GUJARAT ELECTRICITY REGULATORY COMMISSION

Tariff Order

Truing up for FY 2021-22 and

Determination of Tariff for FY 2023-24

For

Madhya Gujarat Vij Company Limited

(MGVCL)

Case No. 2167 of 2022

31st March, 2023

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(GERC)

GANDHINAGAR

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ABBREVIATIONS

A&G	Administration and General Expenses
AB Cable	Aerial Bunched Cable
ABR	Average Billing Rate
AG	Agriculture
APR	Annual Performance Review
APTEL	Appellate Tribunal for Electricity
ARR	Aggregate Revenue Requirement
BST	Bulk Supply Tariff
C&I	Commercial & Industrial
CAGR	Compounded Annual Growth Rate
CAPEX	Capital Expenditure
CERC	Central Electricity Regulatory Commission
Cr	Crore
CSS	Cross-Subsidy Surcharge
DGVCL	Dakshin Gujarat Vij Company Limited
DISCOM	Distribution Company
DSM	Deviation Settlement Mechanism
EA	Electricity Act
EHT	Extra High Tension
EHV	Extra High Voltage
FPPPA	Fuel and Power Purchase Price Adjustment
FY	Financial Year
GEB	Gujarat Electricity Board
GERC	Gujarat Electricity Regulatory Commission
GETCO	Gujarat Energy Transmission Corporation Limited
GFA	Gross Fixed Assets
GLP	General Lighting Purpose
GoG	Government of Gujarat

GSECL	Gujarat State Electricity Corporation Limited
GUVNL	Gujarat Urja Vikas Nigam Limited
HT	High Tension
Ind-AS	Indian Accounting Standards
JGY	Jyoti Gram Yojna
kV	kilo Volt
kVA	kilo Volt Ampere
kVAh	kilo Volt Ampere Hour
kVARh	Reactive Energy
kWh	kilo Watt Hour
LT	Low Tension
MCLR	Marginal Cost of Funds based Lending Rate
MGVCL	Madhya Gujarat Vij Company Limited
TARIFF	Mid-Term Review
MUs	Million Units (Million kWh)
MW	Mega Watt
MYT	Multi Year Tariff
O&M	Operation & Maintenance
OA	Open Access
PF	Power Factor
PFC	Power Finance Corporation
PGCIL	Power Grid Corporation of India Limited
PGVCL	Paschim Gujarat Vij Company Limited
PPA	Power Purchase Agreement
PPPA	Power Purchase Price Adjustment
PWW	Public Water Works
R&M	Repair and Maintenance
RBI	Reserve Bank of India
RE	Revised Estimate
REC	Renewable Energy Certificate

RGP	Residential General Purpose
RLDC	Regional Load Despatch Centre
RoE	Return on Equity
Rs.	Rupees
SBAR	State Bank Advance Rate
SBI	State Bank of India
SLDC	State Load Despatch Centre
UGVCL	Uttar Gujarat Vij Company Limited
WRLDC	Western Regional Load Despatch Centre
YoY	Year on Year

GUJARAT ELECTRICITY REGULATORY COMMISSION

GANDHINAGAR

Case No. 2167 of 2022

Date of the Order 31/03/2023

CORAM

Anil Mukim, Chairman

Mehul M. Gandhi, Member

S. R. Pandey, Member

ORDER

1 Background and Brief History

1.1 Background

Madhya Gujarat Vij Company Ltd., (hereinafter referred to as "MGVCL" or the "Petitioner") has filed a petition under Section 62 of the Electricity Act, 2003, read with Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2016, for the Truing up of FY 2021-22 and Determination of retail supply Tariff for FY 2023-24 on 15th December, 2022.

Gujarat Electricity Regulatory Commission notified the GERC (Multi-Year Tariff) Regulations, 2016 [GERC (MYT) Regulations, 2016] on 29th March, 2016 which is applicable for determination of Tariff in all cases covered under the Regulations from 1st April, 2016 onwards. The Commission vide its Suo-Motu Order dated 20th October, 2022 in Case No. 2140 of 2022 in the matter of "Filing of application for determination of Aggregate Revenue Requirement (ARR) and Tariff for FY 2023-24", has decided to determine the ARR for FY 2023-24 based on the principles and methodology as provided in the GERC (MYT) Regulations, 2016 and defer the next MYT Control Period by one year. Accordingly, the Commission directed all the concerned utilities to file the ARR and Tariff petition based on principles and methodology as provided in the GERC (MYT) Regulations, 2016 on or before 30th November, 2022. Accordingly, MGVCL has filed the petition on 15th December, 2022 for Truing up of FY 2021-22 and, approval of ARR and determination of Tariff for FY 2023-24.

After technical validation of the petition, it was registered on 28th December, 2022 and as provided under Regulation 29.1 of the GERC (MYT) Regulations, 2016, the Commission has proceeded with this Tariff Order.

1.2 Madhya Gujarat Vij Company Limited (MGVCL)

The Government of Gujarat unbundled and restructured the Gujarat Electricity Board with effect from 1st April, 2005. The Generation, Transmission and Distribution businesses of the erstwhile Gujarat Electricity Board were transferred to seven successor companies. The seven successor companies are listed below:

Generation Company Gujarat State Electricity Corporation Limited (GSECL)

Transmission Company Gujarat Energy Transmission Corporation Limited (GETCO)

Distribution Companies:

Sr. No.	Name of Company
1	Dakshin Gujarat Vij Company Limited (DGVCL)
2	Madhya Gujarat Vij Company Limited (MGVCL)
3	Uttar Gujarat Vij Company Limited (UGVCL)
4	Paschim Gujarat Vij Company Limited (PGVCL)

Gujarat Urja Vikas Nigam Limited (GUVNL), a holding company of the above named 6 subsidiary companies is responsible for bulk purchase of electricity from various sources and supply to Distribution Companies and also, other activities including trading of electricity.

Government of Gujarat, vide Notification dated 3rd October, 2006, notified the final opening balance sheets of the transferee companies as on 1st April, 2005. The value of assets and liabilities, which stand transferred from the erstwhile Gujarat Electricity Board to the transferee companies, include Madhya Gujarat Vij Company Limited (MGVCL). Assets and liabilities (gross block, loans and equity), as on the date mentioned in the notification, have been considered by the Commission in line with the Financial Restructuring Plan (FRP), as approved by Government of Gujarat.

1.3 Commission's Order for Approval of True up for FY 2020-21 and determination of Tariff for FY 2022-23

The petitioner filed a petition for Truing Up of FY 2020-21 and determination of Tariff for FY 2022-23 on 29th November, 2021. The petition was registered on 3rd December 2021 (Case No. 2030/2021). The Commission approved the Truing-Up of FY 2020-21, and determined the Tariff for FY 2022-23 vide order dated 31st March, 2022.

1.4 Background of the Present Petition

The Commission has notified the GERC (MYT) Regulations, 2016 for the Control Period of

FY 2016-17 to FY 2020-21. Regulation 16.2(iii) of the GERC (MYT) Regulations, 2016 provides for the truing up of previous year's expenses and revenue based on audited accounts vis-à-vis the approved forecast and categorisation of variation in performance as those caused by factors within the control of applicant (controllable factors) and those caused by factors beyond the control of applicant (uncontrollable factors).

Further, Regulation 16.2 (vi) of the GERC (MYT) Regulations, 2016 provides for annual determination of Tariff for Generating Company, Transmission Licensee, SLDC, Distribution Wires Business and Retail Supply Business for each financial year, within the control period, based on the approved forecast and results of the truing up exercise.

1.5 Registration of the Petition and Public Hearing Process

The petitioner submitted the current petition for Truing–up of FY 2021-22 and Determination of retail supply Tariff for FY 2023-24. After technical validation of the petition, it was registered on 28th December, 2022 (Case No. 2167/2022) and as provided under Regulation 29.1 of the GERC (MYT) Regulations, 2016, the Commission has proceeded with this Tariff order.

In accordance with Section 64 of the Electricity Act, 2003, the Commission directed MGVCL to publish its application in the abridged form to ensure public participation.

The Public Notice, inviting objections/ suggestions from the stakeholders on the Truing up and Tariff determination petition filed by MGVCL was published on the following newspapers:

S. No.	Name of the Newspaper	Language	Date of publication
1	The Indian Express	English	03.1.2023
2	Loksatta Jansatta	Gujarati	03.1.2023

The petitioner also placed the public notice and the petition on the website (www.mgvcl.com) and also hosted on the website of GUVNL, i.e., www.guvnl.com, which is the holding Company of the four State owned DISCOMs for inviting objections and suggestions on its petition. The interested parties/stakeholders were asked to file their objections / suggestions on the petition on or before 2nd February, 2023.

The Commission also placed the petition and additional details received subsequently from the petitioner on its website (www.gercin.org) for information and study of all the stakeholders. The Commission also issued a notice for public hearing in the following newspapers in order to solicit wider participation by the stakeholders.

S. No.	Name of the Newspaper	Language	Date of publication
1	The Indian Express	English	21.02.2023
2	Divya Bhaskar	Gujarati	21.02.2023
3	Gujarat Samachar	Gujarati	21.02.2023

The Commission received objections/suggestions from the consumers/consumer organizations as shown in the Table below. The Commission examined the objections/suggestions received and fixed the date for Public Hearing at Commission's Office for the aforesaid Petition on 1st March, 2023 at 11.30 AM. Subsequently, a communication was sent to the objectors to take part in the public hearing process for presenting their views in person before the Commission. The public hearings were conducted in the Commission's Office at Gandhinagar as scheduled on the above date. The objectors participated in the public hearing and presented their objections.

The status of stakeholders who submitted their written suggestion / objections, those who remained present in public hearing, those who could not attend the public hearings and those who made oral submissions are given in the Table below:

Sr. No.	Name of Stakeholders	Written Submission	Oral Submission	Present on the day of Public hearing
1.	Gujarat Krushi Vij Grahak Surakhsya Sangha	Yes	No	No
2.	Yash Complex Co-Operative Housing Service Society Limited	Yes	No	No

Sr. No.	Name of Stakeholders	Written Submission	Oral Submission	Present on the day of Public hearing
3.	Shri Jayaram C. Marathe	Yes	Yes	Yes
4.	Reliance Industries Ltd.	Yes	No	No
5.	Gujarat Chamber of Commerce & Industry	Yes	Yes	Yes
6.	Reliance Jio Infocomm Ltd.	Yes	No	No
7.	India Energy Exchange Ltd.*	Yes	No	No
8.	Digital Infrastructure Providers Association (DIPA)	Yes	No	No
9.	Cellular Operators Association of India (COAI)	Yes	No	No
10.	Military Engineer Services	Yes	Yes	Yes
11.	Shri K.K. Bajaj	Yes	Yes	Yes
12.	Gujarat Cold Storage Association	Yes	No	No
13.	The Bharati Airtel Ltd.	Yes	No	No
14.	Clean Max	Yes	No	No
15.	Tata Consultancy Services	No	Yes	Yes
16.	Gujarat Rajya Udhavan Piyat Sarkari	Yes	Yes	Yes
17.	Shri Rampura (Kukash) Gram Panchayat	Yes	Yes	Yes
18	AIM Developers	Yes	Yes	Yes

A short note on the main issues raised by the objectors in their submissions on the petition, along with the response of MGVCL and the Commission's views on the response, are briefly given in Chapter 3.

1.6 Approach of this Order

MGVCL has approached the Commission with the present petition for Truing up of FY 2021-22 and determination of retail supply Tariff for FY 2023-24.

The Commission has undertaken Truing up for FY 2021-22, including computation of gains and losses for FY 2021-22, based on the submissions of the petitioner and audited Annual Accounts made available by the petitioner.

While truing up of FY 2021-22, the Commission has been primarily guided by the following principles:

- Controllable parameters have been considered at the level approved as per the Tariff Order dated 31st March, 2021, unless the Commission considers that there are valid reasons for revision of the same.
- Uncontrollable parameters have been revised, based on the actual performance observed.

The Truing Up for FY 2021-22 has been considered, based on the GERC (MYT) Regulations, 2016.

The petitioner has also approached the Commission through its present petition for the determination of ARR and Tariff for FY 2023-24. ARR is required to be determined for the ensuing year, as the MYT Control Period (FY 2016-17 to FY 2020-21) is over, the process related to framing of MYT Regulations for the next Control Period was delayed. In view of the above, the Commission issued suo-moto Order dated 20th October, 2022 to file the ARR and Tariff for the FY 2023-24 and accordingly, the Commission has taken up the determination of ARR and Tariff for FY 2023-24 after hearing the matter.

1.7 Contents of this Order

The Order is divided into **Ten chapters**, as under:

1. The **First Chapter** provides a background of the petitioner, the petition and details of the public hearing process and approach adopted for this order.
2. The **Second Chapter** provides a summary of the petition.

3. The **Third Chapter** deals with the Public hearing process including the Objections raised by Stakeholders, MGVCL's response and the Commission's views on the response.
4. The **Fourth Chapter** deals with the Truing up for FY 2021-22.
5. The **Fifth Chapter** deals with the approval of ARR for FY 2023-24.
6. The **Sixth Chapter** deals with the Cumulative Revenue Gap/(Surplus) for FY 2023-24.
7. The **Seventh Chapter** deals with compliance of the Directives and issue of fresh directives for MGVCL.
8. The **Eighth Chapter** deals with fuel and power purchase adjustments.
9. The **Ninth Chapter** deals with wheeling and cross subsidy surcharges.
10. The **Tenth Chapter** deals with the Tariff philosophy and Determination of retail supply Tariff for FY 2023-24.

2 Summary of MGVCL's Petition

2.1 Introduction

This chapter deals with highlights of the petition as submitted by MGVCL for truing up of FY 2021-22 and determination of ARR and Tariff for FY 2023-24.

2.2 True-Up for FY 2021-22

MGVCL submitted the petition on 15th December, 2022 seeking approval of truing up of ARR for FY 2021-22. MGVCL has worked out its Aggregate Revenue Requirement (ARR) for FY 2021-22 as a part of the True Up for FY 2021-22. MGVCL has presented the actual cost components based on audited annual accounts for FY 2021-22. A summary of the proposed ARR for Truing-up of FY 2021-22 compared with the approved ARR for FY 2021-22 in the Tariff Order dated 31st March, 2021 is presented in the Table given below:

Table 2-1: ARR proposed by MGVCL for FY 2021-22 True up (Rs. Crore)

Sr. No.	Particulars	2021-22 (Approved)	2021-22 (Actual)	Deviation
1	Cost of Power Purchase	5,756.21	6,617.80	(861.59)
2	Operation & Maintenance Expenses	706.21	775.39	(69.18)
2.1	Employee Cost	609.87	637.30	(27.43)
2.2	Repair & Maintenance	63.96	77.19	(13.23)
2.3	Administration & General Expenses	93.45	106.07	(12.62)
2.4	Other Expenses Capitalised	(61.07)	(45.19)	(15.88)
3	Depreciation	294.17	264.91	29.26
4	Interest & Finance Charges	44.37	45.37	(1.00)
5	Interest on Working Capital	-	-	-
6	Provision for Bad Debts	0.00	0.00	0.00
7	**Sub-Total [1 to 6]**	**6,800.96**	**7,703.48**	**(902.51)**
8	Return on Equity	169.64	163.14	6.50
9	Provision for Tax/Tax Paid	12.22	21.68	(9.46)

Sr. No.	Particulars	2021-22 (Approved)	2021-22 (Actual)	Deviation
10	**Total Expenditure [7 to 9]**	**6,982.81**	**7,888.30**	**(905.48)**
11	Less: Non-Tariff Income	145.68	227.97	(82.29)
12	**Aggregate Revenue Requirement [10-11]**	**6,837.13**	**7,660.33**	**(823.19)**

2.3 Revenue gap for FY 2021-22

As shown in the Table below, MGVCL has claimed a Revenue Surplus of Rs. 45.30 Crore in the Truing up after considering the gain/(loss) due to controllable / uncontrollable factors:

Table 2-2: Revenue Surplus/ (Gap) as claimed by MGVCL for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Amount
1	Aggregate Revenue Requirement originally approved for FY 2021-22	6,837.13
2	Less: (Gap) / Surplus of FY 2019-20	409.41
3	Less: Gain / (Loss) on account of Uncontrollable factors to be passed on to Consumer	(984.36)
4	Less: Gain / (Loss) on account of Controllable factors to be passed on to Consumer (1/3rd of Total Gain / (Loss))	53.73
5	**Revised ARR for FY 2020-21 (1 - 2 - 3 - 4)**	**7,358.36**
6	Revenue from Sale of Power	7,227.66
7	Other Income (Consumer related)	99.42
8	**Total Revenue excluding Subsidy (6 + 7)**	**7,327.07**
9	Agriculture Subsidy	68.78
10	GUVNL Profit / (Loss) Allocation	7.81
11	**Total Revenue including Subsidy (8 + 9 + 10)**	**7,403.66**
12	**Revised (Gap)/ Surplus after treating gains/(losses) due to Controllable/ Uncontrollable factors (11 - 5)**	**45.30**

2.4 Aggregate Revenue Requirement for FY 2023-24

MGVCL, in the petition, sought approval of ARR and Tariff for FY 2023-24. A summary of the proposed ARR for FY 2023-24 is presented in the Table given below:

Table 2-3: ARR proposed by MGVCL for FY 2023-24 ARR (Rs. Crore)

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

2.5 Summary of projected Revenue Surplus/(Gap) for FY 2023-24

The Table below summarises the Aggregate Revenue Requirement, the total revenue with the existing Tariff and the Revenue Gap projected for FY 2023-24 by MGVCL:

Table 2-4: Estimated Revenue (Gap)/Surplus for FY 2023-24 (Rs. Crore)

Sr. No.	Particulars	2023-24 (Projected)
1	Aggregate Revenue Requirement	9,399.50
2	Add: Past claim for uncontrollable impact of implementation of 7th Pay revision not claimed in FY 2020-21	23.26
3	Less: Revenue Gap from True up of FY 2021-22	45.30
4	**Total Aggregate Revenue Requirement**	**9,377.46**
5	Revenue with Existing Tariff	5,813.45
6	FPPPA Charges @ Rs.2.60/Unit	3,247.68
7	Other Income (Consumer related)	99.42
8	Agriculture Subsidy	70.81
9	**Total Revenue including Subsidy (4 to 7)**	**9,231.35**
10	**Revenue (Gap)/Surplus (9-4)**	**(146.11)**

2.6 Proposed Changes in the Tariff Structure for FY 2023-24

MGVCL submitted that the consolidated Revenue (Gap)/Surplus for all four distribution companies is Rs. (1,207) Crore, which can be met through efficiency improvement measures. In view of the above, the distribution companies have not proposed any increase in Tariff rates or any modifications in current Tariff structure for FY 2023-24.

MGVCL vide an additional submission through an affidavit dated 2.01.2023 submitted proposal for green Tariff.

Further, MGVCL vide one more additional submission vide affidavit dated 17.02.2023 requested the Commission to approve that the same Tariff shall be applicable for both; post-paid meters and smart pre-paid meters consumers, for FY 2023-24 to facilitate smooth implementation of GoI RDSS scheme.

2.7 Request of MGVCL

1. To admit this Petition seeking True up of FY 2021-22, Aggregate Revenue Requirement for FY 2023-24 and Tariff Proposal for FY 2023-24.

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

3 Brief Outline of objections raised, response from MGVCL and Commission's view

3.1 Public Response to the Petition

In response to the Public Notice inviting objections/ suggestions on the petitions filed by DISCOMs for Truing up of FY 2021-22 and determination of Tariff for FY 2023-24 from the stakeholders, a number of stakeholders filed their objections/suggestions in writing and also participated in the Public Hearing. Further, some of the objections are general in nature and some are specific to the proposals submitted by the petitioner. It is also noted that many of the objections/suggestions are common to all the four DISCOMs and some are specific to the concerned DISCOM. The objections/suggestions connected with the current petition are segregated into two groups, viz., common to all DISCOMs and specific to the concerned DISCOM. The Commission has addressed the objections/ suggestions issue-wise rather than objector-wise.

These objections/suggestions, the response from the petitioner, and the views of the Commission are dealt with hereunder:

3.2 Suggestions/ Objections common to all DISCOMs

Issue No. 1: Cost to Serve Report

The objector submitted that the Petitioner has not submitted Cost to Serve report to Hon'ble Commission, which is amount to non-compliance Hon'ble Commission directives.

Response of the Petitioners

The Petitioner has submitted that as per the directives of Hon'ble Commission, Company has prepared the report for FY 2021-22 through independent consultant and the same is submitted to Hon'ble Commission vide letter dated 18.01.2023 by GUVNL for each subsidiary Distribution Companies of GUVNL and consolidated report for four Distribution Companies as a whole. Further, the Cost to Serve reports along with data table are already uploaded and available on GUVNL/Petitioner website.

Commission's view

The Petitioner has submitted the cost to serve report for FY 2021-22 and the same is also being uploaded on its website.

Issue No. 2: Implementation of BEE Regulation 2021

The Objector submitted that as per provisions of BEE Regulations 2021, the DISCOMs are required to conduct energy audit report and submit the same to concerned authority. However, the same is not available on DISCOM's website.

Response of the Petitioners

The Petitioner has submitted that Company conduct energy account regularly and submits Energy Account reports, from time to time to BEE as provided in the Regulations. Energy Audit for FY 2020-21 and FY 2021-22 has been submitted to Bureau and same is under evaluation at their level. It will be uploaded on the website of Company once finalized.

Commission's view

The Commission has noted the response of the Petitioner.

Issue No. 3: Power Purchase Cost

- **Increase in Power Purchase Cost for FY 2021-22**

  The Objector submitted that in FY 2021-22, the quantum of power purchase is increased as compared to quantum approved by Hon'ble Commission while approving ARR of FY 2021-22. Further, with increase in quantum, the rate for power purchase on per unit basis should have been reduced. However, the rate for incremental quantum is increased substantially.

- **Accounting of Dumped Energy**

  The Objector suggested that the dumped open access energy (not consumed within same 15 minutes time block basis) need to be accounted while computation of distribution losses.
- **Solar Rooftop Energy Accounting**

  The Objector has suggested that the consumers who have installed Solar rooftop system are meeting their consumption requirement from solar rooftop and also selling surplus energy to DISCOM at lower rate, which is required to be accounted separately.
- **Old aged Power Stations and high cost of generation**

  The Objector has submitted that the cost of power form GSECL's power plant and other gas based power plant is substantially higher. Accordingly, there is no reason to continue with costlier old and uneconomical power plants.

Response of the Petitioners

The Petitioner has submitted that as per the direction of Hon'ble Commission, purchase of power from various sources on real time basis is done following the merit order principle wherein power from various sources is scheduled in the ascending order of variable cost i.e. power from cheaper sources is scheduled first and thereafter costlier power till the demand of consumers is met on real time basis. Thus, the increase in power demand (power quantum) during FY 2021-22 necessitated operation of power plants having higher rank in merit order leading to marginally higher cost of power for incremental quantum.

Therefore, the overall increase in power purchase cost is due to un-controllable factors. Otherwise, there is gain (reduction) in power purchase cost due to efficiency improvement by Discoms in terms of reduction Distribution Losses as compared to approved losses. Further, the power purchase cost for FY 2021-22 was approved by Hon'ble Commission in the order dated 31st March, 2021 which was based on actual power purchase cost of FY 2019-20, thereafter there was increase in the price of gas and coal in the international market leading increase in power purchase cost.

In regard to dumped energy, the Petitioner has submitted that the "Overall Distribution loss" are worked out based on input energy recorded in the "Energy Meters" provided at "Feeder Level" (i.e. energy input in the system) and energy recorded in the "Consumers Meter" which includes all types of energy transaction due to wheeling of power under Open Access. Further, energy accounting for wheeled energy under open access and treatment for surplus energy is carried out in accordance with applicable orders / regulations of Hon'ble Commission.

With respect to solar rooftop energy accounting, the Petitioner has submitted that purchase of Surplus energy from Solar Roof Top Consumers have been accounted under the head "Cost of Power Purchase" and also considered in the Energy Balance as" Local Power Purchase by DISCOM".

Furthermore, in regard to old aged power stations, the Petitioner has submitted that the estimation of power purchase for FY 2023-24 is done following the Merit Order dispatched principle wherein cheaper source of power is scheduled first and so on till the energy requirement is met except for must run stations and gas based stations wherein certain level of utilization as explained in the Petition, is considered. In case of GSECL's power projects, utilization level is lower on account of comparatively higher variable cost of generation as compared to NTPC stations mainly due to benefits of pithead stations. Therefore, on account of lower utilization, the cost of GSECL's power on per unit basis appears on higher side.

Similarly, in case of other gas based power stations, it is to mention that due to prevailing international situation, there is abnormal and exceptional increase in gas price in the international market leading to significantly higher cost of generation from gas based stations. Therefore, under merit order principle, the scheduling of power from gas based plants is considered at minimal level. Therefore, scheduling of lower quantum of power coupled with high price, the cost of power purchase from gas based stations appears on higher side on per unit basis.

Commission's view

The response of the petitioners is noted. The details and the reasons have been provided as mentioned above. The power purchase cost for FY 2021-22 was approved by the Commission in the Tariff Order dated 30th March, 2021.

In reply to queries, DISCOMs have provided the reconciliation for Power Purchase Cost as claimed in the petition with the Power Purchase Cost as submitted under FPPPA and Additional Surcharge submission to the Commission as detailed in the relevant para of the Order. The Commission has found the reconciliation submitted by DISCOMs in order. As regards variation on actual power purchase cost for FY 2021-22, the Commission has examined the prudence of power purchase cost in accordance with MYT Regulations, 2016. The analysis of the Commission on power purchase cost for FY 2021-22 is discussed in the subsequent chapters of this Order.

The Commission has noted the response of the Petitioner. Difference of energy scheduled and drawn by the Open Access consumers is an inadvertent flow into the infinite grid.

Issue No. 4: Base FPPPA for FY 2023-24

The Objector submitted that in the computation of base FPPPA charges, the incremental power purchase cost is grossed up with T&D losses. However, DISCOMs are reporting different T&D losses in reports for RIMs, SoP, Audited accounts etc and therefore correct losses are to be evaluated before approving base FPPPA.

Response of the Petitioners

The Petitioner has submitted that the reporting T&D under Regulatory Information and Management System "RIMS", it is to clarify that the purpose of reporting under RIMS is different wherein the "Overall Distribution losses" of distribution system are reported and considered. The "Overall Distribution loss" in RIMs report are worked out based on input energy recorded in the "Energy Meters" provided at "Feeder Level" (i.e. energy input/sent units in the distribution system and energy recorded in the "Consumers Meter" (i.e. energy output/sold units) during the given period of time. It includes all types of energy transactions including energy transactions due to wheeling of power under open access.

Therefore, the losses reported in the RIMS report and losses considered in the True up petition based on Books of Accounts, is for different purpose and cannot be compared. The Book of Accounts of Company, depicts the figures of the "Distribution Loss" considering the purchase and sale of Power for its retail business only i.e. Excluding wheeled energy. Accordingly, in the Tariff Petition loss is considered based on quantum of energy purchased and sold at retail Tariff.

Respondent has mixed up and compared different sets of reporting of Distribution Loss which is for different purpose. Therefore, there is no infirmity in the T&D losses considered in computation of base FPPPA.

Commission's view

The Commission has noted the response of the Petitioner. The Commission has approved the base Power Purchase cost for the DISCOMs as Rs. 4.57/kWh for FY 2022-23. The Commission has also approved the Base FPPPA as Rs.1.90/kWh for FY 2022-23. As explained by the petitioners, incremental power purchase cost over the base power purchase cost is to be recovered through FPPPA charges over and above the Base FPPPA charges. Detailed clarification has been provided in past years Tariff Orders and also in the relevant Chapter of this Order.

Issue No. 5: Agriculture Sales, Revenue, Subsidies and its accounting and real losses

The Objector submitted that there is discrepancy in the Revenue reported in the Petition and in the RIMS report.

Response of the Petitioners

The Petitioner has submitted the Revenue realized from each category of consumers vis-à-vis average cost for FY 2021-22 for all four DISCOMs is as under:

Average Cost V/s Average Billing Rate for FY 2021-22			
Particulars	**Average Cost (Rs/kWh)**	**Average Realisation (Rs/kWh)**	**% Recovery**
Low Tension			
RGP	6.64	5.65	85%
GLP	6.64	6.18	93%
Non-RGP & LTMD	6.64	7.35	111%
Public Water Works & Sewerage Pumps (PWW)	6.64	6.67	101%
Irrigation Agricultural	6.64	3.91	59%
EV Charging Stations	6.64		0%
High Tension	6.64		0%
Industrial High Voltage (Ind. HT)	6.64	7.20	108%
Industrial High Voltage (Ind. EHT)	6.64	-	0%
Railway Traction	6.64	8.04	121%
Licensees	6.64		0%
TOTAL	6.64	**6.27**	94%

From above it can be visualized that average realization from almost all category for FY 2021-22 is almost within the ± 20 % to the average cost of supply except, Railway & Agriculture category.

As regards to Tariff for Unmetered and Metered Agriculture consumers, it is to submit that Tariff for Unmetered category is always higher than Metered category so as to incentivize the Unmetered category for installation of Meter.

As regards to discrepancy observed by the respondent in the Revenue reported in the Petition and in the RIMS report, it is to submit that Petition has been filed as per provisions of MYT Regulations, 2016 and therefore to raise the issue based on RIMS report is not correct.

As per the Tariff order of Hon'ble Commission, FPPPA charge is a part of Tariff. In case of Agricultural consumers, as per the decision of Government of Gujarat, the FPPPA charges payable by Agriculture consumers is not recovered from the consumers but it is being compensated by State Government as a subsidy support to agriculture consumers. It may be noted that FPPPA subsidy received from State Government and subsidy for the Water Works connections have been duly considered in the Revenue from Sale of Power for respective category of consumers both in Annual Accounts of the Company and also in the True up proposal. The details of subsidy claimed and received from Government under various category is as under:

<table>
<tr><th>Particular</th><th>Amount Claimed</th><th>Subsidy Received for FY 2021-22 (including receipt towards past period outstanding)</th><th>Adjustment towards past period outstanding prior to FY 2016-17 (prior</th><th>Adjustment towards past period outstanding after FY 2015-16</th></tr>
<tr><td>Tariff Subsidy</td><td>1516.86</td><td>2024.69</td><td rowspan="5">854.69</td><td rowspan="5">1968.30</td></tr>
<tr><td>Water works</td><td>649.46</td><td>793.97</td></tr>
<tr><td>FPPPA Subsidy</td><td>4039.23</td><td>6209.88</td></tr>
<tr><td>HP Based Subsidy</td><td>1100</td><td>1100</td></tr>
<tr><td>Total</td><td>7305.55</td><td>10128.54</td></tr>
</table>

The Respondent has raised the issue in regards to inclusion of EHV Consumption while calculating Distribution Loss, and distribution losses claimed in the Petition by relying on the quantum of energy input (sent out) reported by SLDC for the different category of feeders. In this context, it is to clarify that consumption by any consumer categories, irrespective of voltage level at which they are connected, is supplied by Distribution Licensee and therefore, to work out the energy loss, the consumption of EHV category is also included in overall Energy Sold by the Company. Historically, Distribution Loss is worked out accordingly and approved by Hon'ble Commission time to time.

As regards to the energy input reported by SLDC, it is to clarify that the quantum of energy input (sent out) metered feeder level meters includes / records energy transacted under all types of commercial transactions i.e. including energy transactions due to wheeling of power under open access.

It is relevant to state that as per the provisions of Electricity Act, 2003, Distribution Company is mandated to provide non-discriminatory access to its Distribution system to the customers availing power from third party sources or wheeling power for self-consumption under Open Access. Such Open Access customers are embedded Consumers of Distribution Company and fulfill their power requirement either fully or partly from third party / captive sources through Open Access. As per provision Hon'ble Commission's regulations, presently such Open Access is permitted for the consumers having power requirement of 1 MW and above. Further, consumers having captive generating plant or renewable generating plant can seek Open access irrespective of its power requirement. The Commercial settlement and energy accounting of such Open Access customers at the recipient unit, is carried out by applying "normative loss" as approved by Hon'ble Commission. Further, as per the provisions of applicable orders/regulations of Hon'ble GERC "Concessional wheeling loss or wheeling loss are exempted and the energy settlement at recipient units are provided accordingly.

Therefore, the losses worked out on the basis of energy reported by SLDC and losses considered in the True up petition based on Books of Accounts cannot be compared. The Book of Accounts of Company, depicts the figures of the "Distribution Loss" considering the purchase and sale of Power for its retail business only i.e. Excluding wheeled energy. Accordingly, in the Tariff Petition loss is considered based on quantum of energy purchased and sold for retail supply business.

Thus, the submission based on comparing sent out units and sold out units from two different sets of information is not correct.

Commission's view

The Commission has noted the response of the Petitioner.

Issue No. 6: Consumer Contribution

The Objector observed that the treatment of consumer contribution in the petition by the Petitioner is not in line with the applicable regulation.

Response of the Petitioners

The Petitioner has submitted that the Tariff petition is prepared on the basis of principles laid down in GERC MYT Regulations 2016. Consumer contribution and capital grants are prudently written back every year a certain percentage of total amount outstanding and is considered as non-Tariff income in the Tariff petition. Thus, treatment for consumer contribution and capital grant is appropriately done in the petition year on year basis. So the treatment by Company is in line with the prevailing regulations.

Commission's view

The Commission has noted the response of the Petitioner.

Issue No. 7: Proposal for Green Tariff

The Objector observed that the proposed green Tariff is too high and discouraging the consumer to buy green power from DISCOM. In the States of Maharashtra, Karnataka, Telangana etc green Tariff is in the range of Rs. 0.50 per Kwh to Rs. 0.66 per kwh. Further, the objector has raised issues on various component considered in the computation of green Tariff.

Response of the Petitioners

The Petitioner has submitted that DISCOMs have filed green Tariff proposal for Supply of Green Energy by DISCOMs in the Tariff proposal of FY 2023-24, as per methodology prescribed in the Ministry of Power Electricity (Promoting RE through Green Energy Open Access) Rules, 2022 notified by Ministry of Power, Government of India.

The Green Open Access Rules, 2022 stipulating norms for grant of open access for consumption of green energy. Further, the rules provide an option to the obligated entity to meet its RPO obligation by purchasing RE power from DISCOMs at a green Tariff decided by respective State Commission in accordance with Clause 4 of the Rules. The relevant part of Clause 4 of the Rules, 2022 read as under:

4. Renewable Purchase Obligation– *(1) On and from the date of commencement of these rules, there shall be an uniform renewable purchase obligation, on all obligated entities in area of a distribution licensee.*

(A) …………………………………………

(C) By requisition from distribution licensee.–

(a) Any entity may elect to purchase green energy either upto a certain percentage of the consumption or its entire consumption and they may place a requisition for this with their distribution licensee, which shall procure such quantity of green energy and supply it and the consumer shall have the flexibility to give separate requisition for solar and non-solar;

(b) The consumer may purchase on a voluntary basis, more renewable energy, than he is obligated to do and for ease of implementation, this may be in steps of Twenty five per cent and going upto Hundred per cent;

(c) The Tariff for the green energy shall be determined separately by the Appropriate Commission, which shall comprise of ***the average pooled power purchase cost of the renewable energy, cross-subsidy charges if any, and service charges covering the prudent cost of the distribution licensee for providing the green energy;***

(d) Any requisition for green energy from a distribution licensee shall be for a minimum period of one year;

(e) The quantum of green energy shall be pre-specified for at least one year;

(f) The green energy purchased from distribution licensee or from Renewable Energy sources other than distribution licensee in excess of Renewable Purchase Obligation of obligated entity shall be counted towards Renewable Purchase Obligation compliance of the distribution licensee;

(g) ***The Accounting of renewable energy supplied at distribution licensee level shall be on a monthly basis;***

As per cause 4 (C) (c) of Rules, 2022, the component for green Tariff shall include (A) Average Pooled Power Purchase Cost of RE (B) Cross Subsidy charges and (C) service charge covering prudent cost of distribution licensee for providing green energy. The analysis and justification of each of cost component incorporated in the proposal for computation of green energy Tariff for FY 2023-24 is duly explained in the proposal.

It is further to state that the Section 61 of Electricity Act, 2003 provides for determination of Tariff in cost reflective manner following the commercial principles. Any concession in determination of green Tariff for obligated entity will adversely impact the Tariff of other general body of consumers.

Commission's view

The response of the DISCOMs is noted. The Commission has also dealt with the issue in the respective Chapter of this Order.

Issue No. 8: Power Purchase Cost for FY 2021-22

- **Variation in Power purchase cost claimed in the Petitions as per annual account and power purchase cost as per total of FPPPA submission of four quarters of FY 2021-22**

  The Objector submitted that as per FPPPA submissions of FY 2021-22, the power purchase expenses is Rs. 54737 Crores whereas as per Petitions (Form no.2), the power purchase cost is Rs. 55526 Crores, higher claim of Rs. 789 Crores in the Petition.

- **Claim of additional power purchase cost based on actual payment to generators towards past period liabilities**

  The Objector suggested that additional power purchase cost of Rs. 539 Crores claimed in the Petitions toward actual payment made to generators for past period liabilities, however, no supporting documents are provided for the same.
- **Purchase of power from short term market and levy of Additional Surcharge**

  The Objector has suggested that in FY 2021-22, power purchase from power exchange was 18322 Mus which is significantly higher and constitutes around 17% of total power purchase. Considering the same, there is no justification to claim Additional Surcharge when DISCOMs are in shortage of power and there is no stranded capacity.
- **Working of BST rate in True up petition**

  The Objector has submitted that working of BST rate for allocation of power purchase cost to DISCOM is not explained in the petition.
- **DSM payments and UI units**

  The Objector submitted that despite of direction of Hon'ble Commission in the order dated 31.03.2021 to bring accuracy in scheduling and forecasting so as to ensure DSM are within permissible limit, DISCOMs are incurring huge loss on account of DSM charges.
- **Exorbitant increase in Tariff due to FPPPA charges**

The Objector submitted that there is huge increase in the Tariff due to increase in FPPPA charges and therefore consumers are to heard before approving the increase in FPPPA charges.

