

# GUJARAT ELECTRICITY REGULATORY COMMISSION



## **Tariff Order**

Truing up for FY 2020-21 and  
Determination of Tariff for FY 2022-23

**For**

**Madhya Gujarat Vij Company Limited  
(MGVCL)**

**Case No. 2030 of 2021**

**31<sup>st</sup> March, 2022**

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**GUJARAT ELECTRICITY REGULATORY COMMISSION**

**(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                                |



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|       |   |
|-------|---|
| 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        |
| MTR   | 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. 2030 of 2021**

**Date of the Order 31/03/2022**

**CORAM**

**Anil Mukim, Chairman**

**Mehul M. Gandhi, Member**

**S. R. Pandey, Member**

**ORDER**



## **1 Background and Brief History**

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### **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 2020-21 and Determination of retail supply tariff for FY 2022-23 on 29<sup>th</sup> November, 2021.

Gujarat Electricity Regulatory Commission notified the GERC (Multi-Year Tariff) Regulations, 2016 [GERC (MYT) Regulations, 2016] on 29<sup>th</sup> March, 2016 which is applicable for determination of tariff in all cases covered under the Regulations from 1<sup>st</sup> April, 2016 onwards. The Commission vide its Suo-Motu Order dated 24<sup>th</sup> September, 2021 in Case No. 1995 of 2021 in the matter of “Filing of application for determination of Aggregate Revenue Requirement (ARR) and Tariff for FY 2022-23”, has decided to determine the ARR for FY 2022-23 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 30<sup>th</sup> November, 2021.

Accordingly, MGVCL has filed the petition on 29<sup>th</sup> November, 2021 for Truing up of FY 2020-21 and approval of ARR and determination of Tariff for FY 2022-23.

After technical validation of the petition, it was registered on 3<sup>rd</sup> December, 2021 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 1<sup>st</sup> 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:**

| <b>Sr. No.</b> | <b>Name of Company</b>                      |
|----------------|---|
| 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 3<sup>rd</sup> October, 2006, notified the final opening balance sheets of the transferee companies as on 1<sup>st</sup> 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 Orders for Approval of final ARR for FY 2016-17 and Approval of Multi-Year ARR for FY 2016-17 to FY 2020-21**

The petitioner filed its petition for Truing up for 2015-16, Approval of Final ARR for 2016-17, Approval of Multi-Year ARR for FY 2016-17 to FY 2020-21 and Determination of tariff for 2017-18 on 30<sup>th</sup> November, 2016. The petition was registered on 03<sup>rd</sup> December, 2016 (Case No. 1624 of 2016). The Commission vide Order dated 31<sup>st</sup> March, 2017 approved the Truing up for 2015-16, Final ARR for 2016-17, Approval of Multi-Year ARR for FY 2016-17 to FY 2020-21 and determined the tariff for FY 2017-18.



#### **1.4 Commission's Order for Approval of True Up for FY 2016-17 and determination of Tariff for FY 2018-19**

The petitioner filed its petition for Truing-up of FY 2016-17 and determination of tariff for FY 2018-19 on 15<sup>th</sup> January, 2018. After technical validation of the petition, it was registered on 17<sup>th</sup> January, 2018 (Case No. 1701/2018). The Commission vide Order dated 31<sup>st</sup> March, 2018 approved truing up for FY 2016-17 and determined the tariff for FY 2018-19.

#### **1.5 Commission's Order for Approval of True up for FY 2017-18, Mid-Term Review of ARR for FY 2019-20 and FY 2020-21 and determination of Tariff for FY 2019-20**

The petitioner filed a petition for Truing Up of FY 2017-18, Mid-Term Review of ARR for FY 2019-20 and FY 2020-21 and determination of Tariff for FY 2019-20 on 30<sup>th</sup> November, 2018. The petition was registered on 4<sup>th</sup> December 2018 (Case No. 1761/2018). The Commission approved the Truing-Up of FY 2017-18, revised the ARR for FY 2019-20 and FY 2020-21 and determined the tariff for FY 2019-20 vide Order dated 24<sup>th</sup> April, 2019.

#### **1.6 Commission's Order for Approval of True up for FY 2018-19 and determination of Tariff for FY 2020-21**

The petitioner filed a petition for Truing Up of FY 2018-19 and determination of Tariff for FY 2020-21 on 30<sup>th</sup> November, 2019. The petition was registered on 11<sup>th</sup> December 2019 (Case No. 1841/2019). The Commission approved the Truing-Up of FY 2018-19, and determined the tariff for FY 2020-21 vide Order dated 31<sup>st</sup> March, 2020.

#### **1.7 Commission's Order for Approval of True up for FY 2019-20 and determination of Tariff for FY 2021-22**

The petitioner filed a petition for Truing Up of FY 2019-20 and determination of Tariff for FY 2021-22 on 27<sup>th</sup> November, 2020. The petition was registered on 9<sup>th</sup> December

2020 (Case No. 1913/2020). The Commission approved the Truing-Up of FY 2019-20, and determined the tariff for FY 2021-22 vide Order dated 31<sup>st</sup> March, 2021.

## **1.8 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.

## **1.9 Registration of the Petition and Public Hearing Process**

The petitioner submitted the current petition for Truing-up of FY 2020-21 and Determination of retail supply tariff for FY 2022-23. After technical validation of the petition, it was registered on 3<sup>rd</sup> December, 2021 (Case No. 2030/2021) 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 MGVCCL 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 MGVCCL was published on the following newspapers:

| <b>Sl. No.</b> | <b>Name of the Newspaper</b> | <b>Language</b> | <b>Date of publication</b> |
|----------------|------------------------------|-----------------|----------------------------|
| 1              | The Indian Express           | English         | 07.12.2021                 |
| 2              | Sandesh                      | Gujarati        | 07.12.2021                 |



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The petitioner also placed the public notice and the petition on the website ([www.mgvcl.com](http://www.mgvcl.com)) and also hosted on the website of GUVNL, i.e., [www.guvnl.com](http://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 6<sup>th</sup> January, 2022.

The Commission also placed the petition and additional details received subsequently from the petitioner on its website ([www.gercin.org](http://www.gercin.org)) for information and study of all the stakeholders. The Commission decided to conduct public hearing for all utilities at one place only, i.e., GERC office, Gandhinagar via Video Conferencing (MS Teams) on 17<sup>th</sup> February, 2022 due to COVID-19 Pandemic. The representatives from Utilities and interested stakeholders who have submitted their suggestions / comments / objections were also invited to participate in the proceedings via Video Conferencing. The interested persons, who wanted to make submission before the Commission during Public Hearing through Video Conferencing (Microsoft Office Teams), were requested to provide their details such as Names, Mobile Numbers and E-mail IDs at [efiling@gercin.org](mailto:efiling@gercin.org). Further, the interested persons, who did not have Audio-Visual facility, were allowed to represent before the Commission virtually from the Commission's Office at Gandhinagar.

The Commission also issued a notice for public hearing in the following newspapers in order to solicit wider participation by the stakeholders.

| Sl. No. | Name of the Newspaper | Language | Date of publication |
|---------|-----------------------|----------|---------------------|
| 1       | The Times of India    | English  | 06.02.2022          |
| 2       | Sandesh               | Gujarati | 06.02.2022          |
| 3       | Gujarat Samachar      | Gujarati | 06.02.2022          |

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 e-Public Hearing through video conferencing (MS Teams) for the petition on 17<sup>th</sup> February, 2022 at 11.30 AM at the Commission's Office, Gandhinagar. 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 was conducted in the Commission's





**Madhya Gujarat Vij Company Limited**  
**Truing up for FY 2020-21 and Determination of Tariff for FY 2022-23**

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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:

| <b>Sr. No.</b> | <b>Name of Stakeholders</b>                               | <b>Written Submission</b> | <b>Oral Submission</b> | <b>Present on the day of hearing</b> |
|----------------|---|---------------------------|------------------------|--------------------------------------|
| 1.             | Yash Complex Co-Operative Housing Service Society Limited | Yes                       | Yes                    | Yes                                  |
| 2.             | Indian Energy Exchange Limited                            | Yes                       | No                     | No                                   |
| 3.             | Gujarat Chamber of Commerce & Industry                    | Yes                       | Yes                    | Yes                                  |
| 4.             | Shri Jayaram C. Marathe                                   | Yes                       | Yes                    | Yes                                  |
| 5.             | Bharatiya Kisan Sangh                                     | Yes                       | No                     | No                                   |
| 6.             | Shri K.K. Bajaj   | Yes                       | Yes                    | Yes                                  |
| 7.             | Shri Sailesh Bachubhai Mehta                              | Yes                       | No                     | No                                   |
| 8.             | Gujarat Krushi Vij Grahak Surakhsya Sangha                | Yes                       | Yes                    | Yes                                  |
| 9.             | Asandas and Sons Pvt. Ltd.                                | Yes                       | Yes                    | Yes                                  |
| 10.            | Utility Users' Welfare Association (UUWA)                 | Yes                       | Yes                    | Yes                                  |
| 11.            | Tata Consultancy Services                                 | No                        | No                     | Yes                                  |
| 12.            | Shri Rajeshbhai Patel                                     | No                        | No                     | Yes                                  |
| 13.            | Shri Umesh Parikh   | No                        | No                     | Yes                                  |
| 14.            | Shri Subodh Shah  | No                        | No                     | No                                   |
| 15.            | Shri Himanshu Umrajwala                                   | No                        | No                     | No                                   |

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

### **1.10 Approach of this Order**

MGVCCL has approached the Commission with the present petition for Truing up of FY 2020-21 and determination of retail supply tariff for FY 2022-23.



The Commission has undertaken Truing up for FY 2020-21, including computation of gains and losses for FY 2020-21, based on the submissions of the petitioner and audited Annual Accounts made available by the petitioner.

While truing up of FY 2020-21, the Commission has been primarily guided by the following principles:

- Controllable parameters have been considered at the level approved as per the MYT Order, 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 2020-21 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 2022-23. 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 and hence, deferred due to the special circumstances of Covid-19. In view of the above, the Commission issued suo-moto Order dated 24<sup>th</sup> September, 2021 to file the ARR and Tariff for the FY 2022-23 and accordingly, the Commission has taken up the determination of ARR and Tariff for FY 2022-23 after hearing the matter.

## **1.11 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 2020-21.
5. The **Fifth Chapter** deals with the approval of ARR for FY 2022-23.

6. The **Sixth Chapter** deals with the Cumulative Revenue Gap/(Surplus) for FY 2022-23.
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 2022-23.



## **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 2020-21 and determination of ARR and tariff for FY 2022-23.

### **2.2 True-Up for FY 2020-21**

MGVCL submitted the petition on 29<sup>th</sup> November, 2021 seeking approval of truing up of ARR for FY 2020-21. MGVCL has worked out its Aggregate Revenue Requirement (ARR) for FY 2020-21 as a part of the True Up for FY 2020-21. MGVCL has presented the actual cost components based on audited annual accounts for FY 2020-21. A summary of the proposed ARR for Truing-up of FY 2020-21 compared with the approved ARR for FY 2020-21 in the MTR Order dated 24<sup>th</sup> April, 2019 is presented in the Table given below:

**Table 2-1: ARR proposed by MGVCL for FY 2020-21 True up (Rs. Crore)**

| Sr. No. | Particulars                       | 2020-21<br>(Approved) | 2020-21<br>(Actual) | Deviation     |
|---------|-----------------------------------|-----------------------|---------------------|---------------|
| 1       | Cost of Power Purchase            | 5,723.61              | 5,237.60            | 486.01        |
| 2       | Operation & Maintenance Expenses  | 682.86                | 625.64              | 57.23         |
| 2.1     | Employee Cost                     | 581.19                | 499.47              | 81.72         |
| 2.2     | Repair & Maintenance              | 69.72                 | 77.42               | (7.70)        |
| 2.3     | Administration & General Expenses | 88.01                 | 88.21               | (0.20)        |
| 2.4     | Other Expenses Capitalised        | (56.05)               | (39.46)             | (16.59)       |
| 3       | Depreciation                      | 270.64                | 270.72              | (0.08)        |
| 4       | Interest & Finance Charges        | 63.38                 | 45.87               | 17.51         |
| 5       | Interest on Working Capital       | -                     | -                   | -             |
| 6       | Provision for Bad Debts           | 0.00                  | 0.01                | (0.00)        |
| 7       | <b>Sub-Total [1 to 6]</b>         | <b>6,740.50</b>       | <b>6,179.84</b>     | <b>560.67</b> |
| 8       | Return on Equity                  | 158.12                | 160.04              | (1.91)        |
| 9       | Provision for Tax/Tax Paid        | 12.11                 | 19.58               | (7.47)        |
| 10      | <b>Total Expenditure [7 to 9]</b> | <b>6,910.73</b>       | <b>6,359.45</b>     | <b>551.29</b> |
| 11      | Less: Non-Tariff Income           | 130.28                | (62.24)             | 192.52        |



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| Sr. No. | Particulars                                  | 2020-21<br>(Approved) | 2020-21<br>(Actual) | Deviation     |
|---------|--|-----------------------|---------------------|---------------|
| 12      | <b>Aggregate Revenue Requirement [10-11]</b> | <b>6,780.45</b>       | <b>6,421.69</b>     | <b>358.75</b> |

### 2.3 Revenue gap for FY 2020-21

As shown in the Table below, MGVCCL has claimed a Revenue Gap of Rs. 72.36 Crore in the Truing up after considering the gain/(loss) due to controllable / uncontrollable factors:

**Table 2-2: Revenue Surplus/ (Gap) as claimed by MGVCCL for FY 2020-21 (Rs. Crore)**

| Sr. No. | Particulars   | Amount          |
|---------|---|-----------------|
| 1       | Aggregate Revenue Requirement originally approved for FY 2020-21  | 6,780.45        |
| 2       | Less: (Gap) / Surplus of FY 2018-19   | 44.88           |
| 3       | Less: Gain / (Loss) on account of Uncontrollable factors to be passed on to Consumer  | 195.40          |
| 4       | Less: Gain / (Loss) on account of Controllable factors to be passed on to Consumer (1/3 <sup>rd</sup> of Total Gain / (Loss)) | 54.45           |
| 5       | <b>Revised ARR for FY 2020-21 (1 - 2 - 3 - 4)</b>   | <b>6,485.71</b> |
| 6       | Revenue from Sale of Power  | 6,171.59        |
| 7       | Other Income (Consumer related)   | 144.80          |
| 8       | <b>Total Revenue excluding Subsidy (6 + 7)</b>  | <b>6,316.39</b> |
| 9       | Agriculture Subsidy   | 84.85           |
| 10      | GUVNL Profit / (Loss) Allocation  | 12.12           |
| 11      | <b>Total Revenue including Subsidy (8 + 9 + 10)</b>   | <b>6,413.36</b> |
| 12      | <b>Revised (Gap)/ Surplus after treating gains/(losses) due to Controllable/ Uncontrollable factors (11 - 5)</b>              | <b>(72.36)</b>  |

### 2.4 Aggregate Revenue Requirement for FY 2022-23

MGVCCL, in the petition, sought approval of ARR and Tariff for FY 2022-23. A summary



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of the proposed ARR for FY 2022-23 is presented in the Table given below:

**Table 2-3: ARR proposed by MGVCL for FY 2022-23 ARR (Rs. Crore)**

| Sr. No.   | Particulars                                  | 2022-23<br>(Projected) |
|-----------|--|------------------------|
| 1         | Cost of Power Purchase*                      | 6,317.26               |
| 2         | Operation & Maintenance Expenses             | 820.11                 |
| 2.1       | Employee Cost                                | 644.75                 |
| 2.2       | Repair & Maintenance                         | 67.62                  |
| 2.3       | Administration & General Expenses            | 98.80                  |
| 2.4       | RDSS Metering Opex                           | 73.50                  |
| 2.5       | Extraordinary Items                          | -                      |
| 2.6       | Net Prior Period Expenses / (Income)         | -                      |
| 2.7       | Other Expenses Capitalised                   | (64.56)                |
| 3         | Depreciation                                 | 300.26                 |
| 4         | Interest & Finance Charges                   | 45.74                  |
| 5         | Interest on Working Capital                  | -                      |
| 6         | Provision for Bad Debts                      | 0.01                   |
| <b>7</b>  | <b>Sub-Total [1 to 6]</b>                    | <b>7,483.37</b>        |
| 8         | Return on Equity                             | 177.15                 |
| 9         | Provision for Tax/Tax Paid                   | 19.58                  |
| <b>10</b> | <b>Total Expenditure [7 to 9]</b>            | <b>7,680.09</b>        |
| 11        | Less: Non-Tariff Income                      | 139.39                 |
| <b>12</b> | <b>Aggregate Revenue Requirement [10-11]</b> | <b>7,540.70</b>        |

\*Note: MGVCL in data gaps reply, has revised 'Cost of Power Purchase' to Rs.6,227.54 Crore; ARR revised to Rs. 7,450.98 Crore.

## 2.5 Summary of projected Revenue Surplus/(Gap) for FY 2022-23

The Table below summarises the Aggregate Revenue Requirement, the total revenue with the existing tariff and the Revenue Gap projected for FY 2022-23 by MGVCL:

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**Table 2-4: Estimated Revenue (Gap)/Surplus for FY 2022-23 (Rs. Crore)**

| Sr. No.  | Particulars                                     | 2022-23<br>(Projected) |
|----------|---|------------------------|
| 1        | Aggregate Revenue Requirement                   | 7,540.70               |
| 2        | Less: Revenue Gap from True up of FY 2020-21    | (72.36)                |
| <b>3</b> | <b>Total Aggregate Revenue Requirement</b>      | <b>7,613.06</b>        |
| 4        | Revenue with Existing Tariff                    | 5,256.58               |
| 5        | FPPPA Charges @ Rs.1.80/Unit                    | 2,064.50               |
| 6        | Other Income (Consumer related)                 | 144.80                 |
| 7        | Agriculture Subsidy                             | 77.31                  |
| <b>8</b> | <b>Total Revenue including Subsidy (4 to 7)</b> | <b>7,543.18</b>        |
| <b>9</b> | <b>Revenue (Gap)/Surplus (8-3)*</b>             | <b>(69.87)</b>         |

\*Note: MGVCL in data gaps reply, has revised 'Revenue (Gap)/Surplus' to Rs.79.65 Crore.

## **2.6 Proposed Changes in the Tariff Structure for FY 2022-23**

MGVCL submitted that the consolidated Revenue (Gap)/Surplus for all four distribution companies is Rs. (568) 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 2022-23.

## **2.7 Request of MGVC**

1. To admit this Petition seeking True up of FY 2020-21, Aggregate Revenue Requirement for FY 2022-23 and Tariff Proposal for FY 2022-23.
2. To approve the True up for FY 2020-21 and allow sharing of gains/ (losses) with the Consumers as per sharing mechanism prescribed in the GERC MYT Regulations, 2016.
3. To allow recovery of Revenue (Gap) / Surplus of FY 2020-21 as part of Tariff determination for FY 2022-23.
4. To approve Aggregate Revenue Requirement for FY 2022-23 as submitted by the Petitioner.
5. To consider approved True up parameters & ARR of GSECL, GETCO and SLDC while finalizing Tariff of the Petitioner.



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6. Pass suitable orders for implementation of Tariff Proposal for FY 2022-23 for making it applicable from 1<sup>st</sup> April, 2022 onwards.
7. To grant any other relief as the Hon'ble Commission may consider appropriate.
8. The Petitioner craves leave of the Hon'ble Commission to allow further submissions, addition and alteration to this Petition as may be necessary from time to time.
9. Pass any other Order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.





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

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### **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 2020-21 and determination of tariff for FY 2022-23 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: Lack of Transparency and Undisclosed Crucial Information**

The objector submitted that the petitions filed by the petitioner lack transparency, as crucial information relevant for True-up of FY 2020-21 and tariff determination process is not disclosed. Further, the petitioners have also failed to comply with directions issued by the Commission in the previous Tariff Order. Since, the Tariff is common for all State DISCOMs, consolidated formats for all 4 DISOCMs should be given.

When any person purchases the copy of the petition from petitioner, CD of MS Excel format should be given for analysis of data. It is requested to fix the minimum font size for documents to be provided to the respondents and to be submitted to the Commission by petitioners and respondents because petitioners provide data in such small fonts that it cannot be read easily.

Article 19 of the Indian Constitution provides the right to be informed. DISCOMs and GUVNL should be directed to provide all data, PPAs, etc. on their website for easy downloading. The Tariff schedule part should also be provided in Gujarati language.

The objector submitted that petitioners have knowingly avoided to give consolidated tariff formats for all four Companies together like category-wise sales, revenue in terms of absolute amount and per unit basis, etc. along with the petitions. In case consolidated tariff format is provided, it would be possible for the general public to verify and analyse the consolidated gap/ surplus position claimed by the petitioners.

### **Response of the Petitioners**

The petition has been filed following the principles, methodology and norms of the EA 2003 and GERC (MYT) Regulations, 2016. The information as required under the GERC (MYT) Regulations is duly provided along with the petition. Further, other relevant information is also available on petitioner's website.

### **Commission's view**

The petition for true-up of FY 2020-21 and determination of ARR and tariff for FY 2022-23 has been filed by the petitioner in accordance with the Suo-Motu Order of the Commission in this regard dated 24<sup>th</sup> September, 2021. The Commission has ensured that the petitions have been filed as per the principles laid down by the Commission in the GERC (MYT) Regulations, 2016. Further, information submitted subsequently by the petitioner is also made available to the stakeholders on the website of the DISCOMs.

### **Issue No. 2: Agricultural Sales and Revenue**

The respondent submitted that the sales and revenue projected for FY 2022-23 have not followed the pattern of actual sales and revenue for FY 2020-21. It is submitted that for unmetered agricultural consumer category, the consumption is considered on the basis of hours of power supply irrespective of use by individual consumer as compared to the power supplied to metered agricultural consumers.

