BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION GANDHINAGAR



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Filing of Petition for True Up for FY 2020-21 and Determination of Aggregate Revenue Requirement

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Tariff of FY 2022-23

Under

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

Filed by:-

Madhya Gujarat Vij Company Ltd.

Corp. Office: Sardar Patel Vidyut Bhavan, Race Course, Vadodara – 390007.



BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION

GANDHINAGAR

Filing No:	
Case No:	
IN THE MATTER OF	Filing of the Petition for True Up for FY 2020-21 and Determination of ARR & Tariff for FY 2022-23 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	Madhya Gujarat Vij Company Limited, Sardar Patel Vidyut Bhavan,
	Race Course, Vadodara – 390007
	PETITIONER
	Gujarat Urja Vikas Nigam Limited
	Sardar Patel Vidyut Bhavan, Race Course,
	Vadodara - 390 007

CO-PETITIONER

THE PETITIONER ABOVE NAMED RESPECTFULLY SUBMITS



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ABBREVIATIONS

1.	ADD	Aggragata Payanua Paguirament
	ARR	Aggregate Revenue Requirement
2.	DGVCL	Dakshin Gujarat Vij Company Limited
3.	FPPPA	Fuel and Power Purchase Price Adjustment
4.	FY	Financial Year
5.	GERC	Gujarat Electricity Regulatory Commission
6.	GERC MYT Regulations, 2016	GERC (Multi Year Tariff) Regulations, 2016
7.	GETCO	Gujarat Energy Transmission Corporation Limited
8.	GoG	Government of Gujarat
9.	Gol	Government of India
10.	GSECL	Gujarat State Electricity Corporation Limited
11.	GUVNL	Gujarat Urja Vikas Nigam Limited
12.	kV	Kilo Volt
13.	kVA	Kilo Volt Ampere
14.	kVAh	Kilo Volt Ampere Hour
15.	kWh	Kilo Watt Hour
16.	MCLR	Marginal Cost of Funds based Lending Rate
17.	MGVCL	Madhya Gujarat Vij Company Limited
18.	MTR	Mid-Term Review
19.	MU	Million Units (Million kWh)
20.	MVA	Mega Volt Ampere
21.	MW	Mega Watt
22.	MYT	Multi Year Tariff
23.	0&M	Operation & Maintenance
24.	PGVCL	Paschim Gujarat Vij Company Limited
25.	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 / 19th August, 2003 had directed the erstwhile Gujarat Electricity Board (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 15th September, 2003. Madhya Gujarat Vij Company Limited (MGVCL) is one of the distribution companies engaged in distribution of electricity in the central zone area of Gujarat.
- 1.2.3 The MGVCL 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 31st March, 2005. The Company has started its commercial function w.e.f. 1st 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 MGVCL, the Hon'ble Commission issued MYT order on 31st 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 29th March, 2016 were in force till 31st March, 2021.
- 1.2.8 The Hon'ble Commission had initiated the process of framing the new MYT Regulations for the Fourth Control Period of FY 2021-22 to FY 2025-26 by issuing Public Notice dated 10th August, 2020 and invited comments/suggestions on the draft MYT Regulations from the stakeholders. However, subsequently the Commission vide its Suo-Motu Order No. 07 of 2020 dated 22 December, 2020 deferred the notification of the Regulations by one year and directed the Licensees / utilities to file the tariff application for the FY 2021-22 based on the principles and methodologies as provided in the GERC MYT Regulations, 2016.
- 1.2.9 Similarly, the Hon'ble Commission vide its Order in Suo Motu Petition No. 1995 of 2021 dated 24th September, 2021 directed generating companies, licensees and utilities to file their tariff applications for approval of true-up for FY 2020- 21 and for determination of Annual ARR and Tariff for FY 2022-23 on or before 30th November, 2021 based on the principles and methodologies as provided in the GERC MYT Regulations, 2016.
- 1.2.10 Also, the FY 2020-21 is completed and annual accounts of MGVCL are also audited, MGVCL is required to file its Petition for True-up of FY 2020-21 in accordance with GERC MYT Regulations, 2016, to the Hon'ble Commission for its approval.
- 1.2.11 Accordingly, MGVCL is filing present Petition for the True up for FY 2020-21 and determination of Aggregate Revenue Requirement & Tariff for FY 2022-23 to the Hon'ble Commission.



SECTION 2. EXECUTIVE SUMMARY

2.1. PREAMBLE

2.1.1. This section highlights the summary of the Petition for True Up for FY 2020-21 and ARR & Tariff for FY 2022-23.

2.2. TRUE UP OF FY 2020-21

- 2.2.1 MGVCL has worked out its actual Aggregate Revenue Requirement (ARR) for FY 2020-21 based on the audited accounts, provisions of the GERC MYT Regulations, 2016 and the principles adopted by the Hon'ble Commission in its previous Orders.
- 2.2.2 The actual expenses have been compared against those approved for FY 2020-21 in the MTR for ARR of FY 2020-21 to FY 2020-21 Order dated 24th April, 2019. The detailed comparison of various cost components with the values approved by the Hon'ble Commission has been presented in the next Chapter on True up of FY 2020-21. A summary of the actual ARR for Truing-up of FY 2020-21 compared with the approved ARR for FY 2020-21 is presented in the table given below:

TABLE 1: TRUE UP FOR FY 2020-21

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Deviation
		(Approved)	(Actual)	
1	Cost of Power Purchase	5,723.61	5,237.60	486.01
2	Operation & Maintenance Expenses	682.86	625.64	57.23
2.1	Employee Cost	581.19	499.47	81.72
2.2	Repair & Maintenance	69.72	77.42	(7.70)
2.3	Administration & General Charges	88.01	88.21	(0.20)
2.4	Other Expenses Capitalised	(56.05)	(39.46)	(16.59)
3	Depreciation	270.64	270.72	(0.08)
4	Interest & Finance Charges	63.38	45.87	17.51
5	Interest on Working Capital	-	-	-
6	Provision for Bad Debts	0.00	0.01	(0.00)
7	Sub-Total [1 to 6]	6,740.49	6,179.84	560.67
8	Return on Equity	158.12	160.04	(1.91)
9	Provision for Tax / Tax Paid	12.11	19.58	(7.47)
10	Total Expenditure (7 to 9)	6,910.73	6,359.45	551.29
11	Less: Non-Tariff Income	130.28	(62.24)	192.52
12	Add: DSM Expenses	-	_	
13	Aggregate Revenue Requirement (10 - 11)	6,780.45	6,421.69	358.75

2.2.3 In line with the provisions of the GERC MYT Regulations, 2016, MGVCL has computed the gains and losses on account of controllable and uncontrollable parameters and its proposed sharing mechanism.



2.2.4 The cost components have been segregated into controllable and uncontrollable factors as per the methodology outlined in Regulation 22 of the GERC MYT Regulations, 2016. Summary of the difference allocation to controllable & Uncontrollable factors is outlined as per the table below:

Table 2: Summary of Controllable and Uncontrollable Factors for FY 2020-21

Rs. in Crores

Sr. No.	Particulars	FY 2020-21 (Approved)	FY 2020-21 (Actual)	Gain/(Loss) due to	Gain/(Loss) due to
				Controllable	Uncontrollabl
1	Cost of Power Purchase	5,723.61	5,237.60	Factors 89.55	e Factors 396.47
2	Operation & Maintenance Expenses	682.87	625.64	73.82	(16.59)
2.1	Employee Cost	581.19	499.47	81.72	-
2.2	Repair & Maintenance	69.72	77.42	(7.70)	-
2.3	Administration & General Charges	88.01	88.21	(0.20)	-
2.4	Other Expenses Capitalised	(56.05)	(39.46)	-	(16.59)
3	Depreciation	270.64	270.72	-	(0.08)
4	Interest & Finance Charges	63.38	45.87	-	17.51
5	Interest on Working Capital	-	-	-	-
6	Provision for Bad Debts	0.00	0.01	(0.00)	-
7	Return on Equity	158.12	160.04	-	(1.91)
8	Provision for Tax / Tax Paid	12.11	19.58	-	(7.47)
9	ARR (1 to 8)	6,910.73	6,359.45	163.36	387.92
10	Non - Tariff Income	130.28	(62.24)	-	192.52
11	Total ARR (9-10)	6,780.45	6,421.69	163.36	195.40

- 2.2.5 As per the mechanism specified in the GERC MYT Regulation 2016, MGVCL proposes to pass on a sum of 1/3rd of total gain/(loss) on account of controllable factors i.e. Rs. 54.45 Crores and total gain/(loss) on account of uncontrollable factor i.e. Rs. 195.40 Crores to the consumers. Further, the Revenue (Gap) / Surplus approved by the Hon'ble Commission on True up of FY 2018-19 of Rs. 44.88 Crores is also considered. Adjusting these to the net Aggregate Revenue Requirement, MGVCL has arrived at the Revised Aggregate Revenue Requirement for FY 2020-21 at Rs. 6,485.71 Crores.
- 2.2.6 This revised Aggregate Revenue Requirement is compared against the actual income under various heads including Revenue from Existing Tariff of Rs. 6,171.59 Crores, Other Consumer related Income of Rs. 144.80 Crores, Agriculture Subsidies of Rs. 84.85 Crores and GUVNL profit allocation of Rs. 12.12 Crores, summing up to a Total Revenue of Rs. 6,413.36 Crores. Accordingly, total Revenue (Gap) / Surplus of MGVCL for FY 2020-21 after treatment of gain/ (loss) due to controllable / uncontrollable factors is computed at Rs. (72.36) Crores as shown in the table below:



TABLE 3: REVENUE (GAP) / SURPLUS FOR FY 2020-21

Sr. No.	Particulars	FY 2020-21
		(Actual)
1	Aggregate Revenue Requirement	6,780.45
	originally approved for FY 2020-21	
2	Less: (Gap) / Surplus of FY 2018-19	44.88
3	Less: Gain / (Loss) on account of	195.40
	Uncontrollable factor to be passed on to	
	Consumer	
4	Less: Gain / (Loss) on account of	54.45
	Controllable factor to be passed on to	
	Consumer (1/3rd of Total Gain / Loss)	
5	Revised ARR for FY 2020-21 (1 - 2 - 3 - 4)	6,485.71
6	Revenue from Sale of Power	6,171.59
7	Other Income (Consumer related)	144.80
8	Total Revenue excluding Subsidy (6 + 7)	6,316.39
9	Agriculture Subsidy	84.85
10	GUVNL Profit / (Loss) Allocation	12.12
Total Revenue including Subsidy (8 + 9 +		6,413.36
	10)	
	Revised (Gap)/ Surplus after treating	
12	12 gains/(losses) due to Controllable/	
	Uncontrollable factors (11 - 5)	

2.3. DETERMINATION OF ARR & TARIFF FOR FY 2022-23

2.3.1. The Aggregate Revenue Requirement for FY 2022-23 as per GERC MYT Regulations, 2016 is projected as below:

TABLE 4: PROJECTION OF ARR FOR FY 2022-23

Rs. in Crores

Sr. No.	Particulars	FY 2022-23 (Projected)
1	Cost of Power Purchase	6,317.33
2	Operation & Maintenance Expenses	820.11
2.1	Employee Cost	644.75
2.2	Repair & Maintenance	67.62
2.3	Administration & General Charges	98.80
2.4	RDSS Metering Opex	73.50
2.5	Extraordinary Items	-
2.6	Net Prior Period Expenses / (Income)	-
2.7	Other Expenses Capitalised	(64.56)
3	Depreciation	300.26
4	Interest & Finance Charges	45.74
5	Interest on Working Capital	-
6	Provision for Bad Debts	0.01
7	Sub-Total [1 to 6]	7,483.44
8	Return on Equity	177.15
9	Provision for Tax / Tax Paid	19.58
10	Total Expenditure (7 to 9)	7,680.17
11	Less: Non-Tariff Income	139.39
12	Aggregate Revenue Requirement (10 - 11)	7,540.77



2.3.2. MGVCL requests the Hon'ble Commission to approve Aggregate Revenue Requirement for FY 2022-23.

2.4. REVENUE (GAP) / SURPLUS FOR FY 2022-23

- 2.4.1. MGVCL has projected sales of 11,469 MU for FY 2022-23. Based on projected sales & existing retail tariff, revenue from sale of power works out to Rs. 5,257 Crore for FY 2022-23.
- 2.4.2. In the Order for True up for FY 2019-20 and Determination of Tariff for FY 2021-22 dated 31st March, 2021, the Hon'ble Commission has considered the base power purchase cost at Rs. 4.481/unit and base FPPPA at Rs. 1.80/unit. As per approved FPPPA formula, any increase in power purchase cost during the year, over and above base power purchase cost of Rs. 4.481/unit is to be recovered through FPPPA, over and above base FPPPA of Rs. 1.80/unit on quarterly basis. As per the projected ARR for FY 2022-23, the weighted average power purchase cost is worked out to Rs. 4.48/unit same as of FY 2021-22.
- 2.4.3. Thus, the change in power purchase cost is Nil for FY 2022-23 and accordingly there is no change in base FPPPA also. Therefore, estimated revenue from FPPPA for FY 2022-23 is considered at Rs. 1.80/unit (i.e. grossing up by approved losses), as shown below.

No.	Particulars	FY 2021-22	2022-23
1	Fixed Cost (Rs. Crore)	11,592	13,005
2	Variable Cost (Rs. Crore)	27,106	28,435
3	GETCO Cost (Rs. Crore)	4,480	4,444
4	GUVNL Cost (Rs. Crore)	411	438
5	PGCIL Charges (Rs. Crore)	2,443	3,075
6	SLDC Charges (Rs. Crore)	21	23
7	Total Power Purchase Cost	46,053	49,421
	(Rs. Crore)		
8	Total Energy Requirement	1,02,775	1,10,375
	(MU)		
9	Power Purchase Cost	4.48	4.48
	(Rs./kWh)		
10	Increase in Power Purchase		-
	Cost (Rs./ KWh)		
11	Additional FPPPA Charges		-
	(Grossed up by Distribution		
	Loss) (Rs./kWh)		
12	Existing FPPPA Charges		1.80
	(Rs./kWh)		
13	Revised FPPPA Charges		1.80
	(Rs./kWh)		

TABLE 5: FPPPA COMPUTATION FOR FY 2022-23

- 2.4.4. The income under the head "Other Consumer Related Income" has been considered the same as of FY 2020-21. The Agriculture subsidy for FY 2022-23 has been projected on the basis of the projected Agricultural sales for FY 2022-23.
- 2.4.5. 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 2022-23 is as shown below:



TABLE 6: TOTAL PROJECTED REVENUE FOR FY 2022-23 AT EXISTING TARIFF

Sr. No.	Particulars	FY 2022-23		
31. 110.	Faiticulais			
1	Revenue with Existing Tariff	5,256.58		
2	FPPPA Charges @ Rs. 1.80/ unit	2,064.50		
3	Other Income (Consumer related)	144.80		
4	Agriculture Subsidy	77.31		
5				

- 2.4.6. The Revenue (Gap) / Surplus of Rs. (72.36) crores after true up exercise of FY 2020-21 is also considered for estimating Revenue (Gap) / Surplus for FY 2022-23.
- 2.4.7. Based on the above, the estimated Revenue (Gap) / Surplus for FY 2022-23 at existing tariff is as outlined in the table below:

TABLE 7: ESTIMATED REVENUE (GAP) / SURPLUS FOR FY 2022-23 AT EXISTING TARIFF

Rs. in Crores

		113. 111 CIUIE3
Sr. No.	Particulars	FY 2022-23 (Projected)
1	Aggregate Revenue Requirement	7,540.77
2	Less: Revenue (Gap)/ Surplus from True up of FY 2020-21	(72.36)
3	Total Aggregate Revenue Requirement	7,613.13
4	Revenue with Existing Tariff	5,256.58
5	FPPPA Charges @ Rs. 1.80/ unit	2,064.50
6	Other Income (Consumer related)	144.80
7	Agriculture Subsidy	77.31
8	Total Revenue including subsidy (4 to 7)	7,543.18
9	Revenue (Gap) / Surplus (8 - 3)	(69.95)

- 2.4.8. The Hon'ble Commission is requested to approve the above-mentioned Revenue (Gap) / Surplus.
- 2.5. Proposed changes in the tariff structure for FY 2022-23
- 2.5.1. The consolidated resultant Revenue (Gap) / Surplus for all four distribution companies is Rs. (568) Crores which can be met through efficiency improvement measures.
- 2.5.2. In view of the above, the distribution companies have not proposed any increase in tariff rates or any modifications in current tariff structure.



SECTION 3. TRUE UP FOR FY 2020-21

3.1. PREAMBLE

3.1.1. This section outlines the performance of MGVCL for FY 2020-21. In line with the provisions of the GERC MYT Regulations, 2016, MGVCL hereby submits the True-Up Petition comparing the actual performance of MGVCL during FY 2020-21 with the forecast approved by the Hon'ble Commission vide MTR Order dated 24th April, 2019.

3.2. PRINCIPLES FOR TRUE UP FOR FY 2020-21

- 3.2.1. As per GERC MYT Tariff Regulations, 2016, the Hon'ble Commission is required to undertake the True-Up of the licensees for FY 2020-21 based on the comparison of the actual performance of the past year with the approved estimates for such year. Section 21.1 of the GERC MYT Regulations, 2016 is read as below:
 - "the Generating Company or Transmission Licensee or SLDC or Distribution Licensee shall be subject to truing up of expenses and revenue during the Control Period in accordance with these Regulations."
- 3.2.2. In line with the provisions of GERC MYT Regulations, 2016, MGVCL has filed this Petition for True-Up for the year FY 2020-21. Information provided in the True-Up for FY 2020-21 is on the basis of audited actual performance and considering principles adopted by the Hon'ble Commission in its previous Orders. The actual performance has been compared with the approved numbers as per the MTR Order dated 24th April, 2019.
- 3.2.3. Accordingly, actual data for revised Aggregate Revenue Requirement, actual revenue and Revenue (Gap) / Surplus for FY 2020-21 are given in the following paragraphs of this chapter.
- 3.2.4. For the purpose of True-Up of all the expense heads have been categorized into Controllable and Uncontrollable factors. A head-wise comparison has been made between the values approved by the Hon'ble Commission and the actual values for various expenditures for FY 2020-21.

3.3. CATEGORY WISE SALES

- 3.3.1. The actual category wise sales for FY 2020-21 were 9,955.69 MUs as against the approved sales of 11,075.83 MUs. The actual sales for FY 2020-21 are lower than approved sales due to Covid-19 pandemic situation has impacted business which has resulted in lower commercial and industrial activities.
- 3.3.2. The table below highlights the comparison of actual category wise sales of MGVCL against that approved by the Hon'ble Commission vide its Tariff Order.