Response of the Petitioners

The Petitioner has submitted that as per the directive of Hon'ble Commission, FPPPA is claimed based on actual payment made during respective quarter, which do not include un-discharged liability / provisions etc. but includes the amount which is paid during the quarter for which liability is accrued and booked as expenditure in the Books of previous year. Whereas Annual Accounts are prepared on accrual basis as per the Indian Accounting Standards (IND-AS) which includes undischarged liabilities / provisions on account of matters pending in various courts and estimated as per the orders of competent courts / best assessment basis.

Thus, the reasons for variation in power purchase cost as per books and claimed in FPPPA are (i) there are certain amounts which are claimed / credited in FPPPA on actual payment basis but part of previous year books (ii) there is increase / decrease in the final bill amount after FPPPA submission (iii) amount accounted in FY 2021-22 but payment is made in subsequent period.

In regard to additional power purchase cost, it is submitted that there are provisions in the books of previous years related to payment liability as per the judgment of various Court and the amount was provided on best estimation basis as the liability was yet to be quantified by lower court / forum. Further, there are provisions in the Books being the amount is decided, accrued and quantified as per the order of lower forum and there is immediate liability to pay but due to pendency of matter in higher forum. However, Hon'ble Commission had disallowed such provision of power purchase cost in the respective year's truing up order, clarifying that these amounts in the Books are provisions only and no actual payment is made. Further, in the relevant order, Hon'ble Commission had provided liberty to DISCOMs to claim such amount as and when payment is materialized.

In the FY 2021-22, GUVNL has paid amount of Rs. 539.49 Crores towards which provisions were made in past years and not considered by Hon'ble Commission in the past orders.

Therefore, power purchase amount of Rs. 539.49 Crores claimed by DISCOMs for FY 2021-22 as per the actual payment made to generators towards past period liabilities. Such claim is legitimate and in accordance with orders of Hon'ble Commission.

In regard to levy of additional surcharge, it is submitted that levy of additional surcharge and purchase of power from short term market are entirely independent aspects. The levy of Additional Surcharge in accordance with Section 42(4) of the Electricity Act 2003 is for compensating DISCOMs towards stranded power purchase cost due to purchase of power by consumers from other sources. The Additional Surcharge is levied as per the formula approved by Hon'ble Commission and after demonstrating the stranded power purchase cost. Whereas, the purpose of purchase of power from short term market is to economize overall power purchase cost specifically when power is available from market at competitive rates.

Further, DISCOMs have tied up significant RE capacity specifically from Wind and Solar sources for fulfillment of RPO obligation stipulated by Hon'ble Commission. Moreover, consumers are also wheeling RE power (Wind/Solar) under open access. The generation (Wind/Solar) power is infirm in nature and integration of RE power on large scale basis necessitates purchase of power from power exchanges to mitigate variation in RE generation.

Therefore, the action of DISCOMs for purchase of power from short term market to economize the overall power purchase cost and as balancing power to mitigate variation in RE generation cannot be construed as shortage of power or non-existence of stranded power purchase cost.

Furthermore, it is to clarify that in MYT/TARIFF orders Hon'ble Commission has approved BST mechanism. Thus, power purchase cost incurred by GUVNL for FY 2021-

22 is allocated to individual DISCOM as per the BST mechanism approved by Hon'ble Commission.

In continuation to above, it is to clarify that the Deviation Settlement Mechanism, which was previously known as "Unscheduled Interchange", is disciplined Item and payable / receivable for the deviation from the schedule. Rate of DSM/UI units varies time to time as it is linked with the Frequency, therefore, rates paid/received under DSM can't be compared with the average Power Purchase cost of the Company. Further, the petitioners are making all the efforts to optimize the DSM/UI liabilities, however, there is challenges in scheduling and forecasting due to large scale integration of infirm nature of RE power in the grid.

In respect to increase in FPPPA charges, as per the provisions of National Tariff Policy, any increase in the Power Purchase cost viz-a-viz power purchase cost approved by Hon'ble Commission in the DISCOM's ARR/MYT Petition, is to be recovered from consumers through FPPPA charges on quarterly basis. The Power Purchase cost for FY 2021-22 was approved by Hon'ble Commission in the order dated 31.03.2021 based on actual power purchase cost of FY 2019-20.

Since then, there has been increase in power purchase cost during FY 2021-22 on account of uncontrollable factors such as increase in fuel cost / power purchase rate and change in generation mix etc. The FPPPA for FY 2021-22 is based on the actual power purchase expenditure incurred and reflects increase in power purchase cost over the base year power purchase cost. Further, the computation of FPPPA charges are carried out as per the formula approved by Hon'ble Commission in the order dated 29.10.2013. The FPPPA formula was approved by Hon'ble Commission in the order dated 29.10.2013 in a transparent manner after conducting public hearing. The working of quarterly FPPPA charges merely involves computation as per approved formula and actual figures of power purchase cost.

Commission's view

The response of the petitioners is noted. The details and the reasons have been provided as mentioned above. The power purchase cost for FY 2021-22 was approved by the Commission in the Tariff Order dated 31st March, 2021.

In reply to queries, DISCOMs have provided the reconciliation for Power Purchase Cost as claimed in the petition with the Power Purchase Cost as submitted under FPPPA and Additional Surcharge submission to the Commission as detailed in the relevant para of the Order. The Commission has found the reconciliation submitted by DISCOMs in order. As regards variation on actual power purchase cost for FY 2021-22, the Commission has examined the prudence of power purchase cost in accordance with MYT Regulations, 2016. The analysis of the Commission on power purchase cost for FY 2021-22 is discussed in the subsequent chapters of this Order.

Issue No. 9: Increase in O&M expenses

The Objector observed that the Petitioners have increased its O&M charges abruptly for FY 2023-24.

Response of the Petitioners

The Petitioner has submitted that the O&M expenses includes expenses towards Employee Cost, A&G Charges and Repair & General Charges.

Five years Compounded Annual Growth rate of MGVCL in terms of numbers of consumers is @ 2.95% and in terms of Connected Load is 6.26%. Moreover, Company has ambitious Capital Expenditure Plan. During the last five years Company spent more than Rs. 1900 Crores and in the year 2021-22 MGVCL spent Rs. 347.44 crores towards capital expenditure under various heads. MGVCL has adopted HVDS (High Voltage Distribution System) for releasing new Agricultural connections since 2009-10.

Naturally all these activities necessitate corresponding increase in employee and A&G expenses. Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses etc. Expense incurred under this head by the Company is mainly following the guidelines issued by Competent Authority. It may also be noted that the increase in O&M cost is also attributable to inflationary increase over which DISCOMs do not have any control.

Moreover, Company takes various steps, narrated as under, for efficient and reliable electricity distribution to its consumers and for reduction of Distribution Loss. Further, Company's area is cyclone prone. Frequent Cyclone and Natural Calamities disrupts the Network and Company is required to spend huge amount in restoration. Moreover, Company makes all efforts for reduction of Distribution losses endeavors to achieve the Loss reduction trajectory as approved by the Hon'ble Commission which besides others increases the Repair and Maintenance expenses. It necessitated the Company to focus all its resources on the activities related to restoration of the network and resumption of power supply to the consumers, which has resulted in increase in R&M Expenses and also hampered the other activities.

Hence, the entire expenditure is a legitimate expenditure and any variation is purely beyond its control.

Commission's view

O&M expenses are approved in the truing up for FY 2021-22 after prudence check, in accordance with relevant provisions of the GERC (MYT) Regulations, 2016, as detailed in the relevant Chapter of this Order. Further, the Commission has approved O&M expenses for FY 2023-24 following the methodology prescribed under the GERC (MYT) Regulations, 2016, as detailed in the relevant Chapter of this Order.

Issue No. 10: Revenue Gap/Surplus of FY 2021-22

The Objector submitted that in true up of FY 2021-22, DISCOMs has wrongly considered pass through of surplus of Rs. 1976.03 Crores of FY 2019-20 in the true up of FY 2019-20 instead of considering surplus amount of Rs. 3641.03 Crores as per Hon'ble GERC order dated 31.03.2021.

Response of the Petitioners

The Petitioner has submitted that the surplus of Rs. 3641.03 Crores includes outstanding subsidy amount of Rs. 1665 Crores. Therefore, surplus of Rs. 1976.03 Crores of FY 2019-20 only considered as pass through in the True up of FY 2021-22.

Commission's view

The Commission has approved Revenue (Gap)/Surplus in the truing up for FY 2021-22 after prudence check, in accordance with relevant provisions of the GERC (MYT) Regulations, 2016, as detailed in the relevant Chapter of this Order.

Issue No. 11: Power Purchase Cost for FY 2023-24

- **Estimation of Power purchase cost for FY 2023-24**

  The Objector submitted that there is significant quantum estimated to be purchased through short term / power exchanges, which indicates that the petitioners are in deficit of power and therefore recovery of additional surcharge should be discontinued.

- **Comparison of Power Purchase Rate of the Q1 of FY 2022-23 with the Power Purchase cost estimated for FY 2023-24.**

  The Objector suggested that no justification is given as to how power purchase cost for FY 2023-24 (Rs. 5.17 per unit) would be lower side as compared to current power purchase cost (Rs. 5. 75 for Q1 of FY 2022-23).

Response of the Petitioners

In regard to purchase of short term power, it is to state that the estimation of purchase of power through short term arrangement for FY 2023-24 is based on present market condition with an objective to economize overall power purchase cost specifically to avoid costlier power purchase from gas based power stations due to exorbitant increase in gas price at international market. It is to clarify that the Petitioners have power purchase arrangement on long terms basis having fixed cost payment liabilities to meet the demand of existing as well future consumer base.

In regard to power purchase comparison to Q1, it is to submit that Power Purchase cost of a Quarter Cannot Justify the Power Purchase cost estimated for a year. Generation mix, availability of power stations, energy balance and demand and supply scenario of a quarter & estimated scenario for FY 2023-24 is entirely different and not comparable and therefore it is not appropriate to compare the per unit power purchase cost of a quarter of FY 2022-23 & estimated power purchase cost of FY 2023-24. The power purchase cost for FY 2022-23 is estimated considered availability of new generation capacity, estimated availability of tied up capacity during the year and off-taking of power considering merit order dispatch principle giving highest priority to the generating stations having lower coat of generation and so on.

Commission's view

The detailed analysis undertaken by the Commission for approval of power purchase cost for FY 2021-22 and FY 2023-24 has been provided in relevant paras of this Order.

Issue No. 12 Estimation of Energy Requirement and T&D Losses for FY 2023-24

The Objector observed that sales for HT consumer is estimated at lower level as compared to actual sales to HT consumers for FY 2021-22.

Response of the Petitioners

The Petitioner has submitted that constant variation in sales has been observed in the Industrial HT category in last five years due to presence of Open Access, slowdown in the economy etc. Year on Year growth may be higher but it would not be appropriate to expect this growth to be sustainable as this growth was driven by Industrial Open Access and Captive consumers resorted to Company's power as alternative source was significantly high. Therefore, sales estimated for HT Category is quite realistic and prudent.

In the response, it is stated that higher T&D loss is considered for estimation of power purchase cost as compared to actual T&D losses for FY 2021-22 by DGVCL, MGVCL & UGVCL.

In this regard, it is to state that the T&D loss level of FY 2021-22 is abnormal on account of various reasons including meter reading / energy accounting issues due to outbreak of COVID-19 pandemic at the beginning of the financial year, weather conditions, high valued HT consumers resorted to Company's Power etc. Therefore, realistic approach has been considered for estimating T&D loss for FY 2023-24.

Commission's view

The Commission has approved energy requirement for DISCOM with approved level of losses in the subsequent chapter of this Order.

Issue No. 13 Green Tariff

The Objector observed that the green Tariff of Rs. 9.89 per unit proposed by the Petitioners in not in accordance with methodology prescribed in the Green Open Access Rules, 2022.

Response of the Petitioners

The Petitioner has submitted that DISCOMs have filed green Tariff proposal for Supply of Green Energy by DISCOMs in the Tariff proposal of FY 2023-24, as per methodology prescribed in the Ministry of Power Electricity (Promoting RE through Green Energy Open Access) Rules, 2022 notified by Ministry of Power, Government of India.

The Green Open Access Rules, 2022 stipulating norms for grant of open access for consumption of green energy. Further, the rules provide an option to the obligated entity to meet its RPO obligation by purchasing RE power from DISCOMs at a green Tariff decided by respective State Commission in accordance with Clause 4 of the Rules.

As per cause 4 (C) (c) of Rules, 2022, the component for green Tariff shall include (A) Average Pooled Power Purchase Cost of RE (B) Cross Subsidy charges and (C) service charge covering prudent cost of distribution licensee for providing green energy. The analysis and justification of each of cost component incorporated in the proposal for computation of green energy Tariff for FY 2023-24 is duly explained in the proposal.

It is further to state that the Section 61 of Electricity Act, 2003 provides for determination of Tariff in cost reflective manner following the commercial principles. Any concession in determination of green Tariff for obligated entity will adversely impact the Tariff of other general body of consumers.

Commission's view

The Commission has dealt the aforesaid issue regarding Green Tariff in subsequent chapter of this Order.

Issue No. 14 Merging of FPPPA in Tariff

The Objector has requested to merge FPPPA charges in the Tariff.

Response of the Petitioners

The Petitioner has submitted that the basic nature of FPPPA/PPPA is 'adjustment' related to power purchase cost i.e. pass through of increase or decrease, as the case may be, in the power purchase cost over the base power purchase cost. The PPPA charge is being levied on the consumer categories on account of the change in the cost of power purchase, which comprises almost 85 to 93% of the Distribution Licensee's Aggregate Revenue Requirement. Any expense pertaining to the regulated business of the Distribution Licensee has to be recovered from all consumers in some manner; therefore, the PPPA charges are recovered in the form of an incremental energy charge (Rs/kwh) recovered as per formulae approved by the Commission and as per directive of Hon'ble Commission.

Commission's view

The Commission has not considered any changes in Tariff Schedule for FY 2023-24 and the same is being dealt in next MYT Control Period.

Issue No. 15 Suggestions on Tariff Schedule for FY 2023-24

At present there are four slabs in Residential Tariff. This should be reduced to two slabs of up to 300 units and above 300 units and accordingly charges should be fixed to simplify the Tariff structure. The Delhi Government is giving 200 units free electricity to every residential consumer. In recent elections in Punjab and UP, it is promised to give 300 units free to residential consumers and free electricity to Agriculture consumers.

At present, there is Agriculture Tariff of 60 Paisa / unit and 80 Paisa / unit in Metered Tariff and in Tatkal Tariff category. It is requested to make the Tariff uniform. As regards Agriculture PDC reconnection, it is requested to abolish Rs. 35 per HP charge recovered for the PDC period.

As regards BPL category, to prevent misuse of scheme, it is requested to fix the limit of connected load and maximum ceiling of unit consumption. If consumer exceeds the limit, it shall be converted to RGP category.

The objector submitted that the preamble of objective of the Act provides for protecting interest of consumers and rationalization of electricity Tariff in a manner to eliminate cross subsidization in the Tariff. However, even after more than 18 years from enactment of the Act, no due consideration has been given for rationalization of Tariff by reducing cross subsidization in Tariff structure as mandated in the Act. Since many years, the level of cross subsidization in the Tariff is not reduced but on the contrary, it has been increased, which is against the objective and spirit of the Act. As a result, the efficient and cost-effective consumers specifically industrial and commercial consumers of the State are left with paying exorbitantly high Tariff and significantly cross subsidizing the other consumers since many years.

The objector submitted that there should be lower per HP charges for agriculture connection having higher load.

The objector submitted that there should be free electricity for blind persons.

The objectors/Respondents have submitted suggestions on Tariff Schedule for FY 2022-23:

- **Rationalization in Energy Charges slabs for HTP-I category**

  It is submitted that there are 3 slabs in the Energy Charges namely, Rs. 4.00 per unit for Billing Demand up to 500 kVA, Rs. 4.20 per unit for Billing Demand above 500 kVA to 2500 KVA, and Rs. 4.30 per unit for Billing Demand above 2500 kVA.

  The single energy charges rate of Rs. 4.00 per Unit may be kept irrespective of consumer's billing demand. At higher voltage level due to higher billing demand, the cost to serve will be lower. Accordingly, it is against the principles of the Act to charge higher energy rates for higher billing demand.

- **Increase in contract demand limit to 150 kW for LTMD category**

  It is submitted that as per the existing Tariff structure, limit of contract demand for LTMD consumers category is 100 kW. The consumers and the petitioners both are facing Right of Way issue for the construction of new HT lines and space constraint for the installation of transformers or breakers, etc. Therefore, it is requested to increase the limit for LTMD category from 100 kW to 150 kW.

- **Introduction of special incentive/rebate for maintaining better load factor for HT/demand-based consumers (for efficient utilisation of demand)**

  It is suggested to introduce incentives/rebate for maintaining better load factor by HT consumers and demand-based LT consumers. Load factor in excess of 50% may be provided incentive/rebate of say Rs. 0.40/unit. This will give signal to consumers to improve their load factor and help to reduce the fixed cost liability of DISCOMs due to better utilisation of generation capacity and transactions network.

- **EHV Rebate**

  In order to incentivize the consumer availing supply at higher voltage level and thereby reduce line losses, the Commission should approve the EHV rebate of at least 7% or Rs. 0.50/unit for availing power supply at 66 kV or above voltage level as the existing rate of rebate is not in any manner incentivizing the consumer.

- **Peak Hours Charges and Night Rebate Charges**

  The Commission should abolish peak hour period of 7.00 hours to 11.00 hours in the absence of cogent data and reasons.

  The peak hour is the hours of day during which, demand is maximum and Companies are to pay higher power purchase cost. Further, no such maximum demand is observed in the State during 7.00 hrs to 10.00 hrs in any season and there is no extra cost for purchase of power during these hours, which would justify the peak hour charges.

  On large scale basis, solar generation is available during 7.00 hours to 11.00 hours at cheaper rate. Therefore, there is no requirement to impose peak hours charges during 7.00 hours – 11.00 hours.

- **Discrimination between peak hour charges and night rebate concession**

  The Commission should reduce peak hour charges equal to night consumption rebate or increase night consumption rebate equal to peak hour charges.

  For HTP-IV Tariff category, the energy charges for consumption during night hours of 22:00 hrs to 6:00 hrs is Rs. 2.25/unit whereas for consumption by HTP-I consumers during the same time period, the applicable Tariff is Rs. 3.87/unit. Thus, there is higher charges of Rs. 1.62/unit for utilisation of power during same time period. This discrimination in charges has been encouraging the load variability and discourages the consumers who are utilising the power all the time.

- **Power Factor Adjustment Charges**

  The Commission is requested to fix demand charges for HT consumers on kW basis instead of kVA basis to avoid double penalty for Power Factor. There must be incentive for Power Factor between 90%-95% for helping the grid.

  There should not be discrimination in the rate of incentive and penalties, but it should be equal rate and that too on energy charges including fuel surcharge.

- **Demand Charges for HT Consumers**

  The Commission should look into revision in the demand charges applicable for HT consumers with contracted demand more than 1000 kVA and bring it down to a reasonable level.

- **Wrong billing demand for seasonal consumers**

  From March 2019, DISCOMs have changed the methodology for levy of demand charges from the consumers during the seasonal period. DISCOMs are levying demand charges during seasonal month considering actual demand or 85% of contract demand, whichever is higher.

  Therefore, the Commission is requested to intervene in the matter and direct DISCOMs accordingly.

- **Introduction of Power Factor Rebate / Incentive for LT category**

  In case of LT category (LTMD) only PF penalty provision (Rs. 0.10/kVARh) is there without any provision for PF incentive for maintaining better Power Factor.

- **Night Rebate for LT category**

  LTMD consumers, being small scale industries, are having lower paying capacity and therefore, benefit of night rebate may also be given to LTMD consumers without putting burden of peak hours charges.

- **Cross Subsidy Surcharge and loss level applicable to Open Access consumers**

  There should not be determination and levy of Cross Subsidy Surcharge (CSS) from open access users before fixing the following issues:

  - There must be road map in place for the reduction in cross-subsidy and CSS thereof.
  - Determination of Tariff and cross subsidy level should be on the basis of voltage-wise cost of supply.

- CSS should be decided on the basis of weighted average cost of power purchase of top 5% at the margin and not on the basis of simply weighted average cost of power purchase.
- While deciding the CSS, the payment of demand charge and additional surcharge is to be deducted from the applicable Tariff so that open access consumers should not unfairly be double charged. (i.e., fixed cost recovery from Demand Charge and Additional surcharge as well as from CSS).

- **Loss Applicable to Open Access consumers**

Distribution losses for LT system will be much higher as compared to HT system. Therefore, among this combined distribution loss of 10%, the loss level for wheeling of power at 11 kV level cannot be more than 1% and the balance 9% needs to be allocated for LT level. Therefore, the Commission is requested to take realistic approach and consider losses applicable to OA users for 11 kV voltage level at 1%.

- **Proposed changes in the Condition for HTP IV Tariff**

The objector has suggested changes in condition No. 7 of the Tariff:

"The option can be exercised to switchover from HTP-I Tariff to HTP-IV Tariff of from HTP IV Tariff 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." It is suggested that work 15 days should be replaced by 2 days.

- **Penalty Charges for Increase in Contract Demand**

The objector has suggested for change in Penalty charges for increase in contract demand by MGVCL as under:

Sr. No.	Details	For Demand <CD in Rs.	Penalty for demand > CD in Rs.	Existing Penalty in %
1	Up to 500 kVA	150	555	270%
2	500 to 1000 kVA	260	555	113%
3	> 1000 kVA	475	555	17%

Demand charges of excess demand should be in terms of percentage increase of the regular demand charges. 20% should be a reasonable figure, and should be charged for excess demand when the billing demand is more than the contract demand.

- **Time of Use charges and Power Factor Rebate**

  The morning peak hour is obsolete and should be cancelled while evening peak hours should be rationalised. Regarding the ToD charges, the Commission is requested to direct DISCOMs and GUVNL to compute the penalty @ 1% of energy bill if PF value is 0.85 to 0.90, and at the rate of 2% if the PF is less than 0.85.

- **Requirement for revision in Delayed Payment Charges**

  Since long, the Delayed Payment Charges (DPC) is levied at the rate of 15% per annum for all consumers except agriculture category. ln this context, it is to state that there has been paradigm shift in the monetary policies in the country leading to significant reduction in prevailing interest rates. The Bank Rate as on 1st April 2021 was 4.25% per annum. The existing DPS is around 350% higher than interest rate applicable on security deposit. Considering the prevailing interest rate situation in the country, the DPC may be provided at 10% per annum instead of present rate of 15% per annum.

- **Requirement for change in minimum agreement period of 2 years for new connection/ load extension**

  As per the present norms, the minimum agreement period is stipulated as 2 years from the date of commencement of power supply and minimum charges are applicable for the period shortfall of 2 years in case of surrender of demand before 2 years. ln this context, the minimum agreement period of 2 years is continued since past many years without any modification. Other consumer will be served from the demand surrendered by the consumer. Thus, DISCOMs are getting double recovery of demand charges namely as a minimum charge compensation from the consumer surrendering the demand and recovery of billing demand charges from other consumers to whom the same demand is served. Further, in other States like Maharashtra and Haryana, there is provision to surrender the demand by giving one month's notice without levy of minimum charges. ln the scenario of business uncertainty due to swift change in technology and consumer preference, it is suggested to reduce the minimum agreement period to one month.

Response of the Petitioners

As regards suggestion on lower per HP charges for agriculture connection having higher load, the petitioners submitted that the Fixed cost should be recovered from Fixed charges which are quite low at present. Also, DISCOMs have not proposed any Tariff revision in the present petition.

As regards suggestion of free electricity for blind persons, the petitioners submitted that there cannot be discrimination as per the Act in supply of electricity.

The responses submitted by petitioners for other objections/comments are as under:

- **Rationalization in Energy Charges slabs for HTP-I category**

  It is submitted that the average realization for HTP category is nearly within the band provided in the Tariff Policy and the petitioner has not suggested any change in the Tariff structure for any category of consumers including HT category. Therefore, change in any particular category (HT category) cannot be considered in an isolated manner. Further, it is not appropriate to delink the Energy Charges from the Billing Demand, as for higher demand, besides more power requirement, network requirement also increases.

- **Increase in contract demand limit to 150 kW for LTMD category**

  The suggestion is not related to Tariff petition as Contract Load limit at particular voltage level is classified in the GERC (Electricity Supply Code and Related Matters) Regulations.

- **Introduction of special incentive/rebate for maintaining better load factor for HT/demand-based consumers (for efficient utilisation of demand)**

  In case the consumer maintains better load factor, the overall Tariff on per unit basis will get reduced due to higher utilization for a given contract demand. By this way, the consumer is already getting benefit for maintaining better load factor. Any modification made by the Commission should be revenue neutral to the Company.

- **EHV Rebate**

  As per Tariff Policy, Tariff determination is based on ACoS. Since, the EHV rebate is given historically to the consumers consuming power supply at EHV level and have been revised by the Commission while deciding the Tariff for FY 2020-21, there is no need to further increase the EHV rebate.

- **Peak Hours Charges and Night Rebate Charges**

  Cost of supplying power at peak hours is significantly higher and network requirement for peak hour supply is also high. Objective of giving night benefit to the consumer is to shift their demand from Peak Hours to off peak hours and thereby to help the grid as well as to flatten the demand curve of the utility. Therefore, present “Load Curve” reflects the present consumption pattern and behaviour of the consumer. The Tariff structure is devised recognizing this fact and allows recovery at higher rates for peak hour use and concession for use of electricity during night hours.

- **Demand Charges for HT Consumers**

  Regarding demand charges recovered from HT Category consumers, it is the basic commercial principle for any organization to recover its fixed costs through recovery of fixed charges. However, with the present Tariff structure, part of fixed cost is recovered through energy charges. Even with the existing rate of Demand Charges, the fixed cost recovery from HTP-I consumers works out to 43.69% of the fixed cost attributable to HT consumers and remaining 56.31% is still being recovered through energy charges. In case of consumers who are not procuring power from Distribution Licensee in correspondence to its contract demand, the unrecovered 56.31% of fixed cost otherwise payable by such consumers is burden to general body of consumers.

- **Introduction of Power Factor Rebate / Incentive for LT category**

  Under the “ABT” regime, DISCOMs are required to maintain “kVARh” drawal or injection depending upon the voltage level. System is highly dynamic and therefore, dynamic compensation mechanism is also required. Since, LT consumers are very large in number, it would be very much difficult to manage and bill “kVARh” consumption of all such consumers particularly when rebate or incentive is provided for better Power Factor to such consumers.

The mechanism of providing PF Rebate may also be counter-productive as in order to get maximum benefit, consumers may be tempted to provide excessive compensation, which besides making grid operation difficult may create a serious safety related issue.

Further, it is not desirable to provide rebate/ incentive to LT category consumers, who are large in number, and it will become difficult to manage reactive power and safety related issues. Further, impact of rebate or discount for one component of Tariff to any category of consumers would be required to be recovered through other components from other categories of consumers.

- **Night Rebate for LT category**

  Sheer objective of giving night benefit to the consumer is to shift their demand to off peak hours and thereby to help the grid as well as to flatten the demand curve of the utility. LT category consumers are small and generally operate their industry in one shift or so, therefore, it is very difficult for them to shift their load from Peak to off Peak hours or night hours. Further, the Commission has decided a special Tariff for NRGP and LTMD consumers for exclusive consumption during night hours, however, practically no consumer has chosen this option.

- **Proposed changes in the conditions for HTP IV Tariff**

  The petitioner has submitted that 11 kV onwards, systems are designed and planned accordingly to actual load established on the existing system. Switching over from HTP-I to HTP-IV necessitates analysis of "Technical Parameters" of the Distribution System and Power Supply Management. Therefore, it is not advisable to reduce the time limit for switching over from HTP-I to HTP-IV. The Commission has reduced the notice period from 30 days to 15 days vide Tariff Order dated 31st March 2018. Hence, the issue is already decided and further reduction in notice period is not feasible.

- **Penalty Charges for Increase in Contract Demand**

  It is not logical as any consumer using load in excess to its contract demand causes the same effect on the distribution system irrespective of its contract demand, therefore, excess demand charges should not be linked with the normal demand charges.

- **Time of Use charges and Power Factor Rebate**

  As regards suggestion on revisiting the timings for morning peak and evening peak, a report in this regard is received from GUVNL and discussion is pending.

  The rebate offered through Tariff schedule is for maintaining Power Factor within prescribed limit and incentivizing the prospective consumers for installation of capacitor banks.

  As regards the representation for rebate @ 1%, the penalty should always be higher than the rebate. The power factor rebate rate of 0.5% of Energy Charges is fixed by the Commission in Review Petition No. 1, 2 & 3 of 2007 filed by Western Railway after a lot of discussion and deliberation from both the sides. ln the previous Tariff Orders also, the issue was deliberated at length by the Commission and the Commission has consciously taken decision not to atter the present rate of rebate.

  Further, the loss to the distribution system due to the Power Factor being lower than specified limit of 0.9, is higher than the gain due to the Power Factor being more than 0.95 and therefore, the penalty and rebate are appropriately reflected.

  As regards suggestion to consider "Fuel Surcharge" for the purpose of giving power factor rebate, higher incentive towards the power factor correction may lead to overcompensation, which will influence the voltage profile of the System, particularly when the overall voltage profile has improved primarily due to increased generation across the State. Moreover, the rebate on better power factor is given since long and, therefore, the cost incurred by the consumer for power factor correction should have been recovered by this time.

Thus, present provision of giving rebate or penalty on the basis of charges under the head "Energy Charges" in the Tariff Schedule annexed to the present petition is appropriate. Moreover, for better power system management, it is desirable to move towards "kVA" and "kVAH" based billing system, therefore, respondent proposal to move from kVA based to kW based billing system is not appropriate.

- **Revision in Delayed Payment Charges**

  DPC is levied if consumers do not pay the energy bills within given grace period provided, thus it is a sort of Penalty charges. Penalty charges should always be higher than the normal rate of interest. Therefore, there is no need to revise the DPC.

- **Change in Minimum Agreement Period**

  The period of Power Supply Agreement is governed as per the provisions of Electricity Supply Code and Related Matters Regulations.

Commission's view

The Commission has noted the reply. The DISCOMs have not proposed any change in the Tariff structure or category-wise Tariffs for FY 2023-24. Further, this is an additional year of MYT Control Period and the Commission is not considering any change in the present tariff structure.

Issue No. 16 Re categorization of Telecom Industry category

The Objector has suggested to consider their connection as Industrial category connection instead of Commercial category considering the telecom infrastructure service providing activities as industrial activities.

Response of the Petitioners

In this regard, it is to state that Hon'ble Commission has by Tariff Order dated 6th Sept.,2011 has rationalized the Tariff categories in the Tariff schedule and merged the earlier Commercial (LFD- II) and Industrial (LTP – I) in one category namely Non-RGP for load upto 40KW and LTMD Tariff category for load above 40KW. Further Option is also there for NRGP Consumers of 6 KW and above contract demand to choose LTMD Tariff category. Thus, at present there is no Tariff differentiation based on commercial and industrial consumption but non-residential / LTMD Tariff is applicable as per the load / demand of consumers.

Moreover, the present Tariff structure has evolved and rationalized over a period of time, therefore, no further categorization is required for limited class of consumers.

Commission's view

The Commission has noted the reply. The DISCOMs have not proposed any change in the Tariff structure or category-wise Tariffs for FY 2023-24. Further, this is an additional year of MYT Control Period and the Commission is not considering any change in the present tariff structure.

Issue No. 17 Separate Tariff Category for Defence Forces

The Objector has requested for separate Bulk HT Tariff category for Defence Forces.

Response of the Petitioners

In this regard, it is to state that as a part of Tariff rationalization and simplification, in case of State owned DISCOMs, the number of Tariff categories has been reduced considerably. In case of HT connections, mainly single Tariff category i.e. HTP-I Tariff is applicable irrespective of purpose for which electricity is used. Therefore, introduction / creation of any new Tariff category for HT connections would be retrogressive and against the objective of Tariff rationalization and simplification.

It is relevant to mention that unlike other States wherein separate higher Tariff category for Armed force connections is applicable, in the State of Gujarat, there is no such special higher Tariff / slab for Armed Force connections. The connections of Armed Forces are charged at normal Tariff as applicable to other consumers of respective category. It is further to submit that any modification to be made by Hon'ble Commission should be revenue neutral to the Company.

Commission's view

The Commission has noted the reply. The DISCOMs have not proposed any change in the Tariff structure or category-wise Tariffs for FY 2023-24. Further, this is an additional year of MYT Control Period and the Commission is not considering any change in the present tariff structure.

Issue No. 18 Separate Consumer Category for Cold Storage purpose

The Objector has filed a petition before this Commission, Petition no. 2132 / 2022 for Separate Consumer category for Cold Storage connections and by submission dated 9th February, 2023 requested Hon'ble Commission to decide the petition no. 2132 / 2022 along with the Tariff petition filed by Company.

Response of the Petitioners

In this regard, it is to state that, Petition no. 2132 of 2022 has been filed during the operational period of order dated 31st March, 2022 in the petition no. 2028 of 2021 determining the ARR and Tariff for FY 2022-23. Therefore, it would not be appropriate to decide the petition filed for a separate period and purpose. As regards to submission for a special Tariff Category for Cold Storage purpose, it is to submit that Hon'ble Commission has by Tariff Order dated 6th Sept.,2011 has rationalized the Tariff categories in the Tariff schedule and merged the earlier Commercial (LFD- II) and Industrial (LTP – I) in one category namely non-RGP for load upto 40KW and LTMD Tariff category for load above 40KW. Further Option is also there for NRGP Consumers of 6 KW and above contract demand to choose LTMD Tariff category. Thus, at present there is no Tariff differentiation based on commercial and industrial consumption, but non-residential / LTMD Tariff is applicable as per the load / demand of consumers. Moreover, the present Tariff structure has evolved and rationalized over a period of time, therefore, no further categorization is required for limited class of consumers.

Commission's view

The Commission has noted the reply. The DISCOMs have not proposed any change in the Tariff structure or category-wise Tariffs for FY 2023-24. Further, this is an additional year of MYT Control Period and the Commission is not considering any change in the present tariff structure.

Issue No. 19: Reduction in HP based Tariff

The Objector has requested to reduce the HP based Tariff for Agriculture consumers and abolish fixed charges.

Response of the Petitioner's

National Tariff Policy mentions the need to have a rationalization of Tariff to various consumer categories such that it is more aligned to the cost of supply in the band of ± 20 % to the average cost of supply. In order to ensure uniform Tariff rates for all four state owned Distribution Companies, differential bulk supply Tariff mechanism is in place. Accordingly Avg. realization from all category consumers for FY 2021- 22 at proposed Tariff vis-a-vis Avg. cost of supply for all the Companies is as under;

Average Cost V/s Average Billing Rate for FY 2021-22			
Particulars	**Average Cost (Rs/kWh)**	**Average Realisation (Rs/kWh)**	**% Recovery**
Low Tension			
RGP	6.64	5.65	85%
GLP	6.64	6.18	93%
Non-RGP & LTMD	6.64	7.35	111%
Public Water Works & Sewerage Pumps (PWW)	6.64	6.67	101%
Irrigation Agricultural	6.64	3.91	59%
EV Charging Stations	6.64		0%
High Tension			0%
Industrial High Voltage (Ind. HT)	6.64	7.20	108%
Industrial High Voltage (Ind. EHT)	6.64	-	0%

Average Cost V/s Average Billing Rate for FY 2021-22			
Particulars	Average Cost (Rs/kWh)	Average Realisation (Rs/kWh)	% Recovery
Railway Traction	6.64	8.04	121%
Licensees	6.64		0%
TOTAL	6.64	6.27	94%

From above it can be visualized that average recovery from Agriculture category consumers is much less than average cost of supply.

As regards to abolition of Fixed Charges, it is to state that it's a basic commercial principle for any organization to recover its fixed costs through recovery of fixed charges. In case of DISCOMs even with the proposed Tariff, only 37 % fixed cost is recovered through fixed charges. Therefore, it is not possible for DISCOMs to abolish fixed charges, however significant component of fixed charge is being born by State Government as a subsidy support to agriculture consumers.

Commission's view:

The Commission has noted the reply. The DISCOMs have not proposed any change in the Tariff structure or category-wise Tariffs for FY 2023-24. Further, this is an additional year of MYT Control Period and the Commission is not considering any change in the present tariff structure.

Issue No. 20: Special sub-category for AP consumers concessional Tariff to micro-irrigation system

The objector has requested to introduce special sub-category for AP consumers along with concessional Tariff for micro-irrigation system

Response of the Petitioner

Present Tariff of agricultural is highly subsidized and hence further categorization is not appropriate. Irrigation to agricultural field through micro/drip irrigation system requires less energy consumption compared with normal mode of irrigation. Thus such agriculture consumers are automatically benefited. Giving benefit to one class of consumer will result into increase in Tariff of other class of consumers.

Commission's view:

The Commission has noted the reply. The DISCOMs have not proposed any change in the Tariff structure or category-wise Tariffs for FY 2023-24. Further, this is an additional year of MYT Control Period and the Commission is not considering any change in the present tariff structure.

Issue No. 21: FPPPA & PPPA charges to be shown separately

The objector has contested that the Petitioner has not provided the FPPPA and PPPA charges separately in its Petition.

Response of the Petitioner

Hon'ble Commission has approved the PPPA formulae through its order dated 29.10.2013. Accordingly, any incremental power purchase cost compared to base year power purchase cost would be a Power Purchase Price Adjustment (PPPA) only and the same is shown separately in the consumers energy bills. In case of agricultural consumers FPPPA charges are compensated by the state government through subsidy support.

Commission's view

The Commission has noted the response of the Petitioner.