DISCOMs have installed 100% DTC metering and hence, it is possible to evaluate the actual consumption for AG dominant feeder. If at all no such exercise is made, the expense of DTC metering for AG dominant feeder is a burden to other non-subsidized category.

It is submitted that energy sales of unmetered Agriculture consumers do not correspond to the sales of metered Agriculture consumers. Also, revenue from Agriculture category shown in petition does not tally with RIMS Report. There is huge

difference in Average Cost of Supply (ACoS) of AG category and revenue realised from this category.

The petitioner has submitted that the government provides subsidy for tariff compensation/FPPPA for metered and unmetered category. The agricultural subsidy is to be paid in advance, however, it was submitted in the past that the same is yet to be received from the Government. Also, subsidy to AG Consumer should be given on per unit basis and directly to consumers' bank account.

### **Response of the Petitioners**

DISCOMs have submitted that sales of metered AG consumers are affected due to theft/ malpractice. In case of unmetered consumers, there is no incentive for energy conservation. As regards the assessment of unmetered Agriculture consumers, the norms of 1700 Units/HP/Annum is derived on the detailed study assessment undertaken by Expert Committee, namely, Dr P.K. Misra Committee, wherein the Committee has analysed consumption patterns and consumption parameters in detail, and recommended the assessment of 1700 per HP per Annum for unmetered agricultural connections in a scientific manner. Also, study was undertaken by TERI for assessing the consumption of unmetered Agriculture consumers. Therefore, there is no justification to raise any issue with regard to the normative consumption assessment considered for un-metered agriculture consumers.

The average realization from almost all categories for FY 2020-21 is within  $\pm 20\%$  of the ACoS except Railways and Agriculture category. In case of Agricultural consumers, as per the decision of the Government of Gujarat, the FPPPA charges payable by Agriculture consumers are not recovered from the consumers but is being compensated by the State Government as a subsidy support to agriculture consumers.

The FPPPA subsidy received from the State Government has been duly considered in the revenue from sale of power for respective category of consumers, both in Annual Accounts and also in the True up petition.

Further, the tariff for Unmetered category is always higher than Metered category so as to incentivize the Unmetered category for installation of Meter.

### **Commission's view**

The response of the petitioners is noted.

**Issue No. 3: Distribution losses**

The objector submitted that the data submitted by the petitioners is not correct. The data needs to be verified by the Commission based on the energy supplied by GETCO at periphery of the State DISCOMs and data of Energy sold at Distribution Transformer level of these four DISCOMs for the year to ascertain the actual level of losses.

In case of DGVCL, losses are still high for even Urban feeders whereas, in case of PGVCL, no details are provided. Therefore, it is necessary to segregate the sales booked between actual metered units and assessed units, mainly for agriculture consumers to ascertain the losses. The Commission should compare the consumption registered in the DT Meters installed for Agriculture consumers with assessed units booked in the sales, which is necessary to ascertain the actual level of losses.

DISCOMs should be directed to submit details of consumption registered in express agriculture feeder and compare it with assessed consumption on the same feeder.

It is submitted that except PGVCL, all three DISCOMs have proposed higher Distribution losses for FY 2022-23 compared to actual loss level achieved during FY 2020-21. The objective of EA 2003 and GERC (MYT) Regulations, 2016 is to improve the performance efficiency of DISCOMs on year-on-year basis and to pass on the benefits of cost reduction on account of improved efficiency to the consumers. Therefore, the Commission is requested to not allow distribution losses claimed by UGVCL, MGVCL and DGVCL. The Commission should approve the losses as per actual losses of FY 2020-21 while approving power purchase cost for FY 2022-23.

The objector submitted that as per the Tariff Policy and MYT framework and principles, the trajectory should be given for the distribution losses. Distribution loss is a controllable factor. The Commission is requested to set the trajectory of controllable and uncontrollable factors on the basis of the best levels achieved by DISCOMs in the past years so that tariff can be reduced and efficiency can be brought into the system.

**Response of the Petitioners**

As regards assessment of unmetered agriculture category, the normative consumption as approved by the Commission for FY 2020-21 is considered.

For reduction of distribution losses by the DISCOM, various activities are planned, such as:

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- Maintenance and replacement of conductor and cables with proper size;
- Providing amorphous transformers and load balancing activities and relocating the distribution transformer in load centre;
- Bifurcating all feeders as per system requirement;
- Removal of joints in lines / cables;
- Releasing of new AG connections preferably with HVDS to reduce LT line losses, etc.

For reduction of commercial losses, following activities are undertaken:

- Vigilance activities and regular checking drives to curb the power theft;
- Providing Aerial Bunch Conductor /insulated conductor / XLPE cable and armoured cables to eliminate power theft by direct hooking;
- Replacing services having joints, provide meters outside at the entrance of premises;
- Replacing electromechanical meters by static meters;
- Replacing faulty/burnt meters and making all installation pilferage proof;
- Consumption monitoring specifically for high value consumers.

The efforts for reduction of distribution losses will be continued and will be enhanced. However, loss reduction is a slow process and becomes increasingly difficult as the loss levels go further down.

Distribution Loss of Agriculture category is highly influenced by the amount and spells of rainfall, etc. However, with the continuous efforts and expeditious release of new connections, the loss of agriculture category has also reduced. Moreover, during FY 2020-21, many of the activities could not be performed due to COVID-19 pandemic and consumption mix has also changed and, therefore, not much reduction in distribution loss is achieved.

As regards projected distribution losses for FY 2022-23, it is submitted that the Distribution losses of FY 2020-21 are abnormal on account of meter reading / energy accounting issues due to outbreak of COVID-19 pandemic at the end of financial year. Therefore, realistic approach has been considered for estimating distribution losses for FY 2022-23.

### **Commission's view**

The Commission has noted the efforts made by the petitioners. However, loss reduction activity being continuous, sustained and concerted efforts should be made to reduce the losses in coming years also. The Commission has allowed the distribution losses based on approved sales for FY 2020-21.

As regards distribution losses for FY 2022-23, the Commission noted that DGVCL, UGVCL and MGCVCL have proposed Distribution Losses for FY 2022-23 higher than actual Losses of FY 2020-21 citing probability of increase in Open Access sales, increasing trend of Losses in Urban and JGY categories on account of affected financial health post lock down era, day time power supply to AG consumers under SKY scheme and more than 8 hours of Power supply to AG consumers on account of delayed/poor monsoon. Also, Distribution losses projected by DISCOMs are higher than Distribution losses approved for 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 DISCOMs, the Commission does not find any rationale in allowing distribution losses higher than that approved for FY 2021-22. The Commission has approved distribution loss for FY 2022-23 same as approved for FY 2021-22, except for UGVCL where distribution loss of 7.00% has been allowed.

### **Issue No. 4: Accounting for Dumped Energy**

The respondent has submitted that inadvertent flow of energy is inevitable phenomena on account of the Open Access consumers and other energy suppliers who are deviating from the schedule of use of consumption. Such dumped energy on account of inadvertent flow is also one of the sources of power supply at no cost. Therefore, the Commission should ensure that such energy is also accounted and not be considered for showing the efficiency in reduction of loss.

### **Response of the Petitioners**

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 the Commission.

**Commission's view**

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

**Issue No. 5: Power Purchase Cost of FY 2020-21**

It is submitted that the cost of power purchase should be reduced as the Fixed and Variable charges of each generator/power supplier is prefixed and the purchase amount has also increased while the energy sales has been reduced by 7058 MUs. According to approved power purchase cost per unit, power purchase cost should have reduced by Rs.36,809 Crore, however, it has increased by Rs.37,809 Crore for FY 2020-21.

In the True up petition, power purchase cost should be worked out for each DISCOM based on BST rate approved in the MTR Order.

- **Variation in Power purchase cost as per FPPPA submission and as per Annual account**

The petitioners have claimed higher amount of power purchase expenses by Rs. 948 Crore in their FPPPA claims for FY 2020-21. It is requested that thorough examination of power purchase expenses of petitioners' vis-a-vis power purchase expenses claimed as part of FPPPA submission should be done by the Commission. Therefore, the Commission is requested to consider recovery of carrying cost for the additional amount of Rs. 948 Crore recovered by the petitioners through FPPPA.

- **Discrepancies in the Power Purchase Cost claimed in the petitions and Power Purchase cost as per Annual Accounts**

The power purchase cost for FY 2020-21 is reduced by amount of Rs. 2015 Crore being provision made during FY 2020-21.

Power purchase provisions during FY 2020-21 as stated in the Accounts is Rs. 2622 Crore instead of Rs. 2015 Crore shown in the petitions. Therefore, the Commission is requested to reduce the power purchase cost by Rs. 2622 Crore for FY 2020-21 instead of Rs. 2015 Crore.



- **Purchase of power from short term market and levy of Additional Surcharge:**

The stand of GUVNL is that they have stranded generating capacity (surplus capacity) and therefore, there is a need to levy Additional Surcharge from open access consumers. Contrary to this, the power purchase cost details submitted by the petitioners clearly indicates that they have purchased huge quantum of power from the short-term market. DISCOMs are procuring power from short term market hence, there is no stranded capacity and hence, there should not be any Additional Surcharge to be levied. The Commission is requested to take serious note of this and restrain the DISCOMs from recovering Additional Surcharge.

- **Bulk Supply Tariff (BST) rate in True up petition**

The Commission has approved the Bulk Supply Tariff (BST) and its working mechanism for allocation of power purchase cost incurred by Co-petitioner among the petitioners. As per the petition, no detail is given as to how the total power purchase cost incurred by GUVNL is allocated to the petitioner companies. As per UGVCL petition, the power purchase cost for UGVCL for FY 2020-21 is Rs. 10949 Crore for 25819 MUs. The methodology to calculate the BST rate is not clear.

- **DSM payments and UI Units**

It is submitted that for UGVCL, there was net deviation of 714 MUs for FY 2020-21, which constitutes around 3% of schedule. Further, the amount received towards DSM charges is Rs. 158.57 Crore, i.e., Rs. 2.22/unit and average power purchase cost is around Rs. 4.24 per unit. So, loss of Rs. 2.02/unit, which amounts to Rs. 144 Crore for UGVCL only. For PGVCL, DSM receivable rate is Rs. 2.02/unit (Rs. 637 MUs at Rs. 137 Crore). In case of MGVCL and DGVCL, the DSM Charges are net payable at Rs. 3.26/unit and Rs. 4.80/unit, respectively.

It is requested to consider appropriate treatment in true-up of FY 2020-21 on account of loss of revenue due to issues in demand forecasting and scheduling of power.

- **Increase in Tariff due to FPPPA Charges**

It is submitted that for FY 2020-21, the approved FPPPA charges was Rs. 1.59/Unit as against which the actual FPPPA charges went as high as Rs. 2.00/Unit (in Quarter-1), that is increase in charges by Rs. 0.41/Unit, which is higher by around 26%. It is requested to revise the existing norms and practice of allowing FPPPA charges without involvement of consumers. Accordingly, the objector requested the Commission to





allow consumer participation in case there is need for significant increase in FPPPA charges.

- **True up of GUVNL Expenses**

Information was sought in regard to the true up expenses and revenue of GUVNL.

**Response of the Petitioners**

The power purchase cost for FY 2020-21 was approved by the Commission in the MTR Order dated 24<sup>th</sup> April, 2019, which was based on actual power purchase cost of FY 2016-17. Increase in Power Purchase Cost during FY 2020-21 was on account of uncontrollable factors such as increase in fuel cost, change in generation mix and increase in sales quantum, etc.

Point wise reply to other objections is as below:

- **Variation in power purchase cost as per FPPPA submission and as per Annual account**

As per the directive of the Commission, FPPPA is claimed based on actual payment made during respective quarter whereas Annual Accounts are prepared on accrual basis as per the Indian Accounting Standards (IND- AS), which includes undischarged liabilities or provisions.

- **Discrepancies in the power purchase cost claimed in the petitions and Power Purchase cost as per Annual Account**

The provision for amount of Rs. 2015 Crore is related to payment liability as per the Judgment of the Hon'ble Supreme Court and the amount is provided on best estimation basis as the liability is yet to be quantified by lower court/forum.

- **Purchase of power from short term market and 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 Additional Surcharge is levied as per the formula approved by the Commission and after demonstrating the stranded power purchase cost. Procurement from short-term market is to optimise the power purchase cost. Stranded Capacity is due to consumers sourcing power from other sources.

- **BST rate in True up petition**

The Commission has approved the BST mechanism in the MYT/MTR orders. Thus, power purchase cost incurred by GUVNL for FY 2020-21 is allocated to individual DISCOM accordingly.

- **DSM payments and UI Units**

The rate of DSM/ UI units varies time to time as it is linked with the frequency, therefore, rates paid / received under DSM cannot be compared with the average power purchase cost of the Company. DSM mechanism is for creating discipline. DSM charges are payable as well as receivable. The petitioners are making all the efforts to optimize the DSM/ UI liabilities.

- **Increase in Tariff due to FPPPA Charges**

As per the provisions of the Tariff Policy, any increase in the Power Purchase cost vis-a-vis power purchase cost approved by the Commission in the DISCOM's ARR/ MYT petition, is to be recovered from consumers through FPPPA charges on quarterly basis.

There has been increase in power purchase cost during FY 2020-21 on account of uncontrollable factors such as increase in fuel cost / power purchase rate and change in generation mix.

- **True up of GUVNL Expenses**

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. As per the MTR order, GUVNL is entitled to claim trading margin of Rs. 0.04 / Unit.

However, GUVNL has instead of claiming any trading margin, allocated less power purchase cost to the tune of Rs. 433 Crore to DISCOMs for FY 2020-21.

**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 2020-21 was approved by the Commission in the MTR Order dated 24<sup>th</sup> April, 2019.

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 2020-21, 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 2020-21 is discussed in the subsequent chapters of this Order.

**Issue No. 6: Power Purchase Cost for FY 2022-23**

The objector submitted that the petitioners will be in power deficit position during FY 2022-23 and accordingly, have proposed to purchase significant quantum of energy from short-term sources. The purchase of power from Power Exchange is shown as 6166 Mus whereas from short-term-bilateral, it is 2000 Mus. Therefore, the total short-term purchase is shown as 8166 Mus, which is 8% of the total energy requirement and no detail of bilateral sources is provided for purchase of 2000 MUs by the petitioners for FY 2022-23 specifically when such huge quantum is proposed to be purchased without long-term tie-up.

It is requested that the Commission may approve purchase of 8166 MUs from Power Exchange and bilateral short-term sources with a specific condition that henceforth, the petitioners will not be entitled for levy of Additional Surcharge for Open Access consumers for FY 2022-23.

The objector submitted that as per the petitions, the power purchase cost for FY 2021-22 would be on lower side by Rs.0.33/unit as compared to actual power purchase cost of FY 2020-21. However, no information has been given to justify the same. Power purchase cost for FY 2022-23 is projected as 4.48/unit whereas it is 4.81/unit for FY 2020-21. Thus, lower power purchase cost is projected for FY 2022-23 to recover the actual power purchase cost through FPPPA without public hearing.

**Response of the Petitioners**

Estimation of purchase of power through short-term arrangement for FY 2022-23 is based on present market condition with an objective to economize overall power purchase cost specifically to minimise the costlier power purchase from gas-based power stations. The petitioners already have power purchase arrangement on long-term basis having fixed cost payment liabilities.

As regards the power purchase cost, the scenario for FY 2020-21 is entirely different compared to estimated scenario for FY 2022- 23 in terms of generation mix, availability of power stations, energy balance, demand and supply scenario and is not comparable. Therefore, it is not appropriate to compare the per unit power purchase cost of FY 2020-21 and estimated power purchase cost of FY 2022-23.

**Commission's view**

As regards short-term power purchase for FY 2022-23, the Commission has noted that DISCOMs have proposed to purchase 8166 MUs of energy through Power Exchange. The Commission has deducted the unmet RPO purchased from GTAM from the power proposed to be purchased from the Power Exchange. The net power purchase from Power Exchange is worked out to be 4366 MUs for FY 2022-23, which is around the same level as in FY 2020-21. The detailed analysis undertaken by the Commission for approval of power purchase cost for FY 2020-21 and FY 2022-23 has been provided in relevant paras of this Order.

**Issue No. 7: RPO**

Petitioner has projected shortfall of approximately 2000 MUs in non-solar segment. DISCOMs have the option to fulfil their existing RPO obligations as well as future RPO targets by procuring RE power from short-term market through Green-DAM and Green-TAM products available at IEX platform.

**Response of the Petitioners**

DISCOMs have tied up required RE capacity to meet RPO. DISCOMs are eligible as per the Commission's Order to claim RE attribute of wheeling of RE power by consumers for captive / third-party consumption who are not claiming RE attributes and consumption of rooftop solar consumers. Considering this, as such no shortfall in RPO is estimated for FY 2022-23.

**Commission's view**

The Commission has approved the procurement of RE power for meeting RPO target for FY 2022-23 and computed unmet RPO of 1800 MUs. For the purpose of the ARR for FY 2022-23, the Commission has considered unmet RPO to be purchased from GTAM at Rs. 4.02 per kWh. However, the DISCOMs should endeavour to purchase

the balance RE power to meet the RPO target for FY 2022-23 from the cheapest sources available.

**Issue No. 8: Exemption from requirement of Undertaking for Consumers participating in RTM, GTAM and GDAM**

As per the Intra-State Open Access Regulations, 2011, a consumer seeking Inter-State short-term Open Access, shall require the consent of Distribution Licensee and SLDC, before giving its consent to the RLDC. It is submitted that since the aforementioned undertaking precludes the consumers from taking advantages of RTM/GTAM, the consumers are denied the option to avail cost effective conventional/RE power.

It is required to revisit the provision related to 24 hours scheduling enforced through Undertaking while seeking Open Access. The Commission is requested to exempt the requirement of Undertaking for consumers participating in these Exchange market segments.

**Response of the Petitioners**

The petitioner submitted that the procurement of power by the consumer under open access is governed as per Open Access Regulations and Orders.

**Commission's view**

The Commission has noted the suggestion of the objector. However, the issue raised is not relevant for the present Tariff proceeding.

**Issue No. 9: GSECL's old aged Power Stations**

It is submitted that the over-aged power stations, which are running at very low PLF should be discarded and its equity should not be allowed. All R&M expenses and establishment expenses should be reduced by GSECL/GUVNL so as to reduce power purchase cost.

The reduction in dispatch of one-third of available MUs give rise to average cost of (Units of GSECL) as high as Rs.8.07 per unit for FY 2022-23, which is more than double as compared to overall average cost of Rs.3.76 per unit.

### **Response of the Petitioners**

The petitioner has submitted that the estimation of power purchase for FY 2022-23 is completed following the Merit Order Dispatch 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.

As regards GSECL's power projects, utilization level is lower on account of comparatively higher variable cost of generation (Rs. 2.82 / unit) as compared to NTPC stations having variable cost of generation of around Rs. 2.09/unit and other stations. GSECL Stations are important to handle variable RE Sources and due to limitations in the inter-State transmission lines.

### **Commission's view**

The Commission has noted the response of the petitioners.

### **Issue No. 10: FPPPA Charges**

There is exorbitant increase in FPPPA charges after issuance of Tariff Order. In calculation of FPPPA, the weighted average of the approved level of Transmission and Distribution losses (%) and the Distribution losses reported by the DISCOMs plays an important role. The FPPPA was worked out as Rs 2.40/ Unit for October-December 2021, however, the Commission's approval was required only for more than 10 paise increase, as per the directions of the Commission. Hence, immediate rise of 10 paise was imposed by the DISCOMs.

The base FPPPA was revised vide the Tariff Order dated 31<sup>st</sup> March, 2020. The base FPPPA for FY 2020-21 was approved as Rs.1.59/unit (1.61-0.02). For FY 2021-22, the base FPPPA was approved as Rs.1.80/unit (Rs.1.59/unit +Rs 0.21/unit).

Therefore, the Commission is requested that the correct evaluation of losses may be first undertaken. Till then, this increase of Base FPPPA rate to Rs. 1.80/ unit should not be allowed as requested by the petitioners for any quarter of FY 2021-22 or for FY 2022-23.

### **Response of the Petitioners**

The FPPPA charges are towards adjustment due to increase or decrease in actual power purchase cost during the year vis-a-vis power purchase cost approved by the

Commission. Since, FPPPA is an adjustment charge towards variation in power purchase cost due to various uncontrollable factors, it may increase or decrease based on variation in actual power purchase cost.

As regards the average Power Purchase cost for FY 2022-23, it has been worked out to Rs. 4.48 per unit and, therefore, FPPPA revenue is estimated separately considering base FPPPA of Rs 1.80/Unit. Any increase in power purchase cost during FY 2022-23 over base power purchase cost will be recovered as incremental FPPPA over base FPPPA of Rs.1.80 /Unit.

**Commission's view**

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. 11: Proposed Addition of 520 MW Capacity during FY 2022- 23**

The Additional Surcharge is levied on six-monthly basis and stranded capacity forms the basis for determination of Additional Surcharge. Proposed addition of 520 MW (6371 MUs) thermal capacity may lead to increase in the stranded capacity and thereby fixed cost payable by the Open Access Consumers by way of Additional Surcharge.

**Response of the Petitioners**

Capacity addition of 520 MW is anticipated during FY 2022-23 from capacity tied-up with NTPC. The proposed capacity addition will be helpful to meet the base load requirement of the State and to economize overall power purchase cost.

**Commission's view**

The Commission has noted the response of the petitioners.

**Issue No. 12: Capital expenditure approved vis-à-vis actual**

DISCOMs have incurred more Capex compared to Capex approved by the Commission. Information was sought about the Capital expenditure and variation in the capital cost of the petitioners. In many projects, CAPEX is incurred without any approval in the MTR Order.

The objector submitted that DISCOMs have made extensive capital investment. However, they have not provided the details of cost benefit analysis as to how consumers are going to be benefited, details of cost of supply, voltage wise cost of supply, etc. in their respective tariff petitions. It seems that just to increase the fixed cost in terms of ROE, DISCOMs are undertaking CAPEX. The commercial principle does not allow any capital investment when it is not going to help in increasing the sale, increasing the profit, reducing the cost/tariff. The Commission is requested to call for the details of capital investment, cost benefit analysis, cost of supply and voltage wise cost of supply, etc., and also provide the same to the stakeholders.