Sr. No.	Particulars	Sales(MUs)		
		FY 2020-21	FY 2020-21	
		Approved	Actual	
Α	LT Consumers			
1	RGP	2,979.20	2,929.65	
2	GLP	69.54	86.97	
3	Non-RGP & LTMD	1,716.46	1,471.32	
4	Public Water Works	409.26	353.57	
5	Agriculture - Metered	1,023.13	1,380.17	
6	Agriculture - Unmetered	475.16	ı	
7	Public Lighting	63.69	ı	
	LT Total (A)	6,736.43	6,222	
В	HT Consumers			
8	8 Industrial HT		3,734	
9	Bulk Supply to KPT	-		
	HT Total (A)	4,339.40	3,734.01	
	Grand Total (A + B)	11.075.83	9.955.69	

TABLE 8: CATEGORY-WISE SALES

3.4. DISTRIBUTION LOSSES

3.4.1. In FY 2020-21, the actual distribution losses were 9.96% as against the approved level of 11.55%. The table below highlights the comparison of actual distribution losses of MGVCL against that approved by the Hon'ble Commission vide its Tariff Order.

TABLE 9: DISTRIBUTION LOSSES

Sr. No.	Particulars	FY 2020-21 (Approved)	FY 2020-21 (Actual)
1	Distribution Losses	11.55%	9.96%

- 3.4.2. The GERC MYT Regulations, 2016 categorise the Distribution Losses as a controllable factor and accordingly any gain or loss on account of this would be shared with the consumers as per the provisions of the regulations.
- 3.4.3. MGVCL submits that it has achieved a significant reduction in distribution losses during FY 2020-21. The Hon'ble Commission had approved the distribution loss levels for MGVCL at 11.55% for FY 2020-21 and the actual loss achieved were 9.96% for FY 2020-21.
- 3.4.4. Since MGVCL has losses lower than those approved by the Hon'ble Commission, its impact has been discussed in the section relating to power purchase and the gains/ (losses) have been captured there itself.

3.5. ENERGY REQUIREMENT AND ENERGY BALANCE

3.5.1. The gross energy requirement of MGVCL is as follows given in the table below:



	Energy Balance						
S.No.	Particulars	Unit	FY 2020-21	FY 2020-21			
			Approved	Actual			
1	Energy Sales	MUs	11,076	9,956			
2	Distribution Losses	MUs	1,446	1,101			
		%	11.55%	9.96%			
3	Energy Requirement	MUs	12,522	11,057			
4	Less: Local Power Purchase by Discom	MUs		107			
5	Power Purchase at T<>D periphery from GUVNL	MUs	12,522	10,950			
6	Transmission Losses	MUs	501	397			
		%	3.85%	3.50%			
7	Total Energy to be input to Transmission System	MUs	13,023	11,347			
8	Pooled Losses in PGCIL System	MUs	233	171			
9	Add: Local Power Purchase by Discom	MUs		107			
10	Total Energy Requirement	MUs	13,255.97	11,625.38			

TABLE 10: ENERGY REQUIREMENT AND ENERGY BALANCE

3.5.2. The gross energy requirement for sale to the consumers in FY 2020-21 is 11,625.38 MUs as compared to 13,255.97 MUs as approved by the Hon'ble Commission.

3.6. POWER PURCHASE COST

- 3.6.1. The company has been currently allocated share of generation capacities as per the scheme worked out by GUVNL. In order to minimize power purchase cost, GUVNL adopts the Merit Order Despatch principles for despatching power from the generating stations based on the demand and accordingly power gets allocated to MGVCL.
- 3.6.2. The actual power purchase from GUVNL is different from allocation because the demand from MGVCL is not constant and it varies from time to time.
- 3.6.3. The total power purchase cost of MGVCL for FY 2020-21 consists of the basic power purchase cost, transmission charges payable to GETCO and PGCIL, SLDC charges and the DISCOM's share of GUVNL cost.
- 3.6.4. As directed by the Hon'ble Commission in Tariff Order dated 31st March, 2021, details of yearly DSM, Additional DSM, Sign deviation charge details of DSM charges paid and earned including penalty levied on/ collected is as under:

TABLE 11: DETAILS OF YEARLY DEVIATION SETTLEMENT MECHANISM

MONTH	SCHEDULE	DRAWL	BASIC UI	CAP UI	ADDITIONAL UI	SIGN VIOLATION	ADJUSTED UI
	IN IV	IWH			UI IN Rs.	VIOLATION	
Apr-20	10,59,801	10,35,813	-4,62,82,861	52,23,710	29,44,800		-5,38,48,625
May-20	11,25,675	11,03,668	-4,03,66,675	1,06,38,867	75,68,966		-3,30,83,716
Jun-20	12,75,393	12,76,042	2,38,45,325	69,53,818	2,16,99,827		4,84,05,233
Jul-20	10,25,388	10,73,342	18,23,16,326	1,49,66,170	5,27,96,084		17,62,66,058
Aug-20	11,24,372	11,91,897	18,51,04,179	63,16,638	5,02,08,688		20,70,25,142
Sep-20	10,37,692	10,72,799	11,59,05,422	81,82,157	2,34,43,359		9,83,46,730
Oct-20	10,61,796	11,16,644	17,70,39,760	91,28,857	2,33,62,275		13,82,03,376
Nov-20	8,98,319	9,31,840	9,11,10,966	1,09,75,733	1,80,63,267		8,51,93,672
Dec-20	10,93,831	11,25,009	8,74,83,812	66,91,168	2,50,51,798		8,15,21,210
Jan-21	9,10,133	9,19,837	5,13,30,315	94,52,353	1,60,28,808		1,34,21,913
Feb-21	10,11,835	10,18,443	2,37,45,408	1,24,76,002	79,34,194	_	1,52,52,695
Mar-21	14,07,915	14,04,267	1,41,11,157	1,51,83,805	1,82,46,578		-20,30,827
TOTAL	1,30,32,150	1,32,69,601	86,53,43,134	11,61,89,278	26,73,48,644	-	77,46,72,861

3.6.5. MGVCL in its Petition for True-up of FY 2019-20 considered liabilities for the payment



towards the power purchase cost to the generating companies under various PPAs are due as per the judgements of the various courts in various litigations and the payment may arise subsequently as part of Power Purchase Cost based on the final outcome in legal cases. The Hon'ble Commission in its earlier Tariff Order have ruled that additional payment liability to be allowed once it gets materialised and paid to the beneficiaries in subsequent years based on the prudence check and verification from audited accounts. Accordingly, in line with approach taken by the Hon'ble Commission, provisions were reduced from power purchase cost for each Discom in ratio of their actual power purchase cost.

3.6.6. In line with the approach adopted by the Hon'ble Commission, Discom has allocated provisions made during FY 2020-21 of Rs. 2015 Crore to Discom in ratio of actual power purchase cost and reduced from power purchase cost. Allocation of provisions to Discom is as under:

TABLE 12: ALLOCATION OF PROVISIONS OF POWER PURCHASE COST TO DISCOM

Rs in Crores

Particulars	DGVCL	MGVCL	PGVCL	UGVCL	Total
Power Purchase	11,198	5,495	14,829	11,487	43,010
Allocation of provisions made in Power Purchase Cost	524.64	257.44	694.74	538.18	2,015.00

- 3.6.7. Discom would like to submit that as stated by the Hon'ble Commission in its last Tariff Order, Discom reserves its right of claim of provisions made in power purchase cost as and when it is paid to beneficiaries in subsequent years.
- 3.6.8. Based on the same, the comparison of the approved and the actual cost of power purchase are as shown below:

TABLE 13: NET POWER PURCHASE COST

Rs in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21
		(Approved)	(Actual)
Α	Cost		
1	Power Purchased from GUVNL		5,379.84
2	Power purchase from Windfarm		6.48
3	Power Purchased from Solar		29.21
4	DSM Charges Payable		77.47
5	SLDC Charges		2.05
	Total Cost		5,495.04
В	Less: Income		
1	Allocation of provisions made in		257.44
	Power Purchase Cost		
2	DSM Income Receivable		-
	Net Power Purchase Cost	5,723.61	5,237.60

- 3.6.9. The variation in the approved and the actual power purchase expenses is on account of various reasons including change in approved cost of power, change in quantum of power purchased, changes in the transmission charges payable etc.
- 3.6.10. The quantum of power purchase depends upon the sales during the year as well as the losses in the system. The actual distribution losses in MGVCL distribution network have



- been lower than the approved level as also the sales than that approved by the Hon'ble Commission and hence, the quantum of power purchased was lower than the approved quantum of power required.
- 3.6.11. As per the GERC MYT Regulations, 2016, the Hon'ble Commission has categorised the variation in the price of fuel and/or price of power purchase according to the FPPPA formula approved by the Hon'ble Commission as an uncontrollable factor. Further, the Hon'ble Commission has also identified the variation in the number or mix of consumers or quantity of electricity sold to consumers as an uncontrollable factor. Thus the variation in the above factors affects the power purchase expenses and results into either a loss or gain. Accordingly, any gain or loss on this account is to be entirely passed on to the consumers as per the methodology approved by the Hon'ble Commission.
- 3.6.12. In addition to the above, there is an incidence of lower power purchase cost on account of the lower Distribution losses as compared to the Distribution losses approved by the Hon'ble Commission. These gains have resulted in lower power purchase expenses as the quantum of power required to be purchased to meet the same level of demand would be lower hence resulting in the gains as explained below:

TABLE 14: GAIN/ (LOSS) ON ACCOUNT OF DISTRIBUTION LOSSES FOR FY 2020-21

	Gain/(Loss) due to Distribution Losses						
S.No.	Particulars	Unit	FY 2020-21 (with Approved Distribution Losses)	FY 2020-21 (with Actual Distribution Losses)			
1	Energy Sales	MUs	9,955.69	9,955.69			
2	Distribution Losses	MUs	1,300.04	1,101.27			
		%	11.55%	9.96%			
3	Energy Requirement	MUs	11,255.73	11,056.97			
4	Saving due to Distribution Losses	MUs		198.76			
5	Average Power Purchase Cost	Rs./Unit		4.51			
6	Gain/(Loss) due to Dist. Losses			89.55			

3.6.13. As can be seen from the above, the total gain on account of lower distribution losses as compared to approved is Rs. 89.55 Crores. This gain is categorised as on account of controllable factors and the appropriate treatment is given below:

Table 15: Gains / (Loss) - Power Purchase Expenses

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Gain/(Loss)	Gain/(Loss) due
		(Approved)	(Actual)	due to	to
				Controllable	Uncontrollable
				Factor	Factor
1	Total Power Purchase Cost	5,723.61	5,237.60	89.55	396.47

3.6.14. Thus, as can be seen from the above table, the power purchase gain/(loss) due to controllable & uncontrollable factors are Rs. 89.55 Crores and Rs. 396.47 Crores respectively which would have to be passed on to the consumers as per the methodology approved by the Hon'ble Commission.



3.7. CAPITAL EXPENDITURE

3.7.1. Capital expenditure incurred by MGVCL in FY 2020-21 was Rs. 297.03 Crores. The actual capital expenditure by MGVCL during the FY 2020-21 is higher than that approved by the Hon'ble Commission. The scheme-wise capital expenditure incurred in FY 2020-21 against approved by the Hon'ble Commission is as shown below:

TABLE 16: CAPITAL EXPENDITURE

Rs. in Crores

	Particulars	FY 2020-21	FY 2020-21	Deviation
		(Approved)	(Actual)	
Α	Distribution Schemes			-
	Normal Development Scheme	31.94	78.99	(47.05
	Distribution Infra & Shifting	20.00	20.40	(0.40
	Schemes(DISS)			
	Electrification of hutments	5.25	3.80	1.45
	Kutir Jyoti Scheme	2.10	1.05	1.05
	Others Harijan Basti – Petapara	0.30	0.25	0.05
	System Improvement		10.70	(10.70)
	Total	59.59	115.19	(55.60)
В	Rural Electrification Schemes			
	TASP(Wells & Petapara)	55.00	68.16	(13.16)
	Special Component plan	1.25	1.57	(0.32)
	RE Wells(OA +SPA)	77.00	74.38	2.62
	Dark Zone	9.25	11.92	(2.67)
	Surya Shakti Kishan Yojana		9.45	(9.45)
	PM Kusum Comp-B		0.22	(0.22)
	PM Kusum Comp-C		1.32	(1.32)
	Total	142.50	167.02	(24.52)
С	Central Government Scheme - Plan			
	Integrated Power Development Scheme (IPDS)	-	-	-
	Din Dayal Upadhyay Gramin Jyoti Yojana (DDUGJY)	-	-	-
	R-APDRP(Scada)-A	0.87	-	0.87
	R-APDRP(Scada)-B	-	-	-
	PSDF	14.12	-	14.12
	RAPDRP (Part B)	-	-	-
	Total	14.99	-	14.99
D	Other New Schemes			
	Sagar Khedu	1.50	1.51	(0.01)
	Energy Conservation(HVDS)	5.00	3.23	1.77
	Vehicle	1.20	-	1.20
	Sardar Krushi Jyoti Yojna	3.66	6.97	(3.31
	Misc Civil + Electrical Works	2.00	2.84	,
	Furniture		0.27	
	Total	13.36	14.82	(1.46
	Capital Expenditure Total	230.44	297.03	(66.59

- 3.7.2. Scheme wise deviation in capital expenditure is explained as under:
 - Normal Development Scheme: Approved CAPEX was 31.94 Crore and actual is 76.17 Crore in FY 2020-21 as in new development full amount is paid by Applicant in New connection of Infrastructure, Industrial LT, HT, EHT Connection and Various



shifting work paid by Govt. and Central govt. department, so actual amount incurred is 76.17 crore.

- SI Scheme: Rs. 65.67 Crore was approved for budget of Year 2020-21 and 10.70 Crore is actual expenditure. The actual expenditure is less due to projects are not implicated in Year 2020-21 like (1) Maintenance of DTR Earthing (2) HT AB Earth Blade Switch (3) Watch dog device (4) DTC review-HVDS (other than KHUSY) (5) Smart Meter Monitoring System (6) Fully automatic 20 position and computerized Energy Meter Test Bench.
- **Government Schemes:** The detailed justification of actual capital expenditure incurred during F.Y. of 2020-21 against approved CAPEX for various Government schemes is as under.

Sr. No.	Particulars	Approved Capex in MTR for F.Y. 2020-21 (In Crore)	Approved Annual Plan by GUVNL vide GUVNL/Tech/ AP/20-21/1009 dtd. 24.04.2020, GUVNL/Tech/AC/1116 dtd. 30.05.2020, GUVNL/Tech/AC/1298 dtd. 30.06.2020 and GUVNL/Tech/AP/2020- 21(RE)/1073 dtd. 06.03.2021 for F.Y. 2020-21 (In Crore)	Actual Capital expenditure incurred for F.Y. 2020-21 (In Crore)
	Distribution Schemes			
1	Electrification of hutments	5.25	3.80	3.80
2	Kutir Jyoti Scheme	2.10	1.05	1.05
3	Others Harijan Basti - Petapara	0.30	0.275	0.275
	TOTAL	7.65	5.125	5.125
	Rural Electrification Scl	nemes – Plai	n	
1	TASP (Wells & Petapara)	55.00	68.16	68.16
2	SC Ag.	1.25	1.15	1.15
3	Normal Scheme (SPA + DZ)	86.25	86.30	86.30
4	Other wells / Lift Irrigation	0.00	0.00	0.42
	TOTAL	142.50	155.61	156.03

- 1) Actual expenditure incurred for various RE Scheme (Ag. connection and Household connection) were in line with approved Annual Plan by GUVNL vide GUVNL/Tech/ AP/20-21/1009 dtd. 24.04.2020, GUVNL/Tech/AC/1116 dtd. 30.05.2020, GUVNL/Tech/AC/1298 dtd. 30.06.2020 and GUVNL/Tech/AP/2020-21(RE)/ 1073 dtd. 06.03.2021 for F.Y. 2020-21.
- 2) The CAPEX booked under SKY scheme, PM KUSUM Comp- B and C for the FY 2021 (Actual) is Rs 9.45 Crore, 0.22 Crore and 1.32 Crore against respectively approved expenditure of Rs 0 Crore (FY 2020-21).
- 3) Under SKY Scheme all the expenditure is either received as grant from GoG, Subsidy from GoG and payment of loan/ upfront amount by farmer.
- 4) Under PM KUSUM B 60% of the expenditure is received as subsidy from government and remaining 40 % is borne by farmer.



3.8. FUNDING OF CAPITALISATION

3.8.1. The funding of actual capitalisation is done through various sources categorised under four headings namely: Consumer Contribution, Grants, Equity and Debt. The detailed breakup of funding of capitalised asset during FY 2020-21 is mentioned in the table below.

TABLE 17: FUNDING OF CAPITALISATION

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Deviation
		(Approved)	(Actual)	
1	Capitalization	230.44	302.43	(71.99)
2	Less : Consumer Contribution	31.94	99.58	(67.64)
3	Grants	23.42	49.17	(25.75)
4	Balance Capitalization	175.08	153.68	21.40
5	Debt @ 70%	122.56	107.58	14.98
6	Equity @ 30%	52.52	46.10	6.42

3.9. FIXED COST FOR FY 2020-21

- 3.9.1. The fixed cost of MGVCL for FY 2020-21 has been determined in accordance with the GERC MYT Regulations, 2016. As outlined under the regulations, the fixed cost for MGVCL has been determined under the following major heads:
 - Operation and Maintenance Expenses
 - Depreciation
 - Interest and Finance Charges
 - Interest on Working Capital
 - Income Tax
 - Return on Equity
- 3.9.2. Net Annual Revenue Requirement of MGVCL has been computed after netting off expenses capitalised and Non-Tariff Income.
- 3.9.3. For the purpose of True-Up, all the heads mentioned above have been categorized into Controllable or Uncontrollable in line with provisions of GERC MYT Regulations, 2016. A head wise comparison of cost has been made between the values approved by the Hon'ble Commission vide MTR Order dated 24th April, 2019 and the actual expenses of MGVCL in FY 2020-21.