Issue No. 22 Information related to Power Purchase Agreement for Purchase of power from Different Sources under Short Term and Long Term Power Purchase Agreement

The Objector has contested that information related Power Purchase Agreement for Purchase of power from Different Sources under Short Term and Long Term Power Purchase Agreement are not available in public domain for stakeholders.

Response of the Petitioner

It is to submit that all the generating stations from which Company/GUVNL is purchasing power, the cost for the same is determined / approved by the appropriate Commissions like cost of power purchase from GSECL stations is determined by the Hon'ble GERC, IPPs are governed by the provisions of PPAs, for central generating stations the Tariff is either determined by the Central Electricity Regulatory Commission or Department of Atomic Energy in case of Nuclear Power Plant and in case of Competitive Bidding, the Tariff is adopted by the GERC. The Tariff for renewable sources is also determined by the Hon'ble GERC or determined through competitive bidding process. Therefore, the Tariff for entire power purchased by Company/GUVNL is determined/ approved by the appropriate Commission. In real time power is procured following merit order dispatch principles.

Thus, all relevant information related to power purchase agreement are made available in public domain from time to time as a part of Tariff determination / Tariff adoption proceedings before Hon'ble GERC/CERC.

Commission's view

The Commission has noted the response of the Petitioner.

Issue No. 23 GUVNL Trading Margin of Rs. 0.04 per unit is to be reduced at Rs. 0.02 per unit

The Objector has requested to reduce the GUVNL Trading Margin of Rs. 0.04 per unit to Rs. 0.02 per unit.

Response of the Petitioner

It is humbly submitted that pursuant to restructuring of the erstwhile Gujarat Electricity Board, the function of bulk purchase of power on behalf of four DISOCMs is carried out by GUVNL. Though GUVNL is entitled to claim Rs. 0.04/Unit trading margin, GUVNL has instead of claiming any trading margin over and above power purchase cost incurred by it on behalf of subsidiary DISCOMs, GUVNL has allocated less power purchase cost to the

DISCOMs. The power purchase cost for DISOCMs as per books of GUVNL is Rs. 55507 Crores against which actual cost allocated to DISCOMS for FY 2021-22 is Rs. 54381 Crores i.e. lesser amount of Rs. 1126 Crores instead of recovering any amount of trading margin from DISCOMs. In addition to this, GUVNL's profit of around Rs. 65 Crores is also allocated to DISCOMs.

Commission's view

The Commission has noted the response of the Petitioner.

Issue No. 24 Copy of policy decisions, guidelines, circulars issued by GUVNL related and affecting to the consumers are required to be submitted for last three years

The Objector has requested for the copy of policy decisions, guidelines, circulars issued by GUVNL related and affecting to the consumers to be submitted for last three years.

Response of the Petitioner

In this regard, it is to mention that as per provisions of Electricity Act, 2003, the activities related to distribution and supply of electricity is governed as per the provisions of order/ regulations / code /standard published by Hon'ble Commission from time to time. The guidelines, circulars issued by GUVNL, if any are merely intended for internal use only for providing guideline to the field offices for uniform implementation of order/ regulations / code /standard published by Hon'ble Commission. The copy of order/ regulations / code /standard published by Hon'ble Commission are available in public domain. Similarly, any communications to field offices which impacts general consumers such as change in FPPPA rate etc are also available on GUVNL / DISCOMs website.

Commission's view

The Commission has noted the response of the Petitioner.

Issue No. 25 The effect of GoG's decision to reduce partially the fixed charges on metered Agriculture connections are not included in the Tariff proposal for FY 2023-24

The Objector has contested that the effect of GoG's decision to reduce partially the fixed charges on metered Agriculture connections are not included in the Tariff proposal for FY 2023-24.

Response of the Petitioner

In this regard, it is to mention that the Tariff / ARR proposals for FY 2023-24 has been prepared as per norms provided in the Multi Year Tariff (MYT) framework. As per the MYT framework, Hon'ble Commission determines category wise Tariff without considering subsidy provided by State Government in the Tariff of particular category consumers, Government compensates the DISCOMs towards differential Tariff through subsidy support. Therefore, subsidy support from State Government is accounted under "Revenue from sale of Power" which included recovery from consumers as well as subsidy from State Government.

Commission's view

The Commission has noted the response of the Petitioner.

Issue No. 26: Separate Tariff for each DISCOM

The Respondents have submitted that there should be separate Tariff for four Distribution Companies to introduce competition as per the Act. Consumers of State DISCOM should get benefits of good performance rather than cross subsidizing for other three State DISCOMs.

Response of the Petitioners

The petitioners submitted that uniform retail supply Tariff for all four DISCOMs (Unbundled entities of erstwhile GEB) has been envisaged so that consumer in the similar categories in the State could have similar Tariff and there may not be any discrimination in the consumers, merely because such consumers are placed at different geographical locations and having different socio-economic conditions, which is also the objective of the Act. The four Distribution Companies are incorporated on the basis of zonal configuration.

It is submitted that since 80%-90% of the total cost incurred by DISCOMs is for Power Purchase, the same plays a major role in determining the ARR as well as (Gap)/ Surplus for the DISCOM for a particular year. Since, the consumer profile and consumption profiles are different in the four Distribution Companies; the revenue earning capabilities of each of the DISCOMs differs, resulting in different ARR. Therefore, it is necessary to build a mechanism in the projections to bring them to a level playing field. This is achieved by differential BST to each of the DISCOMs, which is approved by the Commission in the MYT Order. In this way, it becomes possible to ensure uniform retail consumer Tariffs in the four DISCOMs. Moreover, performance of all the Distribution Companies is monitored by the Commission and accordingly Distribution Loss is approved by the Commission and any variation in the losses is dealt in accordance with principles of GERC (MYT) Regulations, 2016.

Commission's view

The Commission has noted the response of the petitioners. The Commission is of the opinion that the consumers of the State will be benefitted if there is optimisation of Power Purchase cost when purchase for all DISCOMs is in bulk.

Issue No. 27: Electricity Duty (ED)

The Objector has suggested for rationalization of Electricity Duty.

Response of the Petitioners

Electricity Duty is being levied as per Provision of Electricity Duty Act. Others are the suggestions to the Commission. The Hon'ble Commission may examine those suggestions while deciding the petition

Commission's view

The Commission has noted the response of the petitioners. Further, the matter related to Electricity Duty is under the purview of the State Government.

Issue No. 28: Additional higher slab of 400 units for Residential Consumers

The Objector has suggested for additional higher slab of 400 units for Residential Consumers.

Response of the Petitioners

MGVCL has not proposed any Tariff revision or change in existing Tariff structure for FY 2023-24. Tariff structure is designed keeping in mind the different social, economical, technical, demographic and other relevant parameters. In our state, Hon'ble Commission has been time to time reviewing the Tariff structure and rationalizing the Tariff. However, any change in the Tariff structure may be revenue neutral.

Commission's view

The Commission has noted the reply. The DISCOMs have not proposed any change in the Tariff structure or category-wise Tariffs for FY 2023-24. Further, this is an additional year of MYT Control Period and the Commission is not considering any change in the present tariff structure.

3.3 Suggestions/ Objections pertaining to MGVCL

Issue No. 1: Methodology for working of distribution losses and Actual Distribution Loss

The Objector has raised the issue in regard to inclusion of EHV Consumption while calculating Distribution Loss, working of Energy Balance and distribution losses claimed in the Petition by relying on the quantum of energy input (sent out) reported by SLDC for the different category of feeders.

Response of the Petitioners

In this context, it is to clarify that consumption by any consumer categories, irrespective of voltage level at which they are connected, is supplied by Distribution Licensee and therefore, to work out the energy loss, the consumption of EHV category is also included in overall Energy Sold by the Company. Historically, Distribution Loss is worked out accordingly and approved by Hon'ble Commission time to time. As regards to working of Energy Balance, it is to clarify the Distribution loss is not worked out arbitrary, but it is a difference between the Energy Input to Distribution Network and sum of Energy sold to different category of consumers in a given period. The Energy Input to the Distribution Network is the Energy Injected at State Transmission periphery, net off transmission loss. The Energy Balance so worked out is as under;

Particulars	2021-22
Energy Sales – Mus	11,541.35
Distribution losses – Mus	966.69
Distribution losses%	7.74%`
Energy Requirement – Mus	12,508.04
Less: Power purchase by Discom - Mus	131.57
Power purchase at T&D periphery from GUVNL	12,376.47
Transmission Loss - Mus	462.76
Transmission Loss in %	3.60
Total Energy to be input to Transmission System	12,839.23
Pooled losses in PGCIL System	208.49
Add: Local Power Purchase by Discom	131.57
Total Energy Requirement	13,179.30

As regards to the energy input reported by SLDC, it is to clarify that the quantum of energy input (sent out) metered feeder level meters includes / records energy transacted under all types of commercial transactions i.e. including energy transactions due to wheeling of power under open access.

It is relevant to state that as per the provisions of Electricity Act, 2003, Distribution Company is mandated to provide non-discriminatory access to its Distribution system to the customers availing power from third party sources or wheeling power for self-consumption under Open Access. Such Open Access customers are embedded Consumers of Distribution Company and fulfill their power requirement either fully or partly from third party / captive sources through Open Access. As per provision Hon'ble Commission's regulations, presently such Open Access is permitted for the consumers having power requirement of 1 MW and above. Further, consumers having captive generating plant or renewable generating plant can seek Open access irrespective of its power requirement. The Commercial settlement and energy accounting of such Open Access customers at the recipient unit, is carried out by applying "normative loss" as approved by Hon'ble Commission. Further, as per the provisions of applicable orders/regulations of Hon'ble GERC "Concessional wheeling loss or wheeling loss are exempted and the energy settlement at recipient units are provided accordingly.

Therefore, the losses worked out on the basis of energy reported by SLDC and losses considered in the True up petition based on Books of Accounts cannot be compared. The Book of Accounts of Company, depicts the figures of the "Distribution Loss" considering the purchase and sale of Power for its retail business only i.e. Excluding wheeled energy. Accordingly in the Tariff Petition loss is considered based on quantum of energy purchased and sold for retail supply business.

Thus, the submission based on comparing sent out units and sold out units from two different sets of information is not correct.

Commission's view

The Commission has noted the response of the petitioner. The Commission has approved the energy balance and energy requirement for MGVCL for FY 2021-22 as discussed in the relevant Chapter 4 of this Order.

Issue No. 2: Energy Sale to Agriculture Consumers and Distribution Loss calculation

The Objector has raised issue with regard to consumption of HP based un-metered agriculture consumers on the ground that consumption of metered agricultural consumers is comparatively lower than consumption for HP based consumers.

Response of the Petitioners

In this regard, it is to state that the consumption of metered and unmetered category for agricultural connections cannot be compared on accounts of various reasons. The consumption differs because in case of metered consumers, there are instances of under metering due to theft / malpractice as consumer has to pay bill as per consumption recorded in meters. Whereas, in case of un-metered category, there is no incentive for energy conservation as bills are issued on the basis of normative consumption irrespective of actual consumption made by the consumers.

As regard to the normative consumption assessment of 1700 Units per HP per Annum for un metered consumers, it is to state that the norms of 1700 Units/ HP /Annum is derived on the detailed study assessment undertaken by expert Committee, namely, Dr. P.K. Mishra Committee, wherein the Committee has analyzed consumption patterns and consumption parameters in detailed and recommended the assessment of 1700 per HP per Annum for un metered agricultural connections in a scientific manner. Moreover, study was also undertaken by TERI for the assessing consumption of unmetered Agriculture consumers. Therefore, there is no reason / justification to raise any issue with regard to the normative consumption assessment considered for un-metered agriculture consumers.

For the purpose of Distribution Loss calculation, besides energy recorded in metered category consumers for respective period, the energy consumption for unmetered category is assessed as per the norms approved by Hon'ble Commission.

While projecting the Energy Consumption for Agriculture Category, besides for metered category consumption, the consumption by unmetered category is assessed as per above normative consumption and projected for FY 2023-24.

Commission's view

The Commission has noted the response of the petitioner.

Issue No. 3: Tariff for Real Estate Projects

The Objector has raised issue regarding applicability of temporary Tariff to the connection for construction of Real Estate Projects.

Response of the Petitioners

In this regard, it is to submit that generally on construction site, the Electrical Installations are of make shift arrangement. Further, Electricity Supply Code and Electricity Rules, 2022 notified by Ministry of Power, provides for release of temporary connections for the Construction purpose. Therefore, temporary connections is released for construction of Real Estate Projects.

Commission's view

The Commission has noted the response of the petitioner.

4 Truing up of FY 2021-22

This Chapter deals with the truing up of FY 2021-22.

MGVCL, in its submission for True-up of FY 2021-22, has furnished details of the actual energy sales, expenditure and revenue based on the audited Annual Accounts for FY 2021-22. The Licensee has stated that the truing up for FY 2021-22 is based on the comparison of the actual performance of FY 2021-22 with the ARR approved for FY 2021-22 in the Tariff Order dated 31st March, 2020 to arrive at the Gains/(Losses), as per the GERC (MYT) Regulations, 2016.

The Commission has analysed the components of the actual energy sales, expenses, revenue and computed Gains/ (Losses) in the process of truing up for FY 2021-22.

4.1 Energy Sales

Petitioner's Submission

The petitioner has submitted the category-wise actual energy sales for FY 2021-22 as given in the Table below:

Table 4-1: Category-wise sales for FY 2021-22 (MUs)

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing Up
A	**LT Consumers**		
1	RGP	2,999.64	2,777.29
2	GLP	142.64	105.08
3	Non-RGP & LTMD	1,765.37	1,680.75
4	Public Water Works	380.59	378.99
5	Agriculture- Unmetered	437.87	468.13
6	Agriculture-Metered	869.90	807.85
7	Public Lighting	-	-

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing Up
	LT Total (A)	**6,632.01**	**6,218**
B	**HT Consumers**		
8	Industrial HT	4,153.67	5,323
9	Bulk Supply to KPT	-	-
	HT Total (B)	**4,153.67**	**5,323**
	Grand Total (A+B)	**10,785.67**	**11,541.35**

Commission's Analysis

The Commission, in the Tariff Order dated 31st March, 2020, had approved the energy sales of 10,785.67 MUs for FY 2021-22 against which, MGVCL has submitted the actual sales of 11,541.35 MUs.

As can be observed from the Table above, the actual energy sales to LT categories are lower than that approved by the Commission for FY 2021-22 in the Tariff Order dated 31st March, 2020 mainly due to reduction in sales to RGP, Non-RGP & LTMD category and GLP category.

On the other hand, the actual energy sales to HT categories are significantly higher than that approved by the Commission for FY 2021-22 in the Tariff Order dated 31st March, 2020. The reduction in LT sales is primarily attributed to the continuing impact of COVID-19 pandemic situation while industrial sales have not been impacted during FY 2021-22.

Overall, the actual energy sales of MGVCL are higher as compared to that approved in the Tariff Order dated 31st March, 2020. As energy sales are largely uncontrollable in nature, the Commission approves the actual energy sales as detailed in the Table below:

Table 4-2: Energy sales approved in truing up for FY 2021-22 (MUs)

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing Up	Approved after Truing Up
A	**LT Consumers**			
1	RGP	2,999.64	2,777.29	2,777.29

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing Up	Approved after Truing Up
2	GLP	142.64	105.08	105.08
3	Non-RGP & LTMD	1,765.37	1,680.75	1,680.75
4	Public Water Works	380.59	378.99	378.99
5	Agriculture -Unmetered	437.87	468.13	468.13
6	Agriculture-Metered	869.90	807.85	807.85
7	Public Lighting	-	-	-
	LT Total (A)	**6,632.01**	**6,218**	**6,218**
B	**HT Consumers**			
8	Industrial HT	4,153.67	5,323	5,323
9	Bulk Supply to KPT	-	-	-
	HT Total (B)	**4,153.67**	**5,323**	**5,323**
	Grand Total (A+B)	**10,785.67**	**11,541.35**	**11,541.35**

4.2 Distribution Losses

Petitioner's Submission

The petitioner has submitted that the actual distribution losses for FY 2021-22 are 7.74%, as against the losses of 9.00% approved in the Tariff Order dated 31st March, 2020, as given in the Table below:

Table 4-3: Distribution Losses for FY 2021-22 as submitted by MGVCL (%)

Particulars	Approved in the Tariff Order	Actual Claimed
Distribution Losses (%)	9.00%	7.74%

The petitioner submitted that it has achieved significant reduction in distribution loss during FY 2021-22The petitioner submitted that as per the GERC (MYT) Regulations, 2016, the Distribution Losses need to be treated as controllable and any gain or loss has to be dealt with in accordance with the provisions of the GERC (MYT) Regulations, 2016.

Commission's Analysis

The petitioner has submitted that the actual distribution losses are 7.74% against 9.00% approved in the Tariff Order dated 31st March, 2020. The Commission has considered the intra-State Transmission Losses as 3.60%, as submitted by MGVCL based on data available from the SLDC website. Considering the actual sales of 11,541.35 MUs, the Distribution Loss in FY 2021-22 works out to 7.74%.

The Commission considers Distribution Losses as controllable as per the GERC (MYT) Regulations, 2016. Accordingly, the Commission has considered the Distribution Losses of 7.74% as shown in the Table below for computation of Gain/(Loss) due to variance in Distribution Losses:

Table 4-4: Distribution Losses approved for truing up for FY 2021-22 (%)

Particulars	Approved in the Tariff Order	Actual Claimed	Approved in True Up
Distribution Losses (%)	9.00%	7.74%	7.74%

4.3 Energy requirement

Petitioner's Submission

MGVCL has submitted the energy requirement for FY 2021-22 based on the actual energy sales and the actual distribution losses, as given in the Table below:

Table 4-5: Energy Requirement and Energy Balance submitted by MGVCL for FY 2021-22

S. No.	Particulars	Unit	Approved in the Tariff Order	Actual Claimed in Truing up
1	Energy Sales	MUs	10,785.67	11,541.35
2	Distribution Losses	MUs	1,066.71	966.69
		%	9.00%	7.74%
3	Energy Requirement	MUs	11,852.39	12,508.04
4	Local Power Purchase by Discom	MUs		131.57

S. No.	Particulars	Unit	Approved in the Tariff Order	Actual Claimed in Truing up
5	Power Purchase at T<>D periphery from GUVNL	MUs	11,852.39	12,376.47
6	Transmission Losses	MUs	458.52	462.76
		%	3.72%	3,6043%
7	Total Energy to be input to Transmission System	MUs	12,310.90	12,839.23
8	Pooled Losses in PGCIL System	MUs	188.91	208.49
9	Add: Local Power Purchase by Discom	MUs		131.57
10	**Total Energy Requirement**	**MUs**	**12,499.81**	**13,179.30**

Commission's Analysis

MGVCL has computed the energy requirement based on the actual Distribution Losses of 7.74%, actual energy sales of 11,541.39 MUs and Transmission Losses of 3.60%.

In reply to query on PGCIL system losses of 208.49 MUs, MGVCL submitted that PGCIL system pooled losses are worked out as per the weekly Pooled Losses notified by WRLDC for the energy scheduled by WRLDC through CTU for FY 2021-22.

The Commission had approved the distribution losses of 9.00% and the transmission losses of 3.72% in the Tariff Order dated 31st March, 2020. The Commission has worked out the energy requirement of 13,179.30 MUs after truing up of FY 2021-22, considering the actual Distribution Loss of 7.74% and actual intra-State Transmission Loss of 3.60%, as shown in the Table below:

Table 4-6: Energy Requirement approved by the Commission in truing up for FY 2021-22

S. No.	Particulars	Unit	Approved in Tariff Order	Actual Claimed in truing up	Approved in truing up
1	Energy Sales	MUs	10,785.67	11,541.35	11,541.35
2	Distribution Losses	MUs	1,066.71	966.69	966.69
		%	9.00%	7.74%	7.74%
3	Energy Requirement	MUs	11,852.39	12,508.04	12,508.04

S. No.	Particulars	Unit	Approved in Tariff Order	Actual Claimed in truing up	Approved in truing up
4	Local Power Purchase by DISCOM	MUs		131.57	131.57
5	Power Purchase at T<>D periphery from GUVNL	MUs	11,852.39	12,376.47	12,376.47
6	Transmission Losses	MUs	458.52	462.76	462.76
		%	3.72%	3,6043%	3,6043%
7	Total Energy to be input to Transmission System	MUs	12,310.90	12,839.23	12,839.23
8	Pooled Losses in PGCIL System	MUs	188.91	208.49	208.49
9	Add: Local Power Purchase by DISCOM	MUs		131.57	131.57
10	**Total Energy Requirement**	**MUs**	**12,499.81**	**13,179.30**	**13,179.30**

4.4 Power Purchase Cost

Petitioner's Submission

The petitioner has submitted that it has been allocated share of generation capacities as per the scheme worked out by GUVNL. In order to minimise power purchase cost, GUVNL adopts the Merit Order Despatch (MOD) principles for despatching power from the generating stations based on the demand and accordingly power gets allocated to MGVCL.

The actual power purchase from GUVNL is different from the allocation because the demand from MGVCL is not constant and varies from time to time. The total power purchase cost of MGVCL for FY 2021-22 consists of the basic power purchase cost, Transmission Charges payable to GETCO and PGCIL, SLDC Charges, and the DISCOM's share of GUVNL cost.

MGVCL submitted that in its petition for True-up of FY 2020-21, MGVCL had considered liabilities for the payment towards the power purchase cost to the generating companies under various PPAs, which are due as per the Judgments 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 Commission in its earlier Tariff Order has ruled that additional payment liability shall be allowed once it gets materialised and paid to the beneficiaries in subsequent years based on the prudence check and verification from audited accounts.

MGVCL submitted that during FY 2021-22, GUVNL has made provisions of Rs. 361.94 Crore towards power purchase related liabilities towards various generators. At the same time, GUVNL has also paid off some of the liabilities towards which provisions were made in the past years and not considered by the Hon'ble Commission in the past orders for approval considering that these were provisions at that point of time. The actual payment against such liabilities in FY 2021-22 is Rs. 539.49 Crore. Accordingly, the net amount of Rs. 177.54 Crore (539.49-361.94) will be allocated to each of the DISCOM in the ratio of their actual power purchase which is also in line with approach taken by the Hon'ble Commission in the past. Allocation of provisions to DISCOMs is as under:

Table 4-7: Allocation of Provisions of Power Purchase Cost to DISCOMs for FY 2021-22 (Rs. Crore)

Particulars	DGVCL	MGVCL	PGVCL	UGVCL	Total
Power Purchase	16,121	6,596	17,779	14,025	54,522
Allocation of provisions made in Power Purchase Cost	(52.50)	(21.48)	(57.89)	(45.67)	(177.54)

MGVCL submitted that as stated by the Commission in its last Tariff Order, DISCOM reserves its right to claim the provisions made in power purchase cost as and when it is paid to beneficiaries in subsequent years.

Based on above computation, actual cost of power purchase vis-a-vis the approved power purchase cost for FY 2021-22 is submitted in the Table below:

Table 4-8: Power Purchase Cost as submitted by MGVCL for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed
A	**Cost**		
1	Power Purchased from GUVNL		6,742.67
2	Power purchase from Windfarm		3.05

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed
3	Power Purchased from Solar		40.91
4	DSM Charges Payable		-
5	SLDC Charges		1.58
	Total Cost		**6,788.22**
B	**Less: Income**		
1	Allocation of provisions made in Power Purchase Cost		(21.48)
2	DSM Income Receivable		191.89
	Net Power Purchase Cost	**5,756.21**	**6,617.80**

The variation between 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.

The quantum of power purchase depends upon sales during the year as well as the losses in the system. The actual sales and Distribution Losses in MGVCL distribution network have been lower than the approved by the Commission. Hence, the actual quantum of power purchase was lower than the approved quantum of power required.

As per the GERC (MYT) Regulations, 2016, the Commission has categorised the variation in the price of fuel and/or price of power purchase according to the FPPPA formula approved by the Commission as an uncontrollable factor. Further, the Commission has also identified the quantity of electricity sold to consumers as an uncontrollable factor. Accordingly, any gain or loss on this account is to be entirely passed on to the consumers as per the methodology approved by the Commission.

The variation in power purchase quantum and cost due to variation in Distribution Loss is a controllable factor, which would result in gain/(loss) under the GERC (MYT) Regulations, 2016.

MGVCL has claimed a gain of Rs. 87.07 Crore in the power purchase cost due to lower actual Distribution Losses as compared to Distribution Losses approved in the Tariff

Order dated 31st March, 2020. The gain is considered as controllable variation. The calculation of gain/(loss) on account of Distribution Losses as submitted by MGVCL is shown in the Table below:

Table 4-9: Gain/(Loss) on account of Distribution Losses for FY 2021-22 as submitted by MGVCL (Rs. Crore)

S. No.	Particulars	Unit	With Approved Distribution Losses	With Actual Distribution Losses
1	Energy Sales	MUs	11,541.35	11,541.35
2	Distribution Losses	MUs	1,141.45	968.05
		%	9.00%	7.74%
3	Energy Requirement	MUs	12,682.81	12,509.40
4	Gain/(Loss) due to Distribution Losses	MUs		173.41
5	Average Power Purchase Cost	Rs./kWh		5.02
6	Gain/(Loss) due to Dist. Losses	Rs. Crore		**87.07**

The summary of the gain/(loss) on account of controllable and uncontrollable factors of power purchase, as submitted by MGVCL, is shown in the Table below:

Table 4-10: Gains/(Loss) on account of truing up of Power Purchase Expenses for FY 2021-22 (Rs. Crore)

Particulars	Approved in the Tariff Order	Actual	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Total Power Purchase Cost	5,756.21	6,617.80	87.07	(948.67)

Commission's Analysis

The Commission has examined the power purchase cost during FY 2021-22 based on the audited Annual Accounts of MGVCL. The total power purchase cost of MGVCL for FY 2021-22 consists of the basic power purchase cost, Transmission Charges payable to GETCO and PGCIL, SLDC charges and DSM Charges.

The Commission noted that Power Purchase Cost as claimed in the petition does not tally with the Power Purchase Cost as submitted under FPPPA and Additional Surcharge submission to the Commission. Therefore, the Commission asked MGVCL to reconcile the numbers.

In reply, MGVCL submitted that total power purchase cost as per the FPPPA submissions for FY 2021-22 is Rs. 55,094 Crore; whereas, the net power purchase cost claimed in the petition is Rs. 55,525 Crore inclusive of amount of Rs. 361.94 Crore for the provision made in the books towards payment liability as per the Judgment of various forums/courts (provision made on best estimation basis as the amount is yet to be quantified by lower court / forum). Whereas, the FPPPA amount includes payment of Rs. 539.49 Crore materialised during FY 2021-22 towards liabilities of past year, which is not part of power purchase cost in the Books.

MGVCL submitted that as per the directive of Commission, FPPPA is claimed based on actual payment made during respective quarter, which does not include un-discharged liability /provisions, etc.; however, it includes the amount, which is paid during the quarter for which liability is accrued and booked as expenditure in the books of the previous year. Annual Accounts are prepared on accrual basis as per the Indian Accounting Standards (IND-AS), which includes undischarged liabilities / provisions on account of matters pending in various courts and estimated as per the orders of competent courts /best assessment basis.

Further, there are other reasons for variation in power purchase cost as per FPPPA submissions and power Purchase cost as per Books such as (i) amount claimed / credited in FPPPA on actual payment basis but part of previous year account (ii) increase / decrease in the final bill amount after FPPPA submissions (iii) amount accounted in FY 2021-22 but payment is made in subsequent period and therefore not part of FPPPA of FY 2021-22.

MGVCL submitted the reconciliation of power purchase cost claimed in the FPPPA submissions viz-a-viz Books of FY 2021-22 is as tabulated under:

Particulars	Amount in (Rs. Crores)
Power Purchase Cost as per FPPPA	55,094
Add: Adhoc Deductions made in FCA Claim of GSECL	298
Less: GUVNL cost & SLDC charges (being not part of Book cost)	456
Add: Provisions made in Books	362
Add: Net adjustments towards: (i) amount claimed / credited in FPPPA on actual payment basis but part of previous year books (ii) increase / decrease in the final bill amount after FPPPA submission (iii) amount accounted in FY 2021-22 but payment is made in subsequent period	227
Total	**55,525**
Power Purchase cost as per Books	**55,525**

As regard to fixed power purchase cost as per Additional Surcharge submission viz-a-viz books, it is clarified that similar to FPPPA submission, in respect of additional surcharge, the power purchase cost (fixed cost) is claimed on actual payment basis without considering provisions made in the books but including actual payment made towards previous years provisions etc. The reconciliation of power purchase cost (fixed cost) as per books viz-a-viz additional surcharge submission is as under:

Particulars	Amount (Rs. Crores)
Fixed cost as per Additional Surcharge submission	17,686
Add: Provisions made in books (not claimed in Additional Surcharge submission)	234
Add: Net adjustments towards: (i) amount claimed / credited in AS being part of previous year books (ii) increase / decrease in the final bill amount after AS submission (iii) Provisions made in FY 2021-22 subsequent to AS submission	572
Total	**18,492**
Fixed cost as per Books	**18,492**

From the above reply of MGVCL, the Commission noted that DISCOMs has not considered the amount of Rs. 177.55 Crore in the Books and in the petition as power purchase cost in approach to previous Tariff Orders. Accordingly, the Commission has reduced the amount of Rs. 177.55 Crore from power purchase cost for each DISCOM in the same ratio considered by DISCOMs as shown in the Table below:

Table 4-11 Allocation of Additional Provisions considered by the Commission in Power Purchase Cost (Rs. Crore)

Particulars	DGVCL	MGVCL	PGVCL	UGVCL	Total
Allocation of additional provisions considered in Power Purchase Cost	52.50	21.48	57.89	45.68	177.55

The net Power Purchase Cost after truing up for MGVCL for FY 2021-22 works out to Rs. 6,617.80 Crore, as shown in the Table below:

Table 4-12: Power Purchase Cost approved in truing up for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up	Approved in Truing up
A	**Cost**			
1	Power Purchased from GUVNL		6,742.67	6,742.67
2	Power purchase from Windfarm		3.05	3.05
3	Power Purchased from Solar		40.91	40.91
4	DSM Charges Payable		-	-
5	SLDC Charges		1.58	1.58
	Total Cost		**6,788.22**	**6,788.22**
B	**Less: Income**			
1	Allocation of provisions made in Power Purchase Cost		(21.48)	(21.48)
2	DSM Income Receivable		191.89	191.89
	Net Power Purchase Cost	**5,756.21**	**6,617.80**	**6,617.80**

The Commission has approved Distribution Losses at 9.00% for FY 2021-22 in the Tariff Order dated 31st March, 2020, against which MGVCL has achieved Distribution Losses of 7.74%. As stated earlier, the actual Distribution Losses in MGVCL distribution network have been lower than the approved level. The variation in power purchase quantum and cost due to variation in Distribution Loss is a controllable factor, which would result in gain/(loss) under the GERC (MYT) Regulations, 2016.

The calculation of the gain/(loss) on account of the controllable factor of Distribution Losses, as approved by the Commission in the Truing up for FY 2021-22, is shown in the Table below:

Table 4-13: Approved Gain/ (Loss) on account of Distribution Losses for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Unit	With Approved Distribution Losses	Actual Claimed in Truing up	Approved in truing up
1	Energy Sales	MUs	11,541.35	11,541.35	11,541.35
2	Distribution Losses	MUs	1,141.45	968.05	968.05
		%	9.00%	7.74%	7.74%
3	Energy Requirement	MUs	12,682.81	12,509.40	12,509.40
4	Gain/(Loss) due to Distribution Losses	MUs		173.41	173.41
5	Average Power Purchase Cost	Rs. /kWh		5.02	5.02
6	Gain/(Loss) due to Distribution Losses			**87.07**	**87.07**

While computing the Gain/ (Loss) due to change in Distribution Losses, the Commission has considered the Distribution Losses at 7.74% of actual energy sales to arrive at change in energy requirement at the distribution periphery and has not considered the Transmission Losses to factor the efficiency of distribution activities only.

The Commission has considered change in power purchase cost attributable to the variation in cost and quantum of power due to variation in sales and transmission losses as uncontrollable.

Accordingly, the total Gain/(Loss) computed on account of power purchase is shown in the Table below:

Table 4-14: Approved gain / (loss) in power purchase expenses in truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in the Tariff Order	Approved in Truing up	Deviation + (-)	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Total Power Purchase Cost	5,756.21	6,617.80	-	87.07	(948.66)

4.5 Fixed Cost

4.5.1 Operation and Maintenance (O&M) Expenses

MGVCL has claimed O&M Expenses of Rs. 775.39 Crore, which is inclusive of Employee Cost of Rs. 637.30 Crore, Repairs & Maintenance (R&M) Expenses of Rs. 77.19 Crore, Administration & General (A&G) Expenses of Rs. 106.07 Crore, and Other Expenses Capitalized of Rs. 45.19 Crore against the approved O&M Expense of Rs. 706.21 Crore, as per the details given in the Table below:

Table 4-15: O&M Expenses claimed in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Deviation + (-)
1	Employee Cost	609.87	637.30	(27.43)
2	R&M expenses	63.96	77.19	(13.23)
3	A&G expenses	93.45	106.07	(12.62)
4	Less: Other Expenses Capitalised	(61.07)	(45.19)	(15.88)
5	**O&M Expenses**	**706.21**	**775.39**	**(69.18)**

Petitioner's Submission

MGVCL has compared the O&M expenses actually incurred during FY 2021-22 with the expenses approved by the Commission in the Tariff Order dated 31st March, 2020, and arrived at gain/(loss), as shown in the Table below:

Table 4-16: O&M Expenses and Gain/(Loss) claimed in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Employee Expenses	609.87	637.30	77.46	(104.89)
2	R&M Expenses	63.96	77.19	9.26	(22.50)
3	A&G Expenses	93.45	106.07	(12.62)	-
4	Other Expenses Capitalised	(61.07)	(45.19)	-	(15.88)
5	**O&M Expenses**	**706.21**	**775.39**	**74.10**	**(143.27)**

The component-wise O&M expenses are discussed in the following paragraphs.

4.5.1.1 Employee Cost

MGVCL has claimed employee cost of Rs. 637.30 Crore in the truing up for FY 2021-22. The employee cost approved for FY 2021-22 in the Tariff Order dated 31st March, 2020 and claimed by MGVCL in the truing up are given in the Table below:

Table 4-17: Employee Cost claimed by MGVCL in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Employee Cost	609.87	637.30	77.46	(104.89)

Petitioner's Submission

MGVCL submitted that Employee Expenses comprise salaries, dearness allowance, bonus, terminal benefits in the form of pension and gratuity, leave encashment, and staff welfare expenses.

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 2021-22 was Rs. 572.92 Crore, which includes the provision made towards 7th Pay Commission of Rs. 15.54 Crore. In addition, MGVCL has also claimed other comprehensive income of Rs. 0.96 Crore and wage revision arrears of Rs. 87.22 Crore paid during the year. After netting of provisions towards 7th pay Commission of Rs. 15.54 Crore, the net employee expenses claimed by MGVCL for FY 2021-22 are Rs. 637.30 Crore.

Employee expenses are considered as controllable expenses under the provisions of the GERC MYT Regulations, 2016. However, MGVCL has identified certain expenses which are uncontrollable in nature, and these include the following:

Wage Revision Arrears: Rs. 87.22 Crore

These expenses are payable due to implementation of the 7th Pay Commission scale which is an uncontrollable event and hence considered uncontrollable by MGVCL for the purpose of working out the sharing of gains and losses. These have been paid against provisions made in the past and which were disallowed by the hon'ble Commission in the past orders.

Impact of implementation of 7th Pay Commission related allowances and incentive for FY 2021-22: Rs. 17.42 Crore

It is submitted that the Hon'ble Commission in its Order in Case No. 1913 of 2020 dated 31st March 2021 had adopted the following methodology for approving the O&M expenses for FY 2021-22:

> *"Accordingly, GERC has computed the O&M Expenses for FY 2021-22 on the basis of the average of the actual approved O&M Expenses for the three (3) years ending 31st March, 2020 i.e. from FY 2017-18 to FY 2019-20. The average of such O&M Expenses has been considered as O&M Expenses for the financial year ended with 31st March, 2019 as a base year (FY 2018-19). Further, the y-o-y escalation @ 5.72% p.a. is applied O&M Expenses on the base year for computing the O&M Expenses viz, Employee Cost, Repairs and Maintenance Expenses, Administration and General Expenses for FY 2021-22."*

It is further submitted that actual approved expenses for the FY 2017-18 to FY 2019-20 as the base for projecting the expenses for FY 2021-22, the Commission had factored in the impact of the implementation of 7th Pay Commission while projecting the expenses for FY 2021-22 as the 7th Pay Commission was implemented from August 2017. The Commission, in the case of SLDC, had also annualised impact of 7th Pay implementation for FY 2017-18 and then worked out the projection for FY 2021-22 to capture the impact of 7th Pay implementation. However, it is submitted that the actual payment of allowances and incentive as per the 7th Pay Commission was only initiated in FY 2020-21 and hence not part of the payments made in period from FY 2017-18 to FY 2019-20 and consequently not factored in the approved O&M expenses for FY 2021-22.

Accordingly, MGVCL has worked out the differential between the allowances and incentives as per the 7th Pay Commission and those as per 6th Pay Commission scale for the FY 2021-22. The impact works out to Rs. 3.67 Crores in the case of allowances and Rs. 21.09 Crores in case of incentives. MGVCL has considered this amount of Rs. 17.42 Crores as an uncontrollable expense for the purpose of working out the sharing of gains and losses.