**Response of the Petitioners**

Expenditure is incurred through own resources, financial assistance from the Central or State Government through different schemes, or consumer contribution, etc.

The scheme-wise deviation and justification for the Capital expenditure has already been discussed in the petition. CAPEX is incurred to meet the USO and Renovation and Replacement of old distribution network, bifurcation of feeders, installation / augmentation or Distribution Transformers, replacements of meters, etc.

**Commission's view**

The Commission has approved the Capital Expenditure and Capitalisation in the truing up for FY 2020-21 after due prudence check, as discussed in the relevant Chapter of this Order.

**Issue No. 13: Consumer Contribution in Capital Expenditure**

The objector submitted that the consumer pays for new and additional load as per the estimate served to him. Particularly in implementation of Regulation 4.95 of the Supply Code, the Regulations are not followed and estimates are served as for a new consumer when threshold limit of load changes and supply is to be given at higher



voltages. Here the existing load is ignored and the new demand load is considered as fresh connection and entire load is treated as new connection. In processing, the pro-rata charges are made applicable to entire load and existing contracted load in the system is not considered.

In spite of the instruction given by the Commission not to issue any Circular without concurrence of the Commission, the Circulars have been issued and turned down by the Ombudsman in his various orders.

The Distribution capacity is 67,740 MVA for 1917 no. of S/s. The maximum demand (MD) has reached 18,393 MW in March 2021 including load of Torrent (AECO and SECO) of about 2,279 MW. Hence, it can be said that 16,114 MW (18,393-2,279) of DISCOMs load has reached which is 1/4<sup>th</sup> the installed capacity. Therefore, justification of charging the pro-rata charges on each kVA is not justifiable. The Commission is requested to look into it and prudence check is to be exercised on verification of non-tariff income earned by serving estimate beyond scope of Regulations.

#### **Response of the Petitioners**

The Tariff petition is prepared based on principles laid down in the GERC (MYT) Regulations, 2016. A certain percentage of total amount of Consumer Contribution and capital grants outstanding are prudently written back every year and is considered as Non-Tariff Income in the petition. Thus, treatment for consumer contribution and capital grant is appropriately done in the petition on year-on-year basis, in line with prevailing Regulations. Pro-rata charges are recovered by GETCO towards development of required upfront network for catering the power requirement.

#### **Commission's view**

The response of the petitioners is self-explanatory.

#### **Issue No. 14: O&M Expenses**

The Objector submitted that there is an increase in R&M expenses in respect of all four petitioner Companies without any justification. The amount of Rs. 43.34 Crore is shown under the head 'Other Administration and General Expenses' in UGVCL petition. This is similar in the case of all DISCOMs.

The objector submitted that the claim of O&M expenses of Rs. 3792.43 Crore by the petitioners for FY 2022-23 is higher by Rs. 238.46 Crore as compared to eligible O&M expenses of Rs. 3553.97 Crore as per GERC (MYT) Regulations, 2016.

### **Response of the Petitioners**

O&M expenses include expenses towards Employee Cost, A&G Charges and R&M Charges.

The five-year CAGR of MGCVCL in term of number of consumers is 3.19% and in terms of Connected Load is 6.70%. During the last five years, MGCVCL has spent more than Rs. 1500 Crore and in FY 2020-21, MGCVCL spent Rs. 297.03 Crore towards capital expenditure under various heads.

The five-year CAGR of DGVCL in term of number of consumers is 4.24% and in terms of Connected Load is 7.68%. During the last five years, DGVCL has spent more than Rs. 600 Crore and in FY 2020-21, DGVCL spent Rs. 706.87 Crore towards capital expenditure under various heads.

The five-year CAGR of PGVCL in term of number of consumers is 3.70% and in terms of Connected Load is 8.35%. During the last five years, PGVCL has spent more than Rs. 7500 Crore and in FY 2020-21, PGVCL spent Rs. 1167.72 Crore towards capital expenditure under various heads.

The five-year CAGR of UGVCL in terms of numbers of consumers is @ 3.77% and in terms of Connected Load is 8.10%. During the last five years, the Company spent more than Rs. 3000 Crore and in FY 2020-21, UGVCL spent Rs. 651.29 Crore towards capital expenditure under various heads. UGVCL has also adopted High Voltage Distribution System (HVDS) for releasing new agricultural connections.

DISCOMs have also adopted High Voltage Distribution System (HVDS) for releasing new agricultural connections since 2009-10.

Therefore, all these activities necessitate corresponding increase in employee and A&G expenses. DISCOMs makes all the efforts for reduction of Distribution losses endeavours to achieve the Loss reduction trajectory as approved by the Commission, which besides others increases the R&M expenses. Further, the O&M expenses have been estimated as per the GERC (MYT) Regulations, 2016.

**Commission's view**

O&M expenses are approved in the truing up for FY 2020-21 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 2022-23 following the methodology prescribed under the GERC (MYT) Regulations, 2016, as detailed in the relevant Chapter of this Order.

**Issue No. 15: Depreciation**

The total Capex approved for the petitioners was Rs 3261 Crore against which actual claim is Rs. 2775 Crore for FY 2020-21, which results in reduction in Capex of Rs. 486 Crore. However, there is no corresponding reduction in the claim towards depreciation. However, instead of decrease in depreciation claim on account of reduction in CAPEX, there is an increase in depreciation to the tune of Rs.197 Crore.

As per Regulation 39.2 (b) of the GERC (MYT) Regulations, 2016, differential treatment is required for claiming depreciation in case of the assets transferred under the Transfer Scheme. The petitioners have not provided information regarding whether differential treatment for claiming depreciation in case of assets transferred under Transfer Scheme is given as per the mandate of Regulations or not.

Therefore, the Commission is requested to direct the petitioners to provide statement of assets transferred under Transfer Scheme, 2004 and give depreciation treatment for these assets in terms of Regulation 39.2 (b) and to provide complete details of effective date of Transfer Scheme, value of assets transferred, assets which have completed 12 years from Transfer Scheme, etc.

All Companies are taking depreciation in consideration of ARR and recovering it from consumers. They are also taking rebate of depreciation in Income Tax, therefore, it should be rationalized or removed from ARR.

**Response of the Petitioners**

Depreciation is claimed as per the norms followed by Company every year and as per the provisions of GERC (MYT) Regulations, 2016.

**Commission's view**

Depreciation is approved in the truing up for FY 2020-21 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. 16: Interest on Working Capital**

The Objector submitted that the interest on working capital should not be granted because the amount accumulated on account of depreciation is being used as working capital. Moreover, when fixed cost to the generator is given, it includes the working capital and the interest thereon. The gas-based generators are not able to generate the energy because of high price of gas and therefore, the amount on account of fuel purchase and stock of two months of fuel is not kept by the generator, therefore, it should not be recovered twice from the consumers.

**Response of the Petitioners**

Petitioners have not submitted any response.

**Commission's view**

As the petitioners have huge amount of Security Deposit with them, which they use for working capital requirement, the net working capital requirement works out to be negative and accordingly, IoWC is approved as NIL by the Commission for FY 2020-21 and for FY 2022-23 as detailed in the relevant Chapter of this Order.

**Issue No. 17: Return on Equity**

Recently, the rate of interest is reduced by all banks, so ROE should be reduced to decrease the burden on consumers. Erstwhile Gujarat Electricity Board and all Companies are collecting ROE since last 70 years. They had recovered their equity two times during said period. New equity added during last 25 years should only be considered for calculations in ARR.

The objector submitted that ROE should be linked with performance of DISCOMs. In view of Section 61(d) of the Act and Gujarat Electricity Industry (Re-organization and Regulations) Act, the Commission is required to examine the question of applicability of reasonable return on equity as per the provisions of Schedule VI of the 1948 Act in the light of the decision of the Apex Court in case of CESE Vs. WBERC and to weigh

the same vis-à-vis the efficiency, economical use of resources, good performance, etc. and the interest of the consumers.

Return is 14% on equity plus income tax on it. Considering the current scenario in the competitive market, it should be compared with the consumers' business return and bank's rate on deposits and savings. ROE should be linked with the performance of the licensee rather than the fixed rate of 14% in order to achieve the objectives of MYT framework.

### **Response of the Petitioners**

There is no response submitted by the petitioners.

### **Commission's view**

ROE has been approved in the truing up for FY 2020-21 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. 18: Non-Tariff Income**

The objector has submitted that as per the provision of GERC (MYT) Regulations, 2016, the total ARR is to be reduced by Non-Tariff Income to arrive at net ARR to be recovered through tariff. In the MTR Order dated 24<sup>th</sup> April, 2019, the Commission had approved Non-Tariff Income of Rs. 688 Crore against which the four petitioner companies have considered Non-Tariff Income of Rs. (355) Crore.

It is submitted that instead of considering actual non-tariff income of Rs. 774.45 Crore (as mentioned in Books of Accounts) for reduction of ARR of FY 2020-21, the additional amount of Rs. 355.34 Crore is sought to be recovered through ARR of FY 2020-21. Thus, net increase sought in ARR is Rs. 1129.79 Crore.

As per the Tariff petition, the treatment for reversal of Grant and Consumer Contribution and consequent restatement of Non-Tariff Income from FY 2016-17 was given in the accounts of FY 2019-20. The petitioners have not provided the reason as to why the impact of the same was not claimed in the respective petitions for True up of FY 2019-20 itself and the same is now claimed in the petitions for True up of FY 2020-21.

Referring to the audit para, till now consumer contribution was not properly accounted in Non-Tariff Income and ROE was claimed. There is no provision in the GERC (MYT) Regulations, 2016 to consider revenue/expenditure of previous years.

Therefore, the Commission is requested to consider Non-Tariff Income of Rs. 774.45 Crore as per the Books of Account for FY 2020-21 for adjusting ARR of FY 2020-21 and also not allow the additional claim of Rs. 355.34 Crore made in present petitions.

#### **Response of the Petitioners**

Petitioners have submitted that the reversal of deferred income towards grants and consumer contribution has been necessitated in order to comply with the provisions of IND-AS and the same has been claimed in the petition appropriately in line with the treatment given in the Books of Accounts for FY 2020-21. Further, proper justification along with necessary working has already been provided in the petition for deviation.

#### **Commission's view**

The Commission has approved NTI in the truing up for FY 2020-21 after prudence check, in accordance with relevant provisions of the GERC (MYT) Regulations, 2016, and after detailed analysis of the issue of reversal of deferred income towards grants and consumer contribution, as detailed in the relevant Chapter of this Order.

#### **Issue No. 19: Revenue Deficit for FY 2020-21**

The petitioners during the tariff determination of FY 2020-21 had submitted that consolidated resultant revenue gap for all four Distribution Companies is Rs. 881.53 Crore. However, the Commission had approved consolidated gap of Rs. 639.39 Crore and Rs. 490 Crore was considered passed through in FPPPA of FY 2019-20. Remaining Rs. 149 Crore was proposed to be met through efficiency improvement measures. In view of the above, the distribution companies had not proposed any increase in tariff rates.

The objector submitted that based on truing up of FY 2020-21, there is consolidated revenue gap of around Rs. 567.76 Crore. The Commission is requested to verify and confirm whether the gap figure of Rs. 639.39 Crore is after efficiency measures or the performance has deteriorated and in turn, it has resulted into loss or whether State Distribution Companies are indulging in manipulating the figures to artificially lower gap and then claiming the gap in truing up subsequently.

The Commission is further requested to clarify that the Distribution Companies are not entitled to claim the gaps, which have already been forgone.

**Response of the Petitioners**

The Petitioners submitted that based on methodology prescribed in the GERC (MYT) Regulations, 2016, the Company has classified various heads of expenses as Controllable and Uncontrollable. Accordingly, expenses are dealt with for arriving at Revenue Gap for FY 2020-21.

**Commission's view**

The Commission has approved Revenue (Gap)/Surplus in the truing up for FY 2020-21 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. 20: Past Revenue Gap**

The objector submitted that the past revenue gap should not be allowed to be recovered since the new consumers of the licensee who have not used the electricity cannot be held responsible for the past dues of the licensee and vice versa the consumers who have used the electricity and ceased to be consumers of licensee are benefited leaving their financial liability on the new consumers along with the other consumers.

**Response of the Petitioners**

Petitioners have not submitted any response.

**Commission's view**

The Commission while approving the revenue (Gap)/Surplus for FY 2020-21 has considered the past revenue (Gap)/Surplus for FY 2018-19 approved in the earlier Tariff Order as discussed in the relevant section of this Order. The electricity business is an ongoing business, and the regulatory framework allows truing up of the revenue surplus/gap to be passed on in the ensuing year.

**Issue No. 21: Mismanagement in Power Purchase**

The objector submitted that GSECL has filed petition for truing up of FY 2020-21 and tariff for FY 2022-23 wherein it has stated that Gujarat is power surplus State and it

has to back down its plants and operate its plants on reserve shutdown mode. On other side GUVNL has been issuing tender after tender for procurement of power from private generators on RTC basis at higher rates while backing down State-based generation.

GUVNL is procuring power from market when they have surplus power and fixed cost of such excess capacity is being borne by the consumers of the State. GUVNL has been purchasing power from Power Exchange at sky high rates of Rs. 20 per kWh for months.

Therefore, the Commission is requested to take serious note of GUVNL's mismanagement of power purchase. The Commission is further requested to study the procedure adopted by GUVNL for power purchase frequently violating Merit Order Dispatch as mandated by the Commission.

#### **Response of the Petitioners**

The Petitioners submitted that the incidental scenario of power purchase up to Rs. 20 per kWh from Power Exchange is related to the unprecedented and unforeseen power shortage scenario experienced in the country during brief period in September to October 2021. The increase in market price of power was on account of various factors like increase price of imported coal, sudden increase in price of gas in international market, issues related to availability of domestic coal coupled with increase in power demand mainly in agricultural sector on account of delayed rain, etc.

It is submitted that as per the directives of the Commission, the power is procured following the Merit Order Principles under which cheaper generation is availed first followed by the next till the entire demand is met.

#### **Commission's view**

The Commission has noted the response of the petitioners.

#### **Issue No. 22: Misleading power supply position for FY 2022-23**

The objector submitted that the petitioners have considered 41,896 MUs from the Central Sector, 12,649 MUs from Coastal Gujarat Power Co. Ltd., 8,410 MUs from Adani Power Ltd., and 7008 MUs from Essar Power. Regarding Coastal Gujarat, Adani Power and Essar Power, these generators are not supplying power to GUVNL as per



terms and conditions of the PPA and neither is GUVNL taking any action for the same. The Commission is requested to direct GUVNL to provide supporting documents regarding increased off-take proposed from the Central Sector generation.

It is submitted that GUVNL is purchasing tied-up power from Adani at exorbitant rate having energy charge of Rs. 6.50 per unit without any approval while Coastal Gujarat is supplying power at Rs. 4.50 per unit. GUVNL has signed Supplementary PPA despite rejection for any compensation by the Hon'ble Supreme Court at the cost of the consumers and now Adani is dictating to purchase even at the rate above the Supplementary PPA and GUVNL is purchasing the same.

It is submitted that Adani is not supplying power either as per original PPA or supplementary PPA, however, GUVNL has allowed same party to participate in medium-term bidding despite the Commission conferring power to reject the bids of such defaulters. The Commission is requested to call for detailed reply from GUVNL / State Government and verify the matter.

#### **Response of the Petitioners**

Petitioners submitted that to meet power requirement of the four DISCOMs, GUVNL has tied-up power on long-term basis from various sources, viz.:

- (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;
- (v) Power tied up through competitive bidding, etc.

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

- The NPC power plants, renewable and hydro plants have been considered as must run power plants;
- During merit order despatch, at least 5% availability of each plant has been considered to take care of the peak loads and peak season requirements;

- Availability of Thermal Stations has been considered at 85% / 80% as defined in the relevant Regulations (CERC / GERC) and performance in previous years;
- The Fixed and Variable Cost for existing GSECL, IPP, renewable and Central Sector plants are taken as per actual of FY 2020-21 as base power purchase cost;
- For Private IPPs, fixed and variable cost is considered based on likely cost as per PPAs.

### Commission's view

The Commission has noted the response of the petitioners. The analysis of the Commission on power purchase cost for FY 2022-23 is discussed in the subsequent chapters of this Order.

### Issue No. 23: High Tariff for HT Consumers

The objector has compiled and calculated average tariff for HT category vis-à-vis overall average tariff for four petitioners:

| FY 2020-21   | HT           |                     |                 | All Categories |                     |                 |
|--------------|--------------|---------------------|-----------------|----------------|---------------------|-----------------|
|              | MUs          | Revenue (Rs. Crore) | Rate (Rs./Unit) | MUs            | Revenue (Rs. Crore) | Rate (Rs./Unit) |
| DGVCL        | 8494         | 6172                | 7.27            | 17566          | 11679               | 6.66            |
| MGVCL        | 3706         | 2770                | 7.47            | 9933           | 6172                | 6.21            |
| PGVCL        | 11495        | 8324                | 7.24            | 27914          | 16125               | 5.78            |
| UGVCL        | 7303         | 5199                | 7.12            | 22824          | 11749               | 5.15            |
| <b>Total</b> | <b>30998</b> | <b>22465</b>        | <b>7.25</b>     | <b>78237</b>   | <b>45742</b>        | <b>5.85</b>     |

The data shows that recovery from HT category as a percentage of total recovery is 124%, which was 120% during previous year. The objector has stated that even after 18 years after implementation of the Act, still there is alarming situation of cross-subsidization in the HT tariff and showing increasing trend, which is contrary to the objective of the Act.

Cross-subsidisation in Tariff is increased YoY. Also, the road map for reduction in cross-subsidy is not prepared. The Commission is requested to take note of the un-



sustainable level of cross subsidisation. The Commission should prepare a roadmap for reduction in cross subsidy as per the Act and bring down the cross subsidisation to 110% from the current level of 124%.

### **Response of the Petitioners**

Petitioners submitted that the 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 and in a band of  $\pm 20\%$  to the average cost of supply.

DISCOMs submitted that Agriculture category is being supplied only limited power per day of about 8 hours. The tariff rates are based on the economic situation of power consumers, that cannot be neglected as supplying power at affordable rates to all classes of consumers is a primary responsibility of a power utility. It is submitted that to ensure uniform tariff rates for all four State-owned Distribution Companies, differential bulk supply tariff mechanism is in place.

In case of HT category, many of the consumers do not draw power from the Company corresponding to their contract demand and utilize power from other sources through open access and therefore, the average realization from HT category is artificially higher. Cross subsidy level of HT consumers is 117.52% w.r.t. ACoS, and thus, within the limit prescribed in the Tariff Policy. The objector has calculated cross subsidy level w.r.t. ABR.

### **Commission's view**

The average billing rate for most of the categories is within  $\pm 20\%$  range of the ACoS approved for FY 2022-23 in this Order.

### **Issue No. 24: Tariff Rationalization**

The objector submitted that the Commission directed the petitioners 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.

It is submitted that instead of complying with the above directive and proposing rationalization of tariff, the petitioners have stated that the DISCOMs will submit necessary modifications in tariff structure, if needed as and when MYT petition will be

filed. The Commission is requested to rationalize the tariff particularly for Industrial / Commercial consumers on suo-moto basis.

### **Response of the Petitioners**

Petitioners submitted that the Commission has extended the Control Period of the GERC (MYT) Regulations, 2016 till FY 2022-23. Further, no change is proposed by the petitioners in the present Tariff Schedule and Tariff Structure. The petitioners have categorically stated that Company may propose the rationalization / change in Tariff Schedule and Tariff Structure in the subsequent MYT filings.

### **Commission's view**

The response of the DISCOMs is noted. The Commission has also dealt with the issue in Compliance to Directives in the relevant Chapter of this Order.

### **Issue No. 25: Suggestions on Tariff Schedule for FY 2022-23**

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 or 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. In 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 1<sup>st</sup> 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. In 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. In 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 NRGPs 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 31<sup>st</sup> 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. In the previous Tariff Orders also, the issue was deliberated at length by the Commission and the Commission has consciously taken decision not to alter 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 2022-23. Further, this is an additional year of MYT Control Period and the Commission is not considering any

change in the present tariff structure and any suggestions with regards to tariff shall be taken up during the next MYT Control Period.

**Issue No. 26: Green Tariff**

The objector submitted that the petitioners have not made detailed study in compliance of the directives issued by the Commission and just suggested to levy premium of Rs. 0.50/unit over normal tariff, without any justification and cost analysis for the same. Considering the prevailing generation cost of RE power, the premium of Rs. 0.50/unit is not justified. Further, no detail is given in the petition regarding availability of surplus Green Power with the petitioners in excess of renewable purchase obligation, which can be supplied as green power to the consumers desiring for green power.

The Commission is requested to ensure that surplus green power available with the petitioners to supply as green power and in absence of any justifiable data and considering lower cost of RE power, the nominal premium say 5 Paise per Unit may be considered for Green Tariff.

**Response of the Petitioners**

The study for introduction of Green Tariff was undertaken in accordance with the directive issued by the Commission in the Tariff Order dated 31<sup>st</sup> March, 2021. Upon analysis of the Green Tariff introduced by various States including approach taken by the Commission in respect of Tariff Order for Deendayal Port Trust (DPT) allowing premium of Rs. 0.50 / unit in the tariff for FY 2021-22, DISCOMs have proposed introduction of Green Tariff at premium of Rs. 0.50 / unit in line with Tariff Order for DPT.

**Commission's view**

The response of the DISCOMs is noted. The Commission has also dealt with the issue in the Tariff Philosophy Chapter.