3.10. OPERATION & MAINTENANCE EXPENSES

- 3.10.1. Operations and Maintenance (O&M) Expenses of MGVCL consists of the following elements:
 - Employee Expenses
 - Repairs and Maintenance Expenses
 - Administrative and General Expenses



Employee Cost

- 3.10.2. Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses.
- 3.10.3. The employee cost incurred by the company is purely on the basis of the guidelines issued by competent authorities like the state government. The actual employee cost as per profit & loss account for FY 2020-21 were Rs. 499.47 Crores which excludes the provision made towards 7th Pay Commission of Rs. 28.05 Crore but includes Rs. 15.89 Crore of Re-measurement of defined benefit plans.
- 3.10.4. Accordingly, MGVCL has worked out a gain/ (loss) of Rs. 81.72 Crores on account of controllable employee cost.
- 3.10.5. The summary of the comparison of the actual employee expenses for FY 2020-21 vis-à-vis the expenses approved by the Hon'ble Commission is given in the table below:

TABLE 18: EMPLOYEE COST FOR FY 2020-21

Rs. in Crores

Sr. No.	Particulars	FY 2020-21 (Approved)	FY 2020-21 (Actual)	Gain/(Loss) due to Controllable	Gain/(Loss) due to Uncontrollable
				Factor	Factor
1	Employee Cost	581.19	499.47	81.72	-

Repair & Maintenance Cost

- 3.10.6. Repairs and Maintenance expenses are incurred towards the day-to-day upkeep of the distribution network and form an integral part of the efforts towards reliable and quality power supply as also in the reduction of losses in the distribution system.
- 3.10.7. Repair and Maintenance expenditure is dependent on various factors. The assets of MGVCL are old and require regular maintenance to ensure uninterrupted operations. MGVCL has been trying its best to ensure uninterrupted operations of the system and accordingly has been undertaking necessary expenditure for R&M activities. The GERC MYT Regulations, 2016 provides for R&M expenditure as a controllable expenditure. The actual R&M cost for FY 2020-21 is Rs. 77.42 Crores.
- 3.10.8. Accordingly, on the basis of comparison of actual R&M expenditure of MGVCL with the values approved by the Hon'ble Commission, there is a gain/(loss) of Rs. (7.70) Crores as indicated in the table below:

TABLE 19: REPAIR & MAINTENANCE COST FOR FY 2020-21

Rs. in Crores

Sr. No.	Particulars	FY 2020-21 (Approved)	FY 2020-21 (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
1	Repair & Maintenance Cost	69.72	77.42	(7.70)	

Administration & General Expenses

3.10.9. Administration & General expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, etc.



3.10.10. The actual A&G expense for FY 2020-21 were Rs. 88.21 Crores. As per the provisions of the GERC MYT Regulations, 2016, A&G expenses are categorised as controllable expenses and accordingly, the comparison of value approved by the Hon'ble Commission with the actual A&G expenses of MGVCL shows a gain/(loss) of Rs. (0.20) Crores as highlighted in the table below:

Table 20: Administration & General Expenses for FY 2020-21

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Gain/(Loss)	Gain/(Loss) due
		(Approved)	(Actual)	due to	to
				Controllable	Uncontrollable
				Factor	Factor
1	Administration & General Charges	88.01	88.21	(0.20)	

Other Expenses Capitalised

3.10.11. The Other expenses including expenses capitalised, etc. are beyond the control of MGVCL and therefore are considered as uncontrollable.

TABLE 21: OTHER EXPENSES CAPITALISED

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Gain/(Loss)	Gain/(Loss) due
		(Approved)	(Actual)	due to	to
				Controllable	Uncontrollable
				Factor	Factor
1	Other Expenses Capitalised	(56.05)	(39.46)		(16.59)

O&M Expenses

3.10.12. After the combination of all the above parameters for FY 2020-21, MGVCL's actual O&M expenses were Rs. 625.64 Crores which is inclusive of Employee cost of Rs. 499.47 Crores, Repair & Maintenance Charges of Rs. 77.42 Crores and Administration & General Expenses of Rs. 88.21 Crores. Actual other expenses capitalized is Rs. (39.46) Crores for FY 2020-21 which is reduced from actual O&M expenses.

TABLE 22: OPERATION & MAINTENANCE EXPENSES

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Deviation
		(Approved)	(Actual)	
1	Employee Cost	581.19	499.47	81.72
2	Repair & Maintenance	69.72	77.42	(7.70)
3	Administration & General Charges	88.01	88.21	(0.20)
4	Other Expenses Capitalised	(56.05)	(39.46)	(16.59)
5	Operation & Maintenance Expenses	682.86	625.64	57.23

3.10.13. Comparison of actual O&M charges during FY 2020-21 with the value approved by the Hon'ble Commission reflects net gain/(loss) of Rs. 73.82 Crores on account of controllable factors and gain/(loss) of Rs. (16.59) Crores on account of uncontrollable factors to MGVCL.



TABLE 23: TREATMENT OF OPERATION & MAINTENANCE EXPENSES

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Gain/(Loss)	Gain/(Loss) due
		(Approved)	(Actual)	due to	to
				Controllable	Uncontrollable
				Factor	Factor
1	Employee Expenses	581.19	499.47	81.72	=
2	Repair & Maintenance Cost	69.72	77.42	(7.70)	=
3	Administration & General Charges	88.01	88.21	(0.20)	=
4	Other Expenses Capitalised	(56.05)	(39.46)	ı	(16.59)
5	Total O&M Expenses	682.86	625.64	73.82	(16.59)

3.11. DEPRECIATION

- 3.11.1. MGVCL had been charging depreciation on fixed assets of the Company, on the useful life of the assets at rates prescribed under Schedule XIV to the Companies Act, 1956. The Company being engaged in electricity distribution business is covered under the Electricity Act, 2003 and provisions of the Electricity Act supersede the provisions of the Companies Act, 2013.
- 3.11.2. In case of Depreciation, the GERC MYT Regulations, 2016 provides that-

"Depreciation shall be computed annually based on the straight line method at the rates specified in the Annexure I to these Regulations:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets:

Provided further that for a Generating Company or a Transmission Licensee or SLDC or a Distribution Licensee formed as a result of a Transfer Scheme, the depreciation on assets transferred under the Transfer Scheme shall be charged as per rates specified in these Regulations for a period of 12 years from the date of Transfer Scheme, and thereafter depreciation will be spread over the balance useful life of the assets"

- 3.11.3. Accordingly, MGVCL has calculated the Depreciation for FY 2020-21 in accordance with the provisions of the GERC MYT Regulations, 2016 and the aforementioned directives of the Hon'ble Commission.
- 3.11.4. The actual and approved depreciation for FY 2020-21 is as shown below:

Table 24: Fixed Asset and Depreciation for FY 2020-21

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Deviation
		(Approved)	(Actual)	
1	Gross Block in Beginning of the year	5,686.83	5,838.67	
2	Additions during the Year (Net)	230.44	298.67	
3	Closing GFA	5,917.27	6,137.34	
4	Average GFA	5,802.05	5,988.01	
5	Depreciation for the Year	270.64	270.72	(0.08)
6	Average Rate of Depreciation	4.66%	4.52%	

3.11.5. The actual depreciation for FY 2020-21 as against the value approved by the Hon'ble Commission results into an uncontrollable gain/(loss) of Rs. (0.08) Crores as indicated below:



Sr. No.	Particulars	FY 2020-21 (Approved)	FY 2020-21 (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
1	Depreciation	270.64	270.72	-	(0.08)

3.12. Interest & Financial Charges

- 3.12.1. For assessing actual Interest charges on Loans in FY 2020-21, MGVCL has considered the opening balance of loans for FY 2020-21 same as the closing loan approved by the Hon'ble Commission for FY 2019-20 in the True up Order dated 31st March, 2021. The loan addition in FY 2020-21 is computed at Rs. 107.58 Crores which consists of loans for funding the capitalization.
- 3.12.2. In line with the approach adopted by the Hon'ble Commission and as prescribed by GERC MYT Regulations, 2016 repayment during the year has been considered equal to the depreciation for the financial year.
- 3.12.3. Based on the provisions of the GERC MYT Regulations, 2016, the actual weighted average rate of interest during the year for Truing up of FY 2020-21 is 6.30% as against 9.32% as approved by the Hon'ble Commission.
- 3.12.4. MGVCL has also considered the interest on security deposits of Rs. 44.70 Crore as per the provisions of the GERC MYT Regulations, 2016.
- 3.12.5. MGVCL submits that it has been allocated some guarantees of Govt. of Gujarat, for which it is required to pay the guarantee charges. These are the legacy loans which have come from the erstwhile GEB. These charges are, thus, beyond control of MGVCL and hence are required to be considered in the total financial cost.
- 3.12.6. The total Interest & Financial charges for FY 2020-21 computed by MGVCL as against that approved by the Hon'ble Commission is as shown below:

TABLE 26: INTEREST & FINANCE CHARGES

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Deviation
		(Approved)	(Actual)	
1	Opening Loans	-	ı	
2	Loan Additions during the Year	122.56	107.58	
3	Repayment during the Year	122.56	107.58	
4	Closing Loans	-	ı	
5	Average Loans	-	ı	
6	Interest on Loan	-	ı	
7	Interest in Security Deposit	62.47	44.70	
8	Other Bank Charges	0.91	1.18	
9	Total Interest & Financial Charges	63.38	45.87	17.51
10	Weighted Average Rate of Interest	9.32%	6.30%	

3.12.7. The GERC MYT Regulations, 2016 categorise the interest and finance charges as uncontrollable expenses. Any changes on account of changes in applicable interest rates should be considered as uncontrollable. Accordingly, MGVCL has considered deviation in the actual vis-à-vis the approved expenses towards interest and finance charges as



uncontrollable. The same has been provided in the table given below:

TABLE 27: TREATMENT OF INTEREST & FINANCE CHARGES

Rs. in Crores

Sr. No.	Particulars	FY 2020-21 (Approved)	FY 2020-21 (Actual)	Gain/(Loss) due to Controllable	Gain/(Loss) due to Uncontrollable
				Factor	Factor
1	Interest & Finance Charges	63.38	45.87		17.51

3.13. INTEREST ON WORKING CAPITAL

- 3.13.1. The interest on working capital has been calculated on the basis of the provisions of the GERC MYT Regulations, 2016.
- 3.13.2. In line with the First Amendment to the GERC MYT Regulations, 2016 dated 2nd December, 2016, the rate of interest considered is the weighted average of the 1-year MCLR of the State Bank of India during the year plus 250 basis points. This rate works out to 9.57%. Also, as per these Regulations, one month of receivables are to be considered for calculation of interest on working capital. Also amount held as security deposit from consumers under clause (a) and clause (b) of sub-section (1) of Section 47 of the Electricity Act 2003 except the security deposit held in the form of Bank Guarantees is to be deducted from it. Since the interest on working capital for FY 2020-21 incurred by MGVCL is nil, MGVCL has not claimed interest on working capital for FY 2020-21 as shown below:

TABLE 28: INTEREST ON WORKING CAPITAL

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Deviation
		(Approved)	(Actual)	
1	O & M expenses	56.91	52.14	
2	Maintenance Spares	56.87	58.39	
3	Receivables	557.00	533.44	
4	Amount held as security deposit from	999.55	1,014.25	
	consumers			
5	Total Working Capital	(328.77)	(370.29)	
6	Rate of Interest on Working Capital	10.65%	9.57%	
7	Interest on Working Capital	-	-	-

3.14. Provision for Bad Debts

3.14.1. The actual bad debts written off in FY 2020-21 are shown in the following table:

TABLE 29: BAD & DOUBTFUL DEBTS WRITTEN OFF

Rs. in Crores

Sr. No.	Particulars	FY 2020-21 FY 2020-21 (Approved) (Actual)		Deviation
1	Bad and Doubtful Debts	0.0041	0.01	(0.0019)

3.14.2. A comparison of the actual value with the figure approved by the Hon'ble Commission for FY 2020-21 shows a gain/(loss) of Rs. (0.002) Crore on account of controllable factors as shown in the table below:



TABLE 30: TREATMENT OF BAD & DOUBTFUL DEBTS

Sr. No.	Particulars	FY 2020-21 (Approved)	FY 2020-21 (Actual)	Gain/(Loss) due to Controllable	Gain/(Loss) due to Uncontrollable
				Factor	Factor
1	Bad and Doubtful Debts	0.004	0.01	(0.002)	

3.15. RETURN ON EQUITY

- 3.15.1. As per the GERC MYT Regulations, 2016, a return @ 14% on the equity base is considered as reasonable and allowed by the Hon'ble Commission. Accordingly, MGVCL has computed the Return on Equity considering a rate of return at 14%.
- 3.15.2. For assessing actual return on equity for FY 2020-21, MGVCL has considered the opening balance of equity of FY 2020-21 as the closing balance of equity of FY 2019-20 approved by the Hon'ble Commission in the True up Order dated 31st March, 2021 and additions during the year as already discussed in the above paragraphs have been considered. The return on equity for FY 2020-21 is as shown below:

TABLE 31: RETURN ON EQUITY

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Deviation
		(Approved)	(Actual)	
1	Opening Equity Capital	1,103.18	1,120.06	(16.88)
2	Equity Additions during the Year	52.52	46.10	6.42
3	Closing Equity	1,155.70	1,166.16	(10.46)
4	Average Equity	1,129.44	1,143.11	(13.67)
5	Rate of Return on the Equity	14%	14%	-
6	Return on Equity	158.12	160.04	(1.91)

3.15.3. A comparison of the actual Return on Equity for FY 2020-21 with the amount approved by the Hon'ble Commission shows a net uncontrollable gain/ (loss) as indicated below.

TABLE 32: TREATMENT OF RETURN ON EQUITY

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Gain/(Loss)	Gain/(Loss) due
		(Approved)	(Actual)	due to	to
				Controllable	Uncontrollable
				Factor	Factor
1	Return on Equity	158.12	160.04		(1.91)

3.16. INCOME TAX

3.16.1. The actual tax paid in FY 2020-21 was Rs. 19.58 Crores as against Rs. 12.11 Crores approved by the Hon'ble Commission as shown below:

TABLE 33: INCOME TAX

Rs. in Crores

Sr. No.	Particulars	FY 2020-21 (Approved)		
1	Income Tax	12.11	19.58	(7.47)

3.16.2. It is submitted that Income Tax being a statutory expense, any variation on this account



is uncontrollable. Accordingly, MGVCL requests the Hon'ble Commission to consider the same as an uncontrollable loss and allow the entire expenditure towards income tax without any deduction.

3.16.3. A comparison of actual taxes for FY 2020-21 with the amount approved by the Hon'ble Commission shows an uncontrollable gain/(loss) of Rs. (7.47) Crores as indicated in the table below:

TABLE 34: TREATMENT OF INCOME TAX

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Gain/(Loss)	Gain/(Loss) due
		(Approved)	(Actual)	due to	to
				Controllable	Uncontrollable
				Factor	Factor
1	Provision for Tax / Tax Paid	12.11	19.58		(7.47)

3.17. Non-Tariff Income for FY 2020-21

- 3.17.1. The Non-Tariff Income of MGVCL considered for FY 2020-21 is Rs. (62.24) Crores as against Rs. 130.28 Crores approved by the Hon'ble Commission results in an uncontrollable gain/(loss) of Rs. 192.52 Crores.
- 3.17.2. The variation of actual Non-Tariff income from the approved value is due to the treatment of EAC Opinion (Expert Advisory Committee of Institute of Chartered Accountants of India) on deferred income adopted by MGVCL and other state owned utilities in Gujarat.
- 3.17.3. C&AG while conducting the supplementary audit of MGVCL for the FY 2019-20 has drawn a reference to Note no. 46 of the Financial Statement, which is stated below:

""

We draw attention to note No.40 to the Ind AS financial statements wherein the Company has changed the method of accounting regarding writing back balances from grants/ consumer contribution related to certain depreciable assets from hitherto 10% on reducing balance basis to 5.28% on straight line basis prospectively commencing from the financial year 2016-17. However, in our opinion the effect of such change has to be worked out retrospectively commencing from the date on which the depreciable assets related to which the grants/ consumer contribution has been received have been capitalized in the books of account and effect of such change be accounted for in the opening balance of grants/ consumer contribution.

Non accounting of the above effect has resulted into understatement of balance of grants/ consumer contribution as on 31st March, 2020 by Rs. 20,759.00 lakhs and overstatement of balance of 'Retained Earnings' by like amount. Had the above been accounted for, the balance of grants/ consumer contribution would have been Rs.



1,51,084.70 lakhs and balance of 'Retained Earnings' would have been Rs. 1,62,124.62 lakhs as on 31^{st} March, 2020 as against the reported figures of Rs. 1,30,921.05 and Rs. 1,76,892.12 lakhs respectively."

- 3.17.4. C&AG has further drawn attention that the above change in method was made by the Company as there was a mismatch of the grants recognized in the Statement of Profit and Loss versus the related depreciation expenses. Thus, the Company has changed the method of recognition of deferred income in order to align the recognition of deferred income with the related depreciation expenses. As the provision for treatment of deferred income to be recognized in the profit and loss statement on a systematic and rational basis over the useful life of the asset are same in AS 12 and Ind AS 20, the change was not mandated by Ind AS 20. Hence, the Company changed the method in order to correct an error. Since the assets related to which grants/consumer contribution received have been capitalized in the books of accounts, the effect of such change should be worked out retrospectively and accounted for in the opening balance of Deferred Government Grants, Subsidies and Consumer Contribution towards capital assets by 191.49 crore as at 31st March, 2019. Disclosure of the above facts in Note no. 47 instead of giving accounting effect does not suffice the purpose. Further, similar Comment was also raised in all group companies of GUVNL by C&AG Office.
- 3.17.5. Accordingly, in FY 2020-21, GUVNL on behalf of all group companies, has sought the opinion of the Expert Advisory Committee (EAC) of Institute of Chartered Accountants of India on the following issues:
 - a. Is the selection and application of Reducing Balance Method (or Written Down Value) for recognizing government grants in the previous year's i.e., from F.Y. 2004-05 to F.Y. 2015-16 an error?
 - b. If the above, is in affirmative, then what are the implications on the audit opinions including supplementary audit on the compliance of accounting standards in the earlier years as well as on the truthfulness and fairness of the financial statements?
 - c. If conclusion to question 1 is that it is not an error, can the selection and application of Straight Line Method from F.Y. 2016-17 be considered as a correction of prior period error?
- 3.17.6. In response EAC vide its opinion no. EAC/1753/21 dated 16 June, 2021 has stated that the selection and application of RBM (or WDV) for recognizing government grants in the previous years, i.e., from F.Y. 2004-05 to F.Y. 2015-16 is an error. Accordingly, the Committee is of the view that in the financial year 2016-17, the change in the method of recognizing deferred income/grant should be considered as prior period item and not a change in an accounting estimate. Further the Committee notes from the above that adjustments arising from events and transactions before the date of transition to Ind AS (i.e. on 1.4.2016) should be recognized directly in retained earnings.
- 3.17.7. Accordingly, GUVNL vide its letter dated 5 July, 2021 forwarded the EAC opinion to the Office of C&AG for their information and in response, Office of C&AG vide its letter dated 20 July, 2021 addressed to MD, MGVCL has requested to give accounting effect to the audit comment by giving retrospective effect to the change in method of