Impact of implementation of 7th Pay Commission related allowances and incentive for FY 2020-21 (To be claimed in FY 2023-24): Rs. 34.89 Crore

It is submitted that the impact of implementation of 7th Pay Commission related allowances and incentive is also relevant for the FY 2020-21. However, MGVCL had inadvertently not identified this impact as an uncontrollable cost during the true up of FY 2020-21. This impact for the FY 2020-21 is worked out to Rs. 34.89 Crore. This differential cost was clubbed under controllable expense during the true-up of FY 2020-21 and 1/3rd of this amount was allowed for recovery during the true-up of FY 2020-21. Hence, MGVCL is seeking the balance recovery equivalent to the 2/3rd of this amount (2/3rd of 34.89 = 23.26) through the ARR for FY 2023-24. The working of the amount is given in the table below:

Differential amount of entitlement of O&M expenses for FY 2020-21 (To be claimed in FY 2023-24)

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	Net Entitlement
1	Employee Cost - As approved	581.19	499.47	81.72		553.95
2	Employee Cost - Revised	581.19	499.47	116.61	(34.89)	577.21
3	**Differential entitlement to be claimed in FY 2023-24**					**23.26**

Accordingly, MGVCL has worked out a gain/ (loss) of Rs. 77.46 Crores on account of controllable employee cost and a gain/ (loss) of Rs. (104.89) Crores on account of uncontrollable employee cost.

Commission's Analysis

MGVCL has claimed actual employee cost of Rs. 637.30 Crore for FY 2021-22 as against Rs. 609.87 Crore approved in the Tariff Order dated 31st March, 2020. The Commission has verified the actual employee expenses from the audited Annual Accounts of MGVCL. The actual employee expenses claimed by MGVCL includes Rs. 17.42 Crore towards Provision for 7th Pay Commission along with Rs. 87.22 Crore towards wage revision arrears and other comprehensive income of Rs. 0.96 Crore.

Therefore, the Commission after duly prudence check considers the actual employee expenses of Rs. 637.30 Crore for the purpose of true up of FY 2021-22. The Commission considers the employee cost as a controllable expense, in accordance with the GERC (MYT) Regulations, 2016 except impact of Rs. 104.89 Crore (87.22+17.42+0.25) in respect to wage revision as per 7th Pay Commission Order.

Regarding the Petitioner's claim about consideration of Rs. 23.26 Crore related to truing up of FY 2020-21 through the ARR of FY 2023-24, it is to state that the Commission has taken appropriate view while determining ARR for FY 2023-24.

The Commission, accordingly, approves the employee cost at Rs. 637.30 Crore in the truing up for FY 2021-22, with the sharing of Gains/(Losses) as shown in the Table below:

Table 4-18: Employee Cost approved in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Approved in Truing Up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Employee Cost	609.87	637.30	77.46	(104.89)

4.5.1.2 Repairs & Maintenance (R&M) Expenses

MGVCL has claimed R&M expenses of Rs. 77.19 Crore in the truing up for FY 2021-22. The R&M expenses approved for FY 2021-22 in the Tariff Order dated 31st March, 2020 and claimed by MGVCL in the truing up are as given in the Table below:

Table 4-19: R&M Expenses claimed by MGVCL for the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	R&M Expenses	63.96	77.19	9.26	(22.50)

Petitioner's Submission

MGVCL has submitted that R&M 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.

MGVCL has submitted that the assets of MGVCL are old and require regular maintenance to ensure uninterrupted operations. It has been further submitted that MGVCL has been trying its best to ensure uninterrupted operations of the system by undertaking necessary expenditure for R&M activities. The GERC (MYT) Regulations, 2016 provides for R&M expenses as a controllable expense. MGVCL had also incurred Rs. 22.50 Crore relating to restoration of damages on account of Tauktae Cyclone during FY 2021-22.

The actual R&M expenses for FY 2021-22 are Rs. 77.19 Crore, which are higher than the approved R&M expenses of Rs. 63.96 Crore. MGVCL has worked out a loss of Rs. 22.50 Crore due to controllable factors as provided in the GERC (MYT) Regulations, 2016.

Commission's Analysis

The actual R&M expenses incurred during FY 2021-22 are Rs. 77.19 Crore, as per the audited Annual Accounts. The actual R&M expenses incurred by MGVCL are higher than the amount approved in the Tariff Order dated 31st March, 2021 due to expenditure incurred for restoration of damages by Cyclone. The R&M expenses are a controllable item of expenditure under the GERC (MYT) Regulations, 2016. Accordingly, the Commission has trued up the R&M expenses and the sharing of Gains/(Losses) due to controllable factors, as shown in the Table below:

Table 4-20: R&M Expenses approved for the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Approved in Truing Up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	R&M Expenses	63.96	77.19	9.26	(22.50)

4.5.1.3 Administration & General (A&G) Expenses

MGVCL has claimed A&G expenses of Rs. 106.07 Crore in the truing up for FY 2021-22. The A&G expenses approved for FY 2021-22 in the Tariff Order dated 31st March, 2020 and claimed by MGVCL in the truing up are given in the Table below:

Table 4-21: A&G Expenses claimed by MGVCL in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	A&G Expenses	93.45	106.07	(12.62)	-

Petitioner's Submission

MGVCL has submitted that A&G expenses mainly comprise rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, etc. The A&G expenses are categorised as controllable expenses in the GERC (MYT) Regulations, 2016 and the actual A&G expenses are higher than the approved expenses, resulting in a loss of Rs. 12.62 Crore for FY 2021-22.

Commission's Analysis

The actual A&G expenses incurred during FY 2021-22 are Rs. 106.07 Crore, as per the audited Annual Accounts. The Commission asked MGVCL to submit details and justification for expenses booked under 'Miscellaneous Losses and Write-off', and 'Others. In reply, MGVCL submitted details and justification for expenses booked under 'Miscellaneous Losses and Write-off', and 'Others as shown below:

Table 4-22: Miscellaneous Losses & Write-off and Others submitted by MGVCL

S. No.	Description	Amount (Rs. Crore)
A	**Miscellaneous Losses and Write-off**	
1	Compensation for Injuries Deaths Staff	0.00
2	Compensation for Injuries, Death Damage-Outsiders	1.20
3	Loss on Obsolescence of Stores	2.20
4	Loss on Sale of Scrap	0.39
5	Other Losses and write-off	0.06
	Total Miscellaneous Losses and Write-off	**3.86**

The Commission is of the view that the amount booked against Compensation for Injuries, Deaths- Staff & Outsiders, and waiver of the delayed payment surcharge (DPC) has to be borne by MGVCL, since the Commission does not consider DPC under income, therefore, the Commission has not considered waiver of DPC as expense. Accordingly, the Commission has deducted these amounts from the total A&G expenses booked in audited annual accounts.

The actual A&G expenses incurred by MGVCL, considering the above disallowance, are higher than the amount approved in the Tariff Order dated 31st March, 2020. The A&G expenses are a controllable item of expenditure under the GERC (MYT) Regulations, 2016. Accordingly, the Commission has trued up the A&G expenses and the sharing of Gains/(Losses) due to controllable factors, as shown in the Table below:

Table 4-23: A&G Expenses approved in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Approved in Truing Up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Administration & General Charges	93.45	102.21	(8.76)	-

4.5.1.4 Other Expenses Capitalised

MGVCL has claimed the actual expenses capitalised at Rs. 45.19 Crore in the truing up for FY 2021-22, as against Rs. 61.07 Crore approved in the Tariff Order dated 31st March, 2020 as shown in the Table below:

Table 4-24: Other Expenses Capitalised as claimed by MGVCL in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Other Expenses Capitalised	(61.07)	(45.19)	-	(15.88)

Commission's Analysis

The Commission has observed that the other expenses capitalised represent the capitalisation of Employee Expenses and A&G Expenses. The actual other expenses capitalised is Rs. 45.19 Crore, as per the audited annual accounts for FY 2021-22.

The Commission, accordingly, approves the Other Expenses Capitalised at Rs. 45.19 Crore against Rs. 61.07 Crore approved in the Tariff Order dated 31st March, 2020. The Commission allows Rs. 15.88 Crore as loss due to uncontrollable factors as shown in the Table below:

Table 4-25: Other Expenses Capitalised approved in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Approved in Truing Up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Other Expenses Capitalised	(61.07)	(45.19)	-	(15.88)

The total O&M expenses approved in the truing up for FY 2021-22 and the Gain / (Loss) due to controllable and uncontrollable factors are detailed in the Table below:

Table 4-26: Approved O&M expenses and Gain / Loss in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Approved in truing up	Gain/ (Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Employee Cost	609.87	637.30	637.30	77.46	(104.89)
2	R&M Expenses	63.96	77.19	77.19	9.26	(22.50)
3	A&G Expenses	93.45	106.07	102.21	(8.76)	
4	Other Expenses Capitalised	(61.07)	(45.19)	(45.19)		(15.88)
5	**O&M Expenses**	**706.21**	**775.39**	**771.53**	**77.96**	**(143.27)**

4.5.2 Capital Expenditure and Capitalization

MGVCL has achieved actual capital expenditure of Rs. 347.44 Crore in FY 2021-22, against Rs. 348.95 Crore approved in the Tariff Order dated 31st March, 2020, as given in the Table below:

Table 4-27: Capital Expenditure claimed by MGVCL for FY 2021-22 (Rs. Crore)

S. No	Particulars	FY 2021-22 (Approved)	FY 2021-22 (Actual)	Deviation
A	**Distribution Scheme**			
	Normal Development Scheme	33.60	83.00	(49.40)
	DISS	25.00	18.40	6.60
	Electrification of Hutments	3.75	3.80	(0.05)
	Kutir Jyoti Scheme	1.10	2.00	(0.90)
	Others Harijan Basti - Petpara	0.36	0.28	0.09
	System Improvement	71.00	109.07	(38.07)
	Total	**134.81**	**216.55**	**(81.74)**
B	**Rural Electrification Schemes**			
	TASP (Wells & Petapara)	67.60	56.00	11.60
	Special Component Plan	1.30	1.35	(0.05)
	RE Wells (OA+SPA)	77.22	57.55	19.67
	Dark Zone	12.29	-	12.29
	Surya Shakti Kishan Yojna	-	3.88	(3.88)
	PM Kusum Comp-B	-	0.39	(0.39)
	PM Kusum Comp-C	18.80	-	18.80
	Total	**177.21**	**119.17**	**58.04**
C	**Central Govt. Schemes – Plan**			
	PSDF	13.00	-	13.00
	Total	**13.00**	**-**	**13.00**
D	**Other New Schemes**			
	Sagar khedu	1.50	1.20	0.30
	Energy Conservation (HVDS)	4.50	3.60	0.90
	Vehicle	0.15	-	0.15
	Sardar krushi Jyoti Yojna	6.98	5.46	1.52
	Misc. Civil + Electrical Works	10.20	0.98	-
	Furniture	0.60	0.48	-

S. No	Particulars	FY 2021-22 (Approved)	FY 2021-22 (Actual)	Deviation
	Total	**23.93**	**11.72**	**12.21**
E	**Capital Expenditure Total**	**348.95**	**347.44**	**1.51**

Petitioner's Submission

MGVCL has submitted that Capital expenditure incurred by MGVCL in FY 2021-22 was Rs. 347.44 Crore. The actual capital expenditure by MGVCL during the FY 2021-22 is lower than that approved by the Commission. The Scheme-wise deviation in capital expenditure is explained as under:

Normal Development Scheme: Approved CAPEX was Rs. 33.60 Crore and actual is Rs. 82.33 Crore in FY 2021-22, as in new development full amount is paid by Applicant in New connection of Infrastructure, Industrial LT, HT, EHT connection and various shifting work is paid by the State Government of Gujarat (GoG) and Central Government department.

SI Scheme: Rs. 71 Crore was approved for budget of FY 2021-22 and Rs. 109.07 Crore is actual expenditure. The actual expenditure is less due to projects not being implemented in FY 2021-22, viz., (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.

System Improvement (SI) Scheme: SI scheme incorporates the various activities such as bifurcation of feeders, overhead to underground cable conversion, new substation link line work, H.T. Aerial bunch conductor, replacement of deteriorated conductor, L.T. Aerial bunch conductor and distribution transformer review, etc. The S.I. scheme is required for providing quality and reliable power supply to the consumers.

Government Schemes: The detailed justification of actual capital expenditure incurred during FY 2021-22 against approved CAPEX for various Government schemes is as under:

Table 4-28 Capital Expenditure against Government Schemes claimed by MGVCL for FY 2021-22 (Rs. Crore)

S. No	Particulars	FY 2021-22 (Approved)	FY 2021-22 (Actual)
1	Sagarkhedu	1.50	1.199
2	Energy Conservation (HVDS + IEC)	4.50	3.59
3	DISS	25.00	18.40
4	SKJY (Govt. Share)	6.98	5.46

Sagarkhedu, Energy Conservation, DISS & SKJY are Government schemes, and the actual capital expenditurewas incurred as per budget allocated under the respective schemes from Govt. of Gujarat.

MGVCL has claimed actual capitalisation of Rs. 348.69 Crore in the truing up for FY 2021-22, as compared to the capitalisation of Rs. 348.95 Crore approved in the Tariff Order dated 31st March, 2020.

Commission's Analysis

The capital expenditure (CAPEX) approved for FY 2021-22 in the Tariff Order dated 31st March, 2020 was Rs. 348.95 Crore. The actual capital expenditure incurred is Rs. 347.44 Crore, which is lower by Rs. 1.51 Crore than the CAPEX approved in the Tariff Order.

The Commission observed that there is higher Capital Expenditure of Rs. 81.74 Crore during FY 2021-22 compared to that approved in Tariff Order for Normal Development Scheme. The Normal Development Scheme is meant for providing new connections. Any variation in the Capital Expenditure is mainly due to number of applications for new connections received by the Licensee.

It is observed that expenditure under DISS Scheme is dependent upon the proposal for shifting of Distribution Network received from Urban Local Bodies like Nagar Palika, Municipal Corporation, Gram Panchayat, etc.

The Commission observes that most of the CAPEX Schemes by the DISCOMs are of continuous and on-going nature. These are based on yearly targets set for meeting the supply obligation, providing quality and reliable power to the consumers, reduction in losses, release of agriculture connections, etc. Generally, there are no pre-defined timelines as the schemes are further bifurcated into various works under the Scheme, e.g., the system improvement scheme incorporates the various activities such as bifurcation of feeders, overhead to underground cable conversion, new substation link line work, aerial bunch conductor, replacement of deteriorated conductor, etc. Since these works are of ongoing nature and the assets created are capitalised within a short time period, most of the capital investment carried out is capitalised in the same year and therefore, there is not much capital work in progress to be carried forward. Nevertheless, the Licensee should be more realistic in projecting the CAPEX.

The Commission has verified the audited annual accounts of MGVCL and has observed that MGVCL has incurred actual CAPEX of Rs. 347.44 Crore and capitalisation of Rs. 348.69 Crore. The Commission, therefore, approves the actual CAPEX of Rs. 347.44 Crore and gross capitalisation of Rs. 348.69 Crore in the truing up for FY 2021-22.

4.5.2.1 Funding of Capitalisation

Petitioner's Submission

MGVCL submitted that the funding of actual capitalisation is done through various sources categorised under four headings, viz., Consumer Contribution, Grants, Equity and Debt. The detailed breakup of funding of assets capitalised during FY 2021-22 is given in the Table below:

Table 4-29: Funding of Capitalisation submitted by MGVCL for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Claimed in truing up	Deviation
Capitalisation	**348.95**	**348.69**	**0.26**
Less: Consumer Contribution	94.71	157.45	(62.74)
Less: Grants	20.20	198.19	(177.99)

Particulars	Approved in Tariff Order	Claimed in truing up	Deviation
Balance CAPEX for the Year	**234.04**	**(6.96)**	**241.00**
Debt (70%)	163.83	-	163.83
Equity (30%)	70.21	-	70.21

It is submitted that in the FY 2021-22, the grants considered for the purpose of funding the capitalisation also includes loans and interest for schemes like RAPDRP-A, RAPDRP-B and SCADA-A which were converted into grant as per the terms of the scheme. Further, in some cases, the interest converted into grants was passed on to the consumers through the non-Tariff income. The Hon'ble Commission in its Order in Case No. 1913 of 2020 had mentioned that it has been allowing the interest cost in the ARR related to loans for schemes sponsored by the Central Government with provision for conversion of Loan into Grant and the same has been borne by the consumers in the Tariff and the same needs to be provided appropriate treatment/adjustment in subsequent ARR. Accordingly, MGVCL has considered the loans & interest cost converted into grant as a source of funding for the capitalisation done in FY 2021-22, thus reducing the need for debt and equity linked funding. Further, the interest component converted into grant has also been passed on to the consumers through the non-Tariff income. Thus, in line with the directive of the Hon'ble Commission, MGVCL has appropriately passed on the benefit of the conversion of loans to the consumers.

Commission's Analysis

The Commission noted that MGVCL has considered gross capitalisation instead of net capitalisation (net of assets decommissioned) for working out the eligible debt and equity amount for FY 2021-22. In this regard, MGVCL submitted that it has to raise funds for the new assets (addition) created during the year either in the form of Grant, Consumer contribution, debt or equity whereas benefits of deduction in the assets are taken care in the form of gain/(loss) in sale of scrap. Hence, MGVCL has considered gross capitalization for working out the eligible debt and equity amount for FY 2021-22. However, the Commission does not find merit in MGVCL's submission, as the equity and debt related to the assets decommissioned has to also be taken into consideration, in accordance with the GERC (MYT) Regulations, 2016 and the approach adopted by the Commission in previous Orders. Therefore, the Commission has considered net capitalisation (net of assets decommissioned of Rs. 1.35 Crore) for working out the eligible debt and equity amount for FY 2021-22.

The Commission noted the submission of MGVCL about conversion of loans and interest for schemes such as RAPDRP A, RAPDRP B and SCADA A into grant and treatment of the interest recovered from the consumers through the previous Tariff Orders given as Other Income in the present petition.

It is observed that MGVCL has claimed the funding of Capitalisation, net of Consumer Contribution and Government Grant, in the normative Debt: Equity ratio of 70:30, as specified in the GERC (MYT) Regulations, 2016.

The Commission has verified the amount considered by MGVCL against Government Grants and Consumer Contribution from the audited Annual Accounts for FY 2021-22. The Commission has accordingly considered the funding of capitalisation in FY 2021-22 through Consumer Contribution and Grants as Rs. 157.45 Crore and Rs. 198.19 Crore, respectively, in the truing up for FY 2021-22.

The Commission, therefore, approves the funding of Capitalization in the truing up of FY 2021-22 as given in the Table below:

Table 4-30: Approved Capitalisation and sources of funding in the truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Claimed in truing up	Approved in Truing Up
Capitalization	**348.95**	**348.69**	**347.34**
Consumer Contribution	94.71	157.45	157.45
Grants	20.20	198.19	198.19
Balance CAPEX for the Year	**234.04**	**(6.96)**	**(8.30)**
Debt (70%)	163.83	-	-
Equity (30%)	70.21	-	-

4.5.3 Depreciation

MGVCL has claimed Depreciation of Rs. 264.91 Crore in the truing up for FY 2021-22 against the Depreciation of Rs. 294.17 Crore approved in the Tariff Order dated 31st March, 2020.

Petitioner's Submission

MGVCL submitted that it has calculated depreciation for FY 2021-22 in accordance with the provisions of the GERC (MYT) Regulations, 2016, as shown in the Table below:

Table 4-31: Fixed Assets & Depreciation computed by MGVCL for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Deviation
1	Gross Block in Beginning of the year	6,142.01	6,138.29	
2	Additions during the Year (Net)	348.95	347.34	
3	Closing GFA	6,490.96	6,485.63	
4	Average GFA	6,316.48	6,311.96	
5	**Depreciation for the Year**	**294.17**	**264.91**	**29.26**
6	**Average Rate of Depreciation**	**4.66%**	**4.20%**	

MGVCL further submitted that actual depreciation for FY 2021-22, as against the value approved in the Tariff Order, resulted in a net uncontrollable gain of Rs. 29.26 Crore, as shown in the Table below:

Table 4-32: Gain/(Loss) due to Deprecation claimed in the truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Depreciation	294.17	264.91	-	29.26

Commission's Analysis

The Commission has considered the Closing GFA of FY 2020-21 approved in Order dated 31st March, 2022 as Opening GFA of FY 2021-22. The net addition during the year of Rs. 347.34 Crore has been verified from the audited Annual Accounts for FY 2021-22. The depreciation as per audited Annual Accounts for FY 2021-22 is Rs. 264.91 Crore.

The Commission, accordingly, approves Depreciation at Rs. 264.91 Crore in the truing up for FY 2021-22, as shown in the Table below:

Table 4-33: Approved fixed assets & depreciation for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Approved in Truing Up
1	Gross Block in Beginning of the year	6,142.01	6,138.29	6,138.29
2	Additions during the Year (Net)	348.95	347.34	347.34
3	Gross Block at the end of the year	6,490.96	6,485.63	6,485.63
4	**Depreciation for the Year**	**294.17**	**264.91**	**264.91**
5	**Average Rate of Depreciation**	**4.66%**	**4.20%**	**4.20%**

The amount of depreciation is dependent on the quantum of capitalisation, rate of depreciation, etc. The Commission has, therefore, considered the parameters impacting depreciation as uncontrollable.

The Commission, accordingly, approves the Gain /(Loss) on account of depreciation in the truing up for FY 2021-22, as detailed in the Table below:

Table 4-34: Gain/(Loss) due to Depreciation approved in truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Approved in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Depreciation	294.17	264.91		29.26

4.5.4 Interest and Finance charges

MGVCL has claimed Rs. 45.37 Crore towards interest and finance charges in the truing up for FY 2021-22, as against Rs. 44.37 Crore approved in the Tariff Order dated 31st March, 2020, as shown in the Table below:

Table 4-35: Interest and Finance Charges claimed by MGVCL in the truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Actual Claimed in Truing up
Interest and Finance Charges	44.37	45.37

Petitioner's Submission

MGVCL submitted that it has considered the Opening Balance of loans for FY 2021-22 equal to the Closing Balance of Loans approved by the Commission for FY 2020-21. The loan addition in FY 2021-22 is considered as NIL towards funding of CAPEX for FY 2021-22 as the capitalisation is entirely funded through the available grants and consumer contribution. As per the GERC (MYT) Regulations, 2016, repayment during the year has been considered equal to the depreciation for the financial year.

MGVCL has considered the weighted average rate of interest of 11.88% as against 5.63% approved in the Tariff Order dated 31st March, 2020 for FY 2021-22.

In addition, MGVCL has considered the interest on security deposits as per the provisions of the GERC (MYT) Regulations, 2016. The details of interest and finance charges claimed by MGVCL are as given in the Table below:

Table 4-36: Interest and Finance Charges claimed by MGVCL in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up
1	Opening Loans	-	-
2	Loan Additions during the Year	163.83	-

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up
3	Repayment during the Year	163.83	-
4	Closing Loans	-	-
5	**Average Loans**	**-**	**-**
6	Interest on Loan	-	-
7	Interest on Consumers' Security Deposit	43.63	42.98
8	Other Bank Charges	0.74	2.40
9	**Total Interest & Financial Charges**	**44.37**	**45.37**
10	Weighted Average Rate of Interest	5.63%	11.88%

MGVCL submitted that interest and finance charges are categorised as uncontrollable as per the GERC (MYT) Regulations, 2016, and that it has accordingly computed the gain/(loss) between the actual and the approved expenses under uncontrollable factors, as given in the Table below:

Table 4-37: Gain / (Loss) claimed due to Interest & Finance Charges for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Interest and Finance Charges	44.37	45.37	-	(1.00)

Commission's Analysis

The Commission has considered the Closing Balance of Loans approved in the true up Order for FY 2020-21, as the Opening Balance of Loans for FY 2021-22. The normative addition of loans during FY 2021-22 has been considered as NIL Crore, as approved in Table 4.31 of this Order. The repayment of loan has been considered equal to the depreciation approved in this Order.

The interest on security deposits of Rs. 42.98 Crore has been verified from the audited Annual Accounts for FY 2021-22. The Other Bank charges have been considered as per the audited Annual Accounts for FY 2021-22.

MGVCL has submitted details of the actual loan portfolio and the rate of interest applicable for each loan portfolio for FY 2021-22. The Commission has computed the weighted average rate of interest as 9.59% in accordance with Regulation 38 of the GERC (MYT) Regulations, 2016.

Taking all these factors into consideration, the interest and finance charges approved in the truing up for FY 2021-22 is detailed in the Table below:

Table 4-38: Interest and Finance Charges approved by the Commission in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up	Approved in Truing up
1	Opening Loans	-	-	-
2	Loan Additions during the Year	163.83	-	-
3	Repayment during the Year	163.83	-	-
4	Closing Loans	-	-	-
5	**Average Loans**	**-**	**-**	**-**
6	Interest on Loan	-	-	-
7	Interest on Consumers' Security Deposit	43.63	42.98	42.98
8	Other Bank Charges	0.74	2.40	2.40
9	**Total Interest & Financial Charges**	**44.37**	**45.37**	**45.37**
10	Weighted Average Rate of Interest	5.63%	11.88%	9.59%

The Commission, accordingly, approves the interest and finance charges at Rs. 45.37 Crore in the truing up for FY 2021-22.

As per the GERC (MYT) Regulations, 2016, the parameters that impact interest and finance charges are uncontrollable. The Commission, accordingly, approves the Gain /

(Loss) on account of interest and finance charges in the truing up for FY 2021-22, as detailed in the Table below:

Table 4-39: Gain / (Loss) approved in the truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Approved in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Interest and Finance Charges	44.37	45.37		(1.00)

4.5.5 Interest on Working Capital

MGVCL has not claimed any interest on working capital in the truing up for FY 2021-22, against Nil provision approved in the Tariff Order dated 31st March, 2020 as detailed in the Table below:

Table 4-40: Interest on Working Capital claimed by MGVCL in the truing up for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up
1	Interest on Working Capital	-	-

Petitioner's Submission

MGVCL submitted that normative working capital requirement has been calculated in accordance with the GERC (MYT) Regulations, 2016 and the rate of interest is considered as the rate equal to the weighted average of the 1-year Marginal Cost of Lending Rate (MCLR) of State Bank of India (SBI) during the year plus 250 basis points, as per the GERC (MYT) Regulations, 2016. This rate works out to 9.50%.

The detailed computation of Working Capital requirement as per the provisions of the GERC (MYT) Regulations, 2016 and Interest on Working Capital, is as given in the Table below:

Table 4-41: Interest on Working Capital claimed by MGVCL in the truing up for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up
1	O & M expenses	58.85	64.62
2	Maintenance Spares	61.42	61.38
3	Receivables	587.18	616.32
4	Amount held as security deposit from consumers	938.20	1,090.09
5	**Total Working Capital**	**(230.75)**	**(347.77)**
6	Rate of Interest on Working Capital	10.25%	9.50%
7	**Interest on Working Capital**	**-**	**-**

Commission's Analysis

The Commission has examined the computation of normative working capital under the GERC (MYT) Regulations, 2016. The working capital requirement works out to be negative during FY 2021-22. As the working capital requirement works out to be negative, there cannot be any interest on working capital. Accordingly, neither any interest has been claimed by MGVCL nor any interest is approved by the Commission.

The detailed computation of Working Capital requirement and interest thereon is given in the Table below:

Table 4-42: Interest on working capital approved in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up	Approved in Truing up
1	O&M expenses	58.85	64.62	64.29
2	Maintenance Spares	61.42	61.38	61.38
3	Receivables	587.18	616.32	621.21
4	Amount held as security deposit from consumers	938.20	1,090.09	1,090.09
5	**Total Working Capital**	**(230.75)**	**(347.77)**	**(347.77)**

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up	Approved in Truing up
6	Rate of Interest on Working Capital	10.25%	9.50%	9.50%
7	**Interest on Working Capital**	**-**	**-**	**-**

The Commission, accordingly, approves the interest on working capital as Nil in the truing up for FY 2021-22.

4.5.6 Bad Debts Written Off

MGVCL has claimed bad debts written off in the truing up for FY 2021-22 as Rs. 0.0006 Crore, as against Rs. 0.0041 Crore approved in the Tariff dated 31st March, 2020, as given in the Table below:

Table 4-43: Bad Debts claimed by MGVCL in the truing up for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up
1	Bad Debts Written Off	0.0041	0.0006

Petitioner's Submission

MGVCL submitted that as per the audited Annual Accounts for FY 2021-22, bad and doubtful debts written off in FY 2021-22 are Rs. 0.0006 Crore, resulting in a gain of Rs. 0.0035 Crore on account of controllable factors, as shown in the Table below:

Table 4-44: Bad Debts claimed by MGVCL in the truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Bad Debts Written Off	0.0041	0.0006	0.0035	

Commission's Analysis

As per Regulation 94.9.1 of the GERC (MYT) Regulations, 2016, the bad debts written off in the ARR are to be passed through based on the actual write off of bad debts during the year.

The Commission has verified the Bad & Doubtful debts written off from the audited Annual Accounts that MGVCL for FY 2021-22. Accordingly, the Commission allows Bad & Doubtful Debts Written off during FY 2021-22 as Rs. 0.0006 Crore.

The deviation on account of bad debts written off has been considered as loss due to controllable factors, as detailed in the Table below:

Table 4-45: Gain/ (Loss) due to Bad Debts approved in the Truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Approved in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Bad Debts Written Off	0.0041	0.0006	0.0035	

4.5.7 Return on Equity

MGVCL has claimed Rs. 163.14 Crore towards Return on Equity (RoE) in the truing up for FY 2021-22 as against Rs. 169.64 Crore approved in the Tariff Order dated 31st March, 2020, as given in the Table below:

Table 4-46: Return on Equity claimed by MGVCL in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up
1	Return on Equity	169.64	163.14

Petitioner's Submission

MGVCL has computed RoE considering the rate of 14% on the average of opening and closing equity, taking into account the additions during the year, as given in the Table below:

Table 4-47: Return on Equity claimed by MGVCL in the truing up for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up
1	Opening Equity Capital	1,176.59	1,165.32
2	Equity Additions during the Year	70.21	-
3	Closing Equity	1,246.80	1,165.32
4	Average Equity	1,211.69	1,165.32
5	Rate of Return on the Equity	14%	14%
6	**Return on Equity**	**169.64**	**163.14**

MGVCL has computed the Gain / (Loss) on account of RoE in the truing up for FY 2021-22, as detailed in the Table below:

Table 4-48: Gain / (Loss) due to RoE claimed by MGVCL for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Return on Equity	169.64	163.14	-	6.50

Commission's Analysis

The Commission has considered the Closing Balance of equity as approved in the truing up of FY 2020-21, as the Opening Balance of equity for FY 2021-22. The Commission has approved the normative Equity addition as NIL in Table 4.31 of this Order.

The Commission has computed the RoE in the truing up for FY 2021-22 considering the rate of 14% specified in the GERC (MYT) Regulations, 2016 as detailed in the Table below:

Table 4-49: Return on Equity approved in truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up	Approved in Truing up
1	Opening Equity Capital	1,176.59	1,165.32	1,165.32
2	Equity Additions during the Year	70.21	-	-

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up	Approved in Truing up
3	Closing Equity	1,246.80	1,165.32	1,165.32
4	Average Equity	1,211.69	1,165.32	1,165.32
5	Rate of Return on the Equity	14%	14%	14%
6	**Return on Equity**	**169.64**	**163.14**	**163.14**

The Commission approves the Return on Equity at Rs. 163.14 Crore in the truing up for FY 2021-22.

Deviation in RoE is due to uncontrollable factors as RoE is being allowed on a normative basis and the quantum of equity addition in the year depends upon the capital expenditure and the capitalization achieved during the year.

The Commission, accordingly, approves the Gain/(Loss), on account of RoE, in the Truing up for FY 2021-22 as uncontrollable, as detailed in the Table below:

Table 4-50: Approved Gain / Loss due to Return on Equity in the truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Approved in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Return on Equity	169.64	163.14	-	6.50

4.5.8 Income Tax

MGVCL has claimed Rs. 21.68 Crore towards Income Tax for FY 2021-22, as against Rs. 12.22 Crore approved in the Tariff Order dated 31st March, 2020, as given in the Table below:

Table 4-51: Income Tax claimed by MGVCL in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up
1	Income Tax (MAT)	12.22	21.68

Petitioner's Submission

MGVCL submitted that Income Tax being a statutory expense, any variation on this account is uncontrollable. MGVCL has claimed a loss of Rs. 9.46 Crore on this account, as given in the Table below:

Table 4-52: Gain / (Loss) claimed due Income Tax claimed by MGVCL in the truing up (Rs. Crore)

Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Provision for Tax / Tax Paid	12.22	21.68	-	(9.46)

Commission's Analysis

The Commission has verified the amount of Income Tax payable from the audited Annual Accounts of MGVCL, i.e., Rs. 21.68 Crore. The Commission, accordingly, approves the Income Tax of Rs. 21.68 Crore in the truing up for FY 2021-22.

Variation in Income Tax is uncontrollable, hence, the Commission approves the Gain/(Loss) on account of Income Tax in the truing up for FY 2021-22, as detailed in the Table below:

Table 4-53: Approved Gain / (Loss) due to Income Tax in the truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Approved in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Income Tax	12.22	21.68	-	(9.46)

4.5.9 Non-Tariff Income

MGVCL has claimed the actual Non-Tariff Income (NTI) as Rs. 227.97 Crore in the truing up for FY 2021-22, as against Rs. 145.68 Crore approved in the Tariff Order dated 31st March, 2020, as detailed in the Table below:

Table 4-54: Non-Tariff Income claimed by MGVCL in the truing up for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Approved in the Tariff Order	Actual Claimed in Truing up
1	Non-Tariff Income	145.68	227.97

Petitioner's Submission

MGVCL submitted that the NTI of MGVCL considered for FY 2021-22 is Rs. 227.97 Crore as against Rs. 145.68 Crore approved by the Commission, resulting in an uncontrollable gain/(loss) of Rs. 82.29 Crore.

Table 4-55: Gain/(Loss) claimed due to Non-Tariff Income for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Actual Claimed in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Non-Tariff Income	145.68	227.97	-	(82.29)

Commission's Analysis

The actual Non-Tariff Income as per audited Annual Accounts is Rs. 227.97 Crore for FY 2021-22. Therefore, the Commission approves the net NTI as Rs. 227.97 Crore in the truing up for FY 2021-22. The deviation in Non-Tariff Income is considered as uncontrollable. The Commission, accordingly, approves the Gains/(Losses) on account of Non-Tariff Income in the truing up for FY 2021-22, as detailed in the Table below:

Table 4-56: Approved Gains/(Losses) due to Non-Tariff Income in the truing up for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order	Approved in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
Non-Tariff Income	145.68	227.97	-	(82.29)

4.6 ARR approved in the Truing up for FY 2021-22

The ARR approved in the Tariff Order dated 31st March, 2020, actual claimed in truing up, approved in the truing up and Gain/(Loss) computed in accordance with the GERC (MYT) Regulations, 2016, are given in the Table below:

Table 4-57: ARR approved in truing up for FY 2021-22 (Rs. Crore)

S. No.	Annual Revenue Requirement	Approved in the Tariff Order	Actual Claimed in Truing up	Approved in Truing up	Gain/(Loss) due to Controllable Factors	Gain/(Loss) due to Uncontrollable Factors
1	Cost of Power Purchase	5,756.21	6,617.80	6,617.80	87.07	(948.66)
2	O&M Expenses	706.21	775.39	771.53	77.96	(143.27)
2.1	*Employee Cost*	*609.87*	*637.30*	*637.30*	*77.46*	*(104.89)*
2.2	*R&M Expenses*	*63.96*	*77.19*	*77.19*	*9.26*	*(22.50)*
2.3	*A&G Expenses*	*93.45*	*106.07*	*102.21*	*(8.76)*	
2.4	*Other Expenses Capitalised*	*(61.07)*	*(45.19)*	*(45.19)*		*(15.88)*
3	Depreciation	294.17	264.91	264.91		29.26
4	Interest & Finance Charges	44.37	45.37	45.37		(1.00)
5	Interest on Working Capital	-	-	-		-
6	Provision for Bad Debts	0.00	0.00	0.00		0.00
7	Return on Equity	169.64	163.14	163.14		6.50
8	Income Tax	12.22	21.68	21.68		(9.46)
9	**ARR (1 to 8)**	**6,982.81**	**7,888.30**	**7,884.44**	**165.03**	**(1,066.64)**
10	Non-Tariff Income	145.68	227.97	227.97		(82.29)
11	**Total ARR (9-10)**	**6,837.13**	**7,660.33**	**7,656.46**	**165.03**	**(984.35)**

4.7 Revenue for FY 2021-22

MGVCL has claimed the total revenue of Rs. 7,395.85 Crore in the truing up for FY 2021-22 as against Rs. 7,046.11 Crore approved as detailed in the Table below:

Table 4-58: Revenue submitted in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Approved in Tariff Order	Actual Claimed in Truing up
1	Revenue from Sale of Power	4,907.24	7,227.66

S. No.	Particulars	Approved in Tariff Order	Actual Claimed in Truing up
2	Revenue from FPPPA	1,941.42	
3	Other Income (Consumer related)	124.01	99.42
4	**Total Revenue excluding subsidy (1+2+3)**	**6,972.67**	**7,327.07**
5	Agriculture Subsidy	73.44	68.78
6	**Total Revenue including Subsidy (4+5)**	**7,046.11**	**7,395.85**

MGVCL submitted that it has received outstanding payments from the Govt. of Gujarat which pertains to different type of subsidies like HP based subsidy, GERC Tariff Compensation, Water Works (Gram Panchayat) and FPPPA subsidy. Against the total claim of Rs. 6,205.55 Crore (excluding HP based subsidy), the DISCOMs have received Rs. 8,173.85 Crores from the Govt. of Gujarat i.e., excess receipt of Rs. 1,968.30 Crore which is against past subsidy claims pending with the Govt. of Gujarat. Accordingly, considering that this claim pertains to past year, the same has been adjusted from the revenue from sale of power from agricultural consumers during the year. The DISCOM wise allocation of this subsidy received is given in the table below:

Table 4-59 Summary of the subsidy claim, and subsidy received from Govt. of Gujarat in FY 2021-22

DISCOMs	Subsidy claim for FY 2021-22	Allocation of Subsidy received	Subsidy received for previous year claims
DGVCL	316.03	427.35	111.32
MGVCL	406.75	536.29	129.54
PGVCL	2,417.84	3,279.98	862.14
UGVCL	3,064.93	3,930.24	865.31
Total	**6,205.55**	**8,173.85**	**1,968.30**

Commission's Analysis

The Commission has verified the total category-wise revenue for FY 2021-22 from the audited Annual Accounts. The actual revenue from category-wise sales, as per audited Annual Accounts, is Rs. 7,357.20 Crore.