**Issue No. 27: 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. In case of Torrent Power Limited (TPL), the Commission has determined separate tariff for all 3 Distribution Companies at Ahmedabad, Surat and Dahej of TPL. 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. 28: Rationalization of Fixed Charges for Residential and consumer installing solar rooftop**

The respondent submitted that there is a need to rationalise the fixed charges, as fixed cost of the petitioner should be recovered through fixed charges only. At present, GUVNL in connivance with big industrial consumers is indulging in framing favourable

policy under the guise of promotion of Renewable Energy at State level at the cost of small consumers.

The policy is issued for solar roof top to give undue advantage to such consumers having high paying capacity. Such policy has helped big consumers by not paying cost of electricity resulting in under recovery, which is getting passed on to other small retail consumers under the guise of promotion of RE.

Therefore, the Commission is requested to rationalise fixed charges and determine separate higher fixed charges for consumers installing solar rooftop and to direct the Distribution Companies not to indulge in any activity, which results into loss to the consumers.

### **Response of the Petitioners**

No response has been submitted by the petitioners.

### **Commission's view**

As mentioned earlier, the DISCOMs have not proposed any change in the tariff structure or category-wise tariffs for FY 2022-23. As this is an additional year of MYT Control Period and the Commission is not considering any change in the present tariff structure, any suggestions with regard to tariff shall be taken up during the next MYT Control Period.

### **Issue No. 29: Time of Day Tariff for Residential Solar Plants**

The respondent submitted that GUVNL is not in favour of implementing ToD tariff. The respondent strongly objects to GUVNLs stand, which is against interest of smaller consumers. It is submitted that for residential category, consumption is mainly during morning hours and evening/early night hours, whereas solar generation is at peak during afternoon. Consumers who install solar rooftop are provided benefit of banking of solar generation for entire billing cycle.

The Commission is requested to take cognizance of the matter and introduce ToD tariff for residential solar rooftop consumers. The Tariff Policy also provides that time differentiated tariff should be introduced initially for large consumers within one year, and for all consumers within five years of the Policy.



### **Response of the Petitioners**

No response has been submitted by the petitioners.

### **Commission's view**

As mentioned earlier, the Commission is not considering any change in the present tariff structure and any suggestions with regards to tariff shall be taken up during the next MYT Control Period.

### **Issue No. 30: "Off Season Period" for Seasonal consumers**

The respondent submitted that due to calendar year consideration in tariff schedule of Gujarat, potato storage based cold storages in the State are not able to avail benefit of Seasonal Tariff, though these cold storages remain non-working mainly during three months, i.e., from December to February. The Commission is requested to amend "OFF seasonal period" as continuous three months in a year, either financial year or calendar year, for seasonal tariff in the Tariff Schedule of FY 2022-23 onwards.

The Commission is also requested to consider Off Season Period not less than three months but eligible both in Financial Year as well as Calendar Year, so if any consumer applies for OFF Season Period spreading over two calendar years but in same financial year, he will also be eligible in line with MSEDCL tariff order. (UGVCL rejected such application for one of the group cold storages for months spreading in two calendar years). Most of the storages are in Off Season Period for 45 days (15<sup>th</sup> November to 31<sup>st</sup> December) in one calendar year and from 1<sup>st</sup> January to 15<sup>th</sup> February in next calendar year, i.e., a total of 3 months.

### **Response of the Petitioners**

As regards submission for amendment in definition of "Off Seasonal Period", according to present provision, such consumer requires to observe three calendar months in a calendar year. Accordingly, to be eligible seasonal consumer, it is required to observe minimum full three calendar months in a calendar year and not consecutive three calendar months. The case of respondents where the off-season period is from November / December to February is very well covered in the above provision.

In the present case, wherein the request of consumer for off season period is from November / December to February, the request is spreading over two different

calendar years and accordingly for the month of November /December of first calendar year the requirement of seasonal consumer is not getting fulfilled and hence the benefit shall not be available. However, for the period of January and February falling under second calendar year, considering same off-season period for next cycle, the consumer will be allowed the benefit of seasonal consumer for the calendar months January, February and November /December. The same will be followed accordingly. And therefore, no change is required in present provision.

#### **Commission's view**

The Commission has noted the response of the petitioners which is self-explanatory.

#### **Issue No. 31: Night Time Concessional Tariff**

The objector submitted that the night tariff should not have any demand charge. The argument put forward that infrastructure cost required is same is without sustenance. When night time demand is low the infrastructure is sub-optimally loaded. The fixed cost refers to peak cost. The marginal and peak cost would be same for system where load factor is 100%. The utilities have admitted that agricultural supply at night time is cheaper.

The Commission may check the night time UI charges on SLDC, which are small fraction of average charges. Pit head cost of NTPC generation would be around 50 Paise per unit. Night time cost would not be more than 70 Paise. The Commission should ask some independent agency to investigate the veracity of such claim.

#### **Response of the Petitioners**

Petitioners have not submitted any response.

#### **Commission's view**

As mentioned earlier, the Commission is not considering any change in the present tariff structure and any suggestions with regards to tariff shall be taken up during the next MYT Control Period.

#### **Issue No. 32: Transmission Tariff**

The objector submitted that the Transmission Tariff is too high due to multiple reasons. The cost of fixed assets is high as at notification the transferred assets were valued at

far above the book cost. It was declared in reply to objections that depreciation has been added back to the cost. Hence, the consumers are paying second time depreciation. The added depreciation value was treated as equity, so return on equity is being paid in addition. Assets being old, there are high expenditures on modernization and renovation.

The Transmission tariff should be based on transmission capacity and not on generation capacity. If Transmission tariff is based on interface, the total fixed expenditure will be divided by aggregate demand at each of the interface. Since each of the interface has been provided with ABT compliant meters, it is time that Transmission tariff be based on interface points.

There is discrimination in matters of using supply side as basis for transmission tariff. By this method, pre restructured utility is denied the basis of coincident demand for billing purpose contending that infrastructure is spread in geography.

#### **Response of the Petitioners**

Petitioners have not submitted any response.

#### **Commission's view**

The present regulatory process relates to the Truing up and Tariff Petition filed by the DISCOMs. The issue of Transmission tariff is a separate matter.

#### **Issue No. 33: Electricity Duty (ED)**

Clarification is needed whether ED is calculated on DPC, PF Penalty and kVARh Charges. The Commission is requested to clarify the ED precisely in the schedule of tariff. The Commission has an advisory power and under those powers, the Commission should advise the State Government to reduce the ED.

#### **Response of the Petitioners**

ED is calculated on kVARh Charges and in case of LTMD consumers, RkVAh charges are also considered for the purpose of levy of ED.

#### **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. 34: Open Access**

The review of status of Open Access in Distribution was made by the Forum of Regulators (FOR) in September 2019. The Ministry of Power (MoP) in its Consultation Paper of 2017 on 'Issues Pertaining to Open Access' has made observations on issues like frequent shifting of open access consumers, Cross Subsidy Surcharge, Additional Surcharge, Stand-By charges, Tariff design and rationalization, etc.

**Response of the Petitioners**

Open Access is consented to all the eligible applications in accordance with the provisions of Open Access Regulations and Orders issued by the Commission from time to time.

**Commission's view**

The DISCOMs should ensure that the 'Open Access' mechanism is implemented in accordance with the applicable GERC Regulations issued from time to time.

**Issue No. 35: Category-wise Cost-to-Serve report**

The Cost-to-Serve report is put up in the Commission website without any data. Information was sought regarding Cost-to-Serve report for FY 2020-21. The technical loss considered for working of cost of service is higher on YoY basis. Higher technical losses (10%) are recovered from open access consumers even when the aggregate loss is lower than 10%.

**Response of the Petitioners**

As per the directives of the Commission, DISCOMs have prepared the Cost to Serve reports for FY 2020-21 through independent consultant and the same is submitted to the Commission vide letter dated 20.12.2021 by GUVNL on behalf of the petitioners. Further, the Cost to Serve reports along with data table are already uploaded and available on GUVNL/ petitioner's website.

**Commission's view**

The DISCOMs have submitted the Report on Cost to Serve for FY 2020-21 to the Commission and it was also uploaded on GUVNL/ petitioner's website.

**Issue No. 36: Process of Tariff Determination**

The objector submitted that in the other States like Maharashtra, the Maharashtra Electricity Regulatory Commission (MERC) has been issuing draft Tariff Order for inviting comments/ suggestions from the stakeholders. The draft order provides complete information and likely approach of the Commission on the cost and expenses claimed by the petitioner and the likely tariff schedule proposed for next financial year. The Commission is requested to adopt best system adopted by MERC and first issue draft tariff order and thereafter invite comments/ suggestions/ objections from the stakeholders. This will enable the stakeholders to make their submission in more meaningful manner and to assist the Commission in the entire process of tariff determination.

The objector submitted that Tariff determination and true up petitions are to be filed separately, i.e., True up petition- before June end and Tariff petition as per current practice in November. Also, the tariff structures should be simplified so that common man can easily calculate and understand his electricity bill.

**Response of the Petitioners**

Respondent has not raised any specific issue related to the present petition.

**Commission's view**

The Commission has ensured that the Tariff determination is as per the principles laid down by the Commission in the GERC (MYT) Regulations, 2016. Further, it is factually incorrect statement that MERC issues draft Tariff Order for inviting comments/ suggestions from the stakeholders. Also, the True-up petition has to be filed based on the audited accounts of the previous year, which is typically available around 30<sup>th</sup> September, hence, the time for filing the petition is specified as November 30<sup>th</sup> of the previous year.

**Issue No. 37: Legal Status of GUVNL**

The objector sought the clarity on the legal status of GUVNL. If it is a trader then it cannot manage DISCOMs the way it is doing as there is conflict of interest involved. The trading and managing functions should be separated. In the last Tariff Order, the Commission has recorded that GUVNL has explained the position and we are satisfied.

It would serve the public interest if the expression and legal status is elaborated in detail.

**Response of the Petitioners**

Petitioners have not submitted any response.

**Commission's view**

The Commission has noted the suggestion of the objector. However, the issue raised is not relevant for the present Tariff proceeding.

**Issue No. 38: Merging of all State Utilities**

The objector submitted that all State DISCOMs though independent limited Companies are still depending on GUVNL for each and every decision when GUVNL's function is to carry out the residual work. The Commission is empowered to advise the GoG under Sec.86(2)(i) of the Act for promotion of competition, efficiency and economy in activities of the electricity industry.

There are four State DISCOMs., GSECL, GETCO, SLDC and GUVNL, i.e., total 8 limited companies, which are doing the same work which Gujarat Electricity Board was doing. If uniform tariff in Gujarat is to be kept, all Companies should be merged and should form only one Company so that consumers can be saved from paying O&M of these 7 Companies.

**Response of the Petitioners**

Petitioners have not submitted any response.

**Commission's view**

Objector has not raised any specific issue related to the present petition.

**Issue No. 39: Outstanding Cross Subsidy Charges and POC Charges**

The objector submitted that DGVCL and PGVCL have to recover very huge amount on account of Cross Subsidy Surcharges (CSS) and POC Charges from Essar Oil Ltd., Essar Steel Ltd. and Reliance Industries Ltd., etc. The due amount on account of these charges should be deducted from the ARR of respective DISCOMs because it is a failure on part of DISCOMs and GUVNL management and for their defaults, the consumers should not be burdened till the end of the litigation.

**Response of the Petitioners**

Petitioners have not submitted any response.

**Commission's view**

The Commission has noted the suggestion of the objector. However, the issue raised is not relevant for the present Tariff proceeding.

**Issue No. 40: Dispute Resolution Mechanisms**

The objector submitted that the Commission may call for details of all the cases filed in the High Court by or against the consumers and also carried to the Supreme Court to examine as to what is leading to filing of large number of cases.

Advising consumers to approach different fora is not in consumer interest. There is mismatch of legal force; utilities fight the cases on public money while consumers do not have the resources in time and money. A strict check should be placed on legal expenses and diligence may be carried out to see that legal fees are not hidden under the consultancy.

The Commission may ascertain why so many cases are filed in the court by or against consumers. The Commission is requested to mandate DISCOMs to make consumer guidance legal cells for presenting consumer cases in redressal forum on similar lines as Karnataka, which has started consumer advocacy cell in the SERC.

**Response of the Petitioners**

Petitioners have not submitted any response.

**Commission's view**

The Commission has noted the suggestion of the objector. However, the issue raised is not relevant for the present Tariff proceeding.

**Issue No. 41: Meters**

The objector submitted that he is suspicious of the performance of electronic meters. Therefore, random samples may be picked up by the Commission for extensive test in terms of specifications and standards.

**Response of the Petitioners**

Petitioners have not submitted any response.

**Commission's view**

The Commission has noted the suggestion of the objector. However, the issue raised is not relevant for the present Tariff proceeding.

**Issue No. 42: Security Deposit**

The objector submitted that number of interveners have objected to security deposit. The load factor applied for new consumers is very high. Security deposit requirement is to be viewed against the back drop that method of charging for connection are very deep.

**Response of the Petitioners**

Petitioners have not submitted any response.

**Commission's view**

The Commission has noted the suggestion of the objector. However, the issue raised is not relevant for the present Tariff proceeding.

### **3.3 Suggestions/ Objections pertaining to MGCVL**

**Issue No. 1: Distribution losses**

The respondent submitted that the total distribution loss of MGCVL for FY 2018-19 is 9.98% including both technical and commercial losses. The technical losses of MGCVL distribution system are estimated to be 5.25%. The HT losses are estimated to be 1.41% and LT losses are 3.84% for FY 2018-19. The total distribution loss of MGCVL for FY 2020-21 is 9.96% including both technical and commercial losses. The technical losses of MGCVL distribution system are estimated to be 8.52%. The HT losses are estimated to be 2.15% and LT losses are 6.37% for FY 2019-20.

The technical losses and commercial losses widely vary on year-to-year basis for the same distribution network. No sincere efforts have been made towards reduction of technical losses and commercial losses. The Commission is requested to direct the petitioner to explain the discrepancies in technical losses and reduction in commercial losses in FY 2018-19 and FY 2019-20.



It is further submitted that no calculation of technical losses based upon the varying factors presented by the petitioner has been given in the Cost-to-Serve report.

### **Response of the Petitioner**

As regards variation in calculation of Technical/Theoretical loss, various factors like length of line, line configuration, loading pattern, maximum load, Diversity Factor, Load Factor, etc., affects the technical loss of the network. Many of the factors vary on year-on-year basis or during the year itself, therefore, the technical loss is considered as per the mechanism explained in the report.

### **Commission's view**

The Commission has noted the response of the petitioner. The Commission's analysis and ruling on the distribution losses of MGVCCL for FY 2020-21 and FY 2022-23 is detailed in the relevant Chapters of this Order.

### **Issue No. 2: Energy Balance and Energy Requirement**

The energy requirement and energy balance are calculated by the petitioner on the basis of energy sent out as per SLDC report as compared to the Distribution Losses proposed in True up petition for FY 2020-21. Energy sent out at the periphery of distribution network of MGVCCL is 13022 MUs as per the Annual SLDC report for 11 kV dedicated feeders catering to different categories of consumers. SLDC collects the data of panel meters of 11 kV feeders directly from the 66 kV Sub-Stations and these figures of sent out units are accurate.

It is further submitted that the distribution losses are not 9.96%; as per SLDC report, the distribution losses are 24.17% with respect to actual 13022 MUs sent out at the distribution periphery of MGVCCL.

The methodology for working out Distribution Losses is universal, i.e., input energy – sales energy. The Input energy at the Distribution periphery of GETCO is accurately measured and accounted. It is undisputed figure while the energy sales units are disputed as much as the losses are shown as sales of Unmetered Agriculture consumers.

It is requested that energy balance and energy requirement projections for MGVCCL should be based on the energy sent out on category-wise feeders as per SLDC report

and the data of units sent out given by the petitioner in Regulatory Information Management System (RIMS) to the Commission.

No reply has been given by the petitioner explaining the discrepancies of Power Purchase at T&D Periphery as per SLDC Report as well as Distribution Losses.

**Response of the Petitioner**

The quantum of energy input (sent out) on metered feeder level includes energy transacted under all types of commercial transactions, i.e., including energy transactions due to wheeling of power under open access.

As per the Act, DISCOMs are 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. 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 the Open Access customers at the recipient unit, are carried out by applying “normative loss” as approved by the Commission.

As per the approach of the Commission, “Concessional wheeling loss or No wheeling loss” is to be considered for carrying out commercial settlement for wheeling of power from generating plant based on renewable source of energy.

Therefore, it is submitted that 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 the 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. Therefore, 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 MGVCCL for FY 2020-21 as discussed in the relevant Chapter of this Order.

**Issue No. 3: Agriculture Sale, Revenue, Subsidy and its Accounting**

- **Energy sale to Agriculture consumers and Losses of Agricultural Feeder**

It is submitted that the average units sent out per HP per Annum are less than the normative consumption of 1700 Units per HP per Annum considered as sales of Un-metered Agriculture consumers. As such the units shown as sold in excess of units sent out is nothing but the losses shown as sales for all these years.

The Distribution losses of Agriculture consumers worked out by considering 1700 units per HP per annum as normative consumption for unmetered agriculture consumers are lower than Technical losses, while actual Distribution losses of Agriculture feeders are around 23% to 28% as worked out as above and not 9% to 10 % as per True up petition.

It is claimed by the petitioner that the consumption of metered agriculture consumers is on the basis of actual meter readings, which works out to only 667 kWh per HP per annum.

For FY 2020-21, the energy sent out is 1490 MUs for Agriculture sector. However, the average kWh per HP per annum has remained around 1700 while the average energy sent out per HP per Annum has been much less, i.e., 860 per kWh per HP per annum for FY 2019-20 and 907 kWh per HP per annum for FY 2020-21. As a result, MGVCL is able to show overall Distribution losses even below the technical losses for this year.

The energy sent out has increased from 1340 MUs in FY 2019-20 to 1490 MUs in FY 2020-21 and the average per HP per Annum increased from 860 to 907 kWh per HP per annum. It is much less than the normative consumption of 1700 kWh per HP per annum for unmetered agriculture consumers.

It is submitted that when both metred and unmetered agriculture consumers are given power supply from the same AGDOM feeder, for same number of hours, for the same terrain, for the same rainfall, water table, time of rains, etc., such a huge difference on average power consumption for metered agriculture consumers (MAG) and for unmetered agriculture consumers (UAG) is not at all justified.

The objector has submitted that the petitioner is not putting up details of AGDOM feeders for agriculture consumers. Action plan for reduction of losses of Urban, Industrial and GIDC feeders are being reported for urban and industrial feeders. The

feeder-wise losses and actions taken to reduce the losses for agriculture and Jyoti Gram feeders are not reported to the Commission.

Therefore, the Commission is requested to direct the petitioner to work out the Distribution losses of AGDOM feeders on the basis of actual units sent out per HP per annum for all Agriculture Consumers and not normative consumption of 1700 units per HP per annum of UAG consumers and to direct the petitioner to report the actions taken for reduction of Distribution Losses of Jyoti Gram and Agriculture feeders in the prescribed table similar to the quarterly reports for Urban, GIDC and Industrial feeders being submitted under RIMS and till such time, DISCOMs should quantify the energy sales to Un-metered Agriculture (UAG) consumers with the help of Distribution Transformer metering, consider the sale of UAG limited to per HP per Annum energy sent out on AGDOM feeder for load of all Agriculture consumers taken together.

Further, bills are actually issued as per the HP based tariff to unmetered agriculture consumers, that too not at the rate of Rs. 2400 per HP per Annum but at the subsidised rate of Rs. 665 / 807.50 per HP per Annum. The normative consumption of 1700 units per HP per annum for unmetered agriculture consumers is considered for the purpose of working out the Distribution Losses.

The validity of normative consumption of unmetered connections by the Commission is over in FY 2019-20, the petitioner cannot hold on this argument/ justification. The Commission is therefore, requested to direct the petitioner to rework out the Distribution Loss not only for Agriculture consumers but also for all category of consumers based on the input energy at the Distribution periphery as reported by SLDC.

The Commission is requested to appoint an independent expert committee to review the norms of consumption by unmetered consumers with the permission to hear the respondent or any other stakeholder.

- **Agriculture Tariff and Subsidy**

The objector has submitted that the petitioner has not provided DISCOM-wise subsidy claimed and received.

The agriculture HP based subsidy for unmetered Agriculture consumers (UAG) to Gujarat Electricity Board and its successor holding company GUVNL has been frozen at Rs. 1100 Crore since 2006. The HP based subsidy is Rs. 84.85 Crore to MGCVCL.



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The metered agriculture consumer per HP per annum is only 667 units while unmetered energy consumption accounted is 1700 kWh per HP per annum, although both types of consumers are getting power supply for the same number of hours, same number of days, same rainy conditions, same terrain and same cropping patterns. FPPPA subsidy for metered consumers works out to Rs. 175.82 Crore for 911 MUs consumption @ Rs. 1.93 per Unit. Whereas it works out to Rs.90.52 Crore @ Rs. 1.93 for 469 MUs accounted as sales to UAG consumers at 1700 Units per HP per annum. The total FPPPA subsidy thus works out to Rs. 266 Crore for the year 2020-21.

As the Commission has decided the tariff of Rs. 2400 per HP per Annum for unmetered Agriculture consumers and if the per kWh tariff is worked out on normative consumption of 1700 kWh per HP per annum basis, it works out to Rs.1.41 per kWh. However, consumer is required to pay only Rs.665 per HP per annum, which works out to 39 paisa only. The balance of 102 paisa along with FPPPA is at the rate of 193 paisa per kWh for unmetered consumers.

Therefore, 394 paisa per kWh including subsidy is the revenue realization for unmetered agriculture consumers. Whereas, the tariff decided by GERC for metered agriculture consumers is 60 paisa per kWh plus Rs. 20 per HP per month. However, metered agriculture consumers pay 60 paisa per kWh only. Fixed charge of Rs. 240 per HP per annum, which works out to 30 paisa per kWh for an average metered consumption of 550 units per annum, is paid as subsidy to GUVNL by the Government of Gujarat. The FPPPA charges of 193 paisa per kWh are also paid as subsidy for metered consumption of metered agriculture consumers of average 650 units per HP per Annum. Therefore, the per unit realisation for metered agriculture consumers works out to 283 paisa only.