- recognition of grant in proportion of the deprecation expense in line with C&AG comment and EAC opinion in the current year's financial statements (FY 2020-21).
- 3.17.8. In calculating the amount of prior period error which is to be adjusted in Reserve and Surplus (Retained Earnings) of 1st April, 2019 and Deferred Income of FY 2019-20, following points are considered;
 - a. Not practicable / feasible to identify individual assets against which grants / consumer contribution is received.
 - b. Amortization of Consumer Contribution/Grants starts from FY 2005-06 (Date of unbundling of GEB).
 - c. Period/Useful Life of Network Assets is considered 35 years (As per GERC MYT Regulations, 2016) and Grants/Consumer Contribution are amortized fully 100% over the period of 35 years.
 - d. Amortization of Consumer Contribution/Grants from 2005-06 to 2010-11 @ 4.75% on SLM basis (Then prevailing rate of deprecation of Companies Act) & from FY 2011-12 till now @ 5.28% on SLM basis (As per existing GERC's depreciation rates prescribed in GERC MYT Regulations, 2016) for first 12 years and then after remaining balance of grant/consumer contribution amortized over remaining 23 years (As per GERC's methodology of calculating depreciation in GERC MYT Regulations, 2016)
 - e. The amortization of Consumer Contribution/Grants is amortized for full year in the year of receipt irrespective of timing of grants/consumer contribution received at any point of time
 - f. There is no salvage value for Grants/Consumer Contribution and accordingly it is amortized fully 100% unlike depreciation, which is calculated upto 90% and 10% salvage value of Asset is considered as per GERC MYT Regulations, 2016.
- 3.17.9. **Transfer of Grant to GETCO:** Consequent to closure of Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) projects, the proportionate share of Government Grants received against the said projects by MGVCL has been transferred to GETCO as per stipulated guidelines of the scheme. Accordingly, the Company has decreased the government grant balance by the amounts transferred to profit and loss in the earlier years, with the consequential impact on deferred tax expense related balances and the opening retained earnings (reserves and surplus) as on 1st April, 2019 and the profit of the comparative period.
- 3.17.10. It is important to state that the Financial Statements for FY 2018-19 and previous periods were already closed, hence the relevant accounting entry of such prior period error/adjustments has been passed in FY 2019-20 and FY 2020-21. The accounting entries which has been passed in FY 2019-20 and FY 2020-21 for such prior period error/adjustments are shown in the Table Below:

TABLE 35 : DEFERRED INCOME CLAIM CALCULATION

Sr. No.	Particular	Original Accounts	GETCO (IPDS & DDUGJY)	Restated Accounts	Difference
1	Opening balance of Govt. Grants & Subsidies towards Cost of Capital Assets for FY 2019-20	717.91	-	909.41	191.50



Sr. No.	Particular	Original Accounts	GETCO (IPDS & DDUGJY)	Restated Accounts	Difference
1 (A)	Grant Addition: during the year	20.20	-	20.20	-
2	Opening balance of Consumer Contribution towards Capital Assets for FY 2019-20	603.80	-	603.80	-
2 (A)	CC Addition: during the year	94.71	-	94.71	-
3 (A)	Grant transferred to P&L	(65.46)	-	(55.32)	10.14
3 (B)	CC transferred to P&L	(61.95)	-	(61.95)	-
3	Deferred Income towards Govt. Grants/ Subsidies and Consumer Contribution towards Cost of Capital Assets for FY 2019-20 (3A + 3B)	(127.41)	-	(117.27)	10.14
4	Closing balance of Govt. Grants & Subsidies towards Cost of Capital Assets for FY 2019-20 (1 + 1A – 3A)	672.65	-	874.28	201.64
5	Closing balance of Consumer Contribution towards Capital Assets for FY 2019-20 (2 + 2A – 3B)	636.56	-	636.56	-
6	Total (4 + 5)	1,309.21	-	1,510.85	201.64

- 3.17.11. Hence, MGVCL has reduced Rs. 201.64 Crore as Reversal of Grant and Consumer Contribution from Non-Tariff income of Rs. 139.39 Crore earned during FY 2020-21 and net Non-Tariff income is considered for claim.
- 3.17.12. Accordingly, MGVCL has considered Rs. (62.24) Crores as Non-tariff Income for the FY 2020-21 in comparison to the approved values of Rs. 130.28 Crores as shown in the table below:

TABLE 36: TREATMENT OF NON-TARIFF INCOME

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Gain/(Loss)	Gain/(Loss) due
		(Approved)	(Actual)	due to	to
				Controllable	Uncontrollable
				Factor	Factor
1	Total Non-Tariff Income	130.28	(62.24)		192.52

3.18. AGGREGATE REVENUE REQUIREMENT FOR FY 2020-21

3.18.1. Based on above, the table below summarises the actual Aggregate Revenue Requirement of MGVCL for FY 2020-21 as against the value approved by the Hon'ble Commission.



TABLE 37: AGGREGATE REVENUE REQUIREMENT FOR FY 2020-21

Sr. No.	Particulars	FY 2020-21	FY 2020-21	Deviation
		(Approved)	(Actual)	
1	Cost of Power Purchase	5,723.61	5,237.60	486.01
2	Operation & Maintenance Expenses	682.86	625.64	57.23
2.1	Employee Cost	581.19	499.47	81.72
2.2	Repair & Maintenance	69.72	77.42	(7.70)
2.3	Administration & General Charges	88.01	88.21	(0.20)
2.4	Other Expenses Capitalised	(56.05)	(39.46)	(16.59)
3	Depreciation	270.64	270.72	(0.08)
4	Interest & Finance Charges	63.38	45.87	17.51
5	Interest on Working Capital	-	-	-
6	Provision for Bad Debts	0.00	0.01	(0.00)
7	Sub-Total [1 to 6]	6,740.49	6,179.84	560.67
8	Return on Equity	158.12	160.04	(1.91)
9	Provision for Tax / Tax Paid	12.11	19.58	(7.47)
10	Total Expenditure (7 to 9)	6,910.73	6,359.45	551.29
11	Less: Non-Tariff Income	130.28	(62.24)	192.52
12	Add: DSM Expenses	-		
13	Aggregate Revenue Requirement (10 - 11)	6,780.45	6,421.69	358.75

3.19. Sharing of Gains & Losses

3.19.1. GERC MYT Regulations, 2016 specifies the Mechanism for treatment of Gains and Losses on account of Uncontrollable and Controllable expenses. The methodology approved by the Hon'ble Commission for sharing of such gains/ losses is as follows.

Mechanism for sharing of gains or losses on account of Un-controllable factors

- "23.1 The approved aggregate gain or loss to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of uncontrollable factors shall be passed through as an adjustment in the tariff of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee over such period as may be specified in the Order of the Commission passed under these Regulations.
- 23.2 The Generating Company or Transmission Licensee or SLDC or Distribution Licensee shall submit such details of the variation between expenses incurred and revenue earned and the figures approved by the Commission, in the prescribed format to the Commission, along with the detailed computations and supporting documents as may be required for verification by the Commission.
- 23.3 Nothing contained in this Regulation 23 shall apply in respect of any gain or loss arising out of variations in the price of fuel and power purchase, which shall be dealt



with as specified by the Commission from time to time."

Mechanism for sharing of gains or losses on account of controllable factors

- "24.1 The approved aggregate gain to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:
- (a) One-third of the amount of such gain shall be passed on as a rebate in tariffs over such period as may be stipulated in the Order of the Commission under Regulation 21.6; (b) The balance amount, which will amount to two-thirds of such gain, may be utilised at the discretion of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee.
- 24.2 The approved aggregate loss to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:
- (a) One-third of the amount of such loss may be passed on as an additional charge in tariffs over such period as may be stipulated in the Order of the Commission under Regulation 21.6; and
- (b) The balance amount of loss, which will amount to two-thirds of such loss, shall be absorbed by the Generating Company or Transmission Licensee or SLDC or Distribution Licensee."
- 3.19.2. As indicated above, MGVCL has identified all the expenditure heads under controllable and uncontrollable categories. The gain/ (loss) for MGVCL arising as a result of True Up for FY 2020-21 may be suitably passed through in the Tariff as per mechanism specified by the Hon'ble Commission.
- 3.19.3. Based on the methodology prescribed in the GERC MYT Regulations, 2016, MGVCL has classified various heads of expenses as Controllable & Uncontrollable. The head wise losses/gains have been dealt in the above sections. During FY 2020-21, MGVCL has incurred a net gain/(loss) of Rs. 163.36 Crores on account of controllable factors while the net gain/(loss) attributable to uncontrollable factors for FY 2020-21 is Rs. 195.40 Crores.
- 3.19.4. The following Table summarizes net gain/ (loss) to MGVCL during FY 2020-21 on account of controllable & uncontrollable factors.



TABLE 38: NET GAIN/ (LOSS) FOR FY 2020-21

Sr. No.	Particulars	FY 2020-21 (Approved)	FY 2020-21 (Actual)	Gain/(Loss) due to	Gain/(Loss) due to
				Controllable	Uncontrollabl
1	Cost of Power Purchase	5,723.61	5,237.60	Factors 89.55	e Factors 396.47
2	Operation & Maintenance Expenses	682.87	625.64	73.82	(16.59)
2.1	Employee Cost	581.19	499.47	81.72	-
2.2	Repair & Maintenance	69.72	77.42	(7.70)	-
2.3	Administration & General Charges	88.01	88.21	(0.20)	-
2.4	Other Expenses Capitalised	(56.05)	(39.46)	-	(16.59)
3	Depreciation	270.64	270.72	-	(0.08)
4	Interest & Finance Charges	63.38	45.87	-	17.51
5	Interest on Working Capital	-	-	-	-
6	Provision for Bad Debts	0.00	0.01	(0.00)	-
7	Return on Equity	158.12	160.04	-	(1.91)
8	Provision for Tax / Tax Paid	12.11	19.58	-	(7.47)
9	ARR (1 to 8)	6,910.73	6,359.45	163.36	387.92
10	Non - Tariff Income	130.28	(62.24)	-	192.52
11	Total ARR (9-10)	6,780.45	6,421.69	163.36	195.40

3.20. REVENUE FOR FY 2020-21

3.20.1. During the FY 2020-21, MGVCL's actual revenue amounted to Rs. 6,401.24 Crores. The break-up is as follows:

TABLE 39: REVENUE FOR FY 2020-21

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	FY 2020-21
		(Approved)	(Actual)
1	Revenue from Sale of Power	4,847.96	6,171.59
2	Revenue from FPPPA	1,761.06	
3	Other Income (Consumer related)	83.62	144.80
4	Total Revenue excluding subsidy	6,692.64	6,316.39
	(1+2+3)		
5	Agriculture Subsidy	79.78	84.85
6	Total Revenue including subsidy	6,772.42	6,401.24
	(4 + 5)		

3.21. REVENUE (GAP) / SURPLUS FOR FY 2020-21

- 3.21.1. The Hon'ble Commission in its MYT Order dated 24th April, 2019 has approved Aggregate Revenue Requirement of Rs. 6,780.45 Crores for FY 2020-21. The Hon'ble Commission had also added Revenue (Gap) / Surplus of Rs. 44.88 Crores due to Truing up of FY 2018-19 in the Aggregate Revenue Requirement.
- 3.21.2. As per the mechanism specified in the GERC MYT Regulation 2016, MGVCL proposes to pass on a sum of 1/3rd of total gain/(loss) on account of controllable factors i.e. Rs. 54.45 Crores and total gain/(loss) on account of uncontrollable factor i.e. Rs. 195.40 Crores to the consumers. Adjusting these to the net Aggregate Revenue Requirement, MGVCL has arrived at the Revised Aggregate Revenue Requirement for FY 2020-21 at



Rs. 6,485.71 Crores.

3.21.3. This revised Aggregate Revenue Requirement is compared against the revised income under various heads including Revenue with Existing Tariff of Rs. 6,171.59 Crores, Other Consumer related Income of Rs. 144.80 Crores, Agriculture Subsidies of Rs. 84.85 Crores and GUVNL profit allocation of Rs. 12.12 Crore, summing up to a Total Revenue of Rs. 6,413.36 Crores. Accordingly, total Revenue (Gap) / Surplus of MGVCL for FY 2020-21 after treatment of gain/(loss) due to controllable / uncontrollable factors is computed at Rs. (72.36) Crores as shown in the table below:

TABLE 40: REVENUE (GAP) / SURPLUS FOR FY 2020-21

Rs. in Crores

Sr. No.	Particulars	FY 2020-21	
		(Actual)	
1	Aggregate Revenue Requirement	6,780.45	
	originally approved for FY 2020-21		
2	Less: (Gap) / Surplus of FY 2018-19	ap) / Surplus of FY 2018-19 44.88	
3	Less: Gain / (Loss) on account of		
	Uncontrollable factor to be passed on to		
	Consumer		
4	Less: Gain / (Loss) on account of	54.45	
	Controllable factor to be passed on to		
	Consumer (1/3rd of Total Gain / Loss)		
5	Revised ARR for FY 2020-21 (1 - 2 - 3 - 4)	6,485.71	
6	Revenue from Sale of Power	6,171.59	
7	Other Income (Consumer related)	144.80	
8	Total Revenue excluding Subsidy (6 + 7) 6,316		
9	Agriculture Subsidy	84.85	
10	GUVNL Profit / (Loss) Allocation	12.12	
11	Total Revenue including Subsidy (8 + 9 +	6,413.36	
11	10)		
	Revised (Gap)/ Surplus after treating	(72.36)	
12	gains/(losses) due to Controllable/		
	Uncontrollable factors (11 - 5)		

3.21.4. The Hon'ble Commission is requested to approve above mentioned Revenue (Gap) / Surplus based on True up of FY 2020-21 and allow MGVCL to recover the same in FY 2022-23.



SECTION 4. DETERMINATION OF ARR & TARIFF FOR FY 2022-23

4.1. PREAMBLE

- 4.1.1. This section outlines the ARR Determination of MGVCL as per the GERC MYT Regulations, 2016 for FY 2022-23 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 2022-23

4.2. PROJECTION OF ENERGY REQUIREMENT FOR FY 2022-23

4.2.1. 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, MGVCL has estimated the above for various customer categories primarily based on the CAGR trends during past years. However, it is important to note that due to Covid 19 pandemic has impacted the sale of power for FY 2020-21 and hence FY 2020-21 does not represent business as usual year. Growth rates work out considering FY 2020-21 data may not present the correct picture as sales for commercial and industrial establishments for FY 2020-21 had decreased due to shut down. To overcome this issue, DISCOM has worked out growth rates considering FY 2019-20 as base year and the same has been applied on FY 2019-20 (except for Agriculture consumer category where actual sales of FY 2020-21 is considered). Wherever the trend has seemed unreasonable or unsustainable, the growth rates have been corrected by the company, to arrive at more realistic projections.

4.2.2. 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 2022-23. 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.

4.2.3. 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 and the growth rate is applied on actual sales of FY 2019-20 (except for Agriculture consumer category where actual sales of FY 2020-21 is considered), as summarised in the table below:



TABLE 41: 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	FY 2020-21
	Low Tension							
1	RGP	2,130	2,287	2,331	2,475	2,609	2,720	2,930
2	GLP	112	120	124	123	124	135	87
3	Non-RGP & LTMD	1,250	1,326	1,390	1,465	1,543	1,604	1,471
4	Public Water Works	199	220	235	286	302	314	354
5	Agriculture - Unmetered	473	472	471	475	475	474	469
6	Agriculture - Metered	579	710	695	753	857	739	911
7	Electric Vehicle Charging	-	-	-	-	-	-	-
	Sub Total	4,743	5,134	5,245	5,577	5,910	5,987	6,222
	High Tension							
1	Industrial HT	3,161	3,250	3,046	3,703	4,094	3,767	3,734
2	Railway Traction	391	291	39	-	-	-	-
	Sub Total	3,552	3,541	3,085	3,703	4,094	3,767	3,734
	Total	8,295	8,675	8,330	9,281	10,004	9,754	9,956

TABLE 42: CATEGORY-WISE CAGR OF UNITS SOLD (CONSIDERING FY 2019-20 AS BASE YEAR)

Sr. No.	Category	5 Year	4 Year	3 Year	2 Year	1 Year
	Low Tension					
1	RGP	5.01%	4.44%	5.28%	4.82%	4.25%
2	GLP	3.79%	2.96%	2.86%	4.75%	8.61%
3	Non-RGP & LTMD	5.12%	4.88%	4.90%	4.66%	4.00%
4	Public Water Works	9.51%	9.35%	10.10%	4.84%	3.88%
5	Agriculture - Unmetered	0.04%	0.12%	0.23%	-0.14%	-0.25%
6	Agriculture - Metered	5.02%	1.01%	2.09%	-0.93%	-13.72%
7	Electric Vehicle Charging	#REF!	#REF!	#REF!	#REF!	#REF!
	Sub Total	4.77%	3.92%	4.50%	3.60%	1.29%
	High Tension					
1	Industrial HT	3.57%	3.76%	7.34%	0.86%	-7.98%
	Sub Total	1.19%	1.56%	6.89%	0.86%	-7.98%
	Total	3.29%	2.97%	5.40%	2.52%	-2.50%

4.2.4. 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 43 : 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	FY 2020-21
	Low Tension							
1	RGP	24,08,189	24,44,117	24,93,036	25,58,658	26,30,978	26,93,137	27,50,115
2	GLP	27,567	29,038	30,527	31,722	32,760	33,458	33,944
3	Non-RGP & LTMD	2,73,644	2,77,150	2,95,298	3,03,531	3,17,951	3,37,387	3,44,647
4	Public Water Works	15,133	17,071	18,749	20,441	22,228	23,856	25,159
5	Agriculture - Unmetered	25,909	25,856	25,745	26,145	26,015	25,818	25,732
6	Agriculture - Metered	84,358	98,641	1,15,189	1,27,508	1,39,777	1,53,055	1,64,875
7	Electric Vehicle Charging	-	-	-	-	-	-	-
	Sub Total	28,34,800	28,91,873	29,78,544	30,68,005	31,69,709	32,66,711	33,44,472
	High Tension							
1	Industrial HT	1,741	1,841	1,956	2,067	2,222	2,292	2,391
2	Railway Traction	7	1	1	-	-	-	-
	Sub Total	1,748	1,842	1,957	2,067	2,222	2,292	2,391
	Total	28,36,548	28,93,715	29,80,501	30,70,072	31,71,931	32,69,003	33,46,863



Sr. No.	Category	5 Year	4 Year	3 Year	2 Year	1 Year
	Low Tension					
1	RGP	2.26%	2.46%	2.61%	2.59%	2.36%
2	GLP	3.95%	3.61%	3.10%	2.70%	2.13%
3	Non-RGP & LTMD	4.28%	5.04%	4.54%	5.43%	6.11%
4	Public Water Works	9.53%	8.73%	8.36%	8.03%	7.32%
5	Agriculture - Unmetered	-0.07%	-0.04%	0.09%	-0.63%	-0.76%
6	Agriculture - Metered	12.65%	11.61%	9.94%	9.56%	9.50%
7	Electric Vehicle Charging	#REF!	#REF!	#REF!	#REF!	#REF!
	Sub Total	2.88%	3.09%	3.13%	3.19%	3.06%
	High Tension					
1	Industrial HT	5.65%	5.63%	5.43%	5.30%	3.15%
	Sub Total	5.57%	5.62%	5.41%	5.30%	3.15%
	Total	2.88%	3.10%	3.13%	3.19%	3.06%

TABLE 44: CAGR OF NO. OF CONSUMERS (CONSIDERING FY 2019-20 AS BASE YEAR)

4.2.5. 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:

FY 2014-15 FY 2015-16 FY 2016-17 FY 2017-18 FY 2018-19 FY 2019-20 FY 2020-21 Category Sr. No. **Low Tension** 2,733 2,215 2,267 2,421 2,573 2,878 3,018 1 RGP GLP 76 87 93 105 109 2 72 100 3 Non-RGP & LTMD 1,138 1,206 1,286 1,379 1,480 1,576 1,667 156 212 Public Water Works 108 107 145 166 174 Agriculture - Unmetered 207 209 208 207 206 252 206 6 Agriculture - Metered 662 726 743 811 877 955 1,019 Electric Vehicle Charging **Sub Total** 4,447 4,590 4,888 5,220 5,564 5,894 6,231 **High Tension** Industrial HT 1,105 1,321 1,229 1,400 1,533 1,643 1,796 2 Railway Traction 97 15 18 1,400 1,533 1,796 **Sub Total** 1,201 1,336 1,247 1,643 5,648 Total 5,926 6,135 6,620 7,097 7,537 8,027

TABLE 45: CATEGORY-WISE CONNECTED LOAD (MW/MVA)

Table 46: CAGR of Connected Load (considering FY 2019-20 as Base Year)

Sr. No.	Category	5 Year	4 Year	3 Year	2 Year	1 Year
	Low Tension					
1	RGP	5.37%	6.14%	5.93%	5.76%	5.29%
2	GLP	8.00%	8.39%	6.56%	6.44%	5.88%
3	Non-RGP & LTMD	6.72%	6.91%	7.01%	6.91%	6.46%
4	Public Water Works	10.03%	12.97%	6.11%	5.72%	4.67%
5	Agriculture - Unmetered	-3.89%	-0.05%	0.09%	-0.48%	-0.71%
6	Agriculture - Metered	7.59%	7.09%	8.74%	8.51%	8.86%
7	Electric Vehicle Charging	#REF!	#REF!	#REF!	#REF!	#REF!
	Sub Total	5.80%	6.45%	6.44%	6.26%	5.93%
	High Tension					
1	Industrial HT	8.27%	5.60%	10.16%	8.33%	7.17%
	Sub Total	6.46%	5.31%	9.62%	8.33%	7.17%
	Total	5.94%	6.20%	7.10%	6.70%	6.20%

4.2.6. Growth Projections for FY 2022-23

This section discusses in detail the basis for taking the growth projections for various categories of consumers as enumerated above. As mentioned above due to Covid 19



pandemic, sale for FY 2020-21 has impacted and hence FY 2020-21 does not represent business as normal year. Growth rates worked out considering FY 2020-21 data as base year may not give the correct picture as sales for FY 2020-21 has decreased due to shut down of commercial and industrial establishments. To overcome this issue, DISCOM has worked out growth rates considering FY 2019-20 as base year (except for Agriculture consumer category where actual sales of FY 2020-21 is considered) and the same has been applied on FY 2020-21 to work out projections for FY 2022-23.