On a query from the Commission, the Petitioner submitted the statement of subsidy claimed, received from State Government from FY 2015-16 onwards and treatment given to subsidy received in respective true-up year. The Petitioner further submitted that the State Government is providing Tariff subsidy to DISCOMs through GUVNL. It is submitted that similar to the amount of Rs. 1,968.30 Crore which was subsidy for the past period received in FY 2021-22, the amount of Rs. 271.24 Crore was also the subsidy for past period received in FY 2020-21. However, it was inadvertently not adjusted by the DISCOMs in the past truing up petition in line with the approach adopted by the DISCOMs in the present truing up petition for FY 2021-22 wherein the amount of Rs. 1,968.30 Crore was adjusted in the revenue. It is requested to appropriately consider the adjustment of Rs. 271.24 Crore in the present petition from the revenue for FY 2021-22.

The Commission reconciled the data submitted by the Petitioner with the GoG Budget documents depicting subsidy amount released to GUVNL for each year, amount of subsidy shown in the Annual Account of State DISCOMs in each year and treatment of subsidy given by the Commission in each true up year. From the reconciliation, it emerged that for the true up year of FY 2016-17, GUVNL received subsidy of Rs. 4,466.55 Crore from GoG. The same amount had been allocated to DISCOMs by GUVNL and was accordingly reflected in the revenue of respective Discom. However, while truing up, the Commission in the Order dt. 31.03.2018 mentioned as under;

"The Petitioner has stated that subsidy of Rs. 1195.72 Crore for FY 2016-17 which was to be received in advance for all four DISCOMs as whole has not been received from the State Government. The Petitioner also informed about the State Government's commitment to release the subsidy. In view of this commitment, the consolidated gap of all four DISCOMs is reduced by the subsidy receivable amount of Rs. 1,195.72 Crore."

Thus, the Commission considered Rs. 1,195.72 Crore as subsidy received in the true up year of FY 2016-17, even though actually not received by GUVNL. Thereafter, for each true up year i.e. from FY 2017-18 to FY 2020-21, the Commission has considered the actual subsidy received from GoG by each Discom as revenue and accordingly worked out the Gap/ Surplus for each true up year. Thus, the contention of the Petitioner about receipt of additional amount of Rs. 1,968.30 Crore in FY 2021-22 against subsidy pending related to previous years and allocation of such subsidy amount to previous year is not fully considered by the Commission due to the reason explained above. Thus, out of Rs. 1,968.30 Crore additional subsidy received over and above the claimed subsidy only Rs. 1,195.752 Crore is required to be considered as subsidy pertaining to previous years for the truing up purpose and rest of the subsidy is required to be considered as revenue for FY 2021-22. Accordingly, the total revenue of the Discoms is to be reduced by Rs. 1,195.72 Crore only. The Commission adjusted this amount of Rs. 1,195.72 Crore the ratio at which the GUVNL adjusted the revenue of Rs. 1,968.30 Crore as shown under;

DISCOM	Surplus subsidy allocation
DGVCL	67.63
MGVCL	78.69
PGVCL	523.74
UGVCL	525.66
Total	1,195.72

The actual revenue from category wise sales as per audited Accounts, is Rs. 7,357.20 Crore. This amount is reduced by Rs. 78.69 Crore as explained above and accordingly, the Commission considers revenue from sale of power for the Petitioner for truing up of FY 2021-22.

In regard to the submission of the Petitioner about reduction in revenue of all the four DISCOMs together by Rs. 271.24 Crore being an inadvertent error in the truing up petition of FY 2020-21, it is to state that the truing up of FY 2020-21 has been concluded by the Commission on 31st March 2022 and has attained finality. Any correction in the present true up related to previous year tantamount to review of truing up of FY 2020-21. This being impermissible, the Commission does not consider the plea of the Petitioner to reduce the revenue of all the four DISCOMs together by Rs. 271.24 Crore in the truing up of FY 2021-22.

The Other Income as per audited Annual Accounts is Rs. 99.42 Crore. The Commission has considered the actual Agriculture Subsidy Rs. 68.78 Crore separately as per the GERC (MYT) Regulations, 2016.

The Revenue approved in the truing up for MGVCL for FY 2021-22 is shown in the Table below:

Table 4-60: Revenue approved in the truing up for FY 2021-22 (Rs. Crore)

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Approved in Tariff Order</th><th>Actual Claimed in Truing up</th><th>Approved in Truing up</th></tr>
<tr><td>1</td><td>Revenue from Sale of Power</td><td>4,907.24</td><td rowspan="2">7,227.66</td><td rowspan="2">7,278.50</td></tr>
<tr><td>2</td><td>Revenue from FPPPA</td><td>1,941.42</td></tr>
<tr><td>3</td><td>Other Income (Consumer related)</td><td>124.01</td><td>99.42</td><td>99.42</td></tr>
<tr><td>4</td><td>Total Revenue excluding subsidy (1+2+3)</td><td>6,972.67</td><td>7,327.07</td><td>7,377.92</td></tr>
<tr><td>5</td><td>Agriculture Subsidy</td><td>73.44</td><td>68.78</td><td>68.78</td></tr>
<tr><td>6</td><td>Total Revenue (4+5)</td><td>7,046.11</td><td>7,395.85</td><td>7,446.70</td></tr>
</table>

The Commission, accordingly, approves the total revenue of Rs. 7,446.70 Crore, including consumer related income of Rs. 99.42 Crore and Agriculture Subsidy of Rs. 68.78 Crore, in the truing up for FY 2021-22.

4.8 Revenue (Gap)/Surplus for FY 2021-22

As shown in the Table below, MGVCL has claimed a Revenue Surplus of Rs. 45.30 Crore in the truing up for FY 2021-22, considering the treatment of Gain/(Loss) due to controllable/uncontrollable factors, after comparing the performance with the Tariff Order for FY 2021-22:

Table 4-61: Revenue Surplus/(Gap) claimed by MGVCL for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Actual Claimed
1	ARR originally approved for FY 2021-22	6,837.13

S. No.	Particulars	Actual Claimed
2	Less: (Gap)/Surplus of FY 2019-20	409.41
3	Less: Gain/(Loss) on account of Uncontrollable factors to be passed on to Consumer	(984.36)
4	Less: Gain/(Loss) on account of Controllable factors to be passed on to Consumer (1/3rd of Total Gain/(Loss))	53.72
5	**Revised ARR for FY 2020-21 (1 - 2 - 3 - 4)**	**7,358.36**
6	Revenue from Sale of Power	7,227.66
7	Other Income (Consumer related)	99.42
8	**Total Revenue excluding Subsidy (6 + 7)**	**7,327.07**
9	Agriculture Subsidy	68.78
10	GUVNL Profit / (Loss) Allocation	7.81
11	**Total Revenue including Subsidy (8 + 9 + 10)**	**7,403.66**
12	**Revised (Gap)/Surplus after treating gains/(losses) due to Controllable/ Uncontrollable factors (11 - 5)**	**45.30**

Petitioner's Submission

The petitioner submitted that the Commission in the Tariff Order dated 31st March, 2020 has approved the ARR of Rs. 6,837.13 Crore for FY 2021-212. The Commission had also added Revenue (Gap) / Surplus of Rs. 409.41 Crore due to Truing up of FY 2019-20 in ARR.

As per the mechanism specified in the GERC (MYT) Regulations, 2016, MGVCL proposed to pass on 1/3rd of total gain on account of controllable factors, i.e., Rs. 53.72 Crore and total loss on account of uncontrollable factors, i.e., Rs. 984.36 Crore to the consumers. Accordingly, MGVCL has arrived at the revised ARR for FY 2021-22 at Rs. 7,358.36 Crore as shown in the above Table.

The revised ARR is compared against the revised Revenue with Existing Tariff of Rs. 7,227.66 Crore, Other Consumer related Income of Rs. 99.42 Crore, Agriculture Subsidy of Rs. 68.78 Crore and GUVNL profit allocation of Rs. 7.81 Crore, summing up to the total revenue of Rs. 7,403.66 Crore. Revenue (Gap)/Surplus of MGVCL for FY 2021-22 after considering all the above adjustments is computed at Rs. 45.30 Crore.

Commission's Analysis

The Commission has computed the revised ARR and Revenue (Gap)/Surplus for FY 2021-22, based on the expenses and the Gain/(Loss) approved in the truing up for FY 2021-22, and after considering the earlier year's Revenue Surplus. MGVCL's share of GUVNL profit has been considered as Rs. 7.81 Crore for FY 2021-22 as calculated by the Commission.

The Revenue (Gap)/Surplus approved by the Commission after truing up for FY 2021-22, is summarised in the Table below:

Table 4-62: Revenue (Gap)/Surplus approved in the truing up for FY 2021-22 (Rs. Crore)

S. No.	Particulars	Actual Claimed	Approved after truing up
1	ARR originally approved for FY 2021-22	6,837.13	6,837.14
2	Less: (Gap) / Surplus of FY 2019-20	409.41	409.41
3	Less: Gain/(Loss) on account of Uncontrollable factors to be passed on to Consumer	(984.36)	(984.35)
4	Less: Gain / (Loss) on account of Controllable factors to be passed on to Consumer (1/3rd of Total Gain/(Loss))	53.72	55.01
5	**Revised ARR for FY 2020-21 (1 - 2 - 3 - 4)**	**7,358.36**	**7,357.07**
6	Revenue from Sale of Power	7,227.66	7,278.50
7	Other Income (Consumer related)	99.42	99.42
8	**Total Revenue excluding Subsidy (6 + 7)**	**7,327.07**	**7,377.92**
9	Agriculture Subsidy	68.78	68.78
10	GUVNL Profit / (Loss) Allocation	7.81	7.81
11	**Total Revenue including Subsidy (8 + 9 + 10)**	**7,403.66**	**7,454.51**
12	**Revised (Gap)/ Surplus after treating gains/(losses) due to Controllable/ Uncontrollable factors (11 - 5)**	**45.30**	**97.44**

The Revenue (Gap)/Surplus approved by the Commission after truing up for FY 2021-22, has been considered for computing the cumulative Revenue (Gap)/Surplus for FY 2023-24, as elaborated in subsequent Chapters of this Order.

5 ARR for FY 2023-24

5.1 ARR for FY 2023-24

In terms of Regulations 16.2(vi) and 19.2 of the GERC (MYT) Regulations, 2016, annual Tariff determination for the Generating Company, Transmission Licensee, SLDC, and Distribution Wire Business and Retail Supply Business shall be undertaken for each financial year within the Control Period, based on the approved forecast and results of the truing-up exercise on an application that shall be filed by the utilities along with the petition for Truing-Up and Tariff determination. As detailed at para 1.1 in Chapter 1, the Commission has issued suo-moto Order for filing of ARR and Tariff for FY 2023- 24.

5.2 Submission of MGVCL

In accordance with above provision, MGVCL has submitted the petition for determination of ARR and Tariff for FY 2023-24.

5.3 Estimation of ARR for FY 2023-24

The projection of ARR for FY 2023-24 comprises the following elements:

- Energy projection
- Consumer profile
- Distribution loss
- Energy Requirement and Energy Balance
- Power purchase – Bulk Supply Tariff
- Transmission charges
- Capital expenditure and Funding of CAPEX
- O&M Expenses
- Depreciation
- Interest on loan and finance charges
- Interest on Working Capital
- Return on Equity

- Provision for Tax

The Commission has analysed the energy sales and components of expenditure and discussed the same hereunder:

5.4 Energy Sales

5.4.1 Approach for Sales Projections

MGVCL has submitted that methodology based on past trend has proved to be a reasonably accurate and well-accepted method for estimating the load, number of consumers and energy consumption. MGVCL has, therefore, estimated the energy sales, the number of consumers and connected load, based on Compounded Annual Growth Rate (CAGR) during the past years. MGVCL has worked out the growth rates considering FY 2021-22 as base year and the same has been applied on FY 2021-22. Wherever the trend has seemed unreasonable or unsustainable, the growth rates have been corrected by DISCOMs, to arrive at more realistic projections.

5.4.2 Summary of Growth and Projections

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

5.4.3 Category-wise projected energy sales

MGVCL has furnished the category-wise sales of past years and the CAGR for different periods (5 years, 4 years, 3 years, 2 years and Year-on-Year (Y-O-Y)). CAGR has been computed for each consumer category for the past 5-year period from FY 2016-17 to FY 2021-22, the 4-year period from FY 2017-18 to FY 2021-22, the 3-year period from FY 2018-19 to FY 2021-22, and the 2-year period from FY 2019-20 to FY 2021-22, along with the Y-O-Y growth rate of FY 2021-22 over FY 2020-21 and the growth rate is applied on actual sales of FY 2021-22 (except for Agriculture consumer category where sales for FY

2023-24 is being considered on the basis of number of connections to be released), as summarised in the Table below:

Table 5-1: Historical trend in category-wise units sold (in MUs)

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

Table 5-2: Category-wise CAGR of Units Sold

S. No.	Category	5 years	4 years	3 years	2 years	1 year
	Low Tension					
1	RGP	3.57%	2.92%	2.10%	1.05%	-5.20%
2	GLP	-3.24%	-3.84%	-5.40%	-11.72%	20.82%
3	Non-RGP & LTMD	3.87%	3.50%	2.90%	2.35%	14.23%
4	Public Water Works	10.01%	7.33%	7.84%	9.87%	7.19%
5	Agriculture-Unmetered	-0.10%	-0.37%	-0.49%	-0.61%	-0.12%
6	Agriculture-Metered	3.06%	1.76%	-1.95%	4.52%	-11.37%
7	Electric Vehicle Charging	0.00%	0.00%	0.00%	0.00%	0.00%
	Sub-Total	**3.46%**	**2.76%**	**1.71%**	**1.92%**	**-0.06%**
	High Tension					
1	Industrial HT	11.81%	9.49%	9.15%	18.87%	42.56%

S. No.	Category	5 years	4 years	3 years	2 years	1 year
2	Railway Traction	-100.00%	0.00%	0.00%	0.00%	0.00%
3	Electric Vehicle Charging	0.00%	0.00%	0.00%	0.00%	0.00%
	Sub Total	**1.07%**	**4.89%**	**0.27%**	**-4.50%**	**-0.89%**
	Total	**2.79%**	**4.56%**	**2.37%**	**-0.24%**	**2.07%**

5.4.4 Consumer profile and connected load

MGVCL has also furnished the category-wise number of consumers and the connected load for the past years and CAGR growth rates for different periods (5 years, 4 years, 3 years, 2 years and YoY).

5.4.5 Category-wise Projected Growth Rates

The year-on-year growth rates considered by the petitioner for projection of energy sales, number of consumers and connected load for FY 2023-24 over the base number of FY 2021-22 and thereafter on FY 2021-22 are given below:

Table 5-3: Growth rates used by MGVCL

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

5.4.6 Category-wise Projections for Sales, Consumers, and Connected Load

The projected energy sales, consumers and connected load for FY 2023-24 by applying above mentioned growth rates y-o-y basis over FY 2021-22 category-wise elements are shown in the Table below:

Table 5-4: Sales, Consumers and Connected Load Projected by MGVCL for FY 2023-24

S. No.	Category	Sales (MUs)	Consumers (Nos.)	Connected Load (MW/MVA)
	Low Tension			
1	RGP	2,895	29,00,470	3,470
2	GLP	116	35,820	95
3	Non-RGP & LTMD	1,780	3,82,899	1,980
4	Public Water Works	441	29,352	158
5	Agriculture-Unmetered	468	25,482	204
6	Agriculture-Metered	913	1,94,884	1,201
7	Electric Vehicle Charging	5	41	2
	Sub-Total	**6,618**	**35,68,948**	**7,111**
	High Tension			
1	Industrial HT	5,869	2,825	1,990
2	Railway Traction	-	-	-
3	Electric Vehicle Charging	4	2	1
	Sub Total	**5,873**	**2,827**	**1,991**
	Total	**12,491**	**35,71,774**	**9,102**

5.4.7 Detailed Analysis of Energy Sales Projected

Based on the above revised submissions of the petitioner, the Commission now proceeds with the analysis and approval of Sales for each category for FY 2023-24.

5.4.7.1 RGP- Residential

Petitioner's submission

MGVCL submitted that the Company has witnessed a 3-year CAGR of 2.10% in the units sold between FY 2018-19 and FY 2021-22. The company expects this trend to continue in FY 2023-24. Moreover, the number of consumers added in the category has witnessed a 3-

year CAGR of 1.97% between FY 2018-19 and FY 2021-22. The company expects this trend to continue going forward. The connected load added in the category has witnessed a 3-year CAGR of 4.89% between FY 2018-19 and FY 2021-22, which is expected to continue going forward.

Commission's Analysis

The growth during the last 3 years in energy sales is 2.10% and MGVCL expects the same growth rate to be continued for FY 2023-24. The Commission has examined the trend of sales growth between FY 2018-19 to FY 2021-22 and finds the growth rates considered for future projections as appropriate. The Commission, therefore, approves the energy sales to the RGP-residential category at 2,895 MUs for FY 2023-24.

The Commission approves the energy sales to the RGP-residential category at 2,895 MUs for FY 2023-24.

5.4.7.2 GLP-General Lighting Purpose

Petitioner's submission

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

While, the number of consumers added in the category has witnessed a 3-year CAGR of 1.80% between FY 2018-19 and FY 2021-22. The Company expects this trend to continue going forward.

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

Commission's Analysis

The CAGR growth during past 3 years period from FY 2018-19 to FY 2021-22 is abnormal, and MGVCL does not expect the same growth rate to be continued for FY 2023-24 and hence considered normal 5% growth rate in sales. The Commission has examined the trend of sales growth between FY 2018-19 to FY 2021-22 and finds the growth rates are not predicting the actual figures, therefore, the Commission find it appropriate to consider the growth rate of 5% for future projections. The Commission, therefore, approves the energy sales at 116 MUs for FY 2023-24.

The Commission approves the energy sales at 116 MUs for GLP category for FY 2023-24.

5.4.7.3 Non- RGP & LTMD

Petitioner's submission

MGVCL submitted that for sales projection, the 3-year CAGR between FY 2018-19 and FY 2021-22 has been considered, which is 2.90%. The Company expects this trend to continue in FY 2023-24. Moreover, the number of consumers added in the category has witnessed a 3-year CAGR of 3.79% between FY 2018-19 and FY 2021-22. The Company expects this trend to continue going forward.

The connected load added in the category has witnessed a 3-year CAGR of 5.99% between FY 2018-19 and FY 2021-22, which is expected to continue going forward.

Commission's Analysis

The CAGR growth during past 3 years from FY 2018-19 to FY 2021-22 is 2.90%, and MGVCL expects the same growth rate to be continued for FY 2023-24. The Commission has examined the trend of sales growth between FY 2018-19 to FY 2021-22 and finds that growth of 2.90% adopted by MGVCL as reasonable. The Commission, therefore, approves the energy sales of 1,780 MUs to the Non-RGP & LTMD category for FY 2023-24.

The Commission approves the energy sales of 1,780 MUs for Non-RGP & LTMD category for FY 2023-24.

5.4.7.4 Public Water Works

Petitioner's submission

MGVCL submitted that for sales projection, the 3-year CAGR between FY 2018-19 to FY 2021-22 has been considered, which is 7.84%. The Company expects this trend to continue going forward. Similarly, number of consumers added in the category has witnessed a CAGR of 5.72% between FY 2018-19 and FY 2021-22. The Company expects this trend to continue going forward.

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

Commission's Analysis

The CAGR growth during past 3 years between FY 2018-19 to FY 2021-22 is 7.84%, and MGVCL expects the same growth rate to be continued for FY 2023-24. The Commission has examined the trend of sales growth between FY 2018-19 to FY 2021-22 and finds the growth rates considered for future projections as appropriate. The Commission, therefore, approves the energy sales for PWW category as projected by MGVCL, i.e., 441 MUs.

The Commission approves the energy sales of 441 MUs for PWW category for FY 2023-24.

5.4.7.5 Agriculture

Petitioner's submission

MGVCL submitted that based on Government and internal targets, it 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, MGVCL has considered a growth rate of 0% to project the sales, no. of consumers and connected load for unmetered category for FY 2023-24.

As regards 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 licence area of the Company has been presented in the Table below:

Table 5-5: New Connections to Agriculture Consumers as submitted by MGVCL

S. No.	Period	No. of Connections
1	FY 2022-23	7,000
2	FY 2023-24	11,925

In order to estimate the consumption of this category, MGVCL has considered same methodology as adopted by the Commission in the 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. Thus, based on the figures arrived from above, the total sales for FY 2023-24 has been calculated based on the average connected load per consumer for metered and unmetered categories combined worked out considering the period of 5 years i.e., from FY 2017-18 to FY 2021-22 and the number of new connections to be added during each year.

Table 5-6: Sales to Agriculture Consumers (Metered) as submitted by MGVCL

S. No.	Agricultur e Metered	No. of Connections	Average HP of DISCOM	HP Increase	MW Increase	Per HP Consumption	Additional Sale (MUs)
1	FY 2022-23	7,000	9	60,880	45	640	39

S. No.	Agriculture Metered	No. of Connections	Average HP of DISCOM	HP Increase	MW Increase	Per HP Consumption	Additional Sale (MUs)
2	FY 2023-24	11,925	9	1,03,713	77	640	66

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

Commission's Analysis

In Agriculture Consumer category, there is a mix of un-metered and metered consumers. The consumption of unmetered category has been considered at the same level as in FY 2021-22, as MGVCL has mentioned that there would be no additional connections under unmetered category in future years. The Commission has considered the approach considered by MGVCL and accordingly, approves sales of 468 MUs for unmetered category.

For consumption under metered category, the Commission has examined the methodology considered by MGVCL, which is same as that adopted by the Commission in the previous Tariff Order. Therefore, the Commission has considered the sales for metered Agriculture consumer category same as submitted by MGVCL, i.e., 913 MUs.

The Commission approves the energy sales of 468 MUs for Agriculture- Unmetered category and 913 MUs for Agriculture- Metered category for FY 2023-24.

5.4.7.6 Industrial HT

Petitioner's submission

MGVCL submitted that in this category, a constant variation in sales has been observed during last five years due to presence of Open Access, slowdown in the economy, etc. The year-on-year growth rate of 42.56% is significantly high and the company does not expect this growth to be sustainable. Hence, growth rate of 5% has been considered in FY 2023-24.

For addition of consumers in the category, the 3-year and 5-year CAGR of 4.86% and 5.55% respectively is being observed, however, the Company has considered a growth rate of 5% for FY 2023-24.

For projection of connected load, 3-year CAGR of 5.60% is being observed, however, the Company does not feel that this growth rate would sustain consistently. Hence a growth rate of 5% has been considered for FY 2023-24.

Commission's Analysis

The growth rate for energy sales considering year-on-year between FY 2020-21 to FY 2021-22 is 42.56% for this category. However, MGVCL considering the variation due to Open Access transaction and abnormal growth rate, has adopted growth rate of 5% for projection of energy sales for FY 2023-24. Similarly, the growth rate for projection of number of connections to be added in the category and growth in connected load has been considered as 5% instead of 3-year and 5-year CAGR, which are 4.86% and 5.55%, respectively. The Commission has examined the methodology adopted MGVCL for projection of sales in the category and finds growth rate considered by MGVCL as appropriate. The Commission, accordingly, approves sales of 5,869 MUs for Industrial HT category.

The Commission approves the energy sales of 5,869 MUs for Industrial HT category for FY 2023-24.

5.4.7.7 Electric Vehicle Charging category (LT & HT)

Petitioner's submission

MGVCL submitted that for EV, the Company has considered the impact of this policy while projecting the consumption, consumers and load during FY 2023-24. The company has considered the data available regarding the EV charging stations applications received / connections released by the company upto September 2022 as well as the discom wise loads likely to come under the govt. policy.

Commission's Analysis

The Commission has examined the submission of MGVCL in this regard and approves sales as projected by MGVCL, i.e., 5 MUs and 4 MUs for Electric Vehicle Charging (LT & HT) respectively.

The Commission approves the energy sales of 5 MUs and 4 MUs for EV (LT) and EV (HT) respectively for FY 2023-24.

Total energy sales approved by the Commission based on the above analysis is summarised for FY 2023-24 in the Table below:

Table 5-7: Projection of Sales approved by the Commission for FY 2023-24 (MUs)

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

5.5 Distribution Losses

MGVCL has projected the distribution losses for FY 2023-24 as given in the Table below:

Table 5-8: Projection of Distribution Loss (%)

Particulars	FY 2023-24
Distribution Loss	9.00%

Petitioner's submission

MGVCL submitted that the Company has constantly through its endeavours tried to reduce distribution losses in the past. These efforts shall continue and will be enhanced. Further, MGVCL has achieved lower distribution losses in FY 2021-22, however, it is not possible to maintain such low level of distribution losses. Hence, it has projected higher distribution losses for FY 2022-23 considering day by day Open Access consumers are increasing and probability of increase in Open Access consumers for FY 2023-24 is high; losses in Urban & JGY categories are showing an increasing trend in the FY 2022-23; day time power supply to AG consumers under KSY scheme started in phased manner, which lead to increase in losses; more than 8 hours of power supply to Ag consumers on account of delayed/poor monsoon due to global warming effect & unpredictable rain in Gujarat has also led to predict higher losses; and Increase in Solar Roof Top penetration in the Grid.

Commission's Analysis

The Commission in the Tariff Order dated 31st March, 2022, had approved the distribution loss at 9.00% for FY 2022-23. Also, the Commission has approved the distribution loss at 7.74% for FY 2021-22. MGVCL has projected distribution loss for FY 2022-23 as 9.00%, which is higher as compared to actual distribution losses of 7.74% achieved during FY 2021-22. Considering the actual distribution losses incurred during past years with respect to the approved distribution losses, and the capital investments being made regularly by MGVCL, the Commission find it appropriate to allow distribution losses as approved for FY 2022-23. The Commission has approved distribution loss for FY 2023-24 same as approved for FY 2022-23, as shown in the Table below:

Table 5-9: Approved Distribution Loss for FY 2023-24 (%)

Particulars	Approved in this Order
Distribution Loss	9.00%

5.6 Energy Balance and Energy Requirement Projection

The total energy requirement of the Distribution Company to meet the total demand of its consumers is the sum of the estimated energy sales and the system losses (distribution loss) approved by the Commission.

Petitioner's submission

To arrive at the total energy requirement for MGVCL, the total sales projected in MUs have been grossed up by with transmission losses and distribution losses. MGVCL has considered intra-State transmission losses as per the projection by GETCO in its ARR petition for FY 2023-24. The inter-State transmission losses, viz., PGCIL pooled losses have been assumed at same level as in FY 2021-22. The distribution losses have been considered as discussed above.

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

Table 5-10: Energy Balance for FY 2023-24 as submitted by MGVCL

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

S. No.	Particulars	Unit	FY 2023-24
10	**Total Energy Requirement**	**MUs**	**14,469.49**

MGVCL submitted that the power purchase is assumed to be carried out in a consolidated manner and hence, energy requirement of all four Distribution Companies has been aggregated to arrive at consolidated energy requirement for all the four Distribution Companies, as detailed below:

Table 5-11: Consolidated Energy Requirement for FY 2023-24 (MUs)

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

Commission's Analysis

MGVCL has submitted the energy balance and the total energy requirement as discussed above. The Commission considering the projection of energy sales and approved distribution losses as discussed above, has approved the energy requirement for FY 2023-24, as shown in the Table below:

Table 5-12: Approved Energy requirement for FY 2023-24

S. No.	Particulars	Unit	FY 2023-24
1	Energy Sales	MUs	12,491
2	Distribution Losses	MUs	1,235
		%	9.00%
3	Energy Requirement	MUs	13,726

For energy balancing, the Commission has considered the intra-State Transmission Loss as approved for GETCO and the pooled loss has been considered at same level as in FY 2021-22. The approved Energy Balance for FY 2023-24 is shown in the Table below:

Table 5-13: Approved Energy Balance for MGVCL for FY 2023-24

S. No.	Particulars	Unit	FY 2023-24
1	Energy Sales	MUs	12,491
2	Distribution Losses	MUs	1,235
		%	9.00%
3	Energy Requirement	MUs	13,726
4	Less: Power Purchase from SSDSP	MUs	15
5	Power Purchase required from GUVNL	MUs	13,712
6	Transmission Losses	MUs	512
		%	3.60%
7	Total Energy to be input to Transmission System	MUs	14,224
8	Pooled Losses in PGCIL System	MUs	231
9	Add: Power Purchase from SSDSP	MUs	15
10	**Total Energy Requirement**	**MUs**	**14,469**

The Commission has approved the energy balance and the total energy requirement for FY 2023-24 for other three State DISCOMs in their respective Orders. Based on the same, the approved consolidated energy requirement for all the four DISCOMs is as shown below:

Table 5-14: Approved Consolidated Energy Requirement for FY 2023-24 (MUs)

Particulars	Unit	DGVCL	MGVCL	PGVCL	UGVCL	Total
Total Energy Requirement	MUs	30,218	14,469	42,357	31,309	118,353

5.7 Estimation of ARR for FY 2023-24

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

- Power Purchase Cost
- O&M Cost
- Interest on Loan and Financial Charges

- Interest on Working Capital
- Provision for Bad Debts
- Return on Equity
- Provision for Tax

5.8 Power Purchase Cost for FY 2023-24 - Petitioner's Submission

5.8.1 Power Purchase from Small-Scale Distributed Solar Projects

Petitioner's submission

MGVCL submitted that the State Government has notified the Policy for development of small scale distributed solar projects vide GR dated 6th March, 2019 to allow individuals, company or body corporate or association or body of individuals, cooperative society of individual / farmers or artificial juridical persons to set up solar plant of capacity from 0.5 MW to 4 MW for sale of energy to the DISCOMs.

Therefore, DISCOMs have signed PPAs under SSDSP and power generation will be available at Distribution level. Based on the quantum of PPAs signed, expected Commercial Date of Operation (CoD) and Capacity Utilization Factor (CUF), power generation from SSDSP has been estimated as shown in the Table below:

Table 5-15: Power Purchase under SSDSP

S. No.	Details	Unit	DGVCL	MGVCL	PGVCL	UGVCL
1	MW Capacity tie up under SSDSP	MW	0.50	8.98	173.49	177.04
2	Likely COD	mm/yy	Expected COD – 15.11.2022	3.5 MW commissioned. 5.475 MW to be commissioned in Feb 2023	95.05 MW already commissioned. 78.44 MW likely to be commissioned in Nov. 2022	Expected CoD - 27.11.2022

S. No.	Details	Unit	DGVCL	MGVCL	PGVCL	UGVCL
3	Expected CUF	%	19%	19%	19%	19%
4	**Expected Generation from SSDSP**	**MUs**	**0.83**	**14.68**	**291.04**	**294.67**
5	Power Purchase Rate	Rs./kWh	2.83	2.83	2.83	2.83
6	Power Purchase Cost	Rs. Crore	0.23	4.15	82.36	83.39

5.8.2 Power Purchase Sources of GUVNL

Petitioner's submission

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) <u>Existing capacity with GUVNL</u>

The existing contracted capacity tied up by GUVNL as on 1st October, 2022 is 30,166 MW. 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 actuals of FY 2021-22 are shown in the Table below. Necessary adjustment has been made in fixed cost in case of higher/lower payment made during FY 2021-22 due to specific reasons.

Table 5-16: Existing Capacity Allocation with GUVNL

Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumption (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)
	GSECL					
1	GSECL Gandhinagar - 5	210	9.50%	85.00%	142	3.87

Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumption (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)
2	GSECL Wanakbori - 7	210	9.50%	67.08%	148	4.07
3	GSECL Utran Expan	375	3.00%	1.00%	275	7.67
4	GSECL Dhuvaran - 7	107	4.00%	1.00%	82	8.38
5	GSECL Dhuvaran - 8	112	3.00%	1.00%	135	6.06
6	GSECL Ukai	610	9.00%	80.00%	383	3.81
7	GSECL Ukai Expan	500	6.00%	53.80%	294	3.46
8	GSECL Gandhinagar 3-4	420	9.50%	59.64%	276	4.03
9	GSECL Wanakbori 1-6	1,260	9.00%	48.08%	432	4.05
10	GSECL Sikka Expansion	500	9.00%	70.00%	493	3.78
11	GSECL Kutch Lignite	75	12.00%	68.99%	136	3.22
12	GSECL Kutch Lignite Exp unit 4	75	12.00%	80.00%	201	2.90
13	GSECL Ukai Hydro	305	0.60%	25.84%	30	-
14	GSECL Kadana Hydro	242	1.00%	15.49%	60	-
15	GSECL Dhuvaran CCPP III	376	3.00%	1.00%	153	6.66
16	GSECL BLTPS	500	11.00%	60.00%	440	2.68
17	GSECL Wanakbori - 8	800	5.25%	65.53%	585	3.47
	Sub Total	**6,677**				
	IPP's					
1	Gujarat State Energy Generation	156	2.90%	1.00%	53	11.02
2	Gujarat State Energy Generation Expansion	351	3.00%	1.00%	134	10.24
3	Gujarat Industries Power Co Ltd (165 MW) [1]	-	0.00%	1.00%	-	10.63

Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumption (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)
4	Gujarat Industries Power Co Ltd (SLPP)	250	10.00%	80.00%	128	1.81
5	Gujarat Mineral Development Corp.	250	11.00%	80.00%	182	1.54
6	Gujarat Industries Power Co Ltd (145 MW)	28	2.90%	1.00%	1	8.91
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	250	10.00%	80.00%	214	2.06
8	GPPC Pipavav	702	3.00%	1.00%	320	10.31
	Sub Total	**1,987**				
	Central Sector					
1	NPC-Tarapur 1 & 2	160	10.00%	85.00%	-	2.40
2	NPC-Tarapur 3 & 4	274	9.00%	85.00%	-	3.55
3	NPC-Kakrapar	125	8.00%	85.00%	-	2.30
4	NTPC-Vindhyachal - I	247	9.00%	85.00%	150	1.74
5	NTPC-Vindhyachal - II	252	7.05%	85.00%	134	1.62
6	NTPC-Vindhyachal - III	279	6.25%	85.00%	204	1.59
7	NTPC-Korba	380	7.04%	85.00%	195	1.46
8	NTPC-Korba -III	130	6.25%	85.00%	123	1.42
9	NTPC-Kawas	187	2.75%	1.00%	92	12.39
10	NTPC-Jhanor	237	2.75%	1.00%	147	9.03
11	NTPC-Sipat-I	577	6.25%	85.00%	515	1.54
12	NTPC-Sipat - II	286	6.25%	85.00%	197	1.60
13	NTPC-Kahlagaon I	141	9.00%	85.00%	100	2.45
14	NTPC-Vindhyachal - IV	258	6.25%	85.00%	282	1.58
15	NTPC-Mauda	460	6.25%	85.00%	593	3.35
16	NTPC-Vindhyachal - V	103	7.25%	85.00%	119	1.64
17	NTPC-Mauda II	530	6.25%	85.00%	550	3.46

Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumption (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)
18	NTPC-Solapur	24	6.25%	85.00%	29	3.67
19	NTPC-Gadarwara	333	6.25%	85.00%	484	3.14
20	NTPC-LARA	186	6.25%	85.00%	218	2.16
21	NTPC-Khargone	270	6.25%	85.00%	342	2.98
22	NTPC-Farakka - 3	58	6.25%	85.00%	60	2.80
23	NTPC-Kahalgaon II	146	6.25%	85.00%	111	2.65
24	NTPC-Farakka - 1 & 2	255	6.78%	85.00%	146	2.83
25	NTPC-Talcher	24	7.05%	85.00%	16	1.82
26	NTPC-Darlipalli	14	6.25%	85.00%	16	1.05
27	NTPC-Unchahar - 1	63	9.00%	85.00%	44	3.29
28	NTPC-Tanda - 2	44	5.75%	85.00%	91	2.78
29	NTPC-Barah - 1	139	6.25%	85.00%	236	2.65
30	NTPC-Dadri - 1	577	9.00%	85.00%	383	3.88
31	Sardar Sarovar Narmada Nigam Ltd	232	0.70%	30.00%	-	2.05
32	Nabinagar Power Generating Co Ltd	50	6.25%	85.00%	76	2.01
	Sub Total	**7,042**				
	Others					
1	Captive Power	8	0.00%	83.13%	-	2.15
	Renewable					
1	Wind Farms	4,280	0.00%	22.02%	-	3.52
2	Solar	3,582	0.00%	17.14%	-	5.11
3	Small/Mini Hydel	22	0.00%	45.20%	-	3.95
4	Waste to Energy	8	0.00%	1.93%	-	3.61
	Competitive Bidding					
1	Adani Power Ltd Bid 1	1,200	0.00%	80.00%	661	7.18

Sr. No.	Name of the Station	Capacity allocated to GUVNL (MW)	Auxiliary Consumption (%)	Plant Load Factor (%)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)
2	Adani Power Ltd Bid 2	1,234	0.00%	80.00%	725	7.52
3	Essar Power Gujarat Ltd	1,122	0.00%	40.00%	258	6.41
4	ACB India Ltd	200	0.00%	80.00%	121	0.66
5	Coastal Gujarat Power Co Ltd	1,805	0.00%	50.00%	555	5.27
6	MTOA	1,000	0.00%	28.33%	376	1.65
	Sub Total	**14,460**				
	Total	**30,166**				

(II) Capacity Addition

The capacity addition envisaged during FY 2023-24 is NIL.

(III) Renewable Purchase Obligation (RPO)

In accordance with GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 and its First and Second Amendments in 2014, 2018 and 2022 respectively, the DISCOMs are obligated to procure electricity (in kWh) from renewable energy (RE) 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 specified by Commission in its third amendment of the RPO obligation for FY 2023-24, RPO was 9.50% from Solar, 8.40% from Wind, and 0.75% from other sources like Biomass, Bagasse, MSW, Small/ Mini Hydel, etc.