There is deficit of subsidy of Rs. 92 Crore as DISCOMs have not furnished the details of DISCOM-wise subsidy receivable and subsidy received during FY 2020-21, and the True Up petition does not give correct Revenue receipt from sales and subsidy.

It is submitted that the actual amount received by GUVNL towards these subsidies and appropriated as per eligible allocation to MGVCCL and amount of subsidy not received by MGVCCL does not reflect into the books of account and the revenue received from the respective consumers eligible for subsidies is shown as if the allocable subsidies have been received in total.

Therefore, the Commission is requested to direct the petitioner to show the amount of subsidy for metered and unmetered consumers separately in their financial statements so that the correct amount of subsidy receivable and subsidy received and the balance amount of subsidy yet to be received are correctly reflected in the Books of Account so that actual revenue requirement is worked out correctly.

The entire amount of Government Duty collected by each DISCOMs and back-to-back transfer to the Government of Gujarat is disbursed as subsidy to GUVNL. Some additional amount is also paid from the budgetary allocations of HP based subsidy of Rs. 1100 Crore. In the petition, neither the losses are true nor the actual revenue received including subsidy are true.

Therefore, the Commission is requested to direct the petitioner to resubmit the True Up petition for 2020-21 for factual energy requirement and revenue requirement with correctly worked out Distribution Losses and actual revenue receipt including Government Subsidies actually received.

The petitioner has submitted the details of subsidy received towards past period outstanding of Rs.1405.26 Crore. However, the company-wise year-wise subsidy received for the past period is not given. It is therefore, necessary that in the books of account, subsidy should be accounted as subsidy and not as revenue of sales, so that the amount of subsidy not received is transparently accounted in the books of account.

The petitioner is reporting the quarterly revenue in the RIMS report to the Commission. The revenue shown in the RIMS report and in the petition therefore, should not have any deviation.

#### **Response of the Petitioner**

- **Energy Sale to Agriculture Consumers and Losses of Agricultural Feeder**

The petitioner submitted that the consumption of metered and un-metered category for agricultural connections cannot be compared on accounts of various reasons. The consumption differs because in case of metered consumers, there is instances of under-metering due to theft or 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.

The norm of 1700 Units/HP/Annum is derived on the detailed study assessment undertaken by Expert Committee, namely, Dr P.K. Misra Committee, wherein the Committee has analysed consumption patterns and consumption parameters in detail and recommended the assessment of 1700 per HP per Annum for un-metered agricultural connections in a scientific manner. Also, study was also undertaken by TERI for assessing the consumption of unmetered Agriculture consumers. Therefore, there is no justification to raise any issue with regard to the normative consumption assessment considered for un-metered agriculture consumers.

As regards 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 the Commission.

- **Agriculture Tariff and Subsidy**

The average realization from almost all categories for FY 2020-21 is almost within  $\pm$  20% to the ACoS except Railways and Agriculture category.

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

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

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 is being compensated by the State Government as a subsidy support to agriculture consumers.

The revenue received from Agriculture consumers is mentioned at Note 28 of the Annual Accounts of MGVCL for FY 2020-21, which is inclusive of Rs. 267.52 Crore received towards FPPPA subsidy from Government and Rs. 54.27 Crore towards subsidy for tariff compensation for FY 2020-21.

The 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.

**Commission's view**

The response of the petitioner is noted. The petitioner has given point-wise replies to issues raised by the objector and the same are found to be in order.

**Issue No. 4: Fixed Charge Revenue on Connected Load basis**

The petitioner has submitted Tariff-wise details of sale of energy for FY 2020-21 and FY 2022-23 and revenue with proposed tariff in Form no. 10 A. Since, there is no change in the proposed tariff, only the number of consumers may differ in data of both the years.

It is submitted that the connected load/contracted load has no bearing with the slab-wise consumption. While average connected load is 3.6 kW for zero consumption slab, it is 1.5 kW for consumption slab of 250 units and above consumption slab. Average consumption per day for each slab-wise consumers have also been worked out for FY 2022-23, which ranges from 0.8 kWh / day to 33.80 kWh / day in different slabs and works out to average 4.26 kWh / day for RGP Urban consumers.

The respondent submitted that sanctioned load database is itself erroneous and is therefore, required to be a revised for applicability of the fixed charges. The petitioner has failed to appreciate this view point of the respondent and needs to delink the fixed charge on incorrect historical data of the sanctioned load of RGP consumers. Therefore, the Commission is requested to direct the petitioner to submit the factual data of the sanctioned load.

The revenue from fixed charges as collected has been programmed to be at a uniform rate of Rs. 16.99 per month per consumer for RGP Urban category and Rs. 12.39 for Rural category. The veracity, accuracy and authenticity of the data submitted to the Commission for revenue of the fixed charges is therefore questionable.

The objector after analysing the number of consumers, connected load and revenue for all DISCOMs submitted that the average connected load for RGP consumers is 1 kW to 2 kW. The average revenue from fixed charges therefore works out to be Rs. 15 or even less than the fixed charge of Rs. 15 as prescribed for the slabs up to and



including 2 kW. It appears that no fixed charge is being levied from the RGP tariff category consumers for range of higher connected load.

#### **Response of the Petitioner**

The objector has stated that the petitioner has estimated Fixed Charge revenue from the Residential consumers on the basis of connected load. It is submitted that in case of Residential category, the fixed charge is applicable on the basis of sanctioned load. The consumer having lower sanctioned load may also be consuming the energy in the higher slabs due to better Load Factor. Therefore, it is not appropriate to compare the fixed charge recovery on the basis of consumption slabs.

The Company has large numbers of old consumer base with contracted load at the time of getting connection many years ago. The Company endeavours for updating the contract load of such consumers. However, it is not appropriate to analyse applicability of fixed charge based on such sanctioned load database.

#### **Commission's view**

The response of the petitioner is noted. The Commission has approved the revenue for MGVCCL for FY 2020-21 as discussed in the relevant Chapter of this Order.

#### **Issue No. 5: Fixed Charge Revenue on Consumption Slab basis**

There will be a revenue increase of Rs. 49.94 Crore in fixed charges for RGP category without increase in the rate but by simply de-linking it from connected load slabs and linking it with the consumption slabs. This is very much rational, practical and easily adoptable. This will have a minimal impact on the marginal consumers while there will be a nominal increase of fixed charges per month for the consumers consuming 250 and above units per month.

There will be an overall implication of Rs. 87.18 Crore per annum for Urban RGP Consumers, i.e., Rs. 13.28 per month per consumer while for Rural RGP consumers the implication would be Rs. 101.54 Crore per annum and Rs. 10.51 per month per consumer. A perpetual increase of Rs. 188.72 Crore in fixed charge revenue by rationalising the fixed charges as suggested above will help in reducing the revenue gap without increasing the tariff rate of fixed charges.

The petitioner has accepted that the connected load data of RGP consumers is not updated and it is a difficult task to update such data of huge number of RGP consumers. The average fixed charges per unit is 20.82 paisa for all RGP consumers taken together as against demand related cost of 237 paisa per unit as worked out in Cost-of-Service report. Thus, the fixed charges are even less than even 10 % and therefore, grossly under billed.

#### **Response of the Petitioner**

Fixed charges are always linked to stress put on the network by way of contracted / sanctioned load availed by the consumer. In case the recovery of fixed charges is linked to consumption slab instead of sanctioned load, the mechanism will be detrimental to the consumers who are maintaining better load factor. As per the provisions of the Act, consumers who maintain better load factor are to be incentivized and not otherwise. Therefore, it is not appropriate to link the recovery of fixed charges with consumers' consumption slab.

#### **Commission's view**

The response of the petitioner is noted.

#### **Issue No. 6: Large number of Zero consumption Slab Consumers**

The objector submitted that a total of 38.47% of the RGP category consumers are having zero consumption when the total zero consumption consumers slab does not include the house closed connections or permanently disconnected connections whether meter removed or not removed. Zero billing of 38.47% residential consumers is alarming. About 55% of the connected load is of zero consumption consumers as per the Form 10 A data.

The connected load data for RGP category of consumer is also required to be Trued up as the connected load in MW for zero consumption slab is much higher than the other slab-wise energy consuming consumers. Therefore, the Commission is requested to direct the petitioner to verify the connected load of RGP consumers and submit the correct data in Form No. 10.

The petitioner has not given the number of consumers having zero consumption for all the months but even then, it is a matter of concern particularly when about 19%

consumers are having zero consumption and total 16,11,190 consumers, i.e., about 45%, are in the slab of 1 to 50 units in RGP Rural Tariff category.

**Response of the Petitioner**

As regards number of zero consumption slab consumers, the data is of average monthly numbers of consumers in zero slab. Therefore, it cannot be construed that all the consumers in zero consumption slab are having zero consumption for all the billing months for entire year. Moreover, as per requirement, the Company periodically verifies/inspect the premises of the consumers having zero consumption.

**Commission's view**

The response of the petitioner is noted.

**Issue No. 7: Requirement of Form 10A data for true up year**

The respondent submitted that Form 10 A should contain the base year data for FY 2020-21 and then projected data for FY 2022-23. The estimation of revenue based on the growth rate of prospective number of consumers of FY 2020-21 and projection for FY 2022-23 accordingly is not correct. The estimation of consumer category-wise revenue, therefore, should be based on actual data of FY 2020-21.

The data in Form 10 A (Tariff Category and Slab-wise) for the True up year FY 2020-21 may also be given along with the prospective data for the ensuing year (FY 2022-23) of tariff proposed for all category of consumers.

The petitioner has not submitted the actual base year data in Form 10A, therefore, the Commission is requested to direct the petitioner to submit the actual data of Tariff category-wise consumers, connected load, and revenue for the True up year.

**Response of the Petitioner**

The Petition has been filed following the principles, methodology and norms of the Act and GERC (MYT) Regulations, 2016. The information as required under the GERC (MYT) Regulations, 2016 is duly provided along with the petition.

**Commission's view**

The Commission has noted the response of the petitioner. MGVCL has submitted the required information under the GERC (MYT) Regulations, 2016 along with the petition.

**Issue No. 8: Requirement of Form 10 A data for prosumers**

The objector submitted that a suitable proforma may be prescribed for units set off, units injected and captive consumption by Prosumers of Rooftop Solar generation with details of revenue amount set off and loss of revenue due to captive consumption. It will therefore, be appropriate to introduce a new Tariff rate for RGP Prosumer particularly for Solar rooftop generation.

It is requested that a new Form 10 A for prosumer may be prescribed by the Commission for the details of energy consumed, sales revenue, energy purchased and its costs. A new tariff rate for RGP Prosumers may be introduced.

**Response of the Petitioner**

Petitioner has not submitted any response.

**Commission's view**

As mentioned earlier, the Commission is not considering any change in the present tariff structure and any suggestions with regards to tariff shall be taken up during the next MYT Control Period.

## 4 Truing up of FY 2020-21

This Chapter deals with the truing up of FY 2020-21.

MGVCL, in its submission for True-up of FY 2020-21, has furnished details of the actual energy sales, expenditure and revenue based on the audited Annual Accounts for FY 2020-21. The Licensee has stated that the truing up for FY 2020-21 is based on the comparison of the actual performance of FY 2020-21 with the ARR approved for FY 2020-21 in the MTR Order dated 24<sup>th</sup> April, 2019 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 2020-21.

### 4.1 Energy Sales

#### Petitioner's Submission

The petitioner has submitted the category-wise actual energy sales for FY 2020-21 as given in the Table below:

**Table 4-1: Category-wise sales for FY 2020-21 (MUs)**

|          | Particulars              | Approved in the<br>MTR Order | Actual Claimed in<br>Truing Up |
|----------|--------------------------|------------------------------|--------------------------------|
| <b>A</b> | <b>LT Consumers</b>      |                              |                                |
| 1        | RGP                      | 2,979                        | 2,930                          |
| 2        | GLP                      | 70                           | 87                             |
| 3        | Non-RGP & LTMD           | 1,716                        | 1,471                          |
| 4        | Public Water Works       | 409                          | 354                            |
| 5        | Agriculture- Metered     | 1,023                        | 1,380                          |
| 6        | Agriculture- Unmetered   | 475                          |                                |
| 7        | Public Lighting          | 64                           | -                              |
|          | <b>LT Total (A)</b>      | <b>6,736</b>                 | <b>6,222</b>                   |
| <b>B</b> | <b>HT Consumers</b>      |                              |                                |
| 8        | Industrial HT            | 4,339                        | 3,734                          |
| 9        | Railway Traction         | -                            |                                |
|          | <b>HT Total (B)</b>      | <b>4,339</b>                 | <b>3,734</b>                   |
|          | <b>Grand Total (A+B)</b> | <b>11,076</b>                | <b>9,956</b>                   |



### Commission's Analysis

The Commission, in the MTR Order dated 24<sup>th</sup> April, 2019, had approved the energy sales of 11076 MUs for FY 2020-21 against which, MGCVCL has submitted the actual sales of 9956 MUs.

As can be observed from the Table above, the actual energy sales to LT categories are slightly lower than that approved by the Commission for FY 2020-21 in the MTR Order dated 24<sup>th</sup> April, 2019 mainly due to reduction in sales to Non-RGP & LTMD category.

On the other hand, the actual energy sales to HT categories are significantly lower than that approved by the Commission for FY 2020-21 in the MTR Order dated 24<sup>th</sup> April, 2019. The reduction in sales is primarily attributed to the impact of COVID-19 pandemic and lockdown imposed in the State for prolonged periods in FY 2020-21.

Overall, the actual energy sales of MGCVCL are lower as compared to that approved in the MTR Order dated 24<sup>th</sup> April, 2019. 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 2020-21 (MUs)**

|          | Particulars              | Approved in the MTR Order | Actual Claimed in Truing Up | Approved after Truing Up |
|----------|--------------------------|---------------------------|-----------------------------|--------------------------|
| <b>A</b> | <b>LT Consumers</b>      |                           |                             |                          |
| 1        | RGP                      | 2,979                     | 2,930                       | 2,930                    |
| 2        | GLP                      | 70                        | 87                          | 87                       |
| 3        | Non-RGP & LTMD           | 1,716                     | 1,471                       | 1,471                    |
| 4        | Public Water Works       | 409                       | 354                         | 354                      |
| 5        | Agriculture - Metered    | 1,023                     | 1,380                       | 911                      |
| 6        | Agriculture- Unmetered   | 475                       |                             | 469                      |
| 7        | Public Lighting          | 64                        | -                           | -                        |
|          | <b>LT Total (A)</b>      | <b>6,736</b>              | <b>6,222</b>                | <b>6,222</b>             |
| <b>B</b> | <b>HT Consumers</b>      |                           |                             |                          |
| 8        | Industrial HT            | 4,339                     | 3,734                       | 3,734                    |
| 9        | Railway Traction         | -                         |                             |                          |
|          | <b>HT Total (B)</b>      | <b>4,339</b>              | <b>3,734</b>                | <b>3,734</b>             |
|          | <b>Grand Total (A+B)</b> | <b>11,076</b>             | <b>9,956</b>                | <b>9,956</b>             |



## 4.2 Distribution Losses

### Petitioner's Submission

The petitioner has submitted that the actual distribution losses for FY 2020-21 are 9.96%, as against the losses of 11.55% approved in the MTR Order dated 24<sup>th</sup> April, 2019, as given in the Table below:

**Table 4-3: Distribution Losses for FY 2020-21 as submitted by MGVCCL (%)**

| Particulars             | Approved in the MTR Order | Actual Claimed |
|-------------------------|---------------------------|----------------|
| Distribution Losses (%) | 11.55%                    | 9.96%          |

The petitioner submitted that it has achieved significant reduction in distribution loss during FY 2020-21.

The 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 9.96% against 11.55% approved in the MTR Order dated 24<sup>th</sup> April, 2019. The Commission has considered the intra-State Transmission Losses as 3.5021%, as submitted by MGVCCL based on data available from the SLDC website. Considering the actual sales of 9956 MUs, the Distribution Loss in FY 2020-21 works out to 9.96%.

The Commission considers Distribution Losses as controllable as per the GERC (MYT) Regulations, 2016. Accordingly, the Commission has considered the Distribution Losses of 9.96% 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 2020-21 (%)**

| Particulars             | Approved in the MTR Order | Actual Claimed | Approved in True Up |
|-------------------------|---------------------------|----------------|---------------------|
| Distribution Losses (%) | 11.55%                    | 9.96%          | 9.96%               |

### 4.3 Energy requirement

#### Petitioner's Submission

MGVCL has submitted the energy requirement for FY 2020-21 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 2020-21**

| Sl. No.   | Particulars                                     | Unit       | Approved in the MTR Order | Actual Claimed in Truing up |
|-----------|---|------------|---------------------------|-----------------------------|
| 1         | Energy Sales                                    | MUs        | 11,076                    | 9,956                       |
| 2         | Distribution Losses                             | MUs        | 1,446                     | 1,101                       |
|           |   | %          | 11.55%                    | 9.96%                       |
| 3         | Energy Requirement                              | MUs        | 12,522                    | 11,057                      |
| 4         | Local Power Purchase by Discom                  | MUs        |                           | 107                         |
| 5         | Power Purchase at T<>D periphery from GUVNL     | MUs        | 12,522                    | 10,950                      |
| 6         | Transmission Losses                             | MUs        | 501                       | 397                         |
|           |   | %          | 3.85%                     | 3.5021%                     |
| 7         | Total Energy to be input to Transmission System | MUs        | 13,023                    | 11,347                      |
| 8         | Pooled Losses in PGCIL System                   | MUs        | 233                       | 171                         |
| 9         | Add: Local Power Purchase by Discom             | MUs        |                           | 107                         |
| <b>10</b> | <b>Total Energy Requirement</b>                 | <b>MUs</b> | <b>13,256</b>             | <b>11,625</b>               |

#### Commission's Analysis

MGVCL has computed the energy requirement based on the actual Distribution Losses of 9.96%, actual energy sales of 9956 MUs and Transmission Losses of 3.5021%.

In reply to query on PGCIL system losses of 171 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 2020-21.

The Commission had approved the distribution losses of 11.55% and the transmission losses of 3.85% in the MTR Order dated 24<sup>th</sup> April, 2019. The Commission has worked out the energy requirement of 11625 MUs after truing up of FY 2020-21, considering the





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actual Distribution Loss of 9.96% and actual intra-State Transmission Loss of 3.5021%, as shown in the Table below:

**Table 4-6: Energy Requirement approved by the Commission in truing up for FY 2020-21**

| Sl. No.   | Particulars                                     | Unit       | Approved in MTR Order | Actual Claimed in truing up | Approved in truing up |
|-----------|---|------------|-----------------------|-----------------------------|-----------------------|
| 1         | Energy Sales                                    | MUs        | 11,076                | 9,956                       | 9,956                 |
| 2         | Distribution Losses                             | MUs        | 1,446                 | 1,101                       | 1,101                 |
|           |   | %          | 11.55%                | 9.96%                       | 9.96%                 |
| 3         | Energy Requirement                              | MUs        | 12,522                | 11,057                      | 11,057                |
| 4         | Local Power Purchase by DISCOM                  | MUs        |                       | 107                         | 107                   |
| 5         | Power Purchase at T<>D periphery from GUVNL     | MUs        | 12,522                | 10,950                      | 10,950                |
| 6         | Transmission Losses                             | MUs        | 501                   | 397                         | 397                   |
|           |   | %          | 3.85%                 | 3.5021%                     | 3.5021%               |
| 7         | Total Energy to be input to Transmission System | MUs        | 13,023                | 11,347                      | 11,347                |
| 8         | Pooled Losses in PGCIL System                   | MUs        | 233                   | 171                         | 171                   |
| 9         | Add: Local Power Purchase by DISCOM             | MUs        |                       | 107                         | 107                   |
| <b>10</b> | <b>Total Energy Requirement</b>                 | <b>MUs</b> | <b>13,256</b>         | <b>11,625</b>               | <b>11,625</b>         |

#### 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 MGVCCL.

The actual power purchase from GUVNL is different from the allocation because the demand from MGVCCL is not constant and varies from time to time. The total power purchase cost of MGVCCL for FY 2020-21 consists of the basic power purchase cost,



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Transmission Charges payable to GETCO and PGCIL, SLDC Charges, and the DISCOM's share of GUVNL cost.

Further, based on the direction of the Commission in Tariff Order dated 31<sup>st</sup> March, 2021, MGVCL submitted the details of yearly DSM, additional DSM, sign deviation charge details of DSM charges paid and earned including penalty levied on/collected for FY 2020-21.

MGVCL submitted that in its petition for True-up of FY 2019-20, 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. Accordingly, in line with the approach taken by the Commission, provisions were reduced from power purchase cost for each DISCOM in ratio of their actual power purchase cost.

MGVCL has allocated the provision of Rs. 2015 Crore made during FY 2020-21 in the ratio of actual power purchase cost and reduced the same from the power purchase cost. Allocation of provisions to DISCOMs is as under:

**Table 4-7: Allocation of Provisions of Power Purchase Cost to DISCOMs for FY 2020-21 (Rs. Crore)**

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

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 2020-21 is submitted in the Table below:

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**Table 4-8: Power Purchase Cost submitted by MGVCCL for FY 2020-21 (Rs. Crore)**

| Sl. No. | Particulars  | Approved in the MTR Order | Actual Claimed  |
|---------|--|---------------------------|-----------------|
| A       | <b>Cost</b>  |                           |                 |
| 1       | Power Purchased from GUVNL                           |                           | 5,379.84        |
| 2       | Power purchase from Windfarm                         |                           | 6.48            |
| 3       | Power Purchased from Solar                           |                           | 29.21           |
| 4       | DSM Charges Payable                                  |                           | 77.47           |
| 5       | SLDC Charges   |                           | 2.05            |
|         | <b>Total Cost</b>                                    |                           | <b>5,495.04</b> |
| B       | <b>Less: Income</b>                                  |                           |                 |
| 1       | Allocation of provisions made in Power Purchase Cost |                           | 257.44          |
| 2       | DSM Income Receivable                                |                           | 0.00            |
|         | <b>Net Power Purchase Cost</b>                       | <b>5,723.61</b>           | <b>5,237.60</b> |

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 MGVCCL 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.