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 5.01%. The company expects this trend to continue in FY 2022-23.

The number of consumers added in the category has witnessed a 5 year CAGR of 2.26% 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 5.37% 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 2.86%. The company expects this trend to continue in FY 2022-23.

Similarly, the number of consumers added in the category has witnessed a 3 year CAGR of 3.10% 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 6.56% 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 4.90%. 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 4.54% 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 7.01% 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 10.10 %. 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 8.36% which is the 3 year CAGR between FY 2016-17 and FY 2020-21. 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 6.11% going forward.

Agriculture

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

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:

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	Sr. No.	Agriculture	
		Metered	Connections
	1	FY 2021-22	7,000
	2	FY 2022-23	11,925

Table 47 : MGVCL – New Connections to Agriculture Consumers

In order to estimate the consumption of this category, MGVCL 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. MGVCL has calculated the weighted average consumption based on the data available for the last five years in order to achieve a more reasonable consumption estimate. This approach is same as adopted and approved by the Hon'ble Commission in Past Orders. Thus based on the figures arrived from above the total sales for FY 2022-23 has been calculated based on the average connected load per consumer for metered and unmetered categories combined in FY 2020-21 and the number of new connection to be added during each year.



Sr. No.	Agriculture Metered	No. of Connections	Average HP of Discom	HP Increase	MW Increase	Per HP Consumption	Additional Sale (MU)
1	FY 2021-22	7,000	9	60,346	45	670	40
2	FY 2022-23	11,925	9	1,02,804	77	670	69

Table 48: MGVCL - Sales to agriculture consumers (metered)

The number of connections, unit sales and the load as estimated above have been added to the FY 2020-21 details to arrive at an estimate of the sales projections from this category for FY 2022-23.

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 7.34% 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 2022-23.

A 3 year CAGR of 5.43% 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 2022-23.

A 3 year CAGR of 10.16% for the connected load is normally considered for projection. As the Covid-19 pandemic has affected the connected load addition of this category the company expects a lower growth rate. Hence a growth rate of 5% has been considered in FY 2022-23.

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 2022-23.

TABLE 49: GROWTH RATE FOR SALES, No. OF CONSUMERS AND CONNECTED LOAD

Sr. No.	Category	Sales	Consumers	Connected
				Load
	Low Tension			
1	RGP	5.01%	2.26%	5.37%
2	GLP	2.86%	3.10%	6.56%
3	Non-RGP & LTMD	4.90%	4.54%	7.01%
4	Public Water Works	10.10%	8.36%	6.11%
5	Agriculture - Unmetered	0.00%	0.00%	0.00%
6	Agriculture - Metered	Based on n	o. of connec	tion release
7	Electric Vehicle Charging	0.00%	0.00%	0.00%
	High Tension			
1	Industrial HT	5.00%	5.00%	5.00%

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 50: PROJECTION OF SALES (MUS)

Sr. No.	Category	FY 2022-23
	Low Tension	
1	RGP	3,393
2	GLP	95
3	Non-RGP & LTMD	1,698
4	Public Water Works	472
5	Agriculture - Unmetered	469
6	Agriculture - Metered	1,021
7	Electric Vehicle Charging	1
	Sub Total	7,147
	High Tension	
1	Industrial HT	4,323
	Sub Total	4,323
	Total	11,469

TABLE 51: PROJECTION OF NO. OF CONSUMERS

Sr. No.	Category	FY 2022-23
	Low Tension	
1	RGP	29,40,977
2	GLP	37,203
3	Non-RGP & LTMD	3,93,770
4	Public Water Works	32,012
5	Agriculture - Unmetered	25,732
6	Agriculture - Metered	1,83,800
7	Electric Vehicle Charging	ı
	Sub Total	36,13,494
	High Tension	
1	Industrial HT	2,768
	Sub Total	2,768
	Total	36,16,261

Table 52: Projection of Connected Load (MW/MVA)

Sr. No.	Category	FY 2022-23
	Low Tension	
1	RGP	3,531
2	GLP	132
3	Non-RGP & LTMD	2,043
4	Public Water Works	253
5	Agriculture - Unmetered	206
6	Agriculture - Metered	1,141
7	Electric Vehicle Charging	-
	Sub Total	7,305
	High Tension	
1	Industrial HT	2,079
	Sub Total	2,079
	Total	9,385



4.3. DISTRIBUTION LOSSES

4.3.1. The company has constantly through its endeavours tried to reduce its losses in the past.

These efforts shall continue and will be enhanced. Projection of distribution losses for FY 2022-23 are shown below:

TABLE 53: DISTRIBUTION LOSS FOR FY 2022-23

Particulars	FY 2022-23 (Projected)
Distribution Loss	10.75%

- 4.3.2. Though MGVCL has achieved lower distribution losses in FY 2020-21, it is not possible to maintain such low level of distribution losses and hence it has projected higher distribution losses for FY 2022-23 on account of,
 - Day by day Open access consumers are increasing and probability of increase in Open access consumers for FY 2022-23 is high.
 - Losses in Urban & JGY categories are increased in the year 2020-21 and it is in increasing trend for the year 2021-22 observed on account of affected financial health after Post lock down era.
 - Day time power supply to AG consumers under KSY scheme started in phased manner and all Ag feeders are covered under SKY by March'22 & which lead to increase in losses
 - More than 8 hours of Power supply to Ag consumers on account of delayed/poor monsoon due to global warming effect.

4.4. ENERGY BALANCE ENERGY REQUIREMENT PROJECTION FOR MGVCL

- 4.4.1. 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 ARR Petition for FY 2022-23. The inter-state transmission losses viz. PGCIL pooled losses are assumed at same level as in FY 2020-21 for FY 2022-23. Further, the distribution losses are taken as per the projections above.
- 4.4.2. Discom has signed PPAs under Small-scale Distributed Solar Projects (SSDSP) and power generation will be available at Distribution level over and above power purchase from GUVNL. Based on the information provided above, Energy Balance of MGVCL for FY 2022-23 is as shown below:



FY 2022-23 S.No. Unit **Particulars** (Projected) MUs **Energy Sales** 11,469.44 MUs 1,381.47 2 **Distribution Losses** % 10.75% **Energy Requirement** MUs 12,850.91 Less: Power Purchase from SSDSP MUs 33.72 5 Power Purchase required from GUVNL MUs 12,817.19 MUs 495.22 Transmission Losses % 3.72% 7 Total Energy to be input to Transmission System MUs 13,312.41 Pooled Losses in PGCIL System MUs 171.03 8 Add: Power Purchase from SSDSP 9 MUs 33.72 10 **Total Energy Requirement** MUs

TABLE 54: ENERGY BALANCE FOR FY 2022-23

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

TABLE 55: CONSOLIDATED ENERGY REQUIREMENT FOR FY 2022-23

MUs

13,517.17

Sr.No.	Details	DGVCL	MGVCL	PGVCL	UGVCL	Total
1	Power Purchase from SSDSP	15	34	465	315	829
2	Power Purchase from GUVNL	26,520	13,483	39,343	30,200	1,09,546
3	Total Power Purchase	26,535	13,517	39,808	30,515	1,10,375

4.5. **ESTIMATION OF ARR FOR FY 2022-23**

- 4.5.1. The components for the calculation of total expenses for determination of ARR for FY 2022-23 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**

4.6. POWER PURCHASE COST FOR FY 2022-23

4.6.1. Power Purchase from Small-Scale Distributed Solar Projects

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



capacity for sale of energy to the Discoms.

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

Sr.No. DGVCL **PGVCL UGVCL Details** Unit MGVCL MW Capacity tie up under SSDSP MW 17.50 532.39 1 38.60 360.37 2 Likely CoD mm/yy Sep-22 Sep-22 Sep-22 Sep-22 **Expected CUF** 20% 20% 20% 20% **Expected Generation from SSDSP** MU 15.29 33.72 465.10 314.82 5 Power Purchase Rate Rs./kWh 2.83 2.83 2.83 2.83 **Power Purchase Cost** Rs. Crore 4.33 9.54 131.62 89.09 6

Table 56: Power Purchase under SSDSP

4.6.2. Power Purchase Sources of GUVNL

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

i. Existing capacity with GUVNL

The existing contracted capacity tied up by GUVNL as on 1 October, 2021 is **27,590 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 2020-21. Necessary adjustment has been made in fixed cost in case of higher/lower payment made during FY 2020-21 due to specific reasons.

Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumpti on (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kW h)
	GSECL					
1	GSECL Gandhinagar - 5	210	9.50%	38.97%	64	3.70
2	GSECL Wanakbori - 7	210	9.50%	31.17%	56	3.83
3	GSECL Utran Expan	375	3.00%	54.11%	221	2.84
4	GSECL Dhuvaran - 7	107	4.00%	36.07%	64	2.64
5	GSECL Dhuvaran - 8	112	3.00%	34.12%	85	2.91
6	GSECL Ukai	610	9.00%	38.96%	305	3.62
7	GSECL Ukai Expan	500	6.00%	56.83%	463	3.18
8	GSECL Gandhinagar 3-4	420	9.50%	20.08%	213	4.02
9	GSECL Wanakbori 1-6	1,260	9.00%	22.14%	548	3.90
10	GSECL Sikka Expansion	500	9.00%	43.44%	559	3.23
11	GSECL Kutch Lignite	75	12.00%	45.18%	90	2.88
12	GSECL Kutch Lignite Exp unit 4	75	12.00%	46.13%	54	2.68
13	GSECL Ukai Hydro	305	0.60%	24.94%	33	-
14	GSECL Kadana Hydro	242	1.00%	15.21%	56	-
15	GSECL Dhuvaran CCPP III	376	3.00%	29.34%	97	2.91
16	GSECL BLTPS	500	11.00%	30.00%	222	2.98
17	GSECL Wanakbori - 8	800	5.25%	85.00%	838	3.23
	Sub Total	6,677				

TABLE 57: EXISTING CAPACITY ALLOCATION WITH GUVNL



Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumpti on (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kW h)
	IPP's					
1	Gujarat State Energy Generation	156	2.90%	28.89%	50	3.00
2	Gujarat State Energy Generation Expansion	351	3.00%	42.37%	205	2.79
3	Gujarat Industries Power Co Ltd (165 MW)	165	0.00%	1.22%	-	3.54
4	Gujarat Industries Power Co Ltd (SLPP)	250	10.00%	59.96%	107	1.85
5	Gujarat Mineral Development Corp.	250	11.00%	14.95%	33	1.44
6	Gujarat Industries Power Co Ltd (145 MW)	42	2.90%	26.97%	4	2.21
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	250	10.00%	76.70%	225	1.43
8	GPPC Pipavav	702	3.00%	44.87%	319	2.79
	Sub Total	2,166				
	Central Sector		40.000	60.655		2.55
2	NPC-Tarapur 1 & 2 NPC-Tarapur 3 & 4	160 274	10.00%	60.00%	-	2.60
3	NPC-Tarapur 3 & 4 NPC-Kakrapar	125	9.00% 8.00%	80.00% 85.00%	<u> </u>	3.42 2.31
4	NTPC-Vindhyachal - I	247	9.00%	85.00%	143	1.72
5	NTPC-Vindhyachal - II	252	7.05%	85.00%	122	1.62
6	NTPC-Vindhyachal - III	279	6.25%	85.00%	204	1.60
7	NTPC-Korba	380	7.04%	85.00%	180	1.48
8	NTPC-Korba -III	130	6.25%	85.00%	126	1.46
9	NTPC-Kawas	187	2.75%	25.00%	114	2.11
10	NTPC-Jhanor	237	2.75%	25.00%	182	2.28
11	NTPC-Sipat-I	577	6.25%	85.00%	525	1.46
12	NTPC-Sipat - II	286	6.25%	85.00%	247	1.50
13	NTPC-Kahlagaon I	141	9.00%	85.00%	100	2.19
14 15	NTPC-Vindhyachal - IV NTPC-Mauda	258 461	6.25%	85.00%	282 604	1.58
16	NTPC-Mauda NTPC-Vindhyachal - V	103	6.25% 7.25%	60.00% 85.00%	119	2.77 1.63
17	NTPC-Mauda II	530	6.25%	60.00%	550	2.93
18	NTPC-Gadarwara	333	6.25%	85.00%	483	2.54
19	NTPC-LARA	186	6.25%	85.00%	217	2.13
20	NTPC-Khargone	270	6.25%	85.00%	342	2.77
21	NTPC-Farakka - 3	25	6.25%	85.00%	26	2.59
22	NTPC-Kahalgaon II	146	6.25%	85.00%	111	2.12
23	NTPC-Farakka - 1 & 2	244	6.78%	85.00%	140	2.64
24	NTPC-Talcher	24	7.05%	85.00%	16	1.91
25	NTPC-Darlipalli	14	6.25%	85.00%	21	1.12
26	NTPC Tanda 3	36	9.00%	60.00%	26	3.06
27 28	NTPC-Tanda - 2 NTPC Solapur	24	5.75% 6.25%	85.00% 60.00%	50 29	2.58 3.80
29	Sardar Sarovar Nigam Ltd	232	0.70%	85.00%	148	2.05
	Sub Total	6,206	0.7070	03.00/0	140	2.03
		5,200				
	Others					
1	Captive Power	6	0.00%	83.83%	-	2.14
	Renewable					
1	Wind Farms	4,262	0.00%	19.16%	-	3.65
2	Solar	3,016	0.00%	20.76%	-	5.25
3	Small/Mini Hydal	22	0.00%	27.87%	-	5.86
4	Biomass	30	0.00%	35.21%	-	4.19
1	Competitive Bidding	1 000	0.00%	80.00%	634	2.02
2	Essar Power Gujarat Ltd Adani Power Ltd - (Unit 1 - 4)	1,000 1,200	0.00%	80.00%	631 631	2.03
3	ACB India Ltd.	200	0.00%	80.00%	203	0.75
3	ACD IIIUIA LLU.	200	0.00%	00.00%	∠∪3	0.75



Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumpti on (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kW h)
4	Coastal Gujarat Power Co Ltd	1,805	0.00%	80.00%	1,138	1.99
5	MTOA	1,000	0.00%	85.00%	-	3.68
	Sub Total	12,541				
	Total	27,590				

ii. Capacity Addition

The capacity addition envisaged during FY 2022-23 is around 520 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 2022-23 have been considered for full year as capacity will be available for 12 months of FY 2022-23.

Sr.No. Name of the Station Capacity allocated **Auxiliary Plant Load Fixed Cost** Variable Cost to GUVNL (MW) (Rs. Crore) (Rs./kWh) Consumption (%) Factor (%) Ramagundam I & II 358.00 80.00% 228.93 2.42 Kahalgaon I 51.00 9.00% 85.00% 46.91 2.19 Farakka I & II 34.00 6.78% 85.00% 24.42 2.64 3.06 4 Unchahar I 44.00 9.00% 60.00% 41.63 Farakka III 43.07 6.25% 2.59 5 33.00 85.00%

TABLE 58: ADDITIONAL CAPACITY ENVISAGED FOR FY 2022-23

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. For FY 2021-22, RPO was 8.00% from solar, 8.25% from wind and 0.75% from other sources like Biomass, Bagasse, MSW, Small/ mini Hydel etc. In absence of specific target of RPO of FY 2022-23, DISCOM has considered RPO target of FY 2021-22 as given by the Hon'ble Commission for FY 2022-23.

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. Hence, GUVNL/ Discom has considered RE purchase based on actual tied up capacity only.

Purchase from RE sources for FY 2022-23 based on actual tied up capacity has been detailed as follows.

TABLE 59: ADDITIONAL RE CAPACITY ENVISAGED FOR FY 2022-23

Particular	Solar	Wind	Others	Total
Additional Power Purchase (MW)	2,390	1	67	2,457
Additional Power Purchase (MU)	3,591	ı	471	4,062
Power Purchase Cost (Rs./kwh)	2.33	-	6.64	2.83
Power Purchase Cost (Rs. Crore)	835	•	313	1,148



Based on the purchase from various RE sources for FY 2022-23, status of meeting Renewable Purchase Obligation is as under:

Particulars FY 2022-23 Wind Solar Others **Total** 109546 Total Power Purchase (MU) RPO Target (%) 8.00% 8.25% 0.75% 17.00% **RE Purchase Target (MU)** 8,764 9,038 822 18,623 **RE Purchase** RE Purchase Capacity as on 01.10.2021 (MU) 7,214 145 6,140 13,500 New Capacity - Power Purchase (MU) <u>3,5</u>91 4,062 471 RE Purchase under SSDSP (MU) 829 829 RE Purchase (MU) 10,561 7,214 616 18,391

TABLE 60: PROCUREMENT FROM RE FOR MEETING PROJECTED RPO

Balance of RPO will be met through wheeling by consumers for captive/ third party consumption who are not claiming RE attributes and consumption of rooftop consumers as per the Regulation/ Order of the Hon'ble Commission.