GUVNL/DISCOMs have proposed to purchase renewable power from the tied-up sources, new capacity addition during FY 2023-24, local power purchase by DISCOM from SSDP and wheeled energy eligible for DISCOM RPO obligation as per Regulation /Order of Hon'ble Commission.

Purchase from RE sources for FY 2023-24 based on actual tied up capacity is detailed in the Table below:

Table 5-17: Additional RE Capacity envisaged for FY 2023-24

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

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

Table 5-18: Procurement from RE for meeting projected RPO

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

Further, MGVCL submitted that 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 Regulations/Orders of the Commission.

5.8.3 Methodology for Forecasting Power Purchase Cost of GUVNL

Petitioner's submission

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

- The NPC power plants, renewable and hydro plants have been considered as must run power plants.
- During merit order despatch, at least 7% availability of each plant has been considered to take care of the peak loads and peak season requirements.
- Availability of Thermal Stations has been considered at 85% / 80% as defined in Regulations (CERC/GERC) and performance in previous years.
- The Fixed Cost (FC) and Variable Cost (VC) for existing GSECL, IPP, renewable and central sector plants have been taken as per actuals of FY 2021-22 as base power purchase cost.
- For Private IPPs, FC and VC is considered based on likely cost as per PPAs.

5.8.4 Power Purchase Costs

Petitioner's submission

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 FC and VC are shown in the Table below. The dispatched MUs based on merit order stacking consists of power for supplying to the DISCOMs as well as for the purpose of trading.

Table 5-19: Projected Power Purchase Cost for FY 2023-24

S. No.	Name of the Station	Available (MU)	Dispatch (MU)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)	Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)
	GSECL						
1	GSECL Gandhinagar - 5	1,419	1,419	142	3.87	549	691
2	GSECL Wanakbori - 7	1,120	1,120	148	4.07	456	604
3	GSECL Utran Expan	32	32	275	7.67	25	300
4	GSECL Dhuvaran - 7	9	9	82	8.38	8	89
5	GSECL Dhuvaran - 8	10	10	135	6.06	6	141
6	GSECL Ukai	3,901	3,901	383	3.81	1,484	1,868

S. No.	Name of the Station	Availabl e (MU)	Dispatch (MU)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)	Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)
7	GSECL Ukai Expan	2,221	2,221	294	3.46	768	1,062
8	GSECL Gandhinagar 3-4	1,991	1,991	276	4.03	802	1,078
9	GSECL Wanakbori 1-6	4,842	4,842	432	4.05	1,963	2,395
10	GSECL Sikka Expansion	2,798	2,798	493	3.78	1,058	1,550
11	GSECL Kutch Lignite	400	400	136	3.22	129	265
12	GSECL Kutch Lignite Exp unit 4	464	464	201	2.90	135	336
13	GSECL Ukai Hydro	688	688	30	-	-	30
14	GSECL Kadana Hydro	326	326	60	-	-	60
15	GSECL Dhuvaran CCPP III	32	32	153	6.66	21	174
16	GSECL BLTPS	2,345	2,345	440	2.68	630	1,070
17	GSECL Wanakbori - 8	4,363	4,363	585	3.47	1,514	2,098
	Sub Total	**26,960**	**26,960**	**4,265**		**9,545**	**13,811**
	IPP's						
1	Gujarat State Energy Generation	13	13	53	11.02	15	67
2	Gujarat State Energy Generation Expansion	30	30	134	10.24	31	164
3	Gujarat Industries Power Co Ltd (165 MW)	-	-	-	10.63	-	-
4	Gujarat Industries Power Co Ltd (SLPP)	1,581	1,581	128	1.81	287	415
5	Gujarat Mineral Development Corp.	1,564	1,564	182	1.54	241	424
6	Gujarat Industries Power Co Ltd (145 MW)	2	2	1	8.91	2	3
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	1,581	1,581	214	2.06	325	539
8	GPPC Pipavav	60	60	320	10.31	62	382
9	Adani Power Ltd Bid 1	8,433	738	661	7.18	529	1,191
10	Adani Power Ltd Bid 2	8,672	759	725	7.52	571	1,295
11	Essar Power Gujarat Ltd	3,942	690	258	6.41	442	701
12	ACB India Ltd	1,405	1,405	121	0.66	92	213

S. No.	Name of the Station	Available (MU)	Dispatch (MU)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)	Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)
13	Coastal Gujarat Power Co Ltd	7,928	5,985	555	5.27	3,154	3,709
14	MTOA	2,489	2,489	376	1.65	411	787
15	Power Exchange	7,500	7,500	-	5.20	3,899	3,899
16	Short term power purchase	4,800	4,800	-	3.07	1,472	1,472
	Sub Total	**49,999**	**29,197**	**3,728**		**11,533**	**15,261**
	Central Sector						
1	NPC-Tarapur 1 & 2	1,075	1,075	-	2.40	258	258
2	NPC-Tarapur 3 & 4	1,862	1,862	-	3.55	661	661
3	NPC-Kakrapar	859	859	-	2.30	197	197
4	NTPC-Vindhyachal - I	1,680	1,680	150	1.74	292	442
5	NTPC-Vindhyachal - II	1,751	1,751	134	1.62	284	418
6	NTPC-Vindhyachal - III	1,955	1,955	204	1.59	310	514
7	NTPC-Korba	2,637	2,637	195	1.46	386	581
8	NTPC-Korba -III	912	912	123	1.42	129	252
9	NTPC-Kawas	16	16	92	12.39	20	112
10	NTPC-Jhanor	20	20	147	9.03	18	165
11	NTPC-Sipat-I	4,035	4,035	515	1.54	621	1,136
12	NTPC-Sipat - II	1,999	1,999	197	1.60	320	517
13	NTPC-Kahlagaon I	958	958	100	2.45	234	334
14	NTPC-Vindhyachal - IV	1,808	1,808	282	1.58	286	568
15	NTPC-Mauda	3,222	3,222	593	3.35	1,081	1,674
16	NTPC-Vindhyachal - V	711	711	119	1.64	117	235
17	NTPC-Mauda II	3,710	3,710	550	3.46	1,284	1,834
18	NTPC-Solapur	170	170	29	3.67	62	92
19	NTPC-Gadarwara	2,334	2,334	484	3.14	734	1,218
20	NTPC-LARA	1,304	1,304	218	2.16	282	499
21	NTPC-Khargone	1,889	1,889	342	2.98	562	904
22	NTPC-Farakka - 3	402	402	60	2.80	113	173
23	NTPC-Kahalgaon II	1,022	1,022	111	2.65	271	382

S. No.	Name of the Station	Available (MU)	Dispatch (MU)	Fixed Cost (Rs. Crore)	Variable Cost (Rs./kWh)	Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)
24	NTPC-Farakka - 1 & 2	1,775	1,775	146	2.83	502	648
25	NTPC-Talcher	167	167	16	1.82	30	46
26	NTPC-Darlipalli	98	98	16	1.05	10	27
27	NTPC-Unchahar - 1	428	428	44	3.29	141	185
28	NTPC-Tanda - 2	310	310	91	2.78	86	177
29	NTPC-Barah - 1	975	975	236	2.65	258	494
30	NTPC-Dadri - 1	3,920	3,920	383	3.88	1,520	1,903
31	Sardar Sarovar Narmada Nigam Ltd	607	607	-	2.05	124	124
32	Nabinagar Power Generating Co Ltd	349	349	76	2.01	70	146
	Sub Total	**44,961**	**44,961**	**5,650**		**11,267**	**16,917**
	Others						
1	Captive Power	58	58	-	2.15	13	13
	Renewable						
1	Wind Farms	8,278	8,278	-	3.52	2,911	2,911
2	Solar	5,394	5,394	-	5.11	2,757	2,757
3	Small/Mini Hydal	86	86	-	3.95	34	34
4	Biomass	-	-	-	-	-	-
5	Waste to Energy	1	1	-	3.61	0	0
6	HPO	-	-	-	-	-	-
7	Solar (New)	4,079	4,067	-	2.25	914	914
8	Wind (New)	-	-	-	-	-	-
9	Others (New)	29	29	-	6.31	18	18
10	HPO (New)	349	348	-	5.00	174	174
	Sub Total	**18,274**	**18,262**	**-**		**6,821**	**6,821**
	TOTAL	**140,195**	**119,381**	**13,643**		**39,167**	**52,811**

5.8.5 Transmission and other Cost

Petitioner's submission

MGVCL has submitted that the total power purchase cost for FY 2023-24 also consists of Transmission Charges, GUVNL charges and SLDC Fees and Charges in addition to the above-mentioned fixed cost and variable charges. The details of the such charges are as under:

A. Transmission Charges

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

Based on the transmission costs of PGCIL, GETCO and SLDC, the total transmission costs to be included in the overall Power Purchase Costs of all DISCOMs, is shown in the Table below:

Table 5-20: Projected Transmission Charges for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	PGCIL Charges	3,320
2	Annual Transmission Charges of GETCO	5,205
3	SLDC Charges	41

B. GUVNL Cost

MGVCL has submitted that GUVNL is entrusted with the function of Bulk Power Purchase on behalf of four Distribution Companies and Bulk Supply to Distribution Companies for onwards retail supply to consumers, trading of surplus power on behalf of Distribution Companies and activities related to overall coordination between its subsidiary companies.

GUVNL is procuring power on behalf of all DISCOMs to have an economical and optimised power purchase cost. It also undertakes the function of raising and managing the overall loan portfolio of GUVNL and its subsidiaries. GUVNL is charging Rs. 0.04 for every unit transacted. The total cost has been arrived upon after considering the total dispatchable units required to be served to all the four DISCOMs during FY 2023-24.

Table 5-21: GUVNL Cost for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	GUVNL Cost at 4.00 Paisa per Unit	478

5.8.6 Total Power Purchase Cost

Petitioner's submission

Fixed Cost

The Table below shows the total fixed cost projected for FY 2023-24:

Table 5-22: Projected Fixed Cost for DISCOMs for FY 2023-24 (Rs. Crore)

Fixed cost	GETCO Cost	PGCIL Charges	SLDC Charges	Total Fixed Cost	DISCOM Fixed Cost
13,643	478	3,320	41	22,209	22,209

Variable Cost

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

Table 5-23: Projected Variable Cost for DISCOMs for FY 2023-24

Variable cost	GUVNL Cost	Total variable Cost	Despatched (MUs)	Variable Cost per Unit (Rs./kWh)	DISCOM (MUs)	Variable Cost
39,167	478	39,645	1,19,381	3.32	1,19,381	39,645

5.8.7 Net Power Purchase Cost

Petitioner's submission

The net power purchase cost is shown below:

Table 5-24: Projected Net Power Purchase Cost for FY 2023-24 (Rs. Crore)

DISCOMs Fixed cost	DISCOMs Variable Cost	Total Power purchase cost
22,209	39,645	61,854

5.8.8 Bulk Supply Tariff (BST)

Petitioner's submission

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 BST is that:

- GUVNL shall purchase power from various sources in bulk and supply power to 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 are different for each DISCOM. Consequently, the revenue earning capability of each DISCOM is different.
- It is necessary to build a mechanism to bring them to a level playing field in their paying capacity for power purchase and it is proposed to be achieved by different 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.

MGVCL 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 BST. In accordance with this arrangement related to power procurement, the Distribution Licensees have entered into bulk supply arrangement / agreement with GUVNL to meet their 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 EA 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 ARR 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 ARR. 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 BST to each of the DISCOMs, which has already been adopted by the Commission in the previous Tariff Orders. In this way, it would be possible to ensure uniform retail consumer Tariffs in the four DISCOMs.

5.8.9 Allocation of Power Purchase Cost under BST mechanism

Petitioner's submission

The Net Power Purchase cost worked out in the above section has been allocated for FY 2023-24 based on the methodology adopted by the 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 5-25: Allocation of Power Purchase Cost (Rs. Crore)

S. No.	Particulars	DGVCL	MGVCL	PGVCL	UGVCL
1	Sales (MUs)	27,425	12,491	33,704	27,464
2	Revenue from Existing Tariff	13,246	5,813	13,744	9,810
3	Revenue from FPPPA @ Rs. 1.80/ unit	7,131	3,248	8,763	7,141
4	Other Income (Consumer Related)	251	99	264	174

S. No.	Particulars	DGVCL	MGVCL	PGVCL	UGVCL
5	Agricultural Subsidy	54	71	430	545
6	**Total**	**20,681**	**9,231**	**23,201**	**17,670**
7	Expense other than Power Purchase	1,355	1,258	4,746	2,607
8	Power Purchase Cost of SSDSP	0	4	82	83
9	Amount Available with DISCOM for Power purchase from GUVNL	19,325	7,969	18,373	14,980

Table 5-26: Total Revenue (Gap)/ Surplus (Rs. Crore)

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

Table 5-27: Bulk Supply Tariff for FY 2023-24 (Rs. Crore)

S. No.	Particulars	DGVCL	MGVCL	PGVCL	UGVCL
1	**Revenue (Gap)/Surplus**	**(1,207)**			
2	Ratio of allocation of Revenue (Gap)/Surplus	26%	12%	35%	27%
3	Revenue (Gap)/ Surplus allocation	(312)	(146)	(425)	(323)
4	Amount Available with DISCOM for Power purchase from GUVNL	19,325	7,969	18,373	14,980
5	**Power purchase cost of GUVNL**	19,638	8,115	18,798	15,303
6	**Power purchase cost of SSDSP**	0	4	82	83
7	**Power purchase cost of DISCOM**	**19,638**	**8,120**	**18,880**	**15,387**
8	Energy Purchase in DISCOM (MUs)	30,913	14,469	42,357	32,242
9	**Bulk Supply Tariff (Rs. / kWh)**	**6.35**	**5.61**	**4.46**	**4.77**

5.9 Power Purchase Cost for FY 2023-24- Commission's Analysis

5.9.1 Power Purchase from SSDSP

MGVCL submitted that it has considered notification of the State Government for development of SSDSP. Therefore, DISOCMs have signed PPAs under SSDSP and power generation will be available at Distribution level. MGVCL has worked out power generation from SSDSP based on the quantum of PPA signed, expected CoD and CUF. The Commission has gone through the submission of MGVCL regarding power purchased from SSDSP and finds it prudent to allow the same. Accordingly, the Commission has approved the power purchase from SSDSP as projected by MGVCL, which is shown in the Table below:

Table 5-28: Approved Power Purchase under SSDSP

S. No.	Details	Unit	DGVCL	MGVCL	PGVCL	UGVCL
1	MW Capacity tied-up under SSDSP	MW	0.50	8.98	173.49	177.04
2	Likely COD	MM/YY	Expected COD – 15.11.2022	3.5 MW commissioned. 5.475 MW to be commissioned in Feb 2023	95.05 MW already commissioned. 78.44 MW likely to be commissioned in Nov. 2022	Expected CoD - 27.11.2022
3	Expected CUF	%	19%	19%	19%	19%
4	**Expected Generation from SSDSP**	**MUs**	**0.83**	**14.68**	**291.04**	**294.67**
5	Power Purchase Rate	Rs./kWh	2.83	2.83	2.83	2.83
6	Power Purchase Cost	Rs. Crore	0.23	4.15	82.36	83.39

5.9.2 Power Purchase Sources

As mentioned earlier, MGVCL has submitted that GUVNL has entered into contracts for the existing capacity with GSECL, Central Generating Companies, IPPs, Renewable energy sources - Hydro, Solar, Wind, Other RE Sources, IPPs and Power tied up through competitive bidding, etc. The details of the existing plants are given in Table 5-17. GUVNL has also entered into contracts for additional capacity likely to be commissioned in FY 2023-24. The details of additional plants likely to be commissioned in FY 2023-24 are given in Table 5-18.

The capacity projected by the petitioner from each of the sources are summarised in the Table below:

Table 5-29: Capacity Contracted Source-Wise by GUVNL for FY 2023-24 as submitted by MGVCL (MW)

S. No	Particulars	FY 2023-24
1	GSECL	6,677
2	IPPs	1,987
3	Central Generating Stations	7,042
4	Renewable	7,892
5	Competitive Bidding & PX	6,561
6	Other- CPP	8
	Total	**30,166**

Renewable Purchase Obligation (RPO)

The petitioner has submitted the details for RPO compliance for FY 2023-24 as discussed in earlier in Section 5.8.2 (III). The Commission has approved the total energy requirement of 118,353 MUs for all the four DISCOMs for FY 2023-24 based on the energy balance and energy requirement approved for the respective DISCOMs.

As the RPO targets for FY 2023-24 are already being specified by the Commission in its third amendment of RPO Obligation. Also, while computing the RE capacity for FY 2022-23, the petitioner has considered existing tied up sources along with new RE plants expected to be commissioned in FY 2023-24. The list of new plants expected to be operational in FY 2023-24 are shown in the Table below:

Table 5-30: New MSW Plants coming up in FY 2023-24

S. No.	Name of the Station	Capacity	Variable Cost (Rs./kWh)	Generation (MUs)	Variable Cost (Rs. Crore)
1	Goodwatts WTE Ltd.	14.90	6.31	7.21	4.55
2	JITF Urban Waste Mgmt Ahmedabad Pvt. Ltd.	15.00	6.31	7.25	4.58
3	Goodwatts WTE Rajkot Pvt. Ltd.	14.90	6.31	7.21	4.55
4	Goodwatts WTE Vadodara Pvt. Ltd.	14.90	6.31	7.21	4.55

Table 5-31: New Solar Plants coming up in FY 2023-24

S No.	Name of the Station	Rated Capacity allocated to GUVNL (MW)	Variable Cost (Rs./kWh)	Generation (MUs)	Variable Cost (Rs. Crore)
1	Tata Power Renewable Energy Ltd. (TP Kirnali Ltd)	120	2.64	286	75.44
2	Gujarat State Electricity Corporation Ltd	100	2.65	220	58.19
3	Vena Energy Clean Power Pvt Ltd	40	2.61	105	27.51
4	Torrent Solar Power Pvt Ltd.	100	1.99	242	48.21
5	NTPC Renewable Energy Ltd.	200	1.99	486	96.81
6	ABReL SPV2 Ltd.	120	1.99	290	57.68
7	AEW India West One Pvt Ltd.	80	1.99	200	39.85
8	NTPC Renewable Energy Ltd.	150	2.20	368	80.90
9	Sprng Ujjvala Energy Pvt Ltd.	120	2.20	306	67.25
10	SJVN Ltd.	70	2.21	177	39.14
11	TP Saurya Ltd.	60	2.20	149	32.76
12	Coal India Ltd.	100	2.20	246	54.11
13	SJVN Ltd.	100	2.64	252	66.42
14	SJVN Limited	100	2.29	97	22.31
15	SolarXL Alpha Energy Private Limited	200	2.29	168	38.51
16	Amsa Solar Energy Private Limited	80	2.29	71	16.15
17	Hinduja Renewable Energy Private Limited	120	2.29	106	24.22

S No.	Name of the Station	Rated Capacity allocated to GUVNL (MW)	Variable Cost (Rs./kWh)	Generation (MUs)	Variable Cost (Rs. Crore)
18	ABReL SPV2 Ltd.	500	2.30	155	35.60
19	Hinduja Renewable Energy Private Limited	240	2.30	67	15.38
20	SJVN Limited	260	2.30	77	17.77

The list of plants mentioned in the Table above are expected to be completed and operational by March 2023. Therefore, the Commission has considered generation from these plants for RPO compliance of FY 2023-24. Thus, the Commission has considered exiting tied up sources and capacity of new plants expected to be operational during FY 2023-24.

Accordingly, the Commission has approved the procurement of RE power for meeting RPO target for FY 2023-24, as detailed in the Table below:

Table 5-32: Procurement from RE for meeting projected RPO for FY 2023-24 (MUs)

Particulars	Solar	Wind	Others	HPO	Total
Total Power Purchase			**1,17,752**		
RPO Target (%)	9.50%	8.40%	0.75%	0.05%	18.70%
RPO Target	11,186	9,891	883	59	22,020
RE Purchase	11,186	9,891	883	59	22,020
Unmet RPO	-	-	-	-	-

5.9.3 Merit Order despatch and Total Energy requirement including tradable energy

As discussed in Para 5.8.3, in order to optimize the Power Purchase Cost, GUVNL has worked out a comprehensive merit order despatch (MOD).

The quantum of power dispatchable (to be purchased) is arrived at based on the energy available from various sources less energy requirement by the four DISCOMs and energy that could be traded by GUVNL, as given in the Table below:

Table 5-33: Energy requirement and Energy dispatchable as projected by the DISCOMs (MUs)

S. No	DISCOM	FY 2023-24
1	DGVCL	30,913
2	MGVCL	14,455
3	UGVCL	31,947
4	PGVCL	42,066
5	Total requirement at four DISCOMs	1,19,381
6	Tradable energy projected by GUVNL	1,19,381
7	**Total Despatch units**	**1,19,382**

Though the availability is in the order of 1,40,195 MUs during FY 2023-24, DISCOMs have limited the despatch to 1,19,381 MUs as above to meet the total requirement of the four DISCOMs. The projected dispatchable energy is about 81.90% of the projected available energy during FY 2023-24.

The Commission in the analysis of energy sales projected by DISCOMs has approved energy sales and energy requirement of each DISCOM.

The energy requirement projected and energy requirement approved for each DISCOM by the Commission are summarised below:

Table 5-34: Energy requirement and Energy dispatchable as projected by the DISCOMs (MUs)

S. No	DISCOM	Energy Requirement for FY 2023-24	
		Projected	Approved
1	DGVCL	30,913	30217
2	MGVCL	14,455	14455
3	UGVCL	31,947	31014
4	PGVCL	42,066	42066
5	Total requirement at four DISCOMs	1,19,381	1,17,752
6	**Total Despatch units**	**1,19,382**	**1,17,752**

5.9.4 Power Purchase during FY 2023-24

The power purchase for FY 2023-24 is based on the energy requirement of MGVCL / four DISCOMs approved by the Commission.

The source-wise power available and dispatchable units based on the merit order despatch projected for FY 2023-24 are given in the Table below:

Table 5-35: Energy Available & Dispatchable projected for FY 2023-24

Sr. No.	Name of the Station	Available (MU)	Dispatch (MU)
	GSECL		
1	GSECL Gandhinagar – 5	1,419	1,419
2	GSECL Wanakbori – 7	1,120	1,120
3	GSECL Utran Expan	32	32
4	GSECL Dhuvaran – 7	9	9
5	GSECL Dhuvaran – 8	10	10
6	GSECL Ukai	3,901	3,901
7	GSECL Ukai Expan	2,221	2,221
8	GSECL Gandhinagar 3-4	2,002	2,002
9	GSECL Wanakbori 1-6	4,842	4,842
10	GSECL Sikka Expansion	2,798	2,798
11	GSECL Kutch Lignite	400	400
12	GSECL Kutch Lignite Exp unit 4	464	464
13	GSECL Ukai Hydro	688	688
14	GSECL Kadana Hydro	326	326
15	GSECL Dhuvaran CCPP III	32	32
16	GSECL BLTPS	2,345	2,345
17	GSECL Wanakbori - 8	4,363	4,363
	Sub Total	**26,971**	**26,971**
	IPP's		
1	Gujarat State Energy Generation	13	13

Sr. No.	Name of the Station	Available (MU)	Dispatch (MU)
2	Gujarat State Energy Generation Expansion	30	30
3	Gujarat Industries Power Co Ltd (165 MW)	-	-
4	Gujarat Industries Power Co Ltd (SLPP)	1,581	1,581
5	Gujarat Mineral Development Corp.	1,564	1,564
6	Gujarat Industries Power Co Ltd (145 MW)	2	2
7	Gujarat Industries Power Co Ltd (SLPP - Exp)	1,581	1,581
8	GPPC Pipavav	60	60
9	Adani Power Ltd Bid 1	8,433	738
10	Adani Power Ltd Bid 2	8,672	759
11	Essar Power Gujarat Ltd	3,942	690
12	ACB India Ltd	1,405	1,405
13	Coastal Gujarat Power Co Ltd	7,928	4,355
14	MTOA	2,489	2,489
15	Power Exchange	7,500	7,500
16	Short term power purchase	4,800	4,800
	Sub Total	**49,999**	**27,556**
	Central Sector		
1	NPC-Tarapur 1 & 2	1,075	1,075
2	NPC-Tarapur 3 & 4	1,862	1,862
3	NPC-Kakrapar	859	859
4	NTPC-Vindhyachal - I	1,680	1,680
5	NTPC-Vindhyachal - II	1,751	1,751
6	NTPC-Vindhyachal - III	1,955	1,955
7	NTPC-Korba	2,637	2,637
8	NTPC-Korba -III	912	912
9	NTPC-Kawas	16	16
10	NTPC-Jhanor	20	20
11	NTPC-Sipat-I	4,035	4,035

Sr. No.	Name of the Station	Available (MU)	Dispatch (MU)
12	NTPC-Sipat - II	1,999	1,999
13	NTPC-Kahlagaon I	958	958
14	NTPC-Vindhyachal - IV	1,808	1,808
15	NTPC-Mauda	3,222	3,222
16	NTPC-Vindhyachal - V	711	711
17	NTPC-Mauda II	3,710	3,710
18	NTPC-Solapur	170	170
19	NTPC-Gadarwara	2,334	2,334
20	NTPC-LARA	1,304	1,304
21	NTPC-Khargone	1,889	1,889
22	NTPC-Farakka - 3	402	402
23	NTPC-Kahalgaon II	1,022	1,022
24	NTPC-Farakka - 1 & 2	1,775	1,775
25	NTPC-Talcher	167	167
26	NTPC-Darlipalli	98	98
27	NTPC-Unchahar - 1	428	428
28	NTPC-Tanda - 2	310	310
29	NTPC-Barah – 1	975	975
30	NTPC-Dadri – 1	3,920	3,920
31	Sardar Sarovar Narmada Nigam Ltd	607	607
32	Nabinagar Power Generating Co Ltd	349	349
	Sub Total	**44,961**	**44,961**
	Others		
1	Captive Power	58	58
	Renewable		
1	Wind Farms	8,278	8,278
2	Solar	5,394	5,394
3	Small/Mini Hydal	86	86

Sr. No.	Name of the Station	Available (MU)	Dispatch (MU)
4	Biomass	-	-
5	Waste to Energy	1	1
6	HPO	-	-
7	Solar (New)	4,079	4,067
8	Wind (New)	-	-
9	Others (New)	29	29
10	HPO (New)	349	349
11	Solar (Exchange)	-	-
12	Wind (Exchange)	-	-
13	Others (Exchange)	-	-
14	HPO (Exchange)	-	-
	Sub Total	**18,274**	**18,263**
	TOTAL	**140,206**	**1,17,752**

5.9.5 Methodology for Forecasting Power Purchase Cost of GUVNL

In order to optimise the power purchase cost, the Commission has worked out comprehensive MOD. The dispatch from individual generating stations has been worked out by the Commission based on the merit order of the variable cost of each generating unit as follows:

- The NPC power plants, renewable and hydro plants have been considered as must run power plants.
- During merit order despatch, at least 7% availability of each plant has been considered to take care of the peak loads and peak season requirements except for gas based generating stations whose load factor is considered 1% in view of the cost of generation which is impacted due to prevailing gas prices.
- Availability of Thermal Stations has been considered at 85% / 80% as defined in Regulations (CERC/GERC) and performance in previous years. Wherever required, the availability has been changed to reflect the likely scenario based on past trends or other factors.

- The Fixed Cost, Variable Cost and PLF for existing GSECL Stations have been considered as approved in the Tariff Order for GSECL in Case No. 2162 of 2022.
- The Fixed Cost and Variable Cost for IPP, renewable and central sector plants have been taken as per actuals of FY 2021-22 as base power purchase cost, except Vindhyachal-1, which has been taken from latest CERC Order.
- For Private IPPs, FC and VC have been considered based on likely cost as per PPAs.

5.9.6 Power Purchase Cost

The power purchase for FY 2023-24 is based on the energy requirement of four DISCOMs as approved by the Commission. As stated above, the Fixed Cost, Variable Costs and PLF of GSECL stations have been considered as approved in the Tariff Order for GSECL in Case No. 2162 of 2022. For purchases from central generating stations, IPPs and others, the fixed and variable costs are taken based on actuals for FY 2021-22 except Vindhyachal-1, which has been taken from latest CERC Order.

The power purchase costs for FY 2023-24 are shown in the Table below. These include the energy available from each station, as estimated by the Commission, and energy dispatchable, based on merit order as discussed above.

The source-wise power purchase cost for FY 2023-24 as approved by the Commission is shown in the Table below:

Table 5-36: Approved Power Purchase Cost for FY 2023-24

Sr. No.	Name of the Station	Available (MUs)	Dispatch (MUs)	Fixed Cost (Rs. Crore.)	Variable Cost (Rs./kWh)	Variable Cost (Rs. Crore.)	Total Cost (Rs. Crore.)
	GSECL						
1	GSECL Ukai Hydro	688	688	33	-	-	33
2	GSECL Kadana Hydro	326	326	64	-	-	64
3	GSECL BLTPS	2,345	2,345	657	2.83	663	1,320
4	GSECL Kutch Lignite Exp unit 4	464	464	75	3.12	145	220
5	GSECL Kutch Lignite	400	400	143	3.60	144	286
6	GSECL Ukai Expan	2,221	2,221	417	3.49	775	1,192
7	GSECL Wanakbori - 8	4,363	4,363	843	3.54	1,545	2,388
8	GSECL Sikka Expansion	2,798	2,798	601	3.78	1,058	1,658

Sr. No.	Name of the Station	Available (MUs)	Dispatch (MUs)	Fixed Cost (Rs. Crore.)	Variable Cost (Rs./kWh)	Variable Cost (Rs. Crore.)	Total Cost (Rs. Crore.)
9	GSECL Ukai	3,901	3,901	374	3.95	1,541	1,915
10	GSECL Gandhinagar - 5	1,419	1,419	141	3.92	556	697
11	GSECL Gandhinagar 3-4	2,002	2,002	290	4.21	844	1,133
12	GSECL Wanakbori 1-6	4,842	4,842	642	4.25	2,058	2,700
13	GSECL Wanakbori - 7	1,120	1,120	76	4.10	460	536
14	GSECL Dhuvaran - 8	10	10	91	6.14	6	97
15	GSECL Dhuvaran CCPP III	32	32	219	6.70	21	240
16	GSECL Utran Expan	32	32	204	7.68	25	228
17	GSECL Dhuvaran - 7	9	9	71	8.31	7	79
	Sub Total	**26,971**	**26,971**	**4,940**		**9,847**	**14,787**
	IPP's						
1	Gujarat Mineral Development Corp.	1,564	1,564	182	1.54	241	424
2	Gujarat Industries Power Co Ltd (SLPP)	1,581	1,581	128	1.81	287	415
3	Gujarat Industries Power Co Ltd (SLPP - Exp)	1,581	1,581	214	2.06	325	539
4	Gujarat Industries Power Co Ltd (145 MW)	2	2	1	8.91	2	3
5	Gujarat State Energy Generation Expansion	30	30	134	10.24	31	164
6	Gujarat Industries Power Co Ltd (165 MW)	-	-	-	10.63	-	-
7	Gujarat State Energy Generation	13	13	53	11.02	15	67
8	GPPC Pipavav	60	60	320	10.31	62	382
9	Essar Power Gujarat Ltd	3,942	690	258	6.41	442	701
10	Adani Power Ltd Bid 1	8,433	738	661	7.18	529	1,191
11	Adani Power Ltd Bid 2	8,672	759	725	7.52	571	1,295
12	ACB India Ltd	1,405	1,405	121	0.66	92	213
13	Coastal Gujarat Power Co Ltd	7,928	4,344	555	5.27	2,290	2,845
14	MTOA	2,489	2,489	376	1.65	411	787
15	Power Exchange	7,500	7,500	-	5.20	3,899	3,899
16	Short term power purchase	4,800	4,800	-	3.07	1,472	1,472
	Sub Total	**49,999**	**27,556**	**3,728**		**10,669**	**14,396**
	Central Sector						
1	NPC-Tarapur 1 & 2	1,075	1,075	-	2.40	258	258
2	NPC-Tarapur 3 & 4	1,862	1,862	-	3.55	661	661
3	NPC-Kakrapar	859	859	-	2.30	197	197
4	Sardar Sarovar Narmada Nigam Ltd	607	607	-	2.05	124	124
5	NTPC-Darlipalli	98	98	16	1.05	10	27
6	NTPC-Korba -III	912	912	123	1.42	129	252

Sr. No.	Name of the Station	Available (MUs)	Dispatch (MUs)	Fixed Cost (Rs. Crore.)	Variable Cost (Rs./kWh)	Variable Cost (Rs. Crore.)	Total Cost (Rs. Crore.)
7	NTPC-Korba	2,637	2,637	195	1.46	386	581
8	NTPC-Sipat-I	4,035	4,035	515	1.54	621	1,136
9	NTPC-Vindhyachal – IV	1,808	1,808	282	1.58	286	568
10	NTPC-Vindhyachal – III	1,955	1,955	204	1.59	310	514
11	NTPC-Sipat – II	1,999	1,999	197	1.60	320	517
12	NTPC-Vindhyachal – II	1,751	1,751	134	1.62	284	418
13	NTPC-Vindhyachal – V	711	711	119	1.64	117	235
14	NTPC-Vindhyachal – I	1,680	1,680	150	1.74	292	442
15	NTPC-Talcher	167	167	16	1.82	30	46
16	NTPC-LARA	1,304	1,304	218	2.16	282	499
17	NTPC-Kahlagaon I	958	958	100	2.45	234	334
18	NTPC-Barah – 1	975	975	236	2.65	258	494
19	NTPC-Kahalgaon II	1,022	1,022	111	2.65	271	382
20	NTPC-Tanda – 2	310	310	91	2.78	86	177
21	NTPC-Farakka – 3	402	402	60	2.80	113	173
22	NTPC-Farakka - 1 & 2	1,775	1,775	146	2.83	502	648
23	NTPC-Khargone	1,889	1,889	342	2.98	562	904
24	NTPC-Gadarwara	2,334	2,334	484	3.14	734	1,218
25	NTPC-Unchahar – 1	428	428	44	3.29	141	185
26	NTPC-Mauda	3,222	3,222	593	3.35	1,081	1,674
27	NTPC-Mauda II	3,710	3,710	550	3.46	1,284	1,834
28	NTPC-Solapur	170	170	29	3.67	62	92
29	NTPC-Dadri – 1	3,920	3,920	383	3.88	1,520	1,903
30	NTPC-Jhanor	20	20	147	9.03	18	165
31	NTPC-Kawas	16	16	92	12.39	20	112
32	Nabinagar Power Generating Co Ltd	349	349	76	2.01	70	146
	Sub Total	**44,961**	**44,961**	**5,650**		**11,267**	**16,917**
	Others						
1	Captive Power	58	58	-	2.15	13	13
	Renewable						
1	Wind Farms	8,278	8,278	-	3.52	2,911	2,911
2	Solar	5,394	5,394	-	5.11	2,757	2,757
3	Small/Mini Hydal	86	86	-	3.95	34	34
4	Waste to energy	1	1	-	3.61	0	0
5	Solar (New)	4,079	4,067	-	2.25	914	914
6	Wind (New)	-	-	-	-	-	-

Sr. No.	Name of the Station	Available (MUs)	Dispatch (MUs)	Fixed Cost (Rs. Crore.)	Variable Cost (Rs./kWh)	Variable Cost (Rs. Crore.)	Total Cost (Rs. Crore.)
7	Others (New)	29	29	-	6.31	18	18
8	HPO (New)	349	349	-	5.00	174	174
	Sub Total	**18,274**	**18,263**	**-**		**6,822**	**6,822**
	TOTAL	**140,206**	**117,752**	**14,318**		**38,605**	**52,923**

The Commission has considered the dispatchable and available energy from the sources considered by the petitioner to arrive at projection of Power Purchase Cost for FY 2023-24, however, the petitioner shall follow the Merit Order Principles and prudent practices while availing power from different sources.

5.9.7 Transmission and Other Cost

The total power purchase cost for MGVCL for FY 2023-24 also consists of Transmission Charges, GUVNL charges and SLDC Fees and Charges in addition to the above-mentioned fixed cost and variable charges. The details of such charges are as under:

Transmission Charges

- The transmission charges of GETCO have been considered as 89.50% of the Transmission Charges approved in the Tariff Order of GETCO for FY 2023-24 in Case No. 2163 of 2022.
- PGCIL charges for FY 2023-24 are considered based on actual payment made in latest month of FY 2022-23.
- SLDC Fees and Charges also have been considered as 89.50% of the SLDC Charges approved in the Tariff Order of SLDC for FY 2023-24 in Case No. 2164 of 2022.

Based on the transmission costs of PGCIL, GETCO and SLDC, the total transmission costs to be included in the overall power purchase costs is shown in the Table below:

Table 5-37: Approved Transmission Charges for FY 2023-24

S. No.	Particulars	FY 2023-24
1	PGCIL Charges (Rs. Crore)	3,320
2	Annual Transmission Charges of GETCO (Rs. Crore)	5,013

S. No.	Particulars	FY 2023-24
3	SLDC Charges (Rs. Crore)	36

GUVNL Cost

MGVCL has submitted that GUVNL is charging Rs.0.04 for every transaction of one unit of energy for providing the services of procuring the power from various sources and supplying to DISCOMs, trading of surplus power on behalf of DISCOMs, the overall coordination between the subsidiary companies and also undertaking the function of raising and managing the overall loan portfolio of GUVNL and its subsidiaries.