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MGVCL has claimed a gain of Rs. 89.55 Crore in the power purchase cost due to lower actual Distribution Losses as compared to Distribution Losses approved in the MTR Order dated 24<sup>th</sup> April, 2019. The loss 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 2020-21 as submitted by MGVCL (Rs. Crore)**

| Sl. No. | Particulars                            | Unit      | With Approved Distribution Losses | With Actual Distribution Losses |
|---------|--|-----------|-----------------------------------|---------------------------------|
| 1       | Energy Sales                           | MUs       | 9,956                             | 9,956                           |
| 2       | Distribution Losses                    | MUs       | 1,300                             | 1,101                           |
|         |  | %         | 11.55%                            | 9.96%                           |
| 3       | Energy Requirement                     | MUs       | 11,256                            | 11,057                          |
| 4       | Gain/(Loss) due to Distribution Losses | MUs       |                                   | 199                             |
| 5       | Average Power Purchase Cost            | Rs./kWh   |                                   | 4.51                            |
| 6       | Gain/(Loss) due to Dist. Losses        | Rs. Crore |                                   | 89.55                           |

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 2020-21 (Rs. Crore)**

| Particulars               | Approved in the MTR Order | Actual   | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|---------------------------|---------------------------|----------|---|---|
| Total Power Purchase Cost | 5,723.61                  | 5,237.60 | 89.55                                   | 396.47                                    |

### Commission's Analysis

The Commission has examined the power purchase cost during FY 2020-21 based on the audited Annual Accounts of MGVCL. The total power purchase cost of MGVCL for



FY 2020-21 consists of the basic power purchase cost, Transmission Charges payable to GETCO and PGCIL, SLDC charges. Power Purchase Cost is reduced to the extent of income from 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 MGCVL to reconcile the numbers.

In reply, MGCVL submitted that total power purchase cost as per the FPPPA submissions for FY 2020-21 is Rs. 42,215 Crore; whereas, the net power purchase cost claimed in the petition is Rs. 41,268 Crore after deducting the amount of Rs. 2,015 Crore for the provision made in the books towards payment liability as per the Judgment of Hon'ble Supreme Court (provision made on best estimation basis as the amount is yet to be quantified by lower court / forum). Thus, there is difference of Rs. 947 Crore in the Power Purchase Cost as per FPPPA and Cost claimed in the petition for FY 2020-21.

MGVCL submitted that as per the directive of Commission, FPPPA is claimed based on actual payment made during respective quarter, which does not include undischarged 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.

MGVCL submitted that the major reasons for difference in power purchase cost as per submissions of FPPPA and as claimed in the petition for FY 2020-21 are as under:

- a) **The amount provided in Books for FY 2020-21 but not claimed in FPPPA submission for FY 2020-21:** The amount of Rs. 606.54 Crore (in addition to Rs. 2015 Crore) is provided in the books being amount decided, accrued and quantified as per the order of lower forum and there is liability to pay, but not paid due to pendency of matter in higher forum. Thus, the amount of Rs. 606.54 Crore is considered in the Books / petition as power purchase cost but the same is not part of FPPPA submissions.

- b) **The amount claimed as part of FPPPA submission of FY 2020-21 but provided in Books of previous years:** The amount of Rs. 496 Crore paid to Nuclear Power Corporation (NPC) in FY 2020-21 towards the past period tariff difference, which is booked as power purchase expenditure in the books of FY 2019-20, but claimed in FPPPA calculation for first quarter of FY 2020-21.
- c) **The amount of Credit for FY 2020-21 received and Booked for FY 2020-21 subsequent to FPPPA submission for FY 2020-21:** There was credit receipt for the amount of Rs. 217.45 Crore in respect of GSECL towards COVID-19 rebate and receipt of net credit of Rs. 114 Crore in respect of GETCO for FY 2020-21 after FPPPA submissions for FY 2020-21 to the Commission.
- d) **The amount, which is part of FPPPA submission but not booked in Accounts of FY 2020-21:** The GUVNL cost @ Rs. 0.04/Unit (Rs. 374 Crore) is considered in FPPPA submission as per methodology approved by the Commission but the said amount is not part of Power Purchase Cost in the Books of GUVNL Accounts. SLDC Charges (Rs. 33 Crore) is considered in the FPPPA submission as per methodology approved by the Commission but the said amount is not part of Power Purchase Cost as the SLDC charges are directly paid by DISCOMs and thus it is booked in DISCOM's books of Accounts under power purchase expenses.
- e) **Others:** In case of GSECL Stations, there is deduction of Rs. 165 Crore in the FCA claim of GSECL after FPPPA submissions for FY 2020-21 to the Commission. The aggregate amount of Rs. 155 Crore is claimed in FPPPA submissions for actual payment made in FY 2020-21 towards Change in Law claims for past period in respect of CGPL/GIPCL (SLPP/SLPP Exp).

As regards Power Purchase Cost as per Additional Surcharge submission vis-a-vis that claimed in the petition, MGVL submitted that there is net difference of Rs. 88 Crore, i.e., lower claim of Rs. 88 Crore in the Additional Surcharge submissions. The reason for such difference is on account of additional claim / provisions in the Books of account after submission of Additional Surcharge claim.

From the above reply of MGVL, the Commission noted that DISCOMs have considered the amount of Rs. 606.54 Crore in the Books and in the petition as power purchase cost but the same is not part of FPPPA submissions. However, the Commission in its earlier Tariff Order has ruled that additional payment liability shall



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be allowed once it gets materialised and paid to the beneficiaries in subsequent years based on the prudence check and verification from audited accounts. Accordingly, the Commission has reduced the amount of Rs. 606.54 Crore from power purchase cost for each DISCOM in the same ratio considered by DISCOMs for allocation of provision of Rs. 2,015 Crore 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 | 157.92 | 77.49 | 209.13 | 162.00 | 606.54 |

The net Power Purchase Cost after truing up for MGVCL for FY 2020-21 works out to Rs. 5160.10 Crore, as shown in the Table below:

**Table 4-12: Power Purchase Cost approved in truing up for FY 2020-21 (Rs. Crore)**

| Sr. No. | Particulars   | Approved in the MTR Order | Actual Claimed in Truing up | Approved in Truing up |
|---------|---|---------------------------|-----------------------------|-----------------------|
| A       | <b>Cost</b>   |                           |                             |                       |
| 1       | Power Purchased from GUVNL  |                           | 5,379.84                    | 5379.84               |
| 2       | Power purchase from Windfarm  |                           | 6.48                        | 6.48                  |
| 3       | Power Purchased from Solar  |                           | 29.21                       | 29.21                 |
| 4       | DSM Charges Payable   |                           | 77.47                       | 77.47                 |
| 5       | SLDC Charges  |                           | 2.05                        | 2.05                  |
|         | <b>Total Cost</b>   |                           | <b>5,495.04</b>             | <b>5,495.04</b>       |
| B       | <b>Less: Income</b>   |                           |                             |                       |
| 1       | Allocation of provisions made in Power Purchase Cost                  |                           | 257.44                      | 257.44                |
| 2       | DSM Income Receivable   |                           | 0.00                        | 0.00                  |
| 3       | Allocation of additional provisions considered in Power Purchase Cost |                           |                             | 77.49                 |
|         | <b>Net Power Purchase Cost</b>  | <b>5,723.61</b>           | <b>5,237.60</b>             | <b>5,160.10</b>       |

The Commission has approved Distribution Losses at 11.55% for FY 2020-21 in the MTR Order dated 24<sup>th</sup> April, 2019, against which MGVCL has achieved Distribution



Losses of 9.96%. 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 2020-21, is shown in the Table below:

**Table 4-13: Approved Gain/ (Loss) on account of Distribution Losses for FY 2020-21 (Rs. Crore)**

| Sr. No. | Particulars                            | Unit     | With Approved Distribution Losses | Actual Claimed in Truing up | Approved in truing up |
|---------|--|----------|-----------------------------------|-----------------------------|-----------------------|
| 1       | Energy Sales                           | MUs      | 9,956                             | 9,956                       | 9,956                 |
| 2       | Distribution Losses                    | MUs      | 1,300                             | 1,101                       | 1,101                 |
|         |  | %        | 11.55%                            | 9.96%                       | 9.96%                 |
| 3       | Energy Requirement                     | MUs      | 11,256                            | 11,057                      | 11,057                |
| 4       | Gain/(Loss) due to Distribution Losses | MUs      |                                   | 199                         | 199                   |
| 5       | Average Power Purchase Cost            | Rs. /kWh |                                   | 4.51                        | 4.44                  |
| 6       | Gain/(Loss) due to Distribution Losses |          |                                   | <b>89.55</b>                | <b>88.23</b>          |

While computing the Gain/ (Loss) due to change in Distribution Losses, the Commission has considered the Distribution Losses at 9.96% 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:





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**Table 4-14: Approved gain / (loss) in power purchase expenses in truing up for FY 2020-21 (Rs. Crore)**

| Particulars               | Approved in the MTR Order | Approved in Truing up | Deviation + (-) | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|---------------------------|---------------------------|-----------------------|-----------------|---|---|
| Total Power Purchase Cost | 5,723.61                  | 5,160.10              | 563.51          | 88.23                                   | 475.28                                    |

## 4.5 Fixed Cost

### 4.5.1 Operation and Maintenance (O&M) Expenses

MGVCL has claimed O&M Expenses of Rs. 625.64 Crore, which is inclusive of Employee Cost of Rs. 499.47 Crore, Repairs & Maintenance (R&M) Expenses of Rs. 77.42 Crore, Administration & General (A&G) Expenses of Rs. 88.21 Crore, and Other Expenses Capitalized of Rs. 39.46 Crore against the approved O&M Expense of Rs. 682.86 Crore, as per the details given in the Table below:

**Table 4-15: O&M Expenses claimed in the truing up for FY 2020-21 (Rs. Crore)**

| Sr. No. | Particulars                | Approved in MTR Order | Actual Claimed in Truing up | Deviation + (-) |
|---------|----------------------------|-----------------------|-----------------------------|-----------------|
| 1       | Employee Cost              | 581.19                | 499.47                      | 81.72           |
| 2       | R&M expenses               | 69.72                 | 77.42                       | (7.70)          |
| 3       | A&G expenses               | 88.01                 | 88.21                       | (0.20)          |
| 4       | Other Expenses Capitalised | (56.05)               | (39.46)                     | (16.59)         |
| 5       | <b>O&amp;M Expenses</b>    | <b>682.87</b>         | <b>625.64</b>               | <b>57.23</b>    |

### Petitioner's Submission

MGVCL has compared the O&M expenses actually incurred during FY 2020-21 with the expenses approved by the Commission in the MTR Order dated 24<sup>th</sup> April, 2019, and arrived at gain/(loss), as shown in the Table below:



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**Table 4-16: O&M Expenses and Gain/(Loss) claimed in the truing up for FY 2020-21 (Rs. Crore)**

| Sr. No. | Particulars                | Approved in MTR Order | Actual Claimed in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|---------|----------------------------|-----------------------|-----------------------------|---|---|
| 1       | Employee Expenses          | 581.19                | 499.47                      | 81.72                                   | -   |
| 2       | R&M Expenses               | 69.72                 | 77.42                       | (7.70)                                  | -   |
| 3       | A&G Expenses               | 88.01                 | 88.21                       | (0.20)                                  | -   |
| 4       | Other Expenses Capitalised | (56.05)               | (39.46)                     | -                                       | (16.59)                                   |
| 5       | <b>O&amp;M Expenses</b>    | <b>682.87</b>         | <b>625.64</b>               | <b>73.82</b>                            | <b>(16.59)</b>                            |

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. 499.47 Crore in the truing up for FY 2020-21. The employee cost approved for FY 2020-21 in the MTR Order dated 24<sup>th</sup> April, 2019 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 2020-21 (Rs. Crore)**

| Sr. No. | Particulars   | Approved in MTR Order | Actual Claimed in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|---------|---------------|-----------------------|-----------------------------|---|---|
| 1       | Employee Cost | 581.19                | 499.47                      | 81.72                                   | -   |

#### 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. MGVCL submitted that the employee cost incurred by the Company is purely on the basis of the guidelines issued by competent authorities like the State Government. The actual employee cost as per Profit & Loss account for FY 2020-21 was Rs. 499.47 Crore, which excludes the provision made towards 7<sup>th</sup> Pay Commission of Rs. 28.05 Crore, but includes Rs. 15.89 Crore of Re-measurement of defined benefit plans.



### **Commission's Analysis**

MGVCL has claimed actual employee cost of Rs. 499.47 Crore for FY 2020-21 as against Rs. 581.19 Crore approved in the MTR Order dated 24<sup>th</sup> April, 2019. The Commission has verified the actual employee expenses from the audited Annual Accounts of MGVCL. The actual employee expenses claimed by MGVCL excludes Rs. 28.05 Crore towards Provision for 7<sup>th</sup> Pay Commission but includes Rs. 15.89 Crore towards Re-measurement of defined benefit plans.

Therefore, the Commission considers the actual employee expenses of Rs. 499.47 Crore for the purpose of true up of FY 2020-21. The Commission considers the employee cost as a controllable expense, in accordance with the GERC (MYT) Regulations, 2016.

The Commission noted that as per the Ministry of Finance, Government of India Notifications, Dearness Allowance (DA) to the employees for the period 1<sup>st</sup> January, 2020 to 1<sup>st</sup> July, 2021 was not paid due to COVID-19. The Commission asked MGVCL to give the exact amount for such non-payment of DA and also asked to explain why the reduction in employee cost on the account of non-payment of such DA should not be considered as uncontrollable deviation. In reply, MGVCL submitted that DA was not paid to the employees for the period from 1<sup>st</sup> January, 2020 to 1<sup>st</sup> July, 2021 and hence, it is not possible to work out amount of such non-payment of DA.

MGVCL also submitted that the Commission approves employee cost on overall basis and does not approve component-wise. MGVCL submitted that the Commission has considered escalation rate of 5.72% over approved employee cost for FY 2019-20 to arrive at employee cost for FY 2020-21. MGVCL added that even if actual increase in employee cost is higher than 5.72% due to various factors like regular increment of employee's salary, increment in DA by competent authority, etc., which are beyond the control of the DISCOM, the Commission has always considered such increase as controllable only. The Commission has not carried out exercise with reference to increment in DA and allowed addition employee cost incurred by the DISCOM as uncontrollable. MGVCL submitted that in view of the same, variation in employee cost should be treated as controllable on overall basis rather than analysing component-wise and determine whether it is controllable or uncontrollable.

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In view of the above, the Commission has considered the reduction in employee cost on the account of non-payment of such DA as controllable deviation for FY 2020-21.

The Commission, accordingly, approves the employee cost at Rs. 499.47 Crore in the truing up for FY 2020-21, with the sharing of Gains/(Losses) as shown in the Table below:

**Table 4-18: Employee Cost approved in the truing up for FY 2020-21 (Rs. Crore)**

| Sr. No. | Particulars   | Approved in MTR Order | Approved in Truing Up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|---------|---------------|-----------------------|-----------------------|---|---|
| 1       | Employee Cost | 581.19                | 499.47                | 81.72                                   | -   |

#### 4.5.1.2 Repairs & Maintenance (R&M) Expenses

MGVCL has claimed R&M expenses of Rs. 77.42 Crore in the truing up for FY 2020-21. The R&M expenses approved for FY 2020-21 in the MTR Order dated 24<sup>th</sup> April, 2019 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 2020-21 (Rs. Crore)**

| Sr. No. | Particulars  | Approved in MTR Order | Actual Claimed in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|---------|--------------|-----------------------|-----------------------------|---|---|
| 1       | R&M Expenses | 69.72                 | 77.42                       | (7.70)                                  | -   |

#### 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. The actual R&M expenses for FY 2020-21 are Rs. 77.42 Crore, which are higher than the approved R&M expenses of Rs. 69.72 Crore. MGVCL has worked out a loss of Rs. 7.70 Crore due to controllable factors as provided in the GERC (MYT) Regulations, 2016.

**Commission’s Analysis**

The actual R&M expenses incurred during FY 2020-21 are Rs. 77.42 Crore, as per the audited annual accounts. The actual R&M expenses incurred by MGVCL are higher than the amount approved in the MTR Order dated 24<sup>th</sup> April, 2019. 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 2020-21 (Rs. Crore)**

| Sr. No. | Particulars  | Approved in MTR Order | Approved in Truing Up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|---------|--------------|-----------------------|-----------------------|---|---|
| 1       | R&M Expenses | 69.72                 | 77.42                 | (7.70)                                  | -   |

**4.5.1.3 Administration & General (A&G) Expenses**

MGVCL has claimed A&G expenses of Rs. 88.21 Crore in the truing up for FY 2020-21. The A&G expenses approved for FY 2020-21 in the MTR Order dated 24<sup>th</sup> April, 2019 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 2020-21 (Rs. Crore)**

| Sr. No. | Particulars  | Approved in MTR Order | Actual Claimed in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|---------|--------------|-----------------------|-----------------------------|---|---|
| 1       | A&G Expenses | 88.01                 | 88.21                       | (0.20)                                  | -   |



**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. 0.20 Crore for FY 2020-21.

**Commission’s Analysis**

The actual A&G expenses incurred during FY 2020-21 are Rs. 88.21 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**

| <b>Sr. No.</b> | <b>Description</b>                                | <b>Amount (Rs.)</b> |
|----------------|---|---------------------|
| <b>A</b>       | <b>Others</b>                                     |                     |
| 1              | Purchase of Material (Inter-Company Sale)         | 3,83,13,578         |
| <b>B</b>       | <b>Miscellaneous Losses and Write-off</b>         |                     |
| 1              | Miscellaneous Expenses Under SKY Scheme           | 2,018               |
| 2              | Compensation for Injuries, Deaths- Staff          | 1,20,000            |
| 3              | Compensation for Injuries, Death Damage-Outsiders | 77,15,723           |
| 4              | Loss on Obsolescence of Stores                    | 1,49,92,910         |
| 5              | Loss on Sale of Scrap                             | 1,12,33,561         |
| 6              | Other Losses and Write-Off                        | 200                 |
| 7              | Compensation for Injuries Deaths-Staff            | 8,133               |
| 8              | Compensation for Injuries, Death Damage-Outsiders | 1,87,25,628         |
| 9              | Loss on Obsolescence of Stores                    | 53,86,146           |
| 10             | Loss on Sale of Scrap                             | 43,83,936           |
| 11             | Other Losses and Write-Off                        | 9,58,130            |

The Commission is of the view that the amount booked against Compensation for Injuries, Deaths- Staff & Outsiders, and Loss on Obsolescence of Stores has to be



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borne by MGVCCL. 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 MGVCCL, considering the above disallowance, are lower than the amount approved in the MTR Order dated 24<sup>th</sup> April, 2019. 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 2020-21 (Rs. Crore)**

| Sr. No. | Particulars                      | Approved in MTR Order | Approved in Truing Up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|---------|----------------------------------|-----------------------|-----------------------|---|---|
| 1       | Administration & General Charges | 88.01                 | 83.52                 | 4.49                                    | -   |

#### 4.5.1.4 Other Expenses Capitalised

MGVCCL has claimed the actual expenses capitalised at Rs. 39.46 Crore in the truing up for FY 2020-21, as against Rs. 56.05 Crore approved in the MTR Order dated 24<sup>th</sup> April, 2019 as shown in the Table below:

**Table 4-24: Other Expenses Capitalised as claimed by MGVCCL in the truing up for FY 2020-21 (Rs. Crore)**

| Sr. No. | Particulars                | Approved in MTR Order | Actual Claimed in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|---------|----------------------------|-----------------------|-----------------------------|---|---|
| 1       | Other Expenses Capitalised | (56.05)               | (39.46)                     | -                                       | (16.59)                                   |

#### 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. 39.46 Crore, as per the audited annual accounts for FY 2020-21.