4.6.3. Methodology for Forecasting Power Purchase Cost of GUVNL

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

- The NPC power plants, renewable and hydro plants have been considered as must run power plants.
- During merit order despatch, at least 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 2020-21 as base power purchase cost.
- For Private IPPs, fixed & variable cost is considered based on likely cost as per PPAs.

4.6.4. Power Purchase and Costs of GUVNL

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 of power for supplying to the Discoms as well as for the purpose of trading (elaborated in subsequent sub-sections).

S No	Name of the Station	Available (MU)	Dispatch (MU)	Fixed Cost (Rs. Crore)	Variable Cost (Rs. / kWh)	Variabl e Cost (Rs. Crore)	Total Cost (Rs. Crore)
	GSECL						
1	GSECL Gandhinagar - 5	649	117	64	3.70	43	107
2	GSECL Wanakbori - 7	519	117	56	3.83	45	100
3	GSECL Utran Expan	1,724	1,724	221	2.84	489	710
4	GSECL Dhuvaran - 7	325	325	64	2.64	86	149

Table 61: Power Purchase Cost for the FY 2022-23



S No	Name of the Station	Available (MU)	Dispatch (MU)	Fixed Cost (Rs. Crore)	Variable Cost (Rs. / kWh)	Variabl e Cost (Rs. Crore)	Total Cost (Rs. Crore)
5	GSECL Dhuvaran - 8	325	325	85	2.91	94	180
6	GSECL Ukai	1,895	340	305	3.62	123	429
7	GSECL Ukai Expan	2,340	288	463	3.18	92	555
8	GSECL Gandhinagar 3-4	669	233	213	4.02	94	307
9	GSECL Wanakbori 1-6	2,224	703	548	3.90	274	823
10	GSECL Sikka Expansion	1,732	279	559	3.23	90	649
11	GSECL Kutch Lignite	261	261	90	2.88	75	165
12	GSECL Kutch Lignite Exp unit 4	267	267	54	2.68	71	125
13	GSECL Ukai Hydro	662	662	33	-	-	33
14	GSECL Kadana Hydro	319	319	56	-	-	56
15	GSECL Dhuvaran CCPP III	937	716	97	2.91	209	306
16	GSECL BLTPS	1,169	273	222	2.98	81	303
17	GSECL Wanakbori - 8	5,644	465	838	3.23	150	988
	Sub Total	21,660	7,414	3,968		2,017	5,984
1	IPP's Gujarat State Energy	383	93	50	3.00	28	78
2	Generation Gujarat State Energy	1,265	1,265	205	2.79	353	559
3	Generation Expansion Gujarat Industries Power Co Ltd	18	18		3.54	6	6
	(165 MW)	1,182		107			
	4 Gujarat Industries Power Co Ltd (SLPP)		1,182	107	1.85	219	325
5	5 Gujarat Mineral Development Corp.		291	33	1.44	42	75
6	Gujarat Industries Power Co Ltd (145 MW)	96	96	4	2.21	21	26
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	1,512	1,512	225	1.43	216	441
8	GPPC Pipavav	2,677	2,677	319	2.79	747	1,066
9	Essar Power Gujarat Ltd	7,008	7,008	631	2.03	1,421	2,052
10	Adani Power Ltd - (Unit 1 - 4)	8,410	8,410	631	2.30	1,936	2,566
11	ACB India Ltd.	1,402	1,402	203	0.75	106	309
12	Coastal Gujarat Power Co Ltd	12,649	12,649	1,138	1.99	2,522	3,660
13	MTOA	7,446	613	-	3.68	226	226
14	Power Exchange	6,166	6,166	-	4.00	2,466	2,466
15	Short term Bilateral	2,000	2,000	-	4.00	800	800
	Sub Total	52,505	45,382	3,547		11,109	14,656
	Central Sector						
1	NPC-Tarapur 1 & 2	757	757	-	2.60	197	197
2	NPC-Tarapur 3 & 4	1,747	1,747	-	3.42	597	597
3	NPC-Kakrapar	856	856	-	2.31	198	198
4	NTPC-Vindhyachal - I	1,676	1,676	143	1.72	288	431
5	NTPC-Vindhyachal - II	1,746	1,746	122	1.62	283	405
6	NTPC-Vindhyachal - III	1,950	1,950	204	1.60	313	516
7	NTPC-Korba	2,630	2,630	180	1.48	390	571
8	NTPC-Korba -III	909	909	126	1.46	133	259
9	NTPC-Kawas	398	398	114	2.11	84	198
10	NTPC-Jhanor	505	505	182	2.28	115	297
11	NTPC-Sipat-I	4,024	4,024	525	1.46	586	1,111
12	NTPC-Sipat - II	1,994	1,994	247	1.50	299	546
13	NTPC-Kahlagaon I	1,301	1,301	147	2.19	284	431
14	NTPC-Vindhyachal - IV	1,804	1,804	282	1.58	284	567
15	NTPC-Mauda	2,271	2,271	604	2.77	630	1,234
16	NTPC-Vindhyachal - V	709	709	119	1.63	115	234
17	NTPC Coderwore	2,612	305	550	2.93	89	639
18	NTPC-Gadarwara	2,328	2,328	483	2.54	592	1,076



S No	Name of the Station	Available (MU)	Dispatch (MU)	Fixed Cost (Rs.	Variable Cost	Variabl e Cost	Total Cost
		(1410)	(1410)	Crore)	(Rs. / kWh)	(Rs.	(Rs.
·				5.5.5,	(1.51)	Crore)	Crore)
19	NTPC-LARA	1,299	1,299	217	2.13	277	494
20	NTPC-Khargone	1,884	1,884	342	2.77	523	864
21	NTPC-Farakka - 3	405	405	69	2.59	105	174
22	NTPC-Kahalgaon II	1,019	1,019	111	2.12	216	327
23	NTPC-Farakka - 1 & 2	1,930	1,930	164	2.64	510	674
24	NTPC-Talcher	166	166	16	1.91	32	48
25	NTPC-Darlipalli	98	98	21	1.12	11	32
26	NTPC-Unchahar - 1	383	45	68	3.06	14	82
27	NTPC-Tanda - 2	309	309	50	2.58	80	129
28	NTPC Solapur	120	14	29	3.80	5	35
29	NTPC Ramagundam - 1 & 2	2,352	2,352	229	2.42	569	798
30	Sardar Sarovar Nigam Ltd	1,715	1,715	148	2.05	352	499
	Sub Total	41,896	39,144	5,491		8,172	13,663
	Others						
1	Captive Power	44	44	-	2.14	9	9
	Renewable						
1	Wind Farms	7,214	7,214	-	3.64	2,628	2,628
2	Solar	6,140	6,140	-	4.96	3,048	3,048
3	Small/Mini Hydal	53	53	-	5.86	31	31
4	Biomass	93	93	-	4.19	39	39
5	Solar (New)	3,591	3,591	-	2.33	835	835
6	Wind (New)	-	-	-	-	-	-
7	Others (New)	471	471	-	6.64	313	313
	Sub Total	17,606	17,606	-		6,903	6,903
	TOTAL	1,33,668	1,09,546	13,005		28,200	41,206

The total power purchase cost for the company for FY 2022-23 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 2022-23.
- PGCIL charges for FY 2022-23 are considered based on actual payment made in latest month of FY 2021-22.
- SLDC Fees & Charges also have been considered as per the Draft Tariff Petition of SLDC for FY 2022-23.

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 62: Transmission Charges from FY 2022-23

Sr.No.	Particulars	FY 2022-23
1	PGCIL Charges (Rs. Crore)	3,075
2	Annual Transmission charges of GETCO (Rs. Crore)	4,444
3	SLDC Charges (Rs. Crore)	23

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 2022-23.

TABLE 63: GUVNL COST FROM FY 2022-23

Sr.No.	Particulars	FY 2022-23
1	GUVNL Cost at 4.00 Paisa per Unit (Rs.Crore)	438

4.6.5. Summary of total Power Purchase Cost of GUVNL

Fixed Cost

The table below shows the total fixed cost FY 2022-23:

TABLE 64: FIXED COST FOR DISCOM FOR FY 2022-23

Rs. Crore

Fixed cost	GETCO Cost	PGCIL Charges	SLDC Charges	Total Fixed Cost	Discom Fixed Cost
13,005	4,444	3,075	23	20,547	20,547

Variable Cost

The table below shows the total variable cost for FY 2022-23:

TABLE 65: VARIABLE COST OF DISCOMS FOR FY 2022-23

Variable cost	GUVNL Cost	Total Variable	Dispatched	Variable Cost	DISCOM	Variable Cost
(Rs. Crore)	(Rs. Crore)	Cost (Rs. Crore)	(MU)	(Rs./kWh)	(MU)	(Rs. Crore)
28,200	438	28,639	1,09,546	2.61	1,09,546	28,639

4.6.6. The Net Power Purchase cost of GUVNL

The net power purchase cost is shown below:

TABLE 66: GUVNL NET POWER PURCHASE COST FOR FY 2022-23

Rs. Crore

Discom Fixed	Discom	Total Power	
cost	Variable Cost	Purchase Cost	
20,547	28,639	49,186	

4.6.7. Bulk Supply Tariff (BST)

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

- GUVNL shall purchase power from various sources in bulk and supply power in DISCOMs for onward retail supply.
- To ensure uniform retail consumer tariffs in the four DISCOMs.
- Since each of the DISCOM was incorporated 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 arrangement related to power procurement, the Distribution Licensee has entered into bulk supply arrangement / agreement with GUVNL to meet its supply obligations.

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

It is submitted that since more than 80% of the total cost incurred by DISCOM is towards Power Purchase, the same plays a major role in determining the Annual Revenue Requirement as well as Revenue (Gap) / Surplus for the DISCOM for a particular year. Since, the consumer profile and consumption profiles are different in the four Distribution Companies, the revenue earning capabilities of each of the DISCOM differs resulting in different Annual Revenue Requirement. Therefore, it is necessary to build a mechanism in the projections to bring them to a level playing field. This is proposed to be achieved by differential Bulk Supply tariff (BST) to each of the DISCOMs which was already adopted by the Hon'ble Commission in the previous Tariff Orders. In this way, it would be possible to ensure uniform retail consumer tariffs in the four DISCOMs.

4.6.8. Allocation of Power Purchase Cost under BST mechanism

The Net Power Purchase cost worked out in the above section has been allocated for FY 2022-23 based on the methodology adopted by the Hon'ble Commission in the MYT Order dated 31st March, 2017. As per this methodology, the amount available to Discom for power purchase is computed by deducting other expenses (other than power purchase expenses) from total revenue of Discom i.e. revenue from sale of power to consumers, Non-Tariff income, Agricultural subsidy and FPPPA.



TABLE 67: ALLOCATION OF POWER PURCHASE COST

Rs. Crore

Sr.No.	Particulars	DGVCL	MGVCL	PGVCL	UGVCL
1	Sales (MUs)	23,324	11,469	31,141	25,909
2	Revenue from Existing Tariff	11,689	5,257	12,563	8,997
3	Revenue from FPPPA @ Rs80/ unit	4,198	2,064	5,605	4,664
4	Other Income (Consumer Related)	400	145	306	243
5	Agricultural Subsidy	51	77	424	548
6	Total	16,339	7,543	18,898	14,452
7	Expense other than Power Purchase	1,713	1,296	3,850	1,521
8	Power Purchase Cost of SSDSP	4	10	132	89
9	Amount Available with Discom for	14,621	6,238	14,917	12,842
	Power purchase from GUVNL				

TABLE 68: TOTAL REVENUE (GAP) / SURPLUS

Rs. Crore

Sr.No.	Particulars	FY 2022-23
1	Power Purchase Cost of GUVNL	49,186
2	Aggregate Amount available for power	48,618
	purchase from GUVNL	
3	Revenue (Gap) / Surplus	(568)

TABLE 69: BULK SUPPLY TARIFF FOR FY 2022-23

Sr.No.	Details	2022-23			
		DGVCL	MGVCL	PGVCL	UGVCL
1	Revenue (Gap) / Surplus (Rs. Crore)		(56	58)	
2	Ratio of allocation of Revenue (Gap) / Surplus	24%	12%	36%	28%
3	Revenue (Gap)/ Surplus allocation (Rs. Crore)	(138)	(70)	(204)	(157)
4	Amount Available with Discom for Power	14,621	6,238	14,917	12,842
	purchase from GUVNL (Rs. Crore)				
5	Power purchase cost of GUVNL (Rs. Crore)	14,759	6,308	15,121	12,998
6	Power purchase cost of SSDSP (Rs. Crore)	4	10	132	89
7	Power purchase cost of DISCOM (Rs. Crore)	14,763	6,317	15,253	13,088
8	Energy Purchase in DISCOM (MU)	26,535	13,517	39,808	30,515
9	Bulk Supply Tariff (Rs./kWh)	5.56	4.67	3.83	4.29

4.7. CAPITAL EXPENDITURE FOR FY 2022-23

4.7.1. The comparison of the scheme-wise projected capital expenditure for the FY 2022-23 is as shown below:



TABLE 70: CAPITAL EXPENDITURE PLAN FOR FY 2022-23

Rs. in Crores

	Particulars	FY 2022-23 (Projected)
Α	Distribution Schemes	
	Normal Development Scheme	80.00
	Distribution Infra & Shifting	20.00
	Schemes(DISS)	20.00
	Electrification of hutments	2.25
	Kutir Jyoti Scheme	1.80
	Others Harijan Basti – Petapara	0.30
	System Improvement	9.00
	Total	113.35
В	Rural Electrification Schemes	
	TASP(Wells & Petapara)	65.00
	Special Component plan	1.35
	RE Wells(OA +SPA)	79.20
	Dark Zone	10.39
	Surya Shakti Kishan Yojana	-
	Total	155.94
С	Central Government Scheme - Plan	
	PSDF	-
	Total	-
D	Other New Schemes	
	Sagar Khedu	1.50
	Energy Conservation(HVDS)	4.50
	Vehicle	-
	Sardar Krushi Jyoti Yojna	6.98
	Misc Civil + Electrical Works	25.54
	Furniture	2.63
	Total	41.15
	Capital Expenditure Total	310.44

4.7.2. The details of major scheme for the projected capital expenditure for FY 2022-23 are as follows:

Normal Development Scheme:

Under the head Normal Development Scheme, generally expenses incurred to meet the Supply Obligation. As during the year, major shifting of electrical lines work will be taken up for the project like NHRCL etc. Also now as per Gamtal circular NRGP/LTMD connection situated outside Gamtal and if demand is in Agriculture land then full cost is required to recover from the applicant.

Distribution Infrastructure Shifting Scheme:

It is to mention here fund is booked under the scheme, as proposal from Municipal Corporation, Nagar Palika, s essential as per the stipulation of the scheme. During the year on base of proposal received from NP, MNP and GP fund was booked.

Sagarkhedu:

In coastal area since the lines are overhead and open to the atmosphere, the salinity the wind pressures and the variations in atmospheric temperature etc affects the conductor



life. This causes deterioration and corrosion of the conductor. According to DPR fund has been booked 100% grant availed from GOG. Fund utilized is 1.50 Crore.

HVDS:

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

SKJY (Sardar Krushi Jyoti Yojana):

Fund booked as per DPR, in which 80% is GOG grant while 20% is DISCOM fund. To replace the conductors having completed useful life of 35 years & more with associated materials. The aim of these schemes is to provide reliable and quality power supply to consumers.

TASP (Wells & Petapara)

This is Government of Gujarat granted scheme in Tribal Area & Petaparas covered under MGVCL for electrification of Agriculture wells. It is also to state that Target in CAPEX is projected on average cost of Line, however actual CAPEX is booked based on actual line work done which may increase/decrease depending upon the Geographical area, ROW Constraints for line erection work and material Cost. Accordingly, expenditure under this scheme is projected Rs. 65 Crore for FY 2022-23.

SI Scheme:

The prime objectives of our company's operations are, to reduce Distribution and Commercial losses, to enhance revenue collection efficiency, to improve quality of power supply and to attain utmost consumer satisfaction. Keeping the above core values at the center, competent authority has approved the fund under the SI scheme to incur capital expenditure for various system improvement and innovative Projects such as Feeder Bifurcation work having higher ampere loading and %HT VR beyond limit, Link line from new 66KV S/s, providing Aerial Bunched Conductors, High voltage Distribution System (HVDS), AG-JGY crossing at theft prone area etc.

4.8. FUNDING OF CAPITALISATION

4.8.1. For Distribution business, schemes are of shorter duration and hence capitalization is considered same as above-mentioned Capital Expenditure. Funding of capitalisation is envisaged through various sources categorised under four headings namely: Consumer Contribution, Grants, Equity and Debt. The remaining capital expenditure after deducting consumer contribution and grants is proposed to be funded through debt and equity in the ratio of 70:30. The detailed breakup of approved and projected funding of capitalisation for FY 2022-23 is mentioned below.