The Commission considers the charges of Rs.0.04/unit to handle power procurement and supply, etc., as reasonable and approves the GUVNL costs, as given below, based on the energy handled during FY 2023-24:

Table 5-38: Approved GUVNL Cost for FY 2023-24

S. No.	Particulars	FY 2023-24
1	Energy handled (MUs)	1,17,752
2	GUVNL Cost at 4.00 Paisa per Unit (Rs. Crore)	471.01

5.9.8 Summary of Total Power Purchase Cost

Fixed Cost

The fixed costs, due to the capacity contracted by GUVNL, are passed on to DISCOMs, as detailed in the Table below:

Table 5-39: Approved Fixed Cost of DISCOMs for FY 2023-24 (Rs. Crore)

Fixed cost	GETCO Cost	PGCIL Charges	SLDC Charges	Total Fixed Cost	DISCOM Fixed Cost
14,318	5,013	3,320	36	22,687	22,687

Variable Cost

The Commission has approved variable cost for DISCOMs for FY 2023-24, as detailed in the Table below:

Table 5-40: Approved Variable Cost of DISCOMs for FY 2023-24 (Rs. Crore)

Variable cost	GUVNL Cost	Total variable Cost	Despatched	Variable Cost per Unit	DISCOM	Variable Cost
Rs. Crore	Rs. Crore	Rs. Crore	MUs	Rs./kWh	MUs	Rs. Crore
38,605	471	39,076	117,752	3.32	117,752	39,076

5.9.9 The Net Power Purchase Cost

Based on the approved Fixed Cost and Variable Cost as shown above, the Commission has approved net Power Purchase Cost for FY 2023-24, as detailed in the Table below:

Table 5-41: Approved Total Power Purchase Cost for FY 2023-24 (Rs. Crore)

DISCOMs Fixed cost	DISCOMs Variable Cost	Total Power Purchase Cost for DISCOMs
22,687	39,076	61,763

5.9.10 Allocation of Power Purchase Cost under BST mechanism-Commission's Analysis

Power Purchase cost worked out as above for FY 2023-24 is allocated amongst the four DISCOMs based on the methodology adopted by the Commission in the previous Tariff Orders by working out revenue available for purchase of power, Non-Tariff Income, Agricultural Subsidy and ARR other than power purchase cost, as detailed in the Table below:

Table 5-42: Approved Allocation of Power Purchase Cost (Rs. Crore)

S. No.	Particulars	DGVCL	MGVCL	PGVCL	UGVCL
1	Sales (MUs)	27,425	12,491	33,704	27,464
2	Revenue from Existing Tariff	13,221	5,813	13,728	9,810
3	Revenue from FPPPA @ Rs. 1.90/ unit	7,240	3,298	8,898	7,250
4	Other Income (Consumer Related)	251	99	264	174
5	Agricultural Subsidy	54	71	430	545
6	**Total**	**20,766**	**9,281**	**23,320**	**17,780**
7	Expense other than Power Purchase	1,285	1,182	4,518	2,201
8	Power Purchase Cost of SSDSP	0.23	4.15	82.36	83.39

S. No.	Particulars	DGVCL	MGVCL	PGVCL	UGVCL
9	Amount Available with DISCOM for Power purchase from GUVNL	**19,480**	**8,095**	**18,719**	**15,496**

Table 5-43: Approved total Revenue (GAP)/ Surplus (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Power Purchase Cost of GUVNL	61,763
2	Aggregate Amount available for power purchase from GUVNL	61,790
3	**Revenue (Gap)/Surplus**	**27**

Table 5-44: Approved Bulk Supply Tariff for FY 2023-24 (Rs. Crore)

S. No.	Details	FY 2023-24			
		DGVCL	MGVCL	PGVCL	UGVCL
1	**Revenue (Gap)/Surplus**	**27**			
2	Ratio of allocation of Revenue (Gap)/Surplus	26%	12%	36%	26%
3	Revenue (Gap)/ Surplus allocation	6.98	3.34	9.72	7.16
4	Amount Available with DISCOM for Power purchase from GUVNL	19,480	8,095	18,719	15,496
5	Power purchase cost of GUVNL	19,473	8,091	18,709	15,489
6	Power purchase cost of SSDSP	0.23	4.15	82.36	83.39
7	**Power purchase cost of DISCOM**	**19,473**	**8,095**	**18,792**	**15,572**
8	Energy Purchase in DISCOM (MUs)	30,218	14,469	42,357	31,309
9	**Bulk Supply Tariff (Rs./kWh)**	**6.44**	**5.59**	**4.44**	**4.97**

5.10 Capital Expenditure

MGVCL has claimed capital expenditure of Rs. 288.43 Crore for FY 2023-24, as detailed in the Table below:

Table 5-45: Capital Expenditure Plan for FY 2023-24 (Rs. Crore)

S. No	Particulars	FY 2021-22 (Projected)
A	**Distribution Scheme**	
	Normal Development Scheme	50.00
	DISS	20.00
	Electrification of Hutments	2.50
	Kutir Jyoti Scheme	1.80
	Others Harijan Basti - Petpara	0.30
	System Improvement	9.00
	Total	**83.60**
B	**Rural Electrification Schemes**	
	TASP (Wells & Petapara)	65.35
	Special Component Plan	1.35
	RE Wells (OA+SPA)	90.24
	Dark Zone	
	Surya Shakti Kishan Yojna	4.50
	Total	**161.44**
C	**Central Govt. Schemes – Plan**	
	PSDF	-
	Total	**-**
D	**Other New Schemes**	
	Sagar khedu	1.50
	Energy Conservation (HVDS)	4.50
	Vehicle	-
	Sardar krushi Jyoti Yojna	6.90
	Misc. Civil + Electrical Works	30.49
	Furniture	
	Total	**43.39**
E	**Capital Expenditure Total**	**288.43**

MGVCL has furnished scheme-wise justification for projected capital expenditure as detailed below:

Petitioner's submission

Normal Development Scheme:

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

System Improvement (SI):

The prime objectives of MGVCL's operations are to reduce Distribution and Commercial losses, to enhance revenue collection efficiency, to improve quality of power supply and to attain utmost consumer satisfaction. Keeping the above core values at the centre, the competent authority has approved the fund under the SI scheme to incur capital expenditure for various system improvement and innovative Projects such as Feeder Bifurcation work having higher ampere loading and %HT VR beyond limit, Link line from new 66 kV S/s, providing Aerial Bunched Conductors, High voltage Distribution System (HVDS), AG-JGY crossing at theft prone area, etc. Hence, total Rs. 9 Crore of capital expenditure is projected.

High Voltage Distribution System (HVDS):

HVDS is a High Voltage Distribution System of installing smaller size of Distribution Transformers and thereby reducing LT Lines up to negligible level by converting it into HT Line. To improve voltage profile in rural area, the small capacity of Distribution Transformers are to be installed by extending 11 kV Line as near to the load as possible and Distribution Transformer of the capacity of 10, 16, 25, 63 kVA are erected and supply is released to consumer through a short length of LT Lines to provide quality power supply.

Out of Rs. 4.50 Crore GOG grant, Rs. 0.50 Crore is to be utilized for energy conservation and Rs. 4.00 Crore is to be utilized under HVDS. Hence, total Rs. 4.50 Crore of capital expenditure is projected.

Distribution Infrastructure Shifting Scheme (DISS):

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

Sardar krushi Jyoti Yojna (SKJY):

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

Sagarkhedu:

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

TASP (Wells & Petpara):

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

Revamped Distribution Sector Scheme (RDSS):

The Government of India has approved Reformed based and Result Linked, Revamped Distribution Sector Scheme. The key objectives of the scheme are (i) to improve the quality, reliability and affordability of power supply to consumers through a financially sustainable and operationally efficient Distribution Sector; (ii) Reduce the AT&C losses to pan-India levels of 12-15% by 2024-25; and (iii) Reduce ACS-ARR gap to zero by FY 2024-25.

The Scheme is structured into following parts -.

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

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

The Scheme was sanctioned by Ministry of Power (MoP) in March 2022. MoP appointed Power Finance Corporation (PFC) as a nodal agency for financial assistance in this project.

In the case of MGVCL, the implementation of this scheme has been planned in the following phases.

- **Phase – 1 (December - 2023)**
  - Smart Prepaid Meter - 16,88,251 Nos.
  - DT Meter – 82,236 Nos.
- **Phase – 2 (March – 2025)**
  - Smart Prepaid Meter – 23,89,869 Nos.
  - 11 KV MVCC – 4,059 CKm
  - 440 V LT AB Cable – 8,070.36 Km
  - SCADA System – 33 Towns
  - Bifurcation of load with New DTR 11KV/22KV -1619 Nos.

- Augmentation of DTR for right sizing of DTRS-1,360 Nos.
- Replacement of old & frayed bare conductor of HT Line with new Bare conductor – 2,991.27 km
- Bifurcation of 11/22 KV feeders- 535 Km
- Conversion of 22KV system to 11KV System through DTR replacement-1,425 Nos.
- Creation of Resilient Distribution Infrastructure – 1,471.53 Km
- Conversion of O/H network in Five AMRUT towns to U/G network - 658.383 Km

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

Table 5-46 Estimated project cost for RDSS project (Rs. Crore)

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

MGVCL submitted it will undertake the activities envisaged under the scheme as per the finalised plan and the associated expenditure will be claimed during the truing up of the relevant years. Accordingly, the capitalisation and associated expenses towards this scheme has not been presently included in the ARR for the FY 2023-24 and will be claimed during the truing up for the year.

Commission's Analysis

The Commission accepts the justification submitted by MGVCL for the projected capital expenditure of Rs. 288.43 Crore for FY 2023-24. The Commission has approved the scheme-wise CAPEX as proposed by MGVCL for FY 2023-24. While truing up, petitioner is required to submit the details of scheme-wise CAPEX including target and actual date of completion. The Commission shall allow such CAPEX after prudence check in respect to cost incurred, time taken to complete the project and cost benefit analysis. The petitioner shall also justify the competitiveness of the cost incurred.

Table 5-47: Approved Capital Expenditure Plan for FY 2023-24 (Rs. Crore)

<table>
<tr><th>S. No</th><th>Particulars</th><th>FY 2021-22 (Approved)</th></tr>
<tr><td>A</td><td>Distribution Scheme</td><td></td></tr>
<tr><td></td><td>Normal Development Scheme</td><td>50.00</td></tr>
<tr><td></td><td>DISS</td><td>20.00</td></tr>
<tr><td></td><td>Electrification of Hutments</td><td>2.50</td></tr>
<tr><td></td><td>Kutir Jyoti Scheme</td><td>1.80</td></tr>
<tr><td></td><td>Others Harijan Basti - Petpara</td><td>0.30</td></tr>
<tr><td></td><td>System Improvement</td><td>9.00</td></tr>
<tr><td></td><td>Total</td><td>83.60</td></tr>
<tr><td>B</td><td>Rural Electrification Schemes</td><td></td></tr>
<tr><td></td><td>TASP (Wells & Petapara)</td><td>65.35</td></tr>
<tr><td></td><td>Special Component Plan</td><td>1.35</td></tr>
<tr><td></td><td>RE Wells (OA+SPA)</td><td rowspan="2">90.24</td></tr>
<tr><td></td><td>Dark Zone</td></tr>
<tr><td></td><td>Surya Shakti Kishan Yojna</td><td>4.50</td></tr>
<tr><td></td><td>Total</td><td>161.44</td></tr>
<tr><td>C</td><td>Central Govt. Schemes – Plan</td><td></td></tr>
<tr><td></td><td>PSDF</td><td>-</td></tr>
<tr><td></td><td>Total</td><td>-</td></tr>
<tr><td>D</td><td>Other New Schemes</td><td></td></tr>
<tr><td></td><td>Sagar khedu</td><td>1.50</td></tr>
<tr><td></td><td>Energy Conservation (HVDS)</td><td>4.50</td></tr>
</table>

S. No	Particulars	FY 2021-22 (Approved)
	Vehicle	-
	Sardar krushi Jyoti Yojna	6.90
	Misc. Civil + Electrical Works	30.49
	Furniture	
	Total	**43.39**
E	**Capital Expenditure Total**	**288.43**

5.11 Funding of Capitalisation

Petitioner's submission

MGVCL submitted that for Distribution business, schemes are of shorter duration and hence capitalization is considered same as Capital Expenditure discussed above. 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.

MGVCL has projected capitalisation of Rs. 288.43 Crore for FY 2023-24, as detailed in the Table below:

Table 5-48: Funding of Capitalisation for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	**Capitalization**	288.43
2	Consumer Contribution	160.00
3	Grants	21.20
4	**Balance CAPEX for the Year**	**107.23**
5	Debt @70%	75.06
6	Equity @30%	32.17

Commission's Analysis

The Commission has approved the scheme-wise capital expenditure as submitted by MGVCL and hence, approves the capitalisation as projected by MGVCL. Debt and equity mix is considered as 70:30 after deducting the consumer contribution and grants from total projected capitalisation. The capitalisation approved by the Commission for FY 2023-24 is detailed in the Table below:

Table 5-49: Approved funding of Capital Expenditure Plan for FY 2023-24 (Rs. Crore)

S. No.	Particulars	Approved
1	**Capitalization**	288
2	Consumer Contribution	160
3	Grants	21
4	Balance CAPEX for the Year	107
5	Debt @70%	75
6	Equity @30%	32

5.12 Operation and Maintenance (O&M) Expenses

MGVCL has projected O&M expenses of Rs. 961.52 Crore for FY 2023-24, as detailed in the Table below:

Table 5-50: Proposed O&M Expenses for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Employee Cost	681.63
2	R&M Expenses	71.49
3	A&G Expenses	104.45
4	RDSS Metering Opex	172.20
5	Other Expenses Capitalised	(68.25)
6	**O&M Expenses**	**961.52**

Petitioner's submission

MGVCL submitted that the O&M expenses consist of Employee cost, Administration & General (A&G) Expenses, Repair and Maintenance (R&M) expenses, RDSS Metering Opex, Other Debits, Extraordinary Items, and Net Prior Period Income/Expenses.

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 2023-24. However, due to unavoidable circumstances, there is a delay in framing the GERC (MYT) Regulations for the next Control Period, and hence, the applicability of the GERC (MYT) Regulations, 2016 has been extended to include FY 2023-24 also.

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

Considering the same, the O&M expenses for FY 2023-24 have been computed by applying escalation rate of 5.72% (as approved by the Commission in the GERC (MYT) Regulations, 2016) on the O&M expenses of FY 2022-23 as approved in Tariff Order dated 31st March, 2022.

RDSS Metering Opex: The Ministry of Power (MOP), New Delhi, has announced Revamped Distribution Sector Scheme (RDSS) vide Office Memorandum dated 20th July, 2021 with financial outlay of Rs.3,03,758 Crore and an estimated gross budgetary support (GBS) of Rs.97,631 Crore from the Central Government. The Scheme is 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.

The Scheme has two parts, viz., **Part-A** includes Component I: Metering (Consumer Metering and Feeder and DTR Metering), Component II: Distribution Infrastructure Works (Infrastructure works for loss reduction and Infrastructure works for Modernization and network strengthening) and Component III: Project Management. **Part-B** includes Training, Capacity Building and other Enabling and Supporting Activities.

Metering component includes installation of pre-paid smart meters for all consumers along with associated Advanced Metering Infrastructure (AMI), communicable meters for DTs and Feeders, Information and Communications Technology (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 pre-payment 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 would be around Rs. 85/meter/month for 1-Phase and Rs. 110/meter/month for 3-Phase.

Based on the smart meter release target, additional operational cost under RDSS Metering Opex for FY 2023-24 will be as shown below:

Table 5-51: Proposed Operational Cost under RDSS Metering Opex for FY 2023-24 (Rs. Crore)

S. No.	Particular	Number of Meters	Annual Rate (Rs.)	Cost (Rs. Crore)
A	B	C	D	E = (C*D)
1	Target for Single Phase Meters (New + Existing)	1,300,000	1,020	132.60
2	Target for Three Phase Meters (New + Existing)	300,000	1,320	39.60

Commission's Analysis

The Employee expenses, R&M expenses and A&G expenses are commonly considered as

O&M expenses. MGVCL has also included RDSS Metering Open in the O&M expenses.

MGVCL has projected Employee cost, A&G expenses, R&M expenses and other expenses capitalised considering the base value as approved by the Commission for FY 2022-23 and 5.72% escalation rate. The Commission has gone through the computations of MGVCL in this regard.

The Commission has considered FY 2023-24 as the extended year of the Control Period. Accordingly, GERC has computed the O&M Expenses for FY 2023-24 by applying escalation of 5.72% on approved O&M of FY 2022-23. As regards RDSS Metering Opex, the Commission asked MGVCL to submit the DPR for proposed smart meter installation under TOTEX model. In reply, MGVCL submitted that DPR for installation of smart meter under TOTEX model is yet to be finalised.

The Commission considering the initiatives of MoP, GoI has allowed the amount of Rs. 172.20 Crore claimed for RDSS Metering Opex, which is subject to prudence check during true up.

Accordingly, the Commission has approved total O&M expenses for FY 2023-24, as detailed in Table below:

Table 5-52: Approved O&M Expenses for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Employee Cost	681.63
2	R&M Expenses	71.49
3	A&G Expenses	104.45
4	RDSS Metering Opex	172.20
5	Other Expenses Capitalised	(68.25)
6	**O&M Expenses**	**961.52**

5.13 Depreciation

MGVCL has projected depreciation of Rs. 291.28 Crore for FY 2023-24, as detailed in the Table below:

Table 5-53: Depreciation for FY 2023-24 (Rs. Crore)

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

Petitioner's submission

MGVCL submitted that it has considered the closing Gross block of fixed assets of FY 2021-22 as the opening Gross block of fixed assets for FY 2022-23. The addition during FY 2022-23 is considered same as approved by the Commission in the Tariff Order dated 31st March 2022.

Accordingly, the closing balance of GFA for FY 2022-23 thus worked out is considered as opening balance of GFA for FY 2023-24. Addition for FY 2023-24 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 projected capitalisation during the year. Depreciation rate for FY 2023-24 is considered same as actual depreciation rate of FY 2021-22.

Commission's Analysis

The Commission notes that MGVCL has computed the depreciation for FY 2023-24, adopting the average rate of depreciation as per GERC MYT Regulations, 2016. The Commission has accordingly considered the Closing GFA as on 31st March, 2022 as approved for FY 2021-22 as the Opening GFA for FY 2022-23 and has considered the additions as proposed by MGVCL for FY 2022-23 to arrive at the Closing GFA for 2022-23, which in turn is considered as the Opening GFA as on 1st April, 2023. The additions during FY 2023-24 are considered as approved by the Commission. Accordingly, the Commission has approved the Depreciation as given in the Table below:

Table 5-54: Approved Depreciation for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Gross Block in Beginning of the year	6,796
2	Additions during the Year (Net)	288
3	Gross Block in closing of the year	7,084
4	Average Gross Block of the year	6,940
5	**Depreciation for the Year**	**291**
6	Average Rate of Depreciation	4.22%

5.14 Interest on Loan

MGVCL has projected the interest on Loan as detailed in the Table below:

Table 5-55: Interest and Finance Charge for FY 2023-24 (Rs. Crore)

S. No	Particulars	FY 2023-24
1	Opening Loans	-
2	Loan Additions during the Year	75.06
3	Repayment during the Year	75.06
4	Closing Loans	-
5	Average Loans	-
6	**Weighted average rate of interest**	**11.88%**
7	Interest on Loan	-
8	Interest on security deposit	48.10
9	Other Bank Charges	2.40
10	**Total Interest & Financial Charges**	**50.49**

Petitioner's submission

MGVCL submitted that 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.

The closing balance of loan portfolio for FY 2021-22 is considered as opening balance of FY 2022-23. Addition and repayment during FY 2022-23 are considered same as approved by the Commission in the Tariff Order dated 31st March 2022 to work out closing balance of FY 2022-23. The closing balance of FY 2022-23 thus worked out has been considered as opening balance of normative loan for FY 2023-24.

The loan addition for FY 2023-24 is considered as 70% of the capitalisation excluding consumer contribution and grants and repayment during the year is equivalent to the depreciation for FY 2023-24. The rate of interest has been taken as the weighted average rate of interest on the actual loan portfolio for FY 2021-22, i.e., 4.97%.

Interest rate on Security deposit by consumers is taken at the RBI Bank Rate of 4.25%. Other bank charges have been considered same as in FY 2021-22.

Commission's Analysis

The Commission has considered the Closing normative loan as on 31st March, 2022 as approved for FY 2021-22 as the Opening normative loan for FY 2022-23 and has considered the additions as proposed by MGVCL for FY 2022-23 to arrive at the Closing normative loan for 2022-23, which in turn is considered as the Opening normative loan as on 1st April, 2023. The additions during FY 2023-24 are considered as approved by the Commission.

The Commission has considered the rate of interest on long-term loans and consumer security deposit as 9.59% and 4.25%, respectively.

Further, MGVCL has considered other bank charges of Rs. 2.40 Crore as claimed in FY 2021-22. The Commission has considered the other bank charges for FY 2023-24 at the level of actuals for FY 2021-22. Considering all the above, the Commission has computed the interest and finance charges for FY 2023-24, as detailed in the Table below:

Table 5-56: Approved Interest and Finance Charge for FY 2023-24 (Rs. Crore)

S. No	Particulars	FY 2023-24
1	Opening Loans	-
2	Loan Additions during the Year	75.06

S. No	Particulars	FY 2023-24
3	Repayment during the Year	75.06
4	Closing Loans	-
5	Average Loans	-
6	**Weighted average rate of interest**	**9.59%**
7	Interest on Loan	-
8	Interest on security deposit	48.10
9	Other Bank Charges	2.40
10	**Total Interest & Finance Charges**	**50.50**

5.15 Interest on Working Capital

MGVCL has projected the interest on working capital for FY 2023-24, as detailed in the Table below:

Table 5-57: Interest on Working Capital for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	O & M expenses	80.13
2	Maintenance Spares	67.96
3	Receivables	769.28
4	Less: Consumers' security deposit	1,131.67
5	**Total Working Capital**	**(214.30)**
6	Rate of Interest on Working Capital	9.50%
7	**Interest on Working Capital**	-

Petitioner's submission

MGVCL has submitted that interest on working capital has been calculated on normative basis in accordance with the GERC (MYT) Regulations, 2016. Since the security deposit by the consumers with the utility is more than its total normative working capital requirement, therefore, MGVCL has not projected any interest on working capital for FY 2023-24.

Commission's Analysis

The Commission has examined the computation of interest on working capital submitted by MGVCL. The O&M expenses for one month and maintenance spares at 1% GFA are considered by MGVCL as per GERC (MYT) Regulations, 2016. Based on the approved O&M expenses and GFA, the Commission has computed the working capital and interest on working capital, as detailed in the Table below.

Table 5-58: Approved Interest on Working Capital for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	O & M expenses	33.72
2	Maintenance Spares	67.96
3	Receivables	774.48
4	Less: Consumers' security deposit	1,131.67
5	**Total Working Capital**	-
6	Rate of Interest on Working Capital	9.50%
7	**Interest on Working Capital**	-

The Commission, accordingly, approves the interest on working capital as Nil as detailed in the above Table for FY 2023-24.

5.16 Return on equity

MGVCL has projected the Return on Equity for FY 2023-24, as detailed in the Table below:

Table 5-59: Return on Equity for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Opening Equity Capital	1,223.25
2	Additions during the year	32.17
3	Closing Equity	1,255.42
4	Average Equity	1,239.34
5	Rate of Return on the Equity	14.00%
6	**Return on Equity**	**173.51**

Petitioner's submission

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

MGVCL has submitted that the return on equity has been computed @ 14% as per the GERC (MYT) Regulations, 2016 on average equity, based on the opening balance of equity and normative additions during the year. The equity addition for FY 2023-24 has been arrived at by considering 30% of the capitalization net of consumer contribution and grants as funded from equity as discussed above.

Commission's Analysis

The Commission has computed the return on equity @ 14% on the average equity of the opening and closing balance and addition of equity for FY 2023-24, as approved in the Table below:

Table 5-60: Approved Return on Equity for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Opening Equity Capital	1,223.25
2	Additions during the year	32.17
3	Closing Equity	1,255.42
4	Average Equity	1,239.33
5	Rate of Return on the Equity	14%
6	**Return on Equity**	**173.51**

5.17 Provision for Bad and Doubtful Debt

Petitioner's submission

MGVCL has submitted that it has considered provision of bad & doubtful debts for FY 2021-22 as same as for FY 2021-22. Accordingly, MGVCL has projected bad and doubtful debts for FY 2023-24 to the tune of Rs. 0.001 Crore.

Commission's Analysis

Regulation 94.9 of the GERC (MYT) Regulations, 2016 specifies that the Commission may allow bad debts written off as a pass through in the ARR.

The Commission has approved the bad debts written off as Rs. 0.001 Crore. in the truing up for FY 2021-22. For FY 2023-23, MGVCL has projected bad and doubtful debts to the tune of Rs. 0.001 Crore. Therefore, the Commission has also considered the provision for bad and doubtful debt for FY 2023-24 to the tune of Rs. 0.001 Crore.

5.18 Provision for Tax

Petitioner's submission

MGVCL submitted that provision for tax is considered as actual tax paid for FY 2021-22, which is as under:

Table 5-61: Income Tax Projected for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Provision for Tax	21.68

Commission's Analysis

Regulation 41.1 of GERC (MYT) Regulations, 2016 specifies that the Commission, in its MYT Order, shall provisionally approve income tax payable for each year of the Control Period, if any, based on the actual income tax paid as per the latest audited accounts available for the applicant, subject to prudence check. The latest audited accounts available for MGVCL are for FY 2021-22 and the Income Tax admitted in the truing up for FY 2021-22 is Rs. 21.68 Crore. Therefore, provision of Tax approved for FY 2023-24 is shown in the Table below:

Table 5-62: Approved Income Tax for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Provision for Tax	21.68

5.19 Non-Tariff Income

Petitioner's submission

MGVCL has considered the Non-Tariff Income for FY 2023-24 same as actuals of FY 2021-22, however, the amount of Rs. 9.42 Crores which was pertaining to the interest converted to grant and passed on to the consumers through the non-Tariff income in FY 2021-22 has not been considered as it is not a recurring income, as shown in the Table below:

Table 5-63: Non-Tariff Income FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Non-Tariff Income	218.55

Commission's Analysis

The Commission has approved NTI for FY 2023-24 same as actuals of FY 2021-22, as shown in the Table below:

Table 5-64: Approved Non-Tariff Income FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Non-Tariff Income	218.55

5.20 ARR for FY 2023-24

Petitioner's submission

The ARR projected by MGVCL for FY 2023-24 is detailed in the Table below:

Table 5-65: Projected ARR for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Cost of Power Purchase	8,119.57

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

Commission's Analysis

The Commission has analysed the components of ARR in the foregoing paragraphs and approved ARR for FY 2023-24 as summarised in the Table below:

Table 5-66: Approved ARR for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Cost of Power Purchase	8,095.48
2	Operation & Maintenance Expenses	961.52
2.1	*Employee Cost*	*681.63*
2.2	*Repair & Maintenance*	*71.49*
2.3	*Administration & General Charges*	*104.45*
2.4	*RDSS Metering Opex*	*172.20*
2.5	*Other Expenses Capitalised*	*(68.25)*

S. No.	Particulars	FY 2023-24
3	Depreciation	291.28
4	Interest & Finance Charges	50.50
5	Interest on Working Capital	-
6	Provision for Bad Debts	0.001
7	**Sub-Total [1 to 6]**	**9,398.78**
8	Return on Equity	173.51
9	Provision for Tax	21.68
10	**Total Expenditure (7 to 9)**	**9,593.97**
11	Less: Non-Tariff Income	218.55
12	**Aggregate Revenue Requirement (10 - 11)**	**9,375.41**

6 Revenue (Gap)/Surplus for FY 2023-24

6.1 Revenue for FY 2023-24 with Existing Tariff

MGVCL has projected the category-wise revenue from existing Tariff for FY 2023-24, as shown in the Table below:

Table 6-1: Revenue at Existing Tariff for FY 2023-24 (Rs. Crore)

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

Petitioner's submission

MGVCL has projected revenue from existing Tariff for FY 2023-24 by considering projected sales and existing Tariff, as Rs. 5,813.45 Crore.

Commission's Analysis

The Commission has approved the category-wise sales for FY 2023-24, as discussed in the preceding section and taking into consideration the existing Tariff for each category, the Commission has computed the revenue from sale of power for FY 2023-24, as shown in the Table below:

Table 6-2: Approved Revenue at Existing Tariff for FY 2023-24 (Rs. Crore)

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

6.2 Revenue from FPPPA Charges

The petitioner has estimated revenue from FPPPA charges for FY 2023-24, as detailed in the Table below:

Table 6-3: Revenue from FPPPA Charges for FY 2023-24 (Rs. Crore)

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

Petitioner's submission

MGVCL submitted that in the Tariff Order dated 31st March 2022, the Commission had considered the base power purchase cost at Rs. 4.57/unit and base FPPPA at Rs. 1.90/unit. As per approved FPPPA formula, any increase in power purchase cost during the year, over and above base power purchase cost of Rs. 4.57/unit is to be recovered through FPPPA, over and above base FPPPA of Rs. 1.90/unit on quarterly basis. As per the projected ARR for FY 2023-24, the weighted average power purchase cost works out to Rs. 5.17/unit.

Therefore, MGVCL has proposed change in power purchase cost as Rs. 0.60/unit for FY 2023-24 and accordingly, it has proposed Rs. 2.60/unit FPPPA. Therefore, estimated revenue from FPPPA for FY 2023-24 has been considered at Rs. 2.60 /unit (i.e., grossing up by approved losses). MGVCL has submitted FPPPA computation for FY 2023-24, as shown in the Table below:

Table 6-4: FPPPA Computation for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2022-23	FY 2023-24
1	Fixed Cost	13,182	13,643
2	Variable Cost	27,956	39,338
3	GETCO Cost	4,597	5,205
4	GUVNL Cost	428	478
5	PGCIL Charges	3,075	3,320
6	SLDC Charges	25	41
7	Total Power Purchase Cost	49,263	62,024
8	Total Energy Requirement (MUs)	1,07,835	1,19,382
9	**Power Purchase Cost (Rs./kWh)**	**4.57**	**5.17**

S. No.	Particulars	FY 2022-23	FY 2023-24
10	Increase in Power Purchase Cost (Rs./ KWh)		0.60
11	Additional FPPPA Charges (Grossed up by Distribution Loss) (Rs./kWh)		0.70
12	Existing FPPPA Charges (Rs./kWh)		1.90
13	**Revised FPPPA Charges (Rs./kWh)**		**2.60**

Commission's Analysis

The Commission has approved the base power purchase cost for FY 2023-24 as Rs. 5.22/kWh. Thus, there is an increase of Rs. 0.65/kWh in the base power purchase cost of DISCOMs for FY 2023-24 over that of for FY 2022-23 before grossing up with approved loss and Rs.0.09/ kWh after grossing up with overall loss. The revised Base FPPPA charge for FY 2023-24 is shown in the Table below:

Table 6-5: Approved FPPPA for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2022-23	FY 2023-24
1	Fixed Cost	13,182	14,318
2	Variable Cost	27,956	38,605
3	GETCO Cost	4,597	5,013
4	GUVNL Cost	428	471
5	PGCIL Charges	3,075	3,320
6	SLDC Charges	25	36
7	Total Power Purchase Cost	49,263	61,763
8	Total Energy Requirement (MUs)	1,07,835	118,353
9	**Power Purchase Cost (Rs./kWh)**	**4.57**	**5.22**
10	Increase in Power Purchase Cost (Rs./ KWh)		0.65
11	Additional FPPPA Charges (Grossed up by Distribution Loss) (Rs./kWh)		0.74
12	Existing FPPPA Charges (Rs./kWh)		1.90

S. No.	Particulars	FY 2022-23	FY 2023-24
13	**Revised FPPPA Charges (Rs./kWh)**		**2.64**

In view of the above, the Commission has revised the Base FPPPA for FY 2023-24 as Rs. 2.64/kWh.

Accordingly, the Commission allows Base FPPPA charges and revenue therefrom on the approved sales of 12,491 MUs for FY 2023-24 at Rs. 2.64/kWh as shown in the table below:

Table 6-6: Approved revenue from FPPPA charges for FY 2023-24

S. No.	Particulars	FY 2023-24
1	Projected Sales (MUs)	12,491
2	FPPPA Rate (Rs./kWh)	2.64
3	**Revenue from FPPPA (Rs. Crore)**	**3,298**

6.3 Other consumer related Income

MGVCL has projected the other consumer related income as Rs. 99.42 Crore for FY 2023-24, i.e., at the same levels as actuals for FY 2021-22, as shown in the Table below:

Table 6-7: Other Consumer related income for FY 2023-24

S. No.	Particulars	FY 2023-24
1	Other Consumer related income	99.42

Petitioner's submission

MGVCL submitted that the revenue from Other Consumer related income comprises revenue on account of charges other than the basic charges applicable to the Consumers. These include income on account of wheeling charges, inspection charges and miscellaneous charges. MGVCL has projected its Other Consumer related Income for FY 2023-24 same as actual of FY 2021-22.

Commission's Analysis

The Commission observes that MGVCL has projected the other consumer related income for FY 2023-24 at actuals of FY 2021-22 as per audited Annual Accounts. The Commission, accordingly, approves the other consumer related income at Rs. 99.42 Crore for FY 2023-24, as shown in the Table below:

Table 6-8: Approved Other Consumer related income for FY 2023-24

S. No.	Particulars	FY 2023-24
1	Other Consumer related income	99.42

6.4 Agriculture Subsidy

MGVCL has projected Agriculture Subsidy as Rs. 70.81 Crore for FY 2023-24 as shown in the Table below:

Table 6-9: Agriculture Subsidy for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Agriculture Subsidy	70.81

Petitioner's submission

MGVCL 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 Crore. The share of Agricultural Subsidy for FY 2023-24 is considered on pro-rata basis of agriculture consumption.

Commission's Analysis

The Commission has considered the Agriculture Subsidy as projected by the petitioner, and accordingly, approves Agricultural Subsidy as Rs. 70.81 Crore for FY 2023-24, as shown in the Table below:

Table 6-10: Agriculture Subsidy for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Agriculture Subsidy	70.81

6.5 Total Expected Revenue for FY 2023-24

MGVCL has projected total revenue of Rs. 9,231.35 Crore for FY 2023-24, as shown in the Table below:

Table 6-11: Total projected revenue for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Revenue with Existing Tariff	5,813.45
2	FPPPA Charges @ Rs. 2.60/ unit	3,247.68
3	Other Income (Consumer related)	99.42
4	Agriculture Subsidy	70.81
5	**Total Revenue including subsidy (1 to 4)**	**9,231.35**

Petitioner's submission

MGVCL submitted that based on the projections, the total revenue of the company comprises revenue from sale of power at existing Tariff, FPPPA charges, other consumer related income and Agriculture Subsidy.

Commission's Analysis

The Commission has approved the total revenue for FY 2023-24, as shown in the Table below:

Table 6-12: Approved Total Revenue for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Revenue with Existing Tariff	5,813
2	FPPPA Charges @ Rs. 2.64/ unit	3,298
3	Other Income (Consumer related)	99
4	Agriculture Subsidy	71

S. No.	Particulars	FY 2023-24
5	**Total Revenue including subsidy (1 to 4)**	**9,281**

6.6 Revenue (Gap)/Surplus for FY 2023-24

Petitioner's submission

MGVCL has estimated the cumulative Revenue (Gap)/Surplus for FY 2023-24 as shown in the Table below:

Table 6-13: Estimated Revenue (Gap)/ Surplus for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Aggregate Revenue Requirement	9,399.50
2	Add: past claim for uncontrollable impact of implementation of 7th Pay revision not claimed in FY 2020-21	23.26
3	Less: Revenue (Gap)/Surplus from True up of FY 2020-21	45.30
4	**Total Aggregate Revenue Requirement**	**9,377.46**
5	Revenue with Existing Tariff	5,813.45
6	FPPPA Charges @ Rs. 2.60/ unit	3,247.68
7	Other Income (Consumer related)	99.42
8	Agriculture Subsidy	70.81
9	**Total Revenue including subsidy (4 to 7)**	**9,231.35**
10	**Revenue (Gap)/Surplus (8 - 3)**	**(146.11)**

Commission's Analysis

The Petitioner have claimed Rs. 23.26 Crore pertaining to FY 2020-21 to be recovered through ARR for FY 2023-24 stating that the said amount is the 2/3rd amount of uncontrollable expense related to payment made to employees towards incentive and allowance for FY 2020-21 and was inadvertently missed by the Petitioner to claim in the truing up petition of FY 2020-21. In this regard, it is to state that truing up of FY 2020-21 has been concluded by the Commission vide order dated 30th March 2022 and has attained finality. Any changes in the concluded trued up figures amounts to review of the Order of the Commission. This being impermissible, the Commission do not allow to pass the claim of Rs. 5.851 Crore through the ARR of FY 2023-24.

The Commission has estimated the total Revenue (Gap)/ Surplus for FY 2023-24 at the existing Tariff, as shown in the Table below:

Table 6-14: Approved Revenue (Gap)/ Surplus for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Aggregate Revenue Requirement	9,375.41
2	Add: past claim for uncontrollable impact of implementation of 7th Pay revision not claimed in FY 2020-21	-
3	Less: Revenue (Gap)/Surplus from True up of FY 2020-21	97.44
4	**Total Aggregate Revenue Requirement**	**9,277.98**
5	Revenue with Existing Tariff	5,813.45
6	FPPPA Charges @ Rs. 2.64/ unit	3,297.64
7	Other Income (Consumer related)	99.42
8	Agriculture Subsidy	70.81
9	**Total Revenue including subsidy (4 to 7)**	**9,281.32**
10	**Revenue (Gap)/Surplus (8 - 3)**	**3.34**

6.7 Consolidated ARR of the State Owned DISCOMs

Commission's Analysis

Based on the approved ARR for individual DISCOM for FY 2023-24, the consolidated position of the DISCOMS is shown in the table below:

Table 6-15: Approved Consolidated ARR for FY 2023-24 (Rs. Crore)

S. No.	Particulars	Projected In ARR	Approved
1	Cost of Power Purchase	62,024	61,933

S. No.	Particulars	Projected In ARR	Approved
2	Operation & Maintenance Expenses	4,449	4,449
2.1	Employee Cost	*3,337*	*3,337*
2.2	Repair & Maintenance	*446*	*446*
2.3	Administration & General Charges	*576*	*576*
2.4	RDSS Metering Opex	*723*	*723*
2.5	Other Expenses Capitalised	*(634)*	*(634)*
3	Depreciation	2,197	2,197
4	Interest & Finance Charges	425	493
5	Interest on Working Capital	-	-
6	Provision for Bad Debts	7	7
7	**Sub-Total (1 to 6)**	**69,102**	**69,078**
8	Return on Equity	1,402	1,384
9	Provision for Tax	99	99
10	**Total Expenditure (7 to 9)**	**70,603**	**70,561**
11	Less: Non-Tariff Income	974	974
12	**Aggregate Revenue Requirement (10-11)**	**69,629**	**69,587**

6.8 Consolidated Revenue (Gap)/Surplus of the State-Owned DISCOMs

Petitioner's submission

MGVCL submitted that the consolidated resultant Revenue (Gap) / Surplus for all four distribution companies is Rs. (1,207) Crore.