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The Commission, accordingly, approves the Other Expenses Capitalised at Rs. 39.46 Crore against Rs. 56.05 Crore approved in the MTR Order dated 24<sup>th</sup> April, 2019. The Commission allows Rs. 16.59 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 2020-21 (Rs. Crore)**

| Sr. No. | Particulars                | Approved in MTR Order | Approved in Truing Up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|---------|----------------------------|-----------------------|-----------------------|---|---|
| 1       | Other Expenses Capitalised | (56.05)               | (39.46)               | -                                       | (16.59)                                   |

The total O&M expenses approved in the truing up for FY 2020-21 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 2020-21 (Rs. Crore)**

| Sr. No. | Particulars                | Approved in MTR 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              | 581.19                | 499.47                      | 499.47                | 81.72                                    | -   |
| 2       | R&M Expenses               | 69.72                 | 77.42                       | 77.42                 | (7.70)                                   | -   |
| 3       | A&G Expenses               | 88.01                 | 88.21                       | 83.52                 | 4.49                                     | -   |
| 4       | Other Expenses Capitalised | (56.05)               | (39.46)                     | (39.46)               | -  | (16.59)                                   |
| 5       | <b>O&amp;M Expenses</b>    | <b>682.87</b>         | <b>625.64</b>               | <b>620.95</b>         | <b>78.51</b>                             | <b>(16.59)</b>                            |

#### 4.5.2 Capital Expenditure and Capitalization

MGVCL has achieved actual capital expenditure of Rs. 297.03 Crore in FY 2020-21, against Rs. 230.44 Crore approved in the MTR Order dated 24<sup>th</sup> April, 2019, as given in the Table below:





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**Table 4-27: Capital Expenditure claimed by MGVCL for FY 2020-21 (Rs. Crore)**

| Sr. No.  | Particulars                                     | Approved in MTR Order | Actual        | Deviation      |
|----------|---|-----------------------|---------------|----------------|
| <b>A</b> | <b>Distribution Schemes</b>                     |                       |               |                |
|          | Normal Development Scheme                       | 31.94                 | 78.99         | (47.05)        |
|          | Distribution Infra & Shifting Schemes (DISS)    | 20.00                 | 20.40         | (0.40)         |
|          | Electrification of hutments                     | 5.25                  | 3.80          | 1.45           |
|          | Kutir Jyoti Scheme                              | 2.10                  | 1.05          | 1.05           |
|          | Others Harijan Basti – Petapara                 | 0.30                  | 0.25          | 0.05           |
|          | System Improvement                              |                       | 10.70         | (10.70)        |
|          | <b>Total</b>                                    | <b>59.59</b>          | <b>115.19</b> | <b>(55.60)</b> |
| <b>B</b> | <b>Rural Electrification Schemes</b>            |                       |               |                |
|          | TASP (Wells & Petapara)                         | 55.00                 | 68.16         | (13.16)        |
|          | Special Component plan                          | 1.25                  | 1.57          | (0.32)         |
|          | RE Wells(OA +SPA)                               | 77.00                 | 74.38         | 2.62           |
|          | Dark Zone                                       | 9.25                  | 11.92         | (2.67)         |
|          | Surya Shakti Kishan Yojana                      |                       | 9.45          | (9.45)         |
|          | PM Kusum Comp-B                                 |                       | 0.22          | (0.22)         |
|          | PM Kusum Comp-C                                 |                       | 1.32          | (1.32)         |
|          | <b>Total</b>                                    | <b>142.50</b>         | <b>167.02</b> | <b>(24.52)</b> |
| <b>C</b> | <b>Central Government Scheme - Plan</b>         |                       |               |                |
|          | Integrated Power Development Scheme (IPDS)      | -                     | -             | -              |
|          | Din Dayal Upadhyay Gramin Jyoti Yojana (DDUGJY) | -                     | -             | -              |
|          | R-APDRP(Scada)-A                                | 0.87                  | -             | 0.87           |
|          | R-APDRP(Scada)-B                                | -                     | -             | -              |
|          | PSDF  | 14.12                 | -             | 14.12          |
|          | RAPDRP (Part B)                                 | -                     | -             | -              |
|          | <b>Total</b>                                    | <b>14.99</b>          | <b>-</b>      | <b>14.99</b>   |
| <b>D</b> | <b>Other New Schemes</b>                        |                       |               |                |
|          | Sagar Khedu                                     | 1.50                  | 1.51          | (0.01)         |
|          | Energy Conservation (HVDS)                      | 5.00                  | 3.23          | 1.77           |
|          | Vehicle   | 1.20                  | -             | 1.20           |
|          | Sardar Krushi Jyoti Yojna                       | 3.66                  | 6.97          | (3.31)         |
|          | Misc Civil + Electrical Works                   | 2.00                  | 2.84          |                |
|          | Furniture                                       |                       | 0.27          |                |
|          | <b>Total</b>                                    | <b>13.36</b>          | <b>14.82</b>  | <b>(1.46)</b>  |
|          | <b>Capital Expenditure Total</b>                | <b>230.44</b>         | <b>297.03</b> | <b>(66.59)</b> |



**Petitioner’s Submission**

MGVCL has submitted that Capital expenditure incurred by MGVCL in FY 2020-21 was Rs. 297.03 Crore. The actual capital expenditure by MGVCL during the FY 2020-21 is higher than that approved by the Commission. The Scheme-wise deviation in capital expenditure is explained as under:

**Normal Development Scheme:** Approved CAPEX was Rs. 31.94 Crore and actual is Rs. 76.17 Crore in FY 2020-21, as in new development full amount is paid by Applicant in New connection of Infrastructure, Industrial LT, HT, EHT connection and various shifting work is paid by the State Government of Gujarat (GoG) and Central Government department, so actual amount incurred is Rs. 78.99 Crore.

**SI Scheme:** Rs. 65.67 Crore was approved for budget of FY 2020-21 and Rs. 10.70 Crore is actual expenditure. The actual expenditure is less due to projects not being implemented in FY 2020-21, 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.

**Government Schemes:** The detailed justification of actual capital expenditure incurred during FY 2020-21 against approved CAPEX for various Government schemes is as under:

**Table 4-28: Capital Expenditure against Government Schemes claimed by MGVCL for FY 2020-21 (Rs. Crore)**

| Sr. No.                                     | Particulars                     | Approved in MTR Order | Approved Annual Plan by GUVNL | Actual Capital expenditure |
|---|---------------------------------|-----------------------|-------------------------------|----------------------------|
| <b>Distribution Schemes</b>                 |                                 |                       |                               |                            |
| 1   | Electrification of hutments     | 5.25                  | 3.80                          | 3.80                       |
| 2   | Kutir Jyoti Scheme              | 2.10                  | 1.05                          | 1.05                       |
| 3   | Others Harijan Basti - Petapara | 0.30                  | 0.28                          | 0.28                       |
|   | <b>TOTAL</b>                    | <b>7.65</b>           | <b>5.13</b>                   | <b>5.13</b>                |
| <b>Rural Electrification Schemes – Plan</b> |                                 |                       |                               |                            |
| 1   | TASP (Wells & Petapara)         | 55.00                 | 68.16                         | 68.16                      |
| 2   | SC Ag.                          | 1.25                  | 1.15                          | 1.15                       |



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| <b>Sr. No.</b> | <b>Particulars</b>            | <b>Approved in MTR Order</b> | <b>Approved Annual Plan by GUVNL</b> | <b>Actual Capital expenditure</b> |
|----------------|-------------------------------|------------------------------|--------------------------------------|-----------------------------------|
| 3              | Normal Scheme (SPA + DZ)      | 86.25                        | 86.30                                | 86.30                             |
| 4              | Other wells / Lift Irrigation | 0.00                         | 0.00                                 | 0.42                              |
|                | <b>TOTAL</b>                  | <b>142.50</b>                | <b>155.61</b>                        | <b>156.03</b>                     |

Actual expenditure incurred for various RE Scheme (Agriculture connections and Household connections) were in line with approved Annual Plan by GUVNL.

The CAPEX booked under SKY scheme, PM KUSUM Comp- B and C for FY 2021 (Actual) is Rs. 9.45 Crore, Rs. 0.22 Crore and Rs. 1.32 Crore against Nil approved expenditure. Under SKY Scheme, all the expenditure is either received as grant from GoG, Subsidy from GoG and payment of loan/ upfront amount by farmer. Under PM KUSUM B, 60% of the expenditure is received as subsidy from the Government and remaining 40 % is borne by farmers.

MGVCL has claimed actual capitalisation of Rs. 302.43 Crore in the truing up for FY 2020-21, as compared to the capitalisation of Rs. 230.44 Crore approved in the MTR Order dated 24<sup>th</sup> April, 2019.

#### **Commission's Analysis**

The capital expenditure (CAPEX) approved for FY 2020-21 in the MTR Order dated 24<sup>th</sup> April, 2019 was Rs. 230.44 Crore. The actual capital expenditure incurred is Rs. 297.03 Crore, which is higher by Rs. 66.59 Crore than the CAPEX approved in the MTR Order.

The Commission observed that there is higher Capital Expenditure of Rs. 47.05 Crore during FY 2020-21 compared to that approved in MTR 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 Distribution Infrastructure Shifting Scheme is dependent upon the proposal for shifting of Distribution Network received from Urban Local Bodies like Nagar Palika, Municipal Corporation, Gram Panchayat, etc. It is also



observed that variation in the Capital Expenditure for electrification of hutments, Kutir Jyoti scheme and Harijan Basti (Petarapa) scheme is due to variation in number of connections released under these schemes.

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. 297.03 Crore and capitalisation of Rs. 303.37 Crore. The Commission noted that MGVCL has claimed lower capitalisation of Rs. 302.43 Crore for FY 2020-21 against Rs. 303.37 Crore booked in annual accounts due to linking error for asset class of Computers. The Commission, therefore, approves the actual CAPEX of Rs. 297.03 Crore and gross capitalisation of Rs. 303.37 Crore in the truing up for FY 2020-21.

#### **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 2020-21 is given in the Table below:

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**Table 4-29: Funding of Capitalisation submitted by MGVCCL for FY 2020-21 (Rs. Crore)**

| <b>Particulars</b>                | <b>Approved in MTR Order</b> | <b>Claimed in truing up</b> | <b>Deviation</b> |
|-----------------------------------|------------------------------|-----------------------------|------------------|
| <b>Capitalisation</b>             | <b>230.44</b>                | <b>302.43</b>               | <b>(71.99)</b>   |
| Less: Consumer Contribution       | 31.94                        | 99.58                       | (67.64)          |
| Less: Grants                      | 23.42                        | 49.17                       | (25.75)          |
| <b>Balance CAPEX for the Year</b> | <b>175.08</b>                | <b>153.68</b>               | <b>21.40</b>     |
| Debt (70%)                        | 122.56                       | 107.58                      | 14.98            |
| Equity (30%)                      | 52.52                        | 46.10                       | 6.42             |

### **Commission's Analysis**

The Commission noted that MGVCCL has considered gross capitalisation instead of net capitalisation (net of assets decommissioned) for working out the eligible debt and equity amount for FY 2020-21. In this regard, MGVCCL 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, MGVCCL has considered gross capitalization for working out the eligible debt and equity amount for FY 2020-21. However, the Commission does not find merit in MGVCCL'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. 3.76 Crore) for working out the eligible debt and equity amount for FY 2020-21.

It is observed that MGVCCL 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 MGVCCL against Government Grants and Consumer Contribution from the audited Annual Accounts for FY 2020-21. The Commission has accordingly considered the funding of capitalisation in FY 2020-21 through Consumer Contribution and Grants as Rs. 99.58 Crore and Rs. 49.17 Crore, respectively, in the truing up for FY 2020-21.



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The Commission, therefore, approves the funding of Capitalization in the truing up of FY 2020-21 as given in the Table below:

**Table 4-30: Approved Capitalisation and sources of funding in the truing up for FY 2020-21 (Rs. Crore)**

| Particulars                | Approved in MTR Order | Claimed in truing up | Approved in Truing Up |
|----------------------------|-----------------------|----------------------|-----------------------|
| <b>Capitalization</b>      | <b>230.44</b>         | <b>302.43</b>        | <b>299.62</b>         |
| Consumer Contribution      | 31.94                 | 99.58                | 99.58                 |
| Grants                     | 23.42                 | 49.17                | 49.17                 |
| Balance CAPEX for the Year | <b>175.08</b>         | <b>153.68</b>        | <b>150.87</b>         |
| Debt (70%)                 | 122.56                | 107.58               | 105.61                |
| Equity (30%)               | 52.52                 | 46.10                | 45.26                 |

#### 4.5.3 Depreciation

MGVCL has claimed Depreciation of Rs. 270.72 Crore in the truing up for FY 2020-21 against the Depreciation of Rs. 270.64 Crore approved in the MTR Order dated 24<sup>th</sup> April, 2019.

##### Petitioner's Submission

MGVCL submitted that it has calculated depreciation for FY 2020-21 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 2020-21 (Rs. Crore)**

| Sr. No | Particulars                          | Approved in MTR Order | Actual Claimed in Truing up | Deviation     |
|--------|--------------------------------------|-----------------------|-----------------------------|---------------|
| 1      | Gross Block in Beginning of the year | 5,686.83              | 5,838.67                    |               |
| 2      | Additions during the Year (Net)      | 230.44                | 298.67                      |               |
| 3      | Closing GFA                          | 5,917.27              | 6,137.34                    |               |
| 4      | Average GFA                          | 5,802.05              | 5,988.01                    |               |
| 5      | <b>Depreciation for the Year</b>     | <b>270.64</b>         | <b>270.72</b>               | <b>(0.08)</b> |



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| Sr. No | Particulars                  | Approved in MTR Order | Actual Claimed in Truing up | Deviation |
|--------|------------------------------|-----------------------|-----------------------------|-----------|
| 6      | Average Rate of Depreciation | 4.66%                 | 4.52%                       |           |

MGVCL further submitted that actual depreciation for FY 2020-21, as against the value approved in the MTR Order, resulted in a net uncontrollable loss of Rs. 0.08 Crore, as shown in the Table below:

**Table 4-32: Gain/(Loss) due to Deprecation claimed in the truing up for FY 2020-21 (Rs. Crore)**

| Particulars  | Approved in MYT Order | Actual Claimed in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|--------------|-----------------------|-----------------------------|---|---|
| Depreciation | 270.64                | 270.72                      | -                                       | (0.08)                                    |

### Commission's Analysis

The Commission has considered the Closing GFA of FY 2019-20 approved in Order dated 31<sup>st</sup> March, 2021 as Opening GFA of FY 2020-21. The net addition during the year of Rs. 299.62 Crore has been verified from the audited Annual Accounts for FY 2020-21. The depreciation as per audited Annual Accounts for FY 2020-21 is Rs. 270.72 Crore.

The Commission, accordingly, approves Depreciation at Rs. 270.72 Crore in the truing up for FY 2020-21, as shown in the Table below:

**Table 4-33: Approved fixed assets & depreciation for FY 2020-21 (Rs. Crore)**

| Sr. No | Particulars                          | Approved in MTR Order | Actual Claimed in Truing up | Approved in Truing Up |
|--------|--------------------------------------|-----------------------|-----------------------------|-----------------------|
| 1      | Gross Block in Beginning of the year | 5,686.83              | 5,838.67                    | 5,838.67              |
| 2      | Additions during the Year (Net)      | 230.44                | 298.67                      | 299.62                |



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| Sr. No | Particulars                         | Approved in MTR Order | Actual Claimed in Truing up | Approved in Truing Up |
|--------|-------------------------------------|-----------------------|-----------------------------|-----------------------|
| 3      | Gross Block at the end of the year  | 5,917.27              | 6,137.34                    | 6.138.29              |
| 4      | <b>Depreciation for the Year</b>    | <b>270.64</b>         | <b>270.72</b>               | <b>270.72</b>         |
| 5      | <b>Average Rate of Depreciation</b> | <b>4.66%</b>          | <b>4.52%</b>                | <b>4.52%</b>          |

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 2020-21, as detailed in the Table below:

**Table 4-34: Gain/(Loss) due to Depreciation approved in truing up for FY 2020-21 (Rs. Crore)**

| Particulars  | Approved in MYT Order | Approved in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|--------------|-----------------------|-----------------------|---|---|
| Depreciation | 270.64                | 270.72                | -                                       | (0.08)                                    |

#### 4.5.4 Interest and Finance charges

MGVCL has claimed Rs. 45.87 Crore towards interest and finance charges in the truing up for FY 2020-21, as against Rs.63.38 Crore approved in the MTR Order dated 24<sup>th</sup> April, 2019, as shown in the Table below:

**Table 4-35: Interest and Finance Charges claimed by MGVCL in the truing up for FY 2020-21 (Rs. Crore)**

| Particulars                  | Approved in MTR Order | Actual Claimed in Truing up |
|------------------------------|-----------------------|-----------------------------|
| Interest and Finance Charges | 63.38                 | 45.87                       |





**Petitioner's Submission**

MGVCL submitted that it has considered the Opening Balance of loans for FY 2020-21 equal to the Closing Balance of Loans approved by the Commission for FY 2019-20. The loan addition in FY 2020-21 is considered as Rs. 107.58 Crore towards funding of CAPEX for FY 2020-21. 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 6.30% as against 9.32% approved in the MTR Order dated 24<sup>th</sup> April, 2019 for FY 2020-21.

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 2020-21 (Rs. Crore)**

| Sr. No.  | Particulars                                   | Approved in the MTR Order | Actual Claimed in Truing up |
|----------|---|---------------------------|-----------------------------|
| 1        | Opening Loans                                 | -                         | -                           |
| 2        | Loan Additions during the Year                | 122.56                    | 107.58                      |
| 3        | Repayment during the Year                     | 122.56                    | 107.58                      |
| 4        | Closing Loans                                 | -                         | -                           |
| <b>5</b> | <b>Average Loans</b>                          | -                         | -                           |
| 6        | Interest on Loan                              | -                         | -                           |
| 7        | Interest on Consumers' Security Deposit       | 62.47                     | 44.70                       |
| 8        | Other Bank Charges                            | 0.91                      | 1.18                        |
| 9        | <b>Total Interest &amp; Financial Charges</b> | <b>63.38</b>              | <b>45.87</b>                |
| 10       | Weighted Average Rate of Interest             | <b>9.32%</b>              | <b>6.30%</b>                |

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 2020-21  
(Rs. Crore)**

| Particulars                  | Approved in<br>MTR Order | Actual<br>Claimed in<br>Truing up | Gain/(Loss)<br>due to<br>Controllable<br>Factors | Gain/(Loss)<br>due to<br>Uncontrollable<br>Factors |
|------------------------------|--------------------------|-----------------------------------|--|--|
| Interest and Finance Charges | 63.38                    | 45.87                             | -  | 17.51  |

### **Commission's Analysis**

The Commission has considered the Closing Balance of Loans approved in the true up Order for FY 2019-20, as the Opening Balance of Loans for FY 2020-21. The normative addition of loans during FY 2020-21 has been considered at Rs. 105.61 Crore, as approved in Table 4.30 of this Order. Since, the depreciation approved in this Order is higher than the sum of opening normative loan and normative loan addition during the year, , the repayment of loan has been considered equal to the total loan outstanding for the year approved in this Order.

The interest on security deposits of Rs. 44.70 Crore has been verified from the audited Annual Accounts for FY 2020-21. The Other Bank charges have been considered as per the audited Annual Accounts for FY 2020-21. However, the Commission has not considered Interest on Income Tax of Rs. 0.64 Crore as claimed by MGCVCL in Other Bank charges, in line with the approach adopted in earlier Orders.

MGVCL has submitted details of the actual loan portfolio and the rate of interest applicable for each loan portfolio for FY 2020-21. The Commission has computed the weighted average rate of interest as 6.30% 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 2020-21 is detailed in the Table below:

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**Table 4-38: Interest and Finance Charges approved by the Commission in the truing up for FY 2020-21 (Rs. Crore)**

| Sr. No.  | Particulars                                   | Approved in the MTR Order | Actual Claimed in Truing up | Approved in Truing up |
|----------|---|---------------------------|-----------------------------|-----------------------|
| 1        | Opening Loans                                 | -                         | -                           | -                     |
| 2        | Loan Additions during the Year                | 122.56                    | 107.58                      | 105.61                |
| 3        | Repayment during the Year                     | 122.56                    | 107.58                      | 105.61                |
| 4        | Closing Loans                                 | -                         | -                           | -                     |
| <b>5</b> | <b>Average Loans</b>                          | -                         | -                           |                       |
| 6        | Interest on Loan                              | -                         | -                           | -                     |
| 7        | Interest on Consumers' Security Deposit       | 62.47                     | 44.70                       | 44.70                 |
| 8        | Other Bank Charges                            | 0.91                      | 1.18                        | 0.54                  |
| <b>9</b> | <b>Total Interest &amp; Financial Charges</b> | <b>63.38</b>              | <b>45.87</b>                | <b>45.23</b>          |
| 10       | Weighted Average Rate of Interest             | <b>9.32%</b>              | <b>6.30%</b>                | <b>6.30%</b>          |

The Commission, accordingly, approves the interest and finance charges at Rs. 45.23 Crore in the truing up for FY 2020-21.

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 2020-21, as detailed in the Table below:

**Table 4-39: Gain / (Loss) approved in the truing up for FY 2020-21 (Rs. Crore)**

| Particulars                  | Approved in MYT Order | Approved in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|------------------------------|-----------------------|-----------------------|---|---|
| Interest and Finance Charges | 63.38                 | 45.23                 | -                                       | 18.15                                     |



#### 4.5.5 Interest on Working Capital

MGVCL has not claimed any interest on working capital in the truing up for FY 2020-21, against Nil provision approved in the MTR Order dated 24<sup>th</sup> April, 2019 as detailed in the Table below:

**Table 4-40: Interest on Working Capital claimed by MGVCL in the truing up for FY 2020-21 (Rs. Crore)**

| Sr. No. | Particulars                 | Approved in the MTR 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 9.57%.

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 2020-21 (Rs. Crore)**

| Sr. No.  | Particulars                                    | Approved in the MTR Order | Actual Claimed in Truing up |
|----------|--|---------------------------|-----------------------------|
| 1        | O & M expenses                                 | 56.91                     | 52.14                       |
| 2        | Maintenance Spares                             | 56.87                     | 58.39                       |
| 3        | Receivables                                    | 557.00                    | 533.44                      |
| 4        | Amount held as security deposit from consumers | 999.55                    | 1,014.25                    |
| <b>5</b> | <b>Total Working Capital</b>                   | <b>(328.77)</b>           | <b>(370.29)</b>             |
| 6        | Rate of Interest on Working Capital            | 10.65%                    | 9.57%                       |
| <b>7</b> | <b>Interest on Working Capital</b>             | <b>-</b>                  | <b>-</b>                    |



### 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 2020-21. 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 MGCVCL 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 2020-21 (Rs. Crore)**

| Sr. No.  | Particulars                                    | Approved in the MTR Order | Actual Claimed in Truing up | Approved in Truing up |
|----------|--|---------------------------|-----------------------------|-----------------------|
| 1        | O&M expenses                                   | 56.91                     | 52.14                       | 51.75                 |
| 2        | Maintenance Spares                             | 56.87                     | 58.39                       | 58.39                 |
| 3        | Receivables                                    | 557.00                    | 533.44                      | 537.17                |
| 4        | Amount held as security deposit from consumers | 999.55                    | 1,014.25                    | 1,014.25              |
| <b>5</b> | <b>Total Working Capital</b>                   | <b>(328.77)</b>           | <b>(370.29)</b>             | <b>(366.96)</b>       |
| 6        | Rate of Interest on Working Capital            | 10.65%                    | 9.57%                       | 9.57%                 |
| <b>7</b> | <b>Interest on Working Capital</b>             | -                         | -                           | -                     |

The Commission, accordingly, approves the interest on working capital as Nil in the truing up for FY 2020-21.