TABLE 71: FUNDING PLAN OF CAPITAL EXPENDITURE

Rs. in Crores

Sr. No.	Particulars	FY 2022-23 (Projected)
1	Capitalisation	310.44
2	Less: Consumer Contribution	100.00
3	Less: Grants	17.33
4	Balance Capitalization	193.11
5	Debt @ 70%	135.18
6	Equity @ 30%	57.93

4.9. OPERATION & MAINTENANCE EXPENSES

- 4.9.1. The O&M expenses consist of Employee cost, Administration & General Expenses, Repair and Maintenance expenses, RDSS Metering Opex, Other Debits, Extraordinary Items, and Net Prior Period Income/Expenses.
- 4.9.2. Under normal circumstances, the Commission would have revised the O&M norms based on analysis of actual O&M expenses of FY 2021-22, while framing the GERC MYT Regulations for the next Control Period and allowed escalation rate of 5.72% for future years including FY 2022-23. However, due to unavoidable circumstances, there is a delay in framing the GERC MYT Regulations for the next Control Period, and hence, the applicability of the GERC MYT Regulations, 2016 has been extended by two year, to include FY 2022-23 also.
- 4.9.3. In last Tariff Order, the Hon'ble Commission has given effect to the above-mentioned principle and calculated O&M expenses for FY 2021-22 based on actual O&M Expenses in the previous years, by adopting the same principles as adopted in the previous MYT Order. Adopting the similar principle, O&M expenses for FY 2022-23 would have been approved by allowing escalation rate of 5.72% on approved O&M expenses of FY 2021-22.
- 4.9.4. Considering the same, the O&M expenses for FY 2022-23 have been computed by applying escalation rate of 5.72% (as approved by the Hon'ble Commission in the GERC MYT Regulations, 2016) on the O&M expenses of FY 2021-22 as approved in Tariff Order dated 30th March, 2021.
- 4.9.5. **RDSS Metering Opex:** Ministry of Power, New Delhi, have announced Revamped Distribution Sector Scheme (RDSS) vide Office Memorandum dtd. 20.07.2021 with financial outlay of Rs.3,03,758 crore and an estimated gross budgetary support (GBS) of Rs.97,631 crore from Central Government. The Scheme formulated with the aim of large scale reforms in Distribution Sector that would enable the DISCOMs to reduce losses to make them financially sustainable and operationally efficient in a time bound manner by providing financial assistance to DISCOMs for strengthening of supply infrastructure based on meeting pre-qualifying criteria and achieving basic minimum benchmarks in reforms.
- 4.9.6. The Scheme has two parts. Part-A includes Component I: Metering (Consumer Metering & Feeder and DTR Metering), Component II: Distribution Infrastructure Works (Infrastructure works for loss reduction & Infrastructure works for Modernization &



- network strengthening) & Component III: Project Management. Part-B includes Training, Capacity Building and other Enabling & Supporting Activities.
- 4.9.7. Metering Component includes installation of prepaid smart meters for all consumers along with associated AMI, communicable meters for DTs & Feeders, ICT including Artificial Intelligence (AI), Machine Learning (ML), etc. based solutions for power Sector and a unified billing and collection system. Funding under this Part will be available only if the DISCOM agrees to the operation of smart meters in prepayment mode for consumers, and in accordance with the uniform approach indicated by the Central Government, with implementation in TOTEX mode. DISCOMs have to pay monthly charges as per unit rate for 1-Ph and 3-Ph meters to the agency. Smart Meter Tender for Gujarat DISCOMs are under preparation. However, with recent experience in market trend, this cost should be around Rs. 85/meter/month for 1-Phase and Rs. 110/meter/month for 3-Phase.
- 4.9.8. Based on the smart meter release target, additional operational cost under RDSS Metering Opex for FY 2022-23 will be as shown below:

Sr. No.	Particular	Number of Meters	Annual Rate (Rs.)	Cost (Rs. Crore)
Α	В	С	D	E = (C*D)
1	Target for Single Phase Meters (New + Existing)	6,30,000	1,020	64.26
2	Target for Three Phase Meters (New + Existing)	70,000	1,320	9.24

4.9.9. Accordingly, the O&M expenses projected for FY 2022-23 are as below:

Other Expenses Capitalised

Operation & Maintenance Expenses

TABLE 72: PROPOSED O&M EXPENSES FOR FY 2022-23

Rs. in Crores FY 2022-23 Sr. No. **Particulars** (Projected) **Employee Cost** 644.75 1 2 Repair & Maintenance 67.62 3 Administration & General Charges 98.80 4 **RDSS Metering Opex** 73.50

(64.56)

820.11

4.9.10. The Hon'ble Commission is requested to approve the above submission on the O&M expenses projections for FY 2022-23.

4.10. DEPRECIATION

- 4.10.1. MGVCL has considered the closing Gross block of fixed assets of FY 2020-21 as the opening Gross block of fixed assets for FY 2021-22. The addition during the FY 2021-22 is considered same as approved by the Commission in the Tariff Order dated 31st March, 2021.
- 4.10.2. Accordingly, the closing balance of GFA for FY 2021-22 thus worked out is considered as opening balance of GFA for FY 2022-23. Addition for FY 2022-23 has been projected considering capitalisation during the year. Depreciation has been calculated taking into consideration the opening balance of assets in the beginning of the year and the

5



projected capitalisation during the year. Depreciation rate for FY 2022-23 is considered same as actual depreciation rate of FY 2020-21. The projected depreciation for FY 2022-23 is as shown below:

TABLE 73: DEPRECIATION FOR FY 2022-23

Rs. in Crores

Sr. No.	Particulars	FY 2022-23 (Projected)
1	Gross Block in Beginning of the year	6,486.29
2	Additions during the Year (Net)	310.44
3	Gross Block in closing of the year	6,796.73
4	Average Gross Block of the year	6,641.51
5	Depreciation for the Year	300.26
6	Average Rate of Depreciation	4.52%

4.11. INTEREST ON LOAN

- 4.11.1. 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.
- 4.11.2. The closing balance of loan portfolio for FY 2020-21 as calculated in this Petition is taken as opening balance of FY 2021-22. Addition and repayment during FY 2021-22 is considered same as approved by the Hon'ble Commission in its Tariff Order dated 31st March, 2021 to work out closing balance of FY 2021-22. Closing balance of FY 2021-22 thus work out has been considered as opening balance of normative loan for FY 2022-23
- 4.11.3. The loan addition for FY 2022-23 is considered as 70% of the capitalisation excluding consumer contribution and grants which has been worked out in earlier section and repayment during the year is equivalent to the depreciation for FY 2022-23. The rate of interest has been taken as the weighted average rate of interest on the actual loan portfolio for FY 2020-21 that is 6.30%.
- 4.11.4. Interest rate on Security deposit by consumers is taken at the RBI bank rate of 4.25%.
- 4.11.5. Other bank charges have been considered same as of FY 2020-21.
- 4.11.6. The Interest and Finance Charges for FY 2022-23 is projected as tabulated below:



TABLE 74: INTEREST & FINANCIAL CHARGES FOR FY 2022-23

Rs. in Crores

Sr. No.	Particulars	FY 2022-23 (Projected)
1	Opening Loans	-
2	Loan Additions during the Year	135.18
3	Repayment during the Year	135.18
4	Closing Loans	-
5	Average Loans	-
6	Weighted average rate of interest	6.30%
7	Interest on Loan	-
8	Interest in Security Deposit	44.56
9	Other Bank Charges	1.18
10	Total Interest & Financial Charges	45.74

4.12. INTEREST ON WORKING CAPITAL

- 4.12.1. 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.
- 4.12.2. Since the Security deposit by the consumer with the utility is more than its total normative working capital requirement therefore MGVCL is not projecting any interest on working capital for FY 2022-23.

TABLE 75: INTEREST ON WORKING CAPITAL FOR FY 2022-23

Rs. in Crores

Sr. No.	Particulars	FY 2022-23 (Projected)
1	O & M expenses	68.34
2	Maintenance Spares	64.86
3	Receivables	628.60
4	Less : Security Deposit	1,048.52
5	Total Working Capital	(286.72)
6	Rate of Interest on Working Capital	9.50%
7	Interest on Working Capital	-

4.13. RETURN ON EQUITY

- 4.13.1. The closing balance of equity for FY 2020-21 as calculated in this Petition is taken as opening balance of FY 2021-22. Addition during FY 2021-22 is considered same as approved by the Hon'ble Commission in its Tariff Order dated 31st March, 2021 to work out closing balance of FY 2021-22. Closing balance of FY 2021-22 thus work out has been considered as opening balance of equity for FY 2022-23.
- 4.13.2. The equity addition for FY 2022-23 has been arrived at by considering 30% of the Capitalization net of consumer contribution and grants as funded from equity as already explained above.
- 4.13.3. As per the GERC MYT Regulations, 2016, return @ 14% on the equity base is allowed by the Hon'ble Commission. Accordingly, MGVCL has computed the Return on Equity considering a rate of return at 14%.



4.13.4. Accordingly, the normative return on equity for FY 2022-23 is as shown below:

TABLE 76: RETURN ON EQUITY FOR FY 2022-23

Rs. in Crores

Sr. No.	Particulars	FY 2022-23 (Projected)
1	Opening Equity Capital	1,236.38
2	Equity Additions during the Year	57.93
3	Closing Equity	1,294.31
4	Average Equity	1,265.34
5	Rate of Return on the Equity	14%
6	Return on Equity	177.15

4.14. Provision for BAD and Doubtful Debts

4.14.1. Provision for bad & doubtful debts is considered same as actuals of FY 2020-21. It is a very legitimate expenditure which is associated with the business risk and is a consumer related expense as MGVCL is in a distribution business. MGVCL accordingly, has projected Provision for Bad & Doubtful Debts for FY 2022-23 as follows:

TABLE 77: BAD AND DOUBTFUL DEBTS FOR FY 2022-23

Rs. in Crores

Sr. No.	Particulars	FY 2022-23 (Projected)
1	Provision for Bad Debts	0.01

4.15. Taxes

4.15.1. The Income tax for FY 2022-23 has been taken as per the actual income tax paid in FY 2020-21 as per Annual Audited Accounts.

TABLE 78: TAXES FOR FY 2022-23

Rs. in Crores

Sr. No.	Particulars	FY 2022-23 (Projected)
1	Provision for Tax / Tax Expenses	19.58

4.16. Non-Tariff Income

4.16.1. MGVCL has considered the Non-Tariff Income for FY 2022-23 same as actual figures of FY 2020-21.

TABLE 79: NON-TARIFF INCOME FOR FY 2022-23 (Rs. CRORES)

Rs. in Crores

		113. 111 610163
Sr. No.	Particulars	FY 2022-23
31.140.	i ai dediais	(Projected)
1	Total Non-Tariff Income	139.39

4.17. PROJECTED ARR FOR FY 2022-23

4.17.1. The table below shows projection of Aggregate Revenue Requirement by MGVCL for FY 2022-23.



TABLE 80: PROJECTED ARR FOR FY 2022-23

Rs. in Crores

RS. III CIUI		1.5 0.0.05
Sr. No.	Particulars	FY 2022-23 (Projected)
1	Cost of Power Purchase	6,317.33
2	Operation & Maintenance Expenses	820.11
2.1	Employee Cost	644.75
2.2	Repair & Maintenance	67.62
2.3	Administration & General Charges	98.80
2.4	RDSS Metering Opex	73.50
2.5	Extraordinary Items	-
2.6	Net Prior Period Expenses / (Income)	-
2.7	Other Expenses Capitalised	(64.56)
3	Depreciation	300.26
4	Interest & Finance Charges	45.74
5	Interest on Working Capital	-
6	Provision for Bad Debts	0.01
7	Sub-Total [1 to 6]	7,483.44
8	Return on Equity	177.15
9	Provision for Tax / Tax Paid	19.58
10	Total Expenditure (7 to 9)	7,680.17
11	Less: Non-Tariff Income	139.39
12	Aggregate Revenue Requirement (10 - 11)	7,540.77

4.17.2. MGVCL request the Hon'ble Commission to approve the above-mentioned Aggregate Revenue Requirement for FY 2022-23.



SECTION 5. DETERMINATION OF REVENUE (GAP) / SURPLUS FOR FY 2022-23

5.1. Preamble

5.1.1. This chapter deals with the Determination of Final ARR for FY 2022-23 and Revenue (Gap) / Surplus at existing tariff for FY 2022-23.

5.2. REVENUE FOR FY 2022-23 WITH EXISTING TARIFF

5.2.1. Based on projected sales & existing retail tariff, revenue from sale of power works out to Rs. 5,257 Crore for FY 2022-23. The consumer category wise revenue for FY 2022-23 estimated by MGVCL is as given in the following table:

Revenue S.No. **Particulars** excluding FPPPA (Rs. in Crores) Α LT Consumers **RGP** 1,342 GLP 40 2 Non-RGP & LTMD 966 4 Public Water Works 157 5 Agriculture-Unmetered 66 Agriculture-Metered 6 98 7 **Electric Vehicle Charging** LT Total (A) 2,670 **HT Consumers** В 8 **Industrial HT** 2,587 HT Total (B) 2,587 Grand Total (A + B) 5,257

TABLE 81: REVENUE AT EXISTING TARIFF FOR FY 2022-23

5.3. REVENUE FROM FPPPA CHARGES

- 5.3.1. In the Order for True up for FY 2019-20 and Determination of Tariff for FY 2021-22 dated 31st March, 2021, the Hon'ble Commission has considered the base power purchase cost at Rs. 4.481/unit and base FPPPA at Rs. 1.80/unit. As per approved FPPPA formula, any increase in power purchase cost during the year, over and above base power purchase cost of Rs. 4.481/unit is to be recovered through FPPPA, over and above base FPPPA of Rs. 1.80/unit on quarterly basis. As per the projected ARR for FY 2022-23, the weighted average power purchase cost is worked out to Rs. 4.48/unit same as of FY 2021-22.
- 5.3.2. Thus, the change in power purchase cost is Nil for FY 2022-23 and accordingly there is no change in base FPPPA also. Therefore, estimated revenue from FPPPA for FY 2022-23 is considered at Rs. 1.80/unit (i.e. grossing up by approved losses), as shown below.



No. **Particulars** FY 2021-22 2022-23 1 Fixed Cost (Rs. Crore) 11,592 13,005 Variable Cost (Rs. Crore) 28,435 2 27,106 3 GETCO Cost (Rs. Crore) 4,480 4,444 438 GUVNL Cost (Rs. Crore) 4 411 5 PGCIL Charges (Rs. Crore) 2,443 3,075 SLDC Charges (Rs. Crore) 23 6 21 **Total Power Purchase Cost** 46,053 49,421 (Rs. Crore) Total Energy Requirement 1,02,775 1,10,375 8 **Power Purchase Cost** 9 4.48 4.48 (Rs./kWh) 10 Increase in Power Purchase Cost (Rs./ KWh) Additional FPPPA Charges 11 (Grossed up by Distribution Loss) (Rs./kWh) 12 Existing FPPPA Charges 1.80 (Rs./kWh) **Revised FPPPA Charges** 13 1.80

TABLE 82: FPPPA COMPUTATION FOR FY 2022-23

TABLE 83: REVENUE FROM FPPPA CHARGES FOR THE FY 2022-23

Rs. in Crores

		113. 111 610163
Sr. No.	Particulars	FY 2022-23 (Projected)
1	Projected Sales (MU)	11,469.44
2	FPPPA Rate (Rs./kWh)	1.80
3	Revenue from FPPPA (Rs. Crore)	2,064.50

5.4. REVENUE PROJECTION FOR OTHER CONSUMER RELATED INCOME

(Rs./kWh)

5.4.1. The revenue from Other Consumer Related Income comprises of revenue on account of charges other than the basic charges applicable to the Consumers. These include income on account of wheeling charges, inspection charges and miscellaneous charges. MGVCL has projected its Other Consumer related Income for FY 2022-23 same as actual of FY 2020-21. The same is outlined in the table below:

Table 84: Other Consumer related Income for FY 2022-23 $\,$

Rs. in Crores

Sr. No.	l Particulars	FY 2022-23 (Projected)
1	Other Consumer related Income	144.80

5.5. AGRICULTURE SUBSIDY

5.5.1. 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



2022-23 is considered on pro-rata basis of agriculture consumption.

TABLE 85: AGRICULTURE SUBSIDY FOR FY 2022-23

Rs. in Crores

Particulars	FY 2022-23 (Projected)	
Share of Agriculture Subsidy	77.31	

5.6. TOTAL REVENUE FOR FY 2022-23

5.6.1. 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 2022-23 is as shown below:

TABLE 86: TOTAL REVENUE FOR FY 2022-23

Rs. in Crores

		No. III CIOICO
C# No	Dowticulors	FY 2022-23
Sr. No.	Particulars	(Projected)
1	Revenue with Existing Tariff	5,256.58
2	FPPPA Charges @ Rs. 1.80/ unit	2,064.50
3	Other Income (Consumer related)	144.80
4	Agriculture Subsidy	77.31
5	Total Revenue including subsidy (1 to 4)	7,543.18

5.7. ESTIMATED REVENUE (GAP) / SURPLUS FOR FY 2022-23

5.7.1. Based on the above, the estimated Revenue (Gap) / Surplus for FY 2022-23 at existing tariff is as outlined in the table below:

TABLE 87: ESTIMATED REVENUE (GAP) / SURPLUS FOR FY 2022-23 AT EXISTING TARIFF

Rs. in Crores

	1.5 51 51.	
Sr. No.	Particulars	FY 2022-23 (Projected)
1	Aggregate Revenue Requirement	7,540.77
2	Less: Revenue (Gap)/ Surplus from True up of FY 2020-21	(72.36)
3	Total Aggregate Revenue Requirement	7,613.13
4	Revenue with Existing Tariff	5,256.58
5	FPPPA Charges @ Rs. 1.80/ unit	2,064.50
6	Other Income (Consumer related)	144.80
7	Agriculture Subsidy	77.31
8	Total Revenue including subsidy (4 to 7)	7,543.18
9	Revenue (Gap) / Surplus (8 - 3)	(69.95)

5.7.2. The Hon'ble Commission is requested to approve the above-mentioned Revenue (Gap) / Surplus for FY 2022-23.

5.8. Proposed changes in the tariff structure for FY 2022-23

- 5.8.1. The consolidated resultant Revenue (Gap) / Surplus for all four distribution companies is Rs. (568) Crores which can be met through efficiency improvement measures.
- 5.8.2. In view of the above, the distribution companies have not proposed any increase in tariff rates or any modifications in current tariff structure.



SECTION 6. COMPLIANCE OF DIRECTIVES

6.1. Preamble

6.1.1. In the Tariff Orders, the Hon'ble Commission has specified following directives to MGVCL to which, MGVCL is submitting the Compliance, which is as follows:

6.2. COMPLIANCE OF DIRECTIVES

6.2.1. Directive 1: Details of LT and HT Lift Irrigation Category consumers

The Hon'ble Commission directed Discom to keep the record of number of consumers, their consumption during day and night period etc. and report to the Commission on completion of FY 2020-21.

Compliance:

With reference to above directive, MGVCL has submitted details vide letter no. MGVCL/EE(R&C)/Tariff/114 dated 17th August, 2021.

6.2.2. <u>Directive 2: Power Purchase Rationalization</u>

The Commission has directed Discom to submit yearly DSM, Additional DSM, Sign deviation charge details of DSM charges paid and earned including penalty levied on/collected from all the constituents of Gujarat in the next petition under power purchase section of True-up for FY 2020-21.

Compliance:

Discom has submitted details of yearly DSM, Additional DSM, Sign deviation charge details of DSM charges paid and earned including penalty levied on/ collected from all the constituents of Gujarat under power purchase section of True-up for FY 2020-21.

6.2.3. **Directive 3: Tariff Rationalization**

The Commission has directed to Discom to study the tariff slabs of major consumer categories in other leading / neighbouring States and explore options for further rationalization and reduction in number of slabs.

Compliance:

The Hon'ble Commission has issued above directive in its Tariff Order dated 31st March, 2021. Subsequently, the Hon'ble Commission vide Suo-motu order dated 24th September 2021 has decided and directed the utilities to file their tariff applications for approval of true-up for FY 2020- 21 and for determination of Annual ARR and Tariff for FY 2022-23 on or before 30th November, 2021 based on the principles and methodologies as provided in the GERC MYT Regulations, 2016. As Discom is not seeking any tariff revision and this is not being Multi Year Tariff Petition, Discom has not carry out study of tariff rationalization and reduction in number of slabs in present Petition. Discom will carry out study of tariff slabs of major consumer categories with reference to its rationalization and reduction in number of slabs and submit necessary modification in Tariff Structure, if needed as and when MYT Petition will be filed.