Commission's Analysis

Since, the uniform Tariff for State-owned DISCOMs has been envisaged in the MYT Order dated 31st March 2017 and Tariff Order dated 31st March, 2020, it is necessary to consider the consolidated (Gap)/Surplus of FY 2023-24 for all the State-owned DISCOMs, while determining the Tariff for FY 2023-24. The consolidated (Gap)/ Surplus computed for FY 2023-24 is shown in the Table below:

Table 6-16: DISCOM-wise (Gap)/ Surplus computed for FY 2023-24 (Rs. Crore)

S. No.	Particulars	DGVCL	MGVCL	PGVCL	UGVCL	Total
1	Trued up (Gap)/ Surplus of FY 2021-22	117.62	97.44	(1,134.30)	(695.81)	(1,615.07)
2	Total (Gap)/Surplus for FY 2023-24 inclusive of (Gap)/Surplus of FY 2021-22	6.98	3.34	9.72	(75.64)	(55.60)

The consolidated Revenue Gap approved by the Commission for FY 2023-24 as shown in the Table above, is Rs. 55.60 Crore, as compared to Revenue Gap of Rs. 1,207 Crore estimated by the State-owned DISCOMs. The computations are shown in the Table below:

Table 6-17: Consolidated (Gap)/ Surplus computed for FY 2023-24 (Rs. Crore)

S. No.	Particulars	Projected by DISCOMs	Approved
1	ARR for FY 2023-24	**69,629**	**69,587**
2	Impact of 7th Pay Commission	47	
3	Revenue (Gap)/Surplus for FY 2021-22	(2,315)	(1,615)
4	**Net ARR for FY 2023-24**	**71,991**	**71,202**
5	Revenue with existing Tariff	42,613	42,573
6	FPPPA Charges	26,282	26,686
7	Other Income (Consumer Related)	788	788
8	Agriculture Subsidy	1,100	1,100
9	**Total Revenue**	**70,783**	**71,147**
10	**(Gap)/Surplus for FY 2023-24**	**(1,207)**	**(56)**

There is a Cumulative Revenue Gap of Rs. 55.60 Crore (Consolidated for all DISCOMs) while determining the ARR for FY 2023-24.

The State owned DISCOMs shall meet this gap through efficiency measures. Accordingly, the Commission do not make any changes in the existing Tariff.

7 Compliance to Directives

7.1 Compliance to earlier directives

The Commission had given various directives to MGVCL in the Order dated 31st March 2021, compliance of which is mentioned below:

Directive 1: Tariff Rationalization

The Commission has directed 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 had issued the above directive in its Tariff Order dated 31stMarch,2021 and thereafter again directed vide Tariff order dated 31stMarch, 2022 for further rationalization and reduction in number of slabs and submit the details along with next MYT Petition. However, Hon'ble Commission has by Order dated 20th October, 2022 in the Suo-motu petition no. 2140 of 2022 directed Utilities to file the petition for the determination of ARR and Tariff for FY 2023-24 based on the principles and methodologies as provided in the GERC (MYT) Regulations, 2016. Since the petition for determination of ARR and Tariff for FY 2023-24 only, DISCOM may 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. However, DISCOM may suggest certain Tariff rationalisation for some consumer categories in its Tariff proposal.

Commission's comments:

The Commission will consider the Tariff rationalization in next MYT control period.

Directive 2: Implementation of Smart pre-payment meter/pre-payment meters

The Commission has 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:

MGVCL & POWERGRID has signed MOU on dated 14.7.2022 for Implementation of Smart Metering Projects in jurisdiction of MGVCL, Discom of Gujarat under RDSS Scheme. Tender has been floated by POWERGRID on behalf of MGVCL & it is under process.

Commission's comments:

The response of the petitioner is noted. The Petitioner is directed to expedite the process for implementation of RDSS.

Directive 3: Charging Infrastructure for Electric Vehicles

The Commission has suggested DISCOM to explore the possibility of 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:

Govt. of Gujarat has declared Gujarat Electric Vehicle Policy, 2021 on 28th September, 2022 to promote EV Charging Infrastructure. As per the guidelines, GUVNL is the nodal agency for releasing Expression of Interest (EoI), processing of applications, disbursement of subsidies and associated activities for Electric Vehicle Charging Infrastructure.

GUVNL has already initiated action for inviting EoI from the eligible entities. This would be a good move towards achieving the target for providing EV charging facilities across the state.

Commission's comments:

The response of the petitioner is noted.

<u>Directive 4:</u> Rationalization of Tariff

The Commission has directed 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 and asked the DISCOMs to provide data in specified format.

Compliance:

MGVCL has complied with the directive and submitted the details to the Hon'ble Commission vide letter No. MGVCL/RA&C/GERC/175 Dtd 14.07.2022.

Commission's comments:

The response of the petitioner is noted.

8 Fuel and Power Purchase Price Adjustment

8.1 Fuel Price and Power Purchase Price Adjustment

The Commission its Order in Case No. 1309/2013 and 1313/2013 vide dated 29.10.2013, has approved the formula as mentioned below:

FPPPA = [(PPCA-PPCB)] / [100-Loss in %]; Where,

PPCA	is the average power purchase cost per unit of delivered energy (including transmission cost), computed based on the operational parameters approved by the Commission or principles laid down in the Power Purchase Agreements in Rs./kWh for all the generation sources as approved by the Commission while determining ARR and who have supplied power in the given quarter and transmission charges as approved by the Commission for transmission network calculated as total power purchase cost billed in Rs. Million divided by the total quantum of power purchase in Million Units made during the quarter.
PPCB	is the approved average base power purchase cost per unit of delivered energy (including transmission cost) for all the generating stations considered by the Commission for supplying power to the company in Rs./kWh and transmission charges as approved by the Commission calculated as the total power purchase cost approved by the Commission in Rs. Million divided by the total quantum of power purchase in Million Units considered by the Commission
Loss in %	is the weighted average of the approved level of Transmission and Distribution losses (%) for the four DISCOMs / GUVNL and TPL applicable for a particular quarter or actual weighted average in Transmission and Distribution losses (%) for four DISCOMs / GUVNL and TPL of the previous year for which true-up have been done by the Commission, whichever is lower.

8.2 Base Price of Power Purchase (PPCB)

The Commission has approved the total energy requirement and the total Power Purchase Cost for all the DISCOMs including fixed cost, variable cost, GETCO cost, PGCIL charges, SLDC charges for FY 2023-24 from various sources as given in the Table below:

Table 8-1: Base FPPPA Working for FY 2023-24

S. No.	Particulars	FY 2022-23	FY 2023-24
1	Fixed Cost (Rs. Crore)	13,182	14,318
2	Variable Cost (Rs. Crore)	27,956	38,605
3	GETCO Cost (Rs. Crore)	4,597	5,013
4	GUVNL Cost (Rs. Crore)	428	471
5	PGCIL Charges (Rs. Crore)	3,075	3,320
6	SLDC Charges (Rs. Crore)	25	36
7	Total Power Purchase Cost (Rs. Crore)	49,263	**61,763**
8	Total Energy Requirement (MUs)	1,07,835	1,18,353
9	**Power Purchase Cost (Rs./kWh)**	**4.57**	**5.22**
10	Increase in Power Purchase Cost (Rs./ KWh)		0.65
11	Additional FPPPA Charges (Grossed up by Distribution Loss) (Rs./kWh)		0.74
12	Existing FPPPA Charges (Rs./kWh)		1.90
13	**Revised FPPPA Charges (Rs./kWh)**		**2.64**

As mentioned above, the base Power Purchase cost for the DISCOMs is Rs. 5.22/kWh. Further, based on the above computations, the Commission has revised the Base FPPPA as Rs. 2.64/kWh for FY 2023-24.

GUVNL/DISCOMs may claim difference between actual power purchase cost and base power purchase cost approved in the Table above as per the approved FPPPA formula mentioned above.

Information regarding FPPPA recovery and the FPPPA calculations shall be kept on the website of the Licensee / GUVNL.

For any increase in FPPPA, worked out on the basis of above formula, beyond ten (10) paise per kWh in a quarter, prior approval of the Commission shall be necessary and only on approval of such additional increase by the Commission, the FPPPA can be billed to consumers.

FPPPA calculations shall be submitted to the Commission within one month from the end of the relevant quarter.

8.3 Shifting of Base FPPPA

As stated earlier, the Commission has approved base power purchase cost for FY 2023-24 as Rs. 5.22/kWh. Thus, there is an increase of Rs. 0.65/kWh in the base power purchase cost of DISCOMs for FY 2023-24 over that of for FY 2022-23 before grossing up with approved loss and Rs. 0.09/kWh after grossing up with approved loss.

Accordingly, the base FPPPA for FY 2023-24 is approved as Rs. 2.64/unit, considering the base power purchase cost of Rs. 5.22/kWh.

9 Wheeling Charges and Cross-Subsidy Surcharge

9.1 Allocation Matrix

Regulations 87 of the GERC (MYT) Regulations, 2016 specifies that the Commission shall determine the Wheeling Charges of Distribution Wires Business of the Distribution Licensees in the ARR and Tariff Order.

The Allocation Matrix for allocation of costs between the Wires Business and Retail Supply Business as specified in the GERC (MYT) Regulations, 2016, is shown in the table below:

Table 9-1: Allocation matrix for segregation of wheeling and retail supply business of Distribution Licensees

Allocation Matrix	Wires Business (%)	Retail Business (%)
Power Purchase Expenses	0%	100%
Employee Expenses	60%	40%
Repair & Maintenance Expenses	90%	10%
Administration & General Expenses	50%	50%
Other Debits	50%	50%
RDSS Metering Opex*	100%	0%
Extraordinary Items	50%	50%
Net Prior Period Expenses / (Income)	25%	75%
Other Expenses Capitalized	55%	45%
Depreciation	90%	10%
Interest & Finance charges	90%	10%
Interest on Working Capital & Security Deposit	10%	90%
Bad Debts Written off	0%	100%
Income Tax	90%	10%
Return on Equity	90%	10%
Non-Tariff Income	10%	90%

** RDSS Metering Opex was not envisaged as an expenditure item under the GERC (MYT) Regulations, 2016. This expense being a new element for the ARR of FY 2022-23, the Commission categorised this entire expense as the expense related to wire business of the distribution licensee.*

Based on the above Allocation Matrix, the approved ARR for Wires Business and Retail Supply Business for FY 2023-24 is shown in the Table below:

Table 9-2: Allocation of ARR between Wheeling and Retail Supply Business for the four State Owned DISCOMs for FY 2023-24 (Rs. Crore)

S. No.	Particulars	Distribution	Wire Business	Retail Supply Business
1	Power Purchase Expenses	61,932.77	-	61,932.77
2	O & M Expenses	4,449.08	-	
2.1	*Employee Cost*	*3,337.37*	*2,002.42*	*1,334.95*
2.2	*Repair & Maintenance Expenses*	*445.77*	*401.19*	*44.58*
2.3	*Administration & General Expenses*	*576.45*	*288.22*	*288.22*
2.5	*RDSS Metering Opex*	*723.13*	*723.13*	*-*
2.7	*Other Expenses Capitalized*	*(633.64)*	*(348.50)*	*(285.14)*
3	Depreciation	2,196.73	1,977.06	219.67
4	Interest & Finance Charges	166.66	149.99	16.67
5	Interest on Security Deposit	326.31	32.63	293.68
6	Interest on Working Capital	-	-	-
7	Bad Debts written Off	6.68	-	6.68
8	Contribution to contingency reserves	-	-	-
9	Total Revenue Expenditure	69,078.24	2,159.68	62,469.48
10	Return on Equity Capital	1,383.54	1,245.19	138.35
11	Income Tax	99.47	89.52	9.95
12	Aggregate Revenue Requirement	70,561.24	3,494.39	62,617.78
13	Less: Non-Tariff Income	974.01	97.40	876.61
14	Aggregate Revenue Requirement	69,587.23	6,463.45	63,123.78

9.2 Wheeling charges

The Wheeling Charges for the four Distribution Companies, viz., DGVCL, MGVCL, PGVCL and UGVCL for FY 2023-24, as given below are applicable for use of the distribution system of a Distribution Licensee by other Licenses or Generating Companies or captive power plants or consumers/users who are permitted Open Access under Section 42 (2) of the Electricity Act, 2003.

Table 9-3: Wheeling charges for FY 2023-24

S. No.	Particulars	Units	Amount
1	Distribution costs of the four DISCOMs	Rs. Crore	6,463.45
2	Distribution cost of the four DISCOMs at 11 kV level (30% of total distribution cost)	Rs. Crore	1,939.04
3	Distribution cost of the four DISCOMs at LT level (70% of total distribution cost)	Rs. Crore	4,524.42
4	Energy input at 11 kV	MUs	1,12,033.32
5	**Wheeling charges at 11 kV**	**Ps./kWh**	**17.31**
6	Energy Input at 400 V	MUs	54,428.32
7	**Wheeling charges at 400 V (LT)**	**Ps./kWh**	**83.13**

Accordingly, the Commission approves Wheeling Charges for HT network (11 kV system) at 17.31 Paise per kWh and Wheeling Charges for LT network (400 V system) at 83.13 Paise per kWh.

Distribution losses:

The distribution losses applicable for Open Access during FY 2023-24 are as given below:

S. No.	Particulars	Point of Energy Delivered	
		11 kV	400 Volts
1	11 kV, 22 kV and 33 kV	9.50%	9.77%
2	400 Volts		0.56%

The losses in HT and LT network are 9.77% and 0.56% respectively, with respect to energy input to the segment of the system. In case injection at 11 kV levels and drawal at LT level envisages use of both the networks, i.e., 11 kV and LT, in that case, the combined loss works out to 9.77% of the energy injection at 11 kV network.

The above Wheeling Charges payable shall be uniform in all the four Distribution Licensees, viz., DGVCL, MGVCL, PGVCL and UGVCL.

9.3 Cross-Subsidy Surcharge

The Cross-Subsidy Surcharge (CSS) is based on the formula given in the Tariff Policy as below:

S = T - [C/(1-L/100) +D +R]

Where,

- T is the Tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation
- C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation
- D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level
- L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level
- R is the per unit cost of carrying regulatory assets

The CSS based on the above formula is worked out as shown in the Table below:

Table 9-4: Cross Subsidy Surcharge for FY 2023-43

Sr. No.	Particulars	Units	HT Industry
1	T	Rs./ kWh	7.99
2	C	Rs./ kWh	5.22
3	D	Paise/ kWh	17.31

Sr. No.	Particulars	Units	HT Industry
4	L	%	9.50%
5	S (Cross Subsidy Surcharge)	Rs./kWh	2.05

S= 7.99 - [5.22/(1-9.5%/100)+17.31/100+0]= Rs. 2.05/kWh

Thus, CSS as per Tariff Policy, 2016 works out to Rs. 2.05/kWh for the four State owned Distribution companies viz. DGVCL, MGVCL, PGVCL and UGVCL.

However, the Tariff Policy, 2016 provides that the CSS shall not exceed 20% of the Tariff applicable to the category of the consumers seeking Open Access. Accordingly, the leviable CSS from the consumers of the four State Owned Distribution Companies seeking Open Access, for FY 2023-24 works out to Rs. 1.60/kWh.

Accordingly, CSS for HT Category = Rs. 1.60/kWh for FY 2023-24.

Further, vide Order dated 30.08.2022 on Petition No. 1747 of 2018 and 1771 of 2018 about deciding the methodology for working of Additional Surcharge applicable to Open Access consumers, it is decided by the Commission that for every year the percentage of network cost built into the demand charge for the consumers of contract demand in excess of 1000 kVA in each Tariff order will be specified by the Commission in the Tariff Order of respective financial year. Accordingly, for FY 2023-24, 5.66% portion of demand charge proposed to be recovered from the consumers of contracted demand in excess of 1000 kVA (i.e. from the consumers eligible for open access) attributes to network related fixed cost of the distribution licensees.

10 Tariff Philosophy and Tariff Proposals

10.1 Introduction

The Commission is guided by the provisions of the Electricity Act, 2003, the National Electricity Policy (NEP), the Tariff Policy, the Regulations on Terms and Conditions of Tariff issued by the Central Electricity Regulatory Commission (CERC) and GERC (MYT) Regulations, 2016 notified by the Commission.

Section 61 of the Act lays down the broad principles, and guidelines for determination of retail supply Tariff. The basic principle is to ensure that the Tariff should progressively reflect the cost of supply of electricity and reduce the cross subsidies amongst categories within a period to be specified by the Commission.

10.2 Green Tariff

The Commission in the Tariff Order dated 31st March, 2022 had directed DISCOMs to submit a Green Tariff Proposal in the State of Gujarat along with Tariff Petition. Accordingly, in compliance to directions, DISCOM has submitted the Green Tariff proposal.

As per Clause 4 (C)(c) of Rules, 2022, the component for green Tariff shall include (A) Average Pooled Power Purchase Cost of RE (B) Cross Subsidy Charges (C) Service charge covering prudent cost of distribution licensee for providing green energy. The analysis of each of above cost component to be incorporated for computation of green energy Tariff for FY 2023-24 is explained as under;

(A) Average Pooled Power Purchase Cost of RE Energy

It is envisaged that DISCOM will supply green power to obligated entity by tying up of additional RE capacity mainly from Solar and Wind power projects. Considering average Capacity Utilization Factor (CUF) of 25% for wind and solar, the required RE capacity would be around 3.2 times the demand requisitioned by consumer having continuous consumption (considering 80% Load Factor as per GERC Supply Code), say the required RE capacity would be around 320 MW for consumption requirement of say 100 MW on continuous basis with 80% Load Factor. Similarly, in case of non-continuous consumers (30% Load Factor as per GERC Supply Code for single shift operation), the required capacity would be around 1.2 times consumer's demand requirement, say 120 MW RE capacity for 100 MW demand requestioned by consumer. Thus, on an average basis, it is assumed that around two times equivalent RE capacity would be required to meet green power requestioned by consumers for their RPO.

The availability of generation from RE source (wind/solar) is infirm in nature and may not be available at the time of consumer's consumption during a day such as consumption during evening peak hours. Similarly, there may be surplus generation when consumption is lower than generation such as during peak solar hours or night hours when wind generation may be higher. Thus, there would be large variation in generation during a day ranging between 0-100% and gap between RE generation and consumption on real time basis. Therefore, even if quantum of RE generation and consumption is matching on monthly basis, there would be additional cost implication on DISCOM for making available balancing power during a day to mitigate mismatch in generation and consumption on real time basis. Similarly, there would be cost implication on DISCOM due to inefficient operation of conventional generating stations due to frequent ramp up and ramp down to accommodate variation in RE generation. Therefore, in addition to differential cost towards arranging balancing power (i.e. cost of power purchase from alternate firm sources less cost of RE power purchase), cost implication towards backing down of conventional generating stations also need to be factored in the pooled cost of RE power.

In terms of above, landed cost of Pooled Power Purchase of RE power may be worked out taking in account; (i) Cost of RE power purchase, (ii) differential cost of balancing power, (iii) backing down cost and (iv) GETCO charges, as under;

I. Cost of RE Power Purchase

As per DISCOM ARR for FY 2023-24, the RE power purchase cost is estimated as under;

Table 10-1 Weighted average Cost of RE Purchase of DISCOM for FY 2023-24

Sr. No.	RE Power (Source)	Weighted Average Tariff (Rs./kWh)
1	Wind Farms	3.52
2	Solar	5.11
3	Small/Mini Hydel	3.95
4	Waste to Energy	3.61
5	Solar (New)	2.25
6	Others (New)	6.31
7	HPO (New)	5.00
	Total	**3.74**

Thus, as per estimation of FY 2023-24, the average cost of RE power purchase is Rs. 3.74/kWh.

II. Cost of Balancing Power

Considering Wind & Solar as RE source of supply, it is estimated that the requirement of balancing power from firm sources shall be on an average six hours a day to mitigate the mismatch between RE generation and consumption during real time operation. Considering the requirement of balancing power for shorter duration of time, it shall be arranged from short term market/power exchanges. However, the availability of power from short term market/power exchanges specifically during peak hours is not certain all the time. As per the past year details, around 80% of time in a year, power is available as requisitioned for. Therefore, it is assumed that around 80% of time, balancing power will be availed from power exchanges, and for remaining period of time, gas based generating stations shall be operated.

As per the details of April-2022 to November-2022, the average cost of power exchange power during peak hours (7.00-9.00 & 18.00-22.00 Hrs.) is around Rs. 6.16/kWh. Further, considering prevailing gas price of around 30 USD/MMBTU, the cost of gas-based generation is worked out to Rs. 22/kWh.

Accordingly, cost of balancing power is estimated as under;

Table 10-2 Cost of Balancing

Particulars	Unit Cost (Rs./kWh)
(A) Differential cost of power exchange power	2.42
(B) Differential cost of DISCOM owned thermal based power	18.30
(C) Wt. average differential cost (0.80*A+0.20*B)	5.60
Cost of Balancing power considering requirement of 6 hours a day (6*C/24)	**1.40**

It is relevant to mention that in the case of Solar Power 2021, the fixed cost of conventional generator was factored in the computation of banking charges of Rs. 1.50/kWh for wheeling of power for captive use/third party sale. However, in the present case, since the consumer is going to procure RE energy as a consumer of DISCOM and paying normal demand charges the fixed cost of conventional generator is not factored in the computation of balancing power cost.

III. Backing Down Cost

At the time when RE generation is higher than consumption, generation from the conventional sources needs to be backed down. As per the methodology decided in CERC order 05.05.2017 for generating stations of NTPC, the backing down cost is worked out to around Rs. 0.29/kWh due to Degradation of Heat Rate, Aux. Energy Compensation etc. for running the plant at technical minimum for entire day. However, considering that DISCOMs are going to shift entire Agricultural load during daytime in next couple of year in phased manner. Therefore, it is envisaged that excess generation from tied up solar capacity for supply green Tariff rate, will be utilized to supply Agricultural load during daytime and there may be limited instances of backing down of conventional generating plants. Considering the same, the backing down cost of conventional generating plants is not considered in computation of cost of RE Energy at present.

IV. GETCO Transmission Charges

As per GETCO Tariff petition for FY 2023-24, the transmission charge is proposed at Rs. 4271/MW/Day, which works out to Rs. 0.18/kWh at 100% utilization factor. Considering average utilization factor 25% for RE (Wind/Solar), the transmission cost works out Rs. 0.72/kWh, which needs to be factored in the landed cost of RE power.

Considering the above cost factors, the landed cost of renewable energy is worked out as under;

Table 10-3 Landed Cost of Renewable Energy

Sr. No.	Cost Component	Rate (Rs./kWh)
i	Cost of RE Power Purchase	3.74
ii	Cost of Balancing Power	1.40
iii	Backing down cost of Conventional generator	0.00
iv	GETCO Transmission Cost	0.72
v	Total cost of RE Energy at generator end	5.86
vi	T&D Losses for FY 2023-24 (%)	15.75%
vii	**Total cost of RE Energy Purchase grossing up with T&D losses**	**6.96**

(B) Distribution Service Charges

As per the DISCOM's ARR proposal for FY 2023-24, out of total estimated ARR of Rs. 69,628 Crores, the power purchase cost is Rs. 62,024 Crores and balance amount of Rs. 7,604 Crores is towards distribution related costs. Considering energy requirement of 1,13,594 Mus at DISCOM periphery for FY 2023-24, the Distribution service cost is worked out to Rs. 0.67/kWh.

(C) Cross Subsidy Charges

In accordance with the cross-subsidy formula laid down in the Tariff Policy, 2016, Cross subsidy is computed as per following formula;

S = T – [C/(1-L/100)+D+R]

Where,

T is the Tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is the Per unit cost of carrying regulatory assets

In the DISCOM's Tariff Order dated 31.03.2022, the Hon'ble Commission has worked out cross subsidy charges in accordance with formula stipulated in National Tariff Policy 2016, as under;

Table 10-4 Cross-Subsidy Surcharge

S. No.	Cost Component	Rate (Rs./kWh)
i	Cross-Subsidy for HT	2.26

The value of cross subsidy will change as per the figures approved by the Hon'ble Commission in the Tariff Order of FY 2023-24.

(D) Green Tariff

In terms of above, the computation of green Tariff is summarized as under;

Table 10-5 Proposed Green Tariff for FY 2023-24

S. No.	Cost Component	Cost (Rs./kWh)
i	Average Pooled Power Purchase Cost of RE (including Transmission Charges)	6.96
ii	Distribution Charges	0.67
iii	Cross-Subsidy Charges	2.26
	Total	**9.89**

It is to state that, in addition to Green Energy Tariff, the demand charges and PF penalty/rebate, EHV rebate, Reactive charges as approved in Tariff schedule of FY 2023-24 shall be applicable to respective category of consumer.

This being a new category, it is not possible to ascertain the number of consumers who may opt for this Tariff category. Therefore, it is not possible to quantify the sales quantum under this category presently, however, the DISCOM will capture and present the impact of this new Tariff category during the truing-up of FY 2023-24.

Commission's view

It is noted by the Commission that difference between; (i) Green Tariff worked out as above considering various cost elements as per ARR of the four DISCOMs and (ii) the average realisation envisaged for FY 2023-24 for HT and LT (NRGP and LTMD) categories, works out around Rs. 1.50/kWh. Accordingly, in order to introduce Green Tariff, the Commission has decided to set the rate of Green Tariff as Rs. 1.50/unit which will be over and above the normal tariff applicable to the respective category as per Tariff Order. Green Tariff 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 1.50/ 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.

10.3 Implementation of the pre-paid metering

Petitioner's Submission

The Government of India has approved Reformed based and Result Linked, Revamped Distribution Sector Scheme. The key objective of the scheme involves installation of prepaid smart metering for consumers along with the associated Advanced Metering Infrastructure.

The DISCOMs are in the process of implementation of the RDSS scheme in the State and the replacement of all the existing consumer meters with smart pre- paid meters will be executed by the DISCOMs in a phased wise manner.

Accordingly, during the transition phase, certain consumers will continue to be under the post-paid regime and certain consumers will transit to the prepaid regime. Further, it is also envisaged that the replacement of the meters will be a continuous activity and the switchover from existing meters (post-paid) to smart prepaid meters may happen during the ongoing billing cycle and accordingly, the consumer will be billed as per the post-paid Tariff for part of the billing cycle and as per the prepaid Tariff for the remaining part of the billing cycle.

The transition phase is likely to continue during the FY 2023-24 and hence, the hon'ble Commission is requested to pass appropriate orders (continuation of same Tariff for both post-paid and prepaid category consumers and associated conditions during the transition phase) in this regard in its Tariff Order for FY 2023-24 so as to ensure the smooth transition from the existing regime to the prepaid metering regime.

Since, as provided in the Electricity Act, 2003 at Section 47(5), DISCOMs cannot recover Security Deposit from the consumer being supplied through pre-payment meter. Therefore, the existing Security deposit amount of the consumer shall be set-off against equivalent amount of pre-payment, after net-off arrears if any, on installation of pre-payment meter.

Commission's view

The Commission has noted the submission of the Petitioner. The Tariff Schedule attached to this Order is applicable to the consumers based on load and usage and not based on kind of meter i.e., pre-paid or post-paid installed at consumer end. Further, treatment to security deposit of the pre-paid consumers shall be given by the DISCOMs in accordance with the prevailing policy and regulations.

Commission's Order

The Commission approves the Aggregate Revenue Requirement (ARR) for MGVCL for FY 2023-24 as shown in the Table below:

ARR approved for FY 2023-24 (Rs. Crore)

S. No.	Particulars	FY 2023-24
1	Cost of Power Purchase	8,095.48
2	Operation & Maintenance Expenses	961.52
2.1	*Employee Cost*	*681.63*
2.2	*Repair & Maintenance*	*71.49*
2.3	*Administration & General Charges*	*104.45*
2.4	*RDSS Metering Opex*	*172.20*
2.5	*Other Expenses Capitalised*	*(68.25)*
3	Depreciation	291.28
4	Interest & Finance Charges	50.50
5	Interest on Working Capital	-
6	Provision for Bad Debts	0.001
7	**Sub-Total [1 to 6]**	**9,398.78**
8	Return on Equity	173.51
9	Provision for Tax / Tax Paid	21.68
10	**Total Expenditure (7 to 9)**	**9,593.97**
11	Less: Non-Tariff Income	218.55
12	**Aggregate Revenue Requirement (10 - 11)**	**9,375.41**

The retail supply Tariffs for MGVCL distribution area for FY 2023-24 determined by the Commission are annexed to this Order. This Order shall come into force with effect from the 1st April 2023. The revised rate shall be applicable for the electricity consumption from the 1st April, 2023 onwards.

Sd/-	Sd/-	Sd/-
S.R. PANDEY	**MEHUL M. GANDHI**	**ANIL MUKIM**
Member	**Member**	**Chairman**

Place: Gandhinagar

Date: 31/03/2023

ANNEXURE: TARIFF SCHEDULE

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

Effective from 1st April, 2023

General

1. The Tariff figures indicated in this Tariff schedule are the Tariff rates payable by the consumers of Distribution Licensees viz. DGVCL, MGVCL, PGVCL and UGVCL.
2. These Tariffs are exclusive of Electricity Duty, tax on sale of electricity, taxes and other charges levied by the Government or other competent authorities from time to time which are payable by the consumers, in addition to the charges levied as per the Tariff.
3. All these Tariffs for power supply are applicable to only one point of supply.
4. The charges specified are on monthly basis. Distribution Licensee may decide the period of billing and adjust the Tariff rate accordingly.
5. Except in cases where the supply is used for purposes for which a lower Tariff is provided in the Tariff schedule, the power supplied to any consumer shall be utilized only for the purpose for which supply is taken and as provided for in the Tariff.
6. The various provisions of the GERC (licensee's power to recover expenditure incurred in providing supply and other miscellaneous charges) Regulations, except Meter Charges, will continue to apply.
7. Conversion of Ratings of electrical appliances and equipment from kilowatt to B.H.P. or vice versa will be done, when necessary, at the rate of 0.746 kilowatt equal to 1 B.H.P.
8. The billing of fixed charges based on contracted load or maximum demand shall be done in multiples of 0.5 (one half) Horse Power, kilo watt or kilo volt ampere (HP, kW, kVA) as the case may be. The fraction of less than 0.5 shall be rounded off to next 0.5. The billing of energy charges will be done on complete one kilo-watt-hour (kWh).
9. The Connected Load for the purpose of billing will be taken as the maximum load load 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
16. Green Power Tariff
    - Green Power Tariff of Rs 1.50/ 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.

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

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:

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

PLUS

5.2. ENERGY CHARGE:

For the entire consumption during the month	460 Paise per Unit

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 month prior to its expiry.

6. RATE: NON-RGP NIGHT

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

6.1. FIXED CHARGES PER MONTH:

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

PLUS

6.2. ENERGY CHARGES:

For the entire consumption during the month	260 Paise per unit

NOTE:

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

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

7. RATE: LTMD-NIGHT

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

7.1 DEMAND CHARGES PER MONTH:

50% of the Demand charges specified in Rate **LTMD** above

PLUS

7.2. ENERGY CHARGES:

For entire consumption during the month	260 Paise per unit

PLUS

7.3. REACTIVE ENERGY CHARGES:

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

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:

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

9.4 <u>TIME OF USE DISCOUNT</u>:

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

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

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

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

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

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

12.1 FIXED CHARGES

Fixed Charge	Rs. 25 per Installation per Month

12.2 ENERGY CHARGES: FOR THE ENTIRE MONTHLY CONSUMPTION

Energy Charge	410 Paise per Unit

PART - II

TARIFFS FOR SUPPLY OF ELECTRICITY AT HIGH TENSION

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

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

13. RATE- HTP-1

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

13.1 DEMAND CHARGES:

13.1.1 For billing demand up to contract demand

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

13.1.2 For billing Demand in Excess of Contract Demand

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

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

13.10 CONCESSION FOR USE OF ELECTRICITY DURING NIGHT HOURS:

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

13.11 SEASONAL CONSUMERS TAKING HT SUPPLY:

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

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

13.11.3 The total minimum amount under the head "Demand and Energy Charges" payable by a seasonal consumer satisfying the eligibility criteria under sub-clause 13.11.1 above and complying with provisions stipulated under sub-clause 13.11.2 above shall be Rs. 4550 per annum per kVA of the billing demand.

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

a) The highest of the actual maximum demand registered during the calendar year.
b) Eighty-five percent of the arithmetic average of contract demand during the year.
c) One hundred kVA

13.11.5 Units consumed during the off-season period shall be charged for at the flat rate of 430 Paise per unit.

13.11.6 Electricity Bills paid during off-season period shall not be taken into account towards the amount payable against the annual minimum bill. The amount paid by the consumer towards the electricity bills for seasonal period only under the heads "Demand Charges" and "Energy Charges" shall be taken into account while determining the amount payable towards the annual minimum bill.

13.11.7 Seasonal consumer is required to submit to the Distribution Licensee an irrevocable Bank Guarantee from a Nationalised or Scheduled Commercial Bank equal to the difference of amount/ Bank Guarantee lying with the Licensee as Security Deposit and minimum bill calculated at the rate shown in para 13.11.3 for the higher of Contract Demand or Billing Demand. If the Contract Demand is revised upward during the calendar year, the consumer shall submit a revised Bank Guarantee or additional Bank

Guarantee as calculated above to the Licensee. The cost of such Bank Guarantee/s shall be borne by the consumer. It shall be the responsibility of the consumer to keep the bank guarantee/s valid at all times and to renew the bank guarantee/s at least 1 months prior to its expiry.

14. RATE- HTP-II

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

14.1 DEMAND CHARGES:

14.1.1 For billing demand up to contract demand

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

14.1.2 For billing demand in excess of contract demand

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

PLUS

14.2 ENERGY CHARGES:

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

PLUS

14.3 TIME OF USE CHARGES:

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

14.4 Billing Demand

14.5 Minimum Bill

14.6 Maximum demand and its measurement

14.7 Contract Demand

14.8 Rebate for supply at EHV

14.9 Concession for use of electricity during night hours

Same as HTP-I Tariff

14.10 POWER FACTOR ADJUSTMENT CHARGES

14.10.1 Penalty for poor Power Factor:

a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Energy Charges", arrived at using Tariff as per para 14.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.

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

14.10.2 Power Factor Rebate:

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

15. RATE- HTP-III

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

15.1 DEMAND CHARGES:

For billing demand upto 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

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

15.4	Billing Demand	Same as HTP-I Tariff
15.5	Minimum bill	
15.6	Maximum demand and its measurement	
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	225 Paise/Unit

16.3 Billing Demand

16.4 Minimum Bill

16.5 Maximum demand and its measurement

16.6 Contract Demand

16.7 Rebate for supply at EHV

Same as HTP-I Tariff

16.8 POWER FACTOR ADJUSTMENT CHARGES:

16.8.1 Penalty for poor Power Factor:

a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Energy Charges", arrived at using Tariff as per para 16.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.

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

16.8.2 Power Factor Rebate:

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

NOTE:

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

17. RATE- HTP-V

HT - Agricultural (for HT Lift Irrigation scheme only)

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

17.1 DEMAND CHARGES:

Demand Charges Rs. 25 per kVA per month

PLUS

17.2 ENERGY CHARGES:

For all units consumed during the month	80 Paise/Unit

17.3 Billing Demand
17.4 Minimum bill
17.5 Maximum demand and its measurement
17.6 Contract Demand
17.7 Rebate for supply at EHV

Same as per HTP-I Tariff

17.8 POWER FACTOR ADJUSTMENT CHARGES

17.8.1 Penalty for poor power factor

a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Energy Charges", arrived at using Tariff as per para 17.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.

b) In addition to the above clause, for every 1% drop or part thereof in average power factor during the month below 85% at the rate of 2% on the total amount of electricity bill for that month under the head "Energy Charges", arrived at using Tariff as per para 17.2 of this schedule, will be charged

17.8.2 Power Factor Rebate

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

18. <u>RATE- RAILWAY TRACTION</u>

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

18.1 DEMAND CHARGES:

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

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

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

PLUS

18.2 ENERGY CHARGES:

For all the units consumed during the month	500 Paise per Unit

18.3	Billing Demand:	Same as HTP-I Tariff
18.4	Minimum Bill	
18.5	Maximum demand and its measurement	
18.6	Contract Demand	
18.7	Rebate for supply at EHV	

18.8 POWER FACTOR ADJUSTMENT CHARGES

18.8.1 Penalty for poor Power Factor:

a) The power factor adjustment charges shall be levied at the rate of 1% on the total amount of electricity bills for the month under the head "Energy Charges", arrived at using Tariff as per para 18.2 of this schedule, for every 1% drop or part thereof in the average power factor during the month below 90% up to 85%.

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

18.8.2 Power Factor Rebate:

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

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

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

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

19.1 DEMAND CHARGES:

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

PLUS

19.2 ENERGY CHARGES: FOR THE TOTAL MONTHLY CONSUMPTION

ENERGY CHARGE	400 Paise per Unit

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