXISTING TARIFF**

Rs in Crores		
Sr. No.	Particulars	FY 2021-22 (Projected)
1	Aggregate Revenue Requirement	15,198.13
2	Revenue Gap from True up of FY 2019-20	299.22
3	<b>Total Aggregate Revenue Requirement</b>	<b>15,497.35</b>
4	Revenue with Existing Tariff	10,995.65
5	FPPPA Charges	3,952.21
6	Other Income (Consumer related)	286.97
7	Agriculture Subsidy	53.85
8	<b>Total Revenue including subsidy (4 to 7)</b>	<b>15,288.68</b>
9	<b>Gap / (Surplus) (3 - 8)</b>	<b>208.67</b>

4.7.2. The Hon'ble Commission is requested to approve the above mentioned gap.

#### 4.8. PROPOSED CHANGES IN THE TARIFF STRUCTURE FOR FY 2021-22

4.8.1. The consolidated resultant revenue gap for all four distribution companies is Rs. 853 Crores which can be met through efficiency improvement measures.

4.8.2. In view of the above, the distribution companies have neither proposed any increase in tariff rates nor proposed any modifications in current tariff structure.



## **SECTION 5. PRAYER**

**DGVCL respectfully prays to the Hon'ble Commission;**

1. To admit this Petition seeking Determination of ARR & Tariff for FY 2021-22 as an addendum to True-up Petition for FY 2019-20 filed to the Hon'ble Commission.
2. To consider approved True up parameters & Multi-Year ARR of GSECL, GETCO and SLDC while finalizing Tariff of the Petitioner.
3. To allow recovery of Revenue Gap/ (Surplus) of FY 2019-20 as part of Tariff for FY 2021-22.
4. To approve the terms and conditions of Tariff for FY 2021-22 and various other matters as proposed in this petition and proposed changes therein.
5. Pass suitable orders for implementation of Tariff Proposal for FY 2021-22 for making it applicable from 1<sup>st</sup> April, 2021 onwards.
6. To grant any other relief as the Hon'ble Commission may consider appropriate.
7. 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.
8. 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: Surat**

**Date: 6<sup>th</sup> January, 2021**

**(Mr. N D Chaudhari)**

**I/C Add Chief Engineer (C&R)**



**BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION**  
**GANDHINAGAR**

Filing No:

Case No:

**IN THE MATTER OF**

Filing of the Petition for Determination of ARR & Tariff 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

AND

**IN THE MATTER OF**

Dakshin Gujarat Vij Company Limited,  
"Urja Sadan", Nana Varachha Road,  
Kapodara Char Rasta,  
Surat - 395006.

**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, Mr. Nitinbhai, son of Dineshchandra Chaudhari -, aged 54 years, residing at Surat- 395009 do solemnly affirm and say as follows:

- I. I am the I/C Add Chief Engineer (C&R)) of the Dakshin Gujarat Vij Company Limited (DGVCL), 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 Surat on this 6<sup>th</sup> January, 2021 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. N D Chaudhari)

I/C Add Chief Engineer (C&R)

**Identified before me**

**Place: Surat**

**Date: 6<sup>th</sup> January, 2021**

## **SECTION 6. ANNEXURE 1: TARIFF SCHEDULE FOR FY 2021-22**

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

**Effective from 1<sup>st</sup> April, 2021**

#### **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 equipments 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

- 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;
- research and development laboratories;
- 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:
- a) The highest of the actual maximum demand registered during the calendar year.
  - b) Eighty-five percent of the arithmetic average of contract demand during the year.
  - c) 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 demand 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.

*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 <b>LTMD</b> above
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**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:

260 P

1. 15% of the contracted demand can be availed beyond the night hours prescribed as per para 7 above.
2. 10% of total units consumed during the billing period can be availed beyond the night hours prescribed as per para 7 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 LTMD category demand charge rates given in para 5.1 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 LTMD category energy charge rates given in para 5.2 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 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.
6. 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.
7. 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
<b>PLUS</b>		
(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
For energy consumption during night hours, viz, 2200 Hrs to 0600 Hrs next day	85 Paise per Unit

**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:

- 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:
- a) The highest of the actual maximum demand registered during the calendar year.
  - b) Eighty-five percent of the arithmetic average of contract demand during the year.
  - c) 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
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For billing demand in excess of contract demand	Rs. 20/- per kVA per day
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**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%.
- 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 <sup>rd</sup> 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

Same as HTP-I Tariff

**16.8 POWER FACTOR ADJUSTMENT CHARGES:****16.8.1** 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 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%.
- 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:**

- 15% of the contracted demand can be availed beyond the night hours prescribed as per para 16 above.
- 10% of total units consumed during the billing period can be availed beyond the night hours prescribed as per para 16 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 HTP-I category demand charge rates given in para 13.1 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 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
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**PLUS**

**17.2 ENERGY CHARGES:**

For all units consumed during the month	80 Paise/Unit
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**17.3** Billing Demand

**17.4** Minimum bill

**17.5** Maximum demand and its measurement

**17.6** Contract Demand

**17.7** Rebate for supply at EHV

} Same as per HTP-I Tariff

**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:**

- 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%.
- 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:

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



## **SECTION 7.      ANNEXURE 2: TARIFF FILING FORMATS**