6.2.4. Directive 4: Conversion of Loan into Grant

The Hon'ble Commission directed Discom to prepare status report highlighting the efforts made for follow-up with concerned stakeholders, the amount of Interest and Loan likely to be converted into grant and submit the report by 31st July, 2021 to the Commission.

Compliance:

With reference to above directive, MGVCL had written letters to Power Finance Corporation dated 15th July, 2019, 16th May, 2020, 19th May, 2020 and 01st June, 2021. Compliance status was submitted to the Hon'ble Commission vide letter no. MGVCL/EE(R&C)/Tariff/125 dated 21st October, 2021. MGVCL is carrying out time to time necessary communication with Power Finance Corporation for conversion of loan into Grant.

6.2.5. **Directive 5: Green Tariff**

The Commission has directed Discom to analyse and prepare report on Introduction of Green Tariff for the consumers in the State of Gujarat who are willing to procure such Power. Discom to study Green Tariff implementation in other States and accordingly submit the report to the Commission along with next tariff petition including the cost, premium and other parameters.

Compliance:

There is a growing demand from consumers for a rapid transition to a zero-carbon economy. Over 175 of the world's most influential companies have already made this commitment through the global corporate leadership initiative, RE100. Government of India is also promoting RE in a big way and has kept an aggressive target of 175 GW of RE by 2022. Indian corporates are also playing key role in achieving the aggressive target of the Government as corporate citizens and other resultant advantage of being zero carbon companies.

However, many corporate do not wish to go through this process of sourcing RE because either they are not eligible to avail open access under the current Regulatory framework or they do not have the resources, expertise and the bandwidth required for carrying out this activity. Thus, there is emerging need to introduce optional green tariff for supply of green power for meeting green energy requirement of consumers.

At present, the concept of Green tariff has been introduced mainly in four States. i.e. Andhra Pradesh, Karnataka, Maharashtra and Gujarat for encouraging generation and use of green power. Detail of green tariff for above mentioned states is as under:

• Andhra Pradesh:

Andhra Pradesh Electricity Regulatory Commission (APERC) in its Tariff Order dated 25th March, 2021 has created separate consumer category for Green Tariff. Green Power Consumer have to pay Nil Fixed charges and **Rs. 12.25/kWh** energy charges. Relevant part of the same is reproduced here below:

"1.2.4 CATEGORY- II (D): GREEN POWER - LT



Applicability

This tariff is applicable to all consumers other than those covered under Category II (A) (iii) & Category II (A) (iv) who wish to avail power from Non-conventional sources of energy voluntarily and show their support to an environmental cause.

_	endertaining direction of providing directions		
	Fixed Charges	Energy Charges	
	(Rs./kW/month)	(Rs./kWh or kVAh)	
	NIL	12.25	
	Monthly minimum charges: NIL		

Note:

- (i) The Tariff shall be optional and can be extended to any consumer without reference to end use purpose.
- (ii) A consumer shall be entitled to Renewable Energy Certificates (RECs) as may be admissible.

4.2.4 CATEGORY-II (D): GREEN POWER – HT Applicability

This tariff is applicable to all consumers other than those covered under Category II (A) (iv): HT - who wish to avail power from Non-conventional sources of energy voluntarily and show their support to an environmental cause.

Voltage Supply	Energy Charges (Rs. / kVAh)
All Voltages	12.25
Monthly minimum charges: NIL	

Note:

- (i) The Tariff shall be optional and can be extended to any consumer without reference to end use purpose.
- (ii) A consumer shall be entitled to Renewable Energy Certificates (RECs) as may be admissible."

• Karnataka:

Karnataka Electricity Regulatory Commission (KERC) in its Tariff Order dated 09th June, 2021 has approved green tariff premium over and above normal tariff of respective category of consumers. Consumer has to pay **premium of Rs. 0.50 / Unit** for Green tariff over and above normal tariff of respective category of consumers. Relevant part of the same is reproduced here below:

"6.10 Other Issues

i) Tariff for Green Power:

in order to encourage generation and use of green power in the Stae, the Commission decides to continue the existing Green Tariff of 50 paise per unit as the additional tariff over and above the normal tariff to be paid by HT-consumers, who opt for supply of green power from out of the renewable energy procured by distribution utilities over and above their Renewable Purchase Obligation (RPO). The Commission directs ESCOMs to give wide publicity about the availability of RE power through newspapers/media/interaction meeting with the industrial consumers."

• Maharashtra:

Maharashtra Electricity Regulatory Commission (MERC) in its Order dated 22nd March, 2021 has approved green tariff premium over and above normal tariff of respective category of consumers. Consumer has to pay **premium of Rs. 0.66 / Unit** for Green tariff over and above normal tariff of respective category of consumers. Relevant part of the same is reproduced here below:

"

1. Case No 134 of 2020 is allowed.



- 2. Green Power Tariff of Rs 0.66/kWh, which is over and above the normal tariff of the respective category as per Tariff Orders, be levied to the consumers opting for meeting their demand by 100% green energy.
- 3. Revenue earned through Green Power Tariff shall be treated as non-tariff income of Supply Business and thereby be fully accounted for reduction in ARR of supply business.
- 4. All consumers (Extra High Voltage, High Voltage and Low Voltage) shall be eligible for opting 100% RE power on payment of Green Power Tariff.
- 5. The Commission may take overview of the scheme at the time of MTR Proceedings."

• Gujarat:

Gujarat Electricity Regulatory Commission (GERC) in its Tariff Order dated 04th September, 2021 has approved green tariff premium over and above normal tariff of respective category of consumers of Deendayal Port Trust (DPT). Consumer has to pay **premium of Rs. 0.50 / Unit** for Green tariff over and above normal tariff of respective category of consumers. Relevant part of the same is reproduced here below:

"Introduction of Green Tariff

Section 61(h) of the EA, 2003 has specified the promotion of generation of RE. Further, Section 86(e) of the EA, 2003 specifies the function of State Commission, which includes promotion of generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person.

Government of India is also promoting RE in a big way and has kept an aggressive target of 175 GW of RE by 2022. Indian corporates are also playing key role in achieving the aggressive target of the Government as corporate citizens and other resultant advantage of being zero carbon companies.

Further, Green Power Tariff will have the following advantages:

- Green Power Tariff being totally voluntary in nature will give choice to the Consumers to opt for green energy.
- The extra charges for procurement of RE being charged from the specific consumers would not increase the cost to be borne by other consumers.
- This will reduce hesitation of the Distribution Licensees in going for high cost of power purchase from RE sources as it will not have impact on overall tariff, leading to growth in power generation from RE sources.

The Commission has noted that DPT is procuring more than 40% of its power from renewable sources and hence it is in comfortable position to provide green power to its consumers.

Considering the present scenario, the Commission of the view to introduce Green Power Tariff which is optional and available for Consumers who want to avail green power for meeting their requirement by payment of Green Power Tariff over and above the normal tariff applicable to the respective category as per Tariff Order.

- Green Power Tariff of Rs 0.50/kWh, which is over and above the normal tariff of the respective category as per Tariff Order, be levied to the consumers opting for meeting their demand of green energy.
- All consumers (Extra High Voltage, High Voltage and Low Voltage) shall be eligible for opting RE power on payment of Green Power Tariff.
- This option can be exercised by consumer giving one month notice to the Distribution Licensee in writing before commencement of billing period."



Suggested Approach

It is observed that out of four states, three states have introduced premium over and above respective tariff consumer category in place of introducing separate consumer category.

It is important that tariff introduced should be easy to implement as well as encourage consumers to opt for that. Green tariff introduced by the Hon'ble GERC for DPT have both the attributes. Hence, the Hon'ble Commission may introduce Green Tariff for State Discoms similar to approved for DPT.

6.2.6. Directive 6: Implementation of Smart pre-payment meter/pre-payment meters:

The Commission advised Discom for necessary participation in the scheme of switching over to smart pre-payment/pre-payment meters which will help in improvement of metering, billing and collection.

Compliance:

Ministry of Power, Government of India has launched RDSS – Revamped Distribution Sector Scheme. Part A, Component I of the scheme covers metering in which,

- Prepaid smart metering for consumers and System Metering at feeder &
 Distribution Transformer level with communicating feature with advanced
 Metering infrastructure (AMI) will be done in TOTEX mode through PPP, to
 facilitate reduction of Distribution losses and enable automatic measurement of
 energy flows and energy accounting and auditing.
- DPR under RDSS covering implementation of smart pre-paid meters prepared by MGVCL and is under approval.
- For the year 2022-23, it is planned to provide 7,00,000 Nos. of Pre-paid smart meters under the scheme.
- Operational expense (Monthly payment to agency for supply, maintain and operating Metering infrastructure for the purpose of meter related data and services to DISCOM) of 7,00,000 Nos. of Pre-paid smart meters for the year 2022-23 is covered in proposed tariff petition.

6.2.7. Directive 7: Charging Infrastructure for Electric Vehicles:

The commission suggested the Discom to explore the possibility for creation of such infrastructure in its area and may come up with separate capital expenditure plan along with next petition for commission's approval.

Compliance:

Discom submits that at present very few numbers of electric vehicles are on road and existing Electric Vehicles charging stations have very minimal inflow of vehicles coming for charging to their station. Considering the same, creation of infrastructure for Electric Vehicles charging station seems financially unviable. However, in future if demand increases for Electric vehicle charging stations, MGVCL may think of creation of infrastructure for Electric Vehicles charging and Capital expenditure plan will be covered at the relevant time in tariff petition.



SECTION 7. PRAYER

MGVCL respectfully prays to the Hon'ble Commission;

- 1. To admit this Petition seeking True up of FY 2020-21, Aggregate Revenue Requirement for FY 2022-23 and Tariff Proposal for FY 2022-23.
- 2. To approve the True up for FY 2020-21 and allow sharing of gains/ (losses) with the Consumers as per sharing mechanism prescribed in the GERC MYT Regulations, 2016.
- 3. To allow recovery of Revenue (Gap) / Surplus of FY 2020-21 as part of Tariff determination for FY 2022-23.
- 4. To approve Aggregate Revenue Requirement for FY 2022-23 as submitted by the Petitioner.
- 5. To consider approved True up parameters & ARR of GSECL, GETCO and SLDC while finalizing Tariff of the Petitioner.
- 6. Pass suitable orders for implementation of Tariff Proposal for FY 2022-23 for making it applicable from 1st April, 2022 onwards.
- 7. To grant any other relief as the Hon'ble Commission may consider appropriate.
- 8. The Petitioner craves leave of the Hon'ble Commission to allow further submissions, addition and alteration to this Petition as may be necessary from time to time.
- 9. Pass any other Order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.

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

	Signature of the Petitioner		
Place: Vadodara	(Mr)		
Date: November, 2021	Chief Engineer (Tech and R&C)		



BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION GANDHINAGAR

Filing No:

Case No:

IN THE MATTER OF

Filing of the Petition for True Up of FY 2020-21 and Determination of ARR & Tariff for FY 2022-23 under GERC MYT Regulations, 2016 along with other Guidelines and Directions issued by the GERC from time to time AND under Part VII (Section 61 to Section 64) of the Electricity Act, 2003 read with the relevant Guidelines

AND

IN THE MATTER OF

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

PETITIONER

Gujarat Urja Vikas Nigam Limited

Sardar Patel Vidyut Bhavan,

Race Course, Vadodara - 390 007

CO-PETITIONER

THE PETITIONER ABOVE NAMED RESPECTFULLY SUBMITS



SECTION 8. ANNEXURE 1: TARIFF SCHEDULE FOR FY 2022-23

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

Effective from 1st April, 2022

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

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
1 11100 01101800	1101 07 1101 11101

PLUS

2.2. ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION:

(OTHER THAN BPL CONSUMERS)

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

2.3. ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION:

FOR THE CONSUMER BELOW POVERTY LINE (BPL)**

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

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

2.4. MINIMUM BILL

Payment of fixed charges as specified in 2.1 above.

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

3. RATE: GLP

This tariff is applicable to

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

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

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



4. RATE: NON-RGP

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

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

4.1. FIXED CHARGES PER MONTH

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

PLUS

4.2. ENERGY CHARGES:

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

4.3. MINIMUM BILL PER INSTALLATION FOR SEASONAL CONSUMERS

- **4.3.1.** "Seasonal Consumers", shall mean a consumer who takes and uses power supply for ice factory, ice candy machines, ginning and pressing factory, oil mill, rice mill, huller, salt industry, sugar factory, khandsari, cold storage plants (including such plants in fisheries industry), tapioca industries manufacturing starch, vegetable dehydration industries.
- **4.3.2.** Any consumer, who desires to be billed for the minimum charges on annual basis shall intimate to that effect in writing at least one month before commencement of billing period about the off-season during which energy consumption, if any, shall be mainly for overhauling of the plant and machinery. The off-season period at any time shall be a full calendar month/months. The total period of the off-season so declared and observed shall be not less than three calendar months in a calendar year.
- **4.3.3.** The total minimum amount under the head "Fixed and Energy Charges" payable by the seasonal consumer satisfying the eligibility criteria under sub-clause 4.3.1 above and complying with the provision stipulated under sub-clause 4.3.2 above shall be Rs. 1800 per annum per kW of the contracted load/ sanctioned load.
- **4.3.4.** The units consumed during the off-season period shall be charged for at a flat rate of 480 Paise per unit.
- **4.3.5.** The electricity bills related to the off-season period shall not be taken into account towards the amount payable against the annual minimum bill. The amount paid by the consumer towards the electricity bills related to the seasonal period only under the heads "Fixed Charges" and "Energy Charges", shall be taken into account while determining the amount of short-fall payable towards the annual minimum bill as specified under sub-clause 4.3.3 above.
- **4.3.6.** Seasonal consumer is required to submit to the Distribution Licensee an irrevocable Bank Guarantee from a Nationalised or Scheduled Commercial Bank equal to the difference of amount/ Bank Guarantee lying with the Distribution Licensee as Security Deposit and minimum



bill calculated at the rate shown in para 4.3.3 with the Contracted Load/ Sanctioned Load of such consumer. If the Contracted Load/ Sanctioned Load is revised upward during the calendar year, the consumer shall submit a revised Bank Guarantee or additional Bank Guarantee as calculated above to the Licensee. The cost of such Bank Guarantee/s shall be borne by the consumer. It shall be the responsibility of the consumer to keep the bank guarantee/s valid at all times and to renew the bank guarantee/s at least 1 months prior to its expiry

5. RATE: LTMD

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

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

5.1. **DEMAND CHARGE:**

	For b	lling 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 bi	lling 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

5.4. BILLING DEMAND

The billing demand shall be highest of the following:

- a) Eighty-five percent of the contract demand
- b) Actual maximum demand registered during the month
- c) 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 <u>exclusively during night hours</u> 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

PLUS

6.2. ENERGY CHARGES:

For the entire consumption during the month	260 Paise per unit
To the critic consumption during the month	200 raise per anne



NOTE:

- 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:

I	50% of the Demand charges specified in Rate LTMD above
	30% of the Bernard Charges specified in Nate 211115 above

PLUS

7.2. ENERGY CHARGES:

For entire consumption during the month	260 Paise per unit
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PLUS

7.3. REACTIVE ENERGY CHARGES:

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

- 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	
	PLUS		
(b)	Energy charges per month; For entire consumption during the month	410 Paise per Unit	



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

ĺ	Energy charges per month:	
		320 Paise /Unit
	For entire consumption during the month	-

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

11.2 ENERGY CHARGE

A flat rate of	465 Paise per Unit
A liat rate of	405 raise per offic

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 <u>exclusively</u> 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

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. <u>RATE- HTP-1</u>



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:

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

13.5 MINIMUM BILLS:

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

13.6 POWER FACTOR ADJUSTMENT CHARGES:

13.6.1 Penalty for poor Power Factor:

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

13.6.2 Power Factor Rebate



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

13.7 MAXIMUM DEMAND AND ITS MEASUREMENT:

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

13.8 CONTRACT DEMAND:

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

13.9 REBATE FOR SUPPLY AT EHV:

On E	nergy 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 e	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	5.
(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	Same as HTP-I Tariff
14.7	Contract Demand	>
14.8	Rebate for supply at EHV	
14.9	Concession for use of electricity during night hours	

14.10 POWER FACTOR ADJUSTMENT CHARGES

14.10.1 Penalty for poor Power Factor:

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

14.10.2 Power Factor Rebate:

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

15. RATE- HTP-III

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

15.1 DEMAND CHARGES:

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

15.2 ENERGY CHARGES:

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

15.3 TIME OF USE CHARGES:

Additional charge for energy consumption during two peak periods, viz, 0700 Hrs. to 1100 Hrs. and 1800 Hrs. to 2200 Hrs.	85 Paise per Unit
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- 15.4 Billing Demand
- 15.5 Minimum bill
- **15.6** Maximum demand and its measurement Same as HTP-I Tariff
- 15.7 Contract Demand
- 15.8 Rebate for supply at EHV

15.9 POWER FACTOR ADJUSTMENT CHARGES

15.9.1 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 15.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.
- b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head "Energy Charges", arrived at using tariff as per para 15.2 of this schedule, will be charged.

15.9.2 Power Factor Rebate:

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

16. RATE- HTP-IV

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

16.1 DEMAND CHARGES:

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

PLUS

16.2 ENERGY CHARGES:

For all units consumed during the month

16.3 Billing Demand

16.4 Minimum Bill

16.5 Maximum demand and its measurement

16.6 Contract Demand

16.7 Rebate for supply at EHV



16.8 POWER FACTOR ADJUSTMENT CHARGES:

16.8.1Penalty for poor Power Factor:

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

16.8.2 Power Factor Rebate:

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

NOTE:

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

17. <u>RATE- HTP-V</u>

HT - Agricultural (for HT Lift Irrigation scheme only)



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

17.1 DEMAND CHARGES:

Demand Charges Rs. 25 per kVA per month

PLUS

17.2 ENERGY CHARGES:

	For a	Il units consumed during the month	80 Paise/Unit	
17	7.3	Billing Demand		
17	7.4	Minimum bill		
17	7.5	Maximum demand and its measurement	Same as per HTP-I Tariff	
17	7.6	Contract Demand		
17	7.7	Rebate for supply at EHV		

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:

Ī	(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

- **18.3** Billing Demand:
- 18.4 Minimum Bill
- **18.5** Maximum demand and its measurement
- **18.6** Contract Demand
- 18.7 Rebate for supply at EHV

Same as HTP-I Tariff

18.8 POWER FACTOR ADJUSTMENT CHARGES

18.8.1 Penalty for poor Power Factor:

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

18.8.2 Power Factor Rebate:

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

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

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

Other consumers can use their regular electricity supply for charging electric vehicle under same regular category i.e. HTP-I, HTP-II, HTP-II, 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
ENERGY CHARGE	400 Paise per Unit

19.3 BILLING DEMAND

The billing demand shall be the highest of the following:

a) Actual maximum demand established during the month



- b) Eighty-five percent of the contract demand
- c) One hundred kVA



SECTION 9. ANNEXURE 2: TARIFF FILING FORMATS