#### 4.5.6 Bad Debts Written Off

MGVCL has claimed Rs. 0.01 Crore towards bad debts written off in the truing up for FY 2020-21, as against Rs. 0.004 Crore approved in the MTR dated 24<sup>th</sup> April, 2019, as given in the Table below:

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**Table 4-43: Bad Debts claimed by MGVCCL in the truing up for FY 2020-21 (Rs. Crore)**

| Sr. No. | Particulars           | Approved in the MTR Order | Actual Claimed in Truing up |
|---------|-----------------------|---------------------------|-----------------------------|
| 1       | Bad Debts Written Off | 0.004                     | 0.01                        |

**Petitioner's Submission**

MGVCL submitted that as per the audited Annual Accounts for FY 2020-21, bad and doubtful debts written off in FY 2020-21 are Rs 0.01 Crore, resulting in a loss of Rs. 0.0019 Crore on account of controllable factors, as shown in the Table below:

**Table 4-44: Bad Debts claimed by MGVCCL in the truing up for FY 2020-21 (Rs. Crore)**

| Particulars           | Approved in MTR Order | Actual Claimed in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|-----------------------|-----------------------|-----------------------------|---|---|
| Bad Debts Written Off | 0.004                 | 0.01                        | (0.002)                                 | -   |

**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 MGVCCL for FY 2020-21. Accordingly, the Commission allows Bad & Doubtful Debts Written off as Rs. 0.01 Crore during FY 2020-21.

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 2020-21 (Rs. Crore)**

| Particulars           | Approved in MTR Order | Approved in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|-----------------------|-----------------------|-----------------------|---|---|
| Bad Debts Written Off | 0.004                 | 0.01                  | (0.002)                                 | -   |

#### 4.5.7 Return on Equity

MGVCL has claimed Rs. 160.04 Crore towards Return on Equity (RoE) in the truing up for FY 2020-21 as against Rs. 158.12 Crore approved in the MTR Order dated 24<sup>th</sup> April, 2019, as given in the Table below:

**Table 4-46: Return on Equity claimed by MGVCL in the truing up for FY 2020-21 (Rs. Crore)**

| Sr. No. | Particulars      | Approved in the MTR Order | Actual Claimed in Truing up |
|---------|------------------|---------------------------|-----------------------------|
| 1       | Return on Equity | 158.12                    | 160.04                      |

#### 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 2020-21 (Rs. Crore)**

| Sr. No. | Particulars                      | Approved in the MTR Order | Actual Claimed in Truing up |
|---------|----------------------------------|---------------------------|-----------------------------|
| 1       | Opening Equity Capital           | 1,103.18                  | 1,120.06                    |
| 2       | Equity Additions during the Year | 52.52                     | 46.10                       |
| 3       | Closing Equity                   | 1,155.70                  | 1,166.16                    |
| 4       | Average Equity                   | 1,129.44                  | 1,143.11                    |
| 5       | Rate of Return on the Equity     | 14.00%                    | 14.00%                      |



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| Sr. No. | Particulars      | Approved in the MTR Order | Actual Claimed in Truing up |
|---------|------------------|---------------------------|-----------------------------|
| 6       | Return on Equity | 158.12                    | 160.04                      |

MGVCL has computed the Gain / (Loss) on account of RoE in the truing up for FY 2020-21, as detailed in the Table below:

**Table 4-48: Gain / (Loss) due to RoE claimed by MGVCL for FY 2020-21 (Rs. Crore)**

| Particulars      | Approved in MTR Order | Actual Claimed in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|------------------|-----------------------|-----------------------------|---|---|
| Return on Equity | 158.12                | 160.04                      | -                                       | (1.91)                                    |

### Commission's Analysis

The Commission has considered the Closing Balance of equity as approved in the truing up of FY 2019-20, as the Opening Balance of equity for FY 2020-21. The Commission has approved the normative Equity addition of Rs. 45.26 Crore in Table 4.30 of this Order.

The Commission has computed the RoE in the truing up for FY 2020-21 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 2020-21 (Rs. Crore)**

| Sr. No. | Particulars                      | Approved in the MTR Order | Actual Claimed in Truing up | Approved in Truing up |
|---------|----------------------------------|---------------------------|-----------------------------|-----------------------|
| 1       | Opening Equity Capital           | 1,103.18                  | 1,120.06                    | 1,120.06              |
| 2       | Equity Additions during the Year | 52.52                     | 46.10                       | 45.26                 |
| 3       | Closing Equity                   | 1,155.70                  | 1,166.16                    | 1,165.32              |
| 4       | Average Equity                   | 1,129.44                  | 1,143.11                    | 1,142.69              |
| 5       | Rate of Return on the Equity     | 14.00%                    | 14.00%                      | 14.00%                |
| 6       | Return on Equity                 | 158.12                    | 160.04                      | 159.98                |





The Commission approves the Return on Equity at Rs. 159.98 Crore in the truing up for FY 2020-21.

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 2020-21 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 2020-21 (Rs. Crore)**

| <b>Particulars</b> | <b>Approved in MTR Order</b> | <b>Approved in Truing up</b> | <b>Gain/(Loss) due to Controllable Factors</b> | <b>Gain/(Loss) due to Uncontrollable Factors</b> |
|--------------------|------------------------------|------------------------------|--|--|
| Return on Equity   | 158.12                       | 159.98                       | -  | (1.85)   |

#### **4.5.8 Income Tax**

MGVCL has claimed Rs. 19.58 Crore towards Income Tax for FY 2020-21, as against Rs. 12.11 Crore approved in the MTR Order dated 24<sup>th</sup> April, 2019, as given in the Table below:

**Table 4-51: Income Tax claimed by MGVCL in the truing up for FY 2020-21 (Rs. Crore)**

| <b>Sr. No.</b> | <b>Particulars</b> | <b>Approved in the MTR Order</b> | <b>Actual Claimed in Truing up</b> |
|----------------|--------------------|----------------------------------|------------------------------------|
| 1              | Income Tax (MAT)   | 12.11                            | 19.58                              |

#### **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. 7.47 Crore on this account, as given in the Table below:



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

| Particulars                  | Approved in MTR Order | Actual Claimed in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|------------------------------|-----------------------|-----------------------------|---|---|
| Provision for Tax / Tax Paid | 12.11                 | 19.58                       | -                                       | (7.47)                                    |

**Commission's Analysis**

The Commission has verified the amount of Income Tax payable from the audited Annual Accounts of MGVCL, i.e., Rs. 19.58 Crore. The Commission, accordingly, approves the Income Tax of Rs. 19.58 Crore in the truing up for FY 2020-21.

Variation in Income Tax is uncontrollable, hence, the Commission approves the Gain/(Loss) on account of Income Tax in the truing up for FY 2020-21, as detailed in the Table below:

**Table 4-53: Approved Gain / (Loss) due to Income Tax in the truing up for FY 2020-21 (Rs. Crore)**

| Particulars | Approved in MTR Order | Approved in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|-------------|-----------------------|-----------------------|---|---|
| Income Tax  | 12.11                 | 19.58                 | -                                       | (7.47)                                    |

**4.5.9 Non-Tariff Income**

MGVCL has claimed the actual Non-Tariff Income (NTI) as Rs. (62.24) Crore in the truing up for FY 2020-21, as against Rs. 130.28 Crore approved in the MTR Order dated 24<sup>th</sup> April 2019, as detailed in the Table below:



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**Table 4-54: Non-Tariff Income claimed by MGCVCL in the truing up for FY 2020-21 (Rs. Crore)**

| Sr. No. | Particulars       | Approved in the MTR Order | Actual Claimed in Truing up |
|---------|-------------------|---------------------------|-----------------------------|
| 1       | Non-Tariff Income | 130.28                    | (62.24)                     |

**Petitioner's Submission**

MGVCL submitted that the NTI of MGCVCL considered for FY 2020-21 is Rs. (62.24) Crore as against Rs. 130.28 Crore approved by the Commission, resulting in an uncontrollable gain/(loss) of Rs. 192.52 Crore. The variation of actual NTI from the approved value is due to the treatment of Opinion of Expert Advisory Committee (EAC) of Institute of Chartered Accountants of India on deferred income adopted by MGCVCL and other State-owned Utilities in Gujarat.

The Comptroller and Auditor General of India (C&AG) while conducting the supplementary audit of MGCVCL for FY 2019-20 has drawn a reference to Note 46 (Note 40) of the Financial Statement, as reproduced below:

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

*Non accounting of the above effect has resulted into understatement of balance of grants/ consumer contribution as on 31st March, 2020 by Rs. 20,759.00 lakhs and overstatement of balance of 'Retained Earnings' by like amount. Had the above been accounted for, the balance of grants/ consumer contribution would have been Rs. 1,51,084.70 lakhs and balance of 'Retained Earnings' would have*



*been Rs. 1,62,124.62 lakhs as on 31st March, 2020 as against the reported figures of Rs. 1,30,921.05 and Rs. 1,76,892.12 lakhs respectively.”*

C&AG has further drawn attention that the above change in method was made by the Company as there was a mismatch of the grants recognized in the Statement of Profit and Loss versus the related depreciation expenses. Thus, the Company has changed the method of recognition of deferred income in order to align the recognition of deferred income with the related depreciation expenses. As the provision for treatment of deferred income to be recognized in the profit and loss statement on a systematic and rational basis over the useful life of the asset are same in AS-12 and Ind AS-20, the change was not mandated by Ind AS-20. Hence, the Company changed the method in order to correct an error. Since the assets related to which grants/consumer contribution received have been capitalized in the books of accounts, the effect of such change should be worked out retrospectively and accounted for in the opening balance of Deferred Government Grants, Subsidies and Consumer Contribution towards capital assets by Rs. 191.49 Crore as at 31<sup>st</sup> March, 2019. Disclosure of the above facts in Note 47 instead of giving accounting effect does not suffice the purpose. Further, similar comment was also raised in all Group Companies of GUVNL by C&AG.

Accordingly, in FY 2020-21, GUVNL on behalf of all Group Companies, has sought the opinion of the EAC of Institute of Chartered Accountants of India on the following issues:

- a. *“Is the selection and application of Reducing Balance Method (or Written Down Value) for recognizing government grants in the previous years, i.e., from FY 2004-05 to FY 2015-16 an error?”*
- b. *If the above, is in affirmative, then what are the implications on the audit opinions including supplementary audit on the compliance of accounting standards in the earlier years as well as on the truthfulness and fairness of the financial statements?*
- c. *If conclusion to question 1 is that it is not an error, can the selection and application of Straight Line Method from FY 2016-17 be considered as a correction of prior period error?”*

In response, EAC vide its Opinion No. EAC/1753/21 dated 16<sup>th</sup> June, 2021 has stated that the selection and application of RBM (or WDV) for recognizing government grants

in the previous years, i.e., from FY 2004-05 to FY 2015-16 is an error. Accordingly, the Committee is of the view that in FY 2016-17, the change in the method of recognizing deferred income/grant should be considered as prior period item and not a change in an accounting estimate. Further, the Committee notes from the above that adjustments arising from events and transactions before the date of transition to Ind AS (i.e., on 01.04.2016) should be recognized directly in retained earnings.

Accordingly, GUVNL vide its letter dated 5<sup>th</sup> July, 2021 forwarded the EAC opinion to the Office of C&AG for their information. In response, Office of C&AG vide its letter dated 20 July, 2021 addressed to MD, MGVCCL has requested to give accounting effect to the audit comment by giving retrospective effect to the change in method of recognition of grant in proportion of the depreciation expense in line with C&AG comment and EAC opinion in the current year's financial statements (FY 2020-21).

In calculating the amount of prior period error, which is to be adjusted in Reserve and Surplus (Retained Earnings) of 1<sup>st</sup> April, 2019 and Deferred Income of FY 2019-20, following points are considered:

- a. Not practicable / feasible to identify individual assets against which grants / consumer contribution is received;
- b. Amortization of Consumer Contribution/Grants starts from FY 2005-06 (Date of unbundling of GEB);
- c. Period/useful life of network assets is considered 35 years (As per GERC MYT Regulations, 2016) and Grants/Consumer Contribution are amortized fully (100%) over the period of 35 years;
- d. Amortization of Consumer Contribution/Grants from FY 2005-06 to FY 2010-11 @ 4.75% on SLM basis (Then prevailing rate of depreciation of Companies Act) and from FY 2011-12 till now @ 5.28% on SLM basis (As per existing depreciation rates prescribed in GERC (MYT) Regulations, 2016) for first 12 years and then after remaining balance of grant/consumer contribution amortized over remaining 23 years (As per GERC's methodology of calculating depreciation in GERC (MYT) Regulations, 2016);
- e. The Consumer Contribution/Grants is amortized for full year in the year of receipt irrespective of timing of grants/consumer contribution received at any point of time;

- f. There is no salvage value for Grants/Consumer Contribution and accordingly it is amortized fully (100%) unlike depreciation, which is calculated up to 90% and 10% salvage value of Asset is considered as per GERC (MYT) Regulations, 2016.

**Transfer of Grant to GETCO:** Consequent to closure of Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) projects, the proportionate share of Government Grants received against the said projects by MGVCCL has been transferred to GETCO as per stipulated guidelines of the scheme. Accordingly, the Company has decreased the government grant balance by the amounts transferred to profit and loss in the earlier years, with the consequential impact on deferred tax expense related balances and the opening retained earnings (reserves and surplus) as on 1<sup>st</sup> April, 2019 and the profit of the comparative period.

MGVCCL submitted that the Financial Statements for FY 2018-19 and previous periods were already closed, hence, the relevant accounting entry of such prior period error/adjustments has been passed in FY 2019-20 and FY 2020-21. The accounting entries, which have been passed in FY 2019-20 and FY 2020-21 for such prior period error/adjustments are shown in the Table below:

**Table 4-55: Deferred Income Claim Calculation submitted by MGVCCL (Rs. Crore)**

| Sr. No.  | Particulars  | Original Accounts | Restated Accounts | Difference   |
|----------|--|-------------------|-------------------|--------------|
| 1        | Opening balance of Govt. Grants & Subsidies towards Cost of Capital Assets for FY 2019-20  | 717.91            | 909.41            | 191.50       |
| 1 (A)    | Grant Addition: during the year  | 20.20             | 20.20             | -            |
| 2        | Opening balance of Consumer Contribution towards Capital Assets for FY 2019-20   | 603.80            | 603.80            | -            |
| 2 (A)    | CC Addition: during the year   | 94.71             | 94.71             | -            |
| 3 (A)    | Grant transferred to P&L   | (65.46)           | (55.32)           | 10.14        |
| 3 (B)    | CC transferred to P&L  | (61.95)           | (61.95)           | -            |
| <b>3</b> | <b>Deferred Income towards Govt. Grants/ Subsidies and Consumer Contribution towards Cost of Capital Assets for FY 2019-20 (3A + 3B)</b> | <b>(127.41)</b>   | <b>(117.27)</b>   | <b>10.14</b> |



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| Sr. No.  | Particulars   | Original Accounts | Restated Accounts | Difference    |
|----------|---|-------------------|-------------------|---------------|
| 4        | Closing balance of Govt. Grants & Subsidies towards Cost of Capital Assets for FY 2019-20 (1 + 1A – 3A) | 672.65            | 874.28            | 201.64        |
| 5        | Closing balance of Consumer Contribution towards Capital Assets for FY 2019-20 (2 + 2A – 3B)            | 636.56            | 636.56            | -             |
| <b>6</b> | <b>Total (4 + 5)</b>  | <b>1,309.21</b>   | <b>1,510.85</b>   | <b>201.64</b> |

In view of the above, MGVCL has reduced Rs. 201.64 Crore as Reversal of Grant and Consumer Contribution from Non-Tariff income of Rs. 139.39 Crore earned during FY 2020-21 and net NTI is considered for claim. Accordingly, MGVCL has considered Rs. (62.24) Crore as NTI for FY 2020-21 in comparison to the approved value of Rs. 130.28 Crore, as shown in the table below:

**Table 4-56: Gain/(Loss) claimed due to Non-Tariff Income for FY 2020-21 (Rs. Crore)**

| Particulars       | Approved in MTR Order | Actual Claimed in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|-------------------|-----------------------|-----------------------------|---|---|
| Non-Tariff Income | 130.28                | (62.24)                     | -                                       | 192.52                                    |

**Commission's Analysis**

The actual Non-Tariff Income as per audited Annual Accounts is Rs. 139.39 Crore for FY 2020-21. The Commission noted that MGVCL has claimed NTI of Rs. (62.24) Crore for FY 2020-21 against approved amount of Rs. 130.28 Crore. MGVCL has submitted that during Ind AS implementation in FY 2016-17, on review of the prevailing facts and developments, the Companies changed the method for recognizing the government grants and consumer contribution from Written Down Value (WDV) method to Straight Line Method (SLM) in the profit and loss statement and applied the change prospectively. During FY 2020-21, based on opinion of EAC of ICAI on accounting of Government Grants, the Company has reviewed the accounting treatment to give effect to the opinion. Accordingly, year-wise retrospective impact of deferred grant due



to EAC opinion has been considered in the Financial Statement for FY 2020-21 by considering consequential impact on the retained earnings. MGVCL has submitted that Accounts have been restated and relevant accounting entry of prior period error/adjustments has been passed in FY 2020-21. MGVCL has reduced differential amount as reversal of grant and consumer contribution from NTI earned during FY 2020-21 and considered the net NTI for claim, which has resulted in negative NTI for FY 2020-21.

As regards the issue of impact on NTI due to prior period restatement of depreciation on assets funded through grants/consumer contribution, the Commission asked MGVCL to furnish the following information:

- (a) Depreciation charged in each year from FY 2005-06 to FY 2019-20 against assets funded through grants/consumer contribution, and allowed through ARR/Tariff;
- (b) NTI on account of deferred income in each year from FY 2005-06 to FY 2019-20 against assets funded through grants/consumer contribution, and considered in ARR/Tariff;
- (c) Corresponding impact of proposed prior period restatement on the depreciation, interest expenses, Profit Before Tax, and Income tax in each year from FY 2005-06 to FY 2019-20.

In reply, MGVCL has submitted point-wise clarification, as under:

- (a) Depreciation charged in each year from FY 2005-06 to FY 2019-20 against assets funded through grants/consumer contribution and allowed through ARR/Tariff Depreciation on the assets funded through grants/consumer contribution cannot be worked out separately as there is no bifurcation of the asset funded through grants /consumer contribution. The asset block comprises of the assets funded through company's own funds, loans, grants and consumer contribution. It is practically difficult to bifurcate the assets as per the funding pattern. Hence, depreciation on the assets funded through grants/consumer contribution cannot be worked out separately.
- (b) NTI on account of deferred income in each year from FY 2005-06 to FY 2019-20 against assets funded through grants/consumer contribution, and considered in ARR/Tariff is as under:



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**Table 4-57: Deferred Revenue transferred to P&L as submitted by MGVCL (Rs. Lakh)**

| <b>Financial Year</b> | <b>Deferred revenue transferred to P&amp;L</b> |
|-----------------------|--|
| 2005-06               | 1084.82  |
| 2006-07               | 2773.65  |
| 2007-08               | 2639.51  |
| 2008-09               | 3930.03  |
| 2009-10               | 5283.71  |
| 2010-11               | 5926.26  |
| 2011-12               | 8150.21  |
| 2012-13               | 9106.15  |
| 2013-14               | 10254.00                                       |
| 2014-15               | 10801.54                                       |
| 2015-16               | 11168.10                                       |
| 2016-17               | 9568.27  |
| 2017-18               | 11164.71                                       |
| 2018-19               | 12134.31                                       |
| 2019-20               | 11727.04                                       |

(c) During Ind AS implementation in FY 2016-17, on review of the prevailing facts and developments, the Company changed the method for recognising the government grants and consumer contribution from WDV Method to SLM in the profit and loss statement and applied the change prospectively. During FY 2020-21, based on EAC opinion on accounting of Government Grants, the Company has reviewed the accounting treatment to give effect to the opinion. Accordingly, the Company has considered year-wise retrospective impact of deferred grant due to EAC opinion in the Financial Statement for FY 2020-21 by considering consequential impact on the retained earnings as detailed in the Table below:

**Table 4-58: Impact of deferred grant due to EAC opinion in the Financial Statements for FY 2020-21 as submitted by MGVCL (Rs. Lakh)**

| <b>Year</b> | <b>Deferred grant as per books of Accounts</b> | <b>Revised deferred grant due to EAC Opinion</b> | <b>Differential Impact</b> |
|-------------|--|--|----------------------------|
| 2005-06     | 9763.37  | 5393.49  | 4369.88                    |
| 2006-07     | 15940.49                                       | 5124.52  | 10815.96                   |



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| Year    | Deferred grant as per books of Accounts | Revised deferred grant due to EAC Opinion | Differential Impact |
|---------|---|---|---------------------|
| 2007-08 | 20443.38                                | 4855.56                                   | 15587.82            |
| 2008-09 | 32398.54                                | 16545.24                                  | 15853.3             |
| 2009-10 | 44879.55                                | 32317.74                                  | 12561.81            |
| 2010-11 | 50929.01                                | 41774.83                                  | 9154.18             |
| 2011-12 | 71185.58                                | 65951.36                                  | 5234.22             |
| 2012-13 | 80005.62                                | 78736.32                                  | 1269.31             |
| 2013-14 | 90531.25                                | 93309.51                                  | (2778.26)           |
| 2014-15 | 94055.30                                | 102196.94                                 | (8141.64)           |
| 2015-16 | 97961.05                                | 118769.64                                 | (20808.59)          |
| 2016-17 | 106871.33                               | 126580.26                                 | (19708.93)          |
| 2017-18 | 125942.10                               | 144858.34                                 | (18916.24)          |
| 2018-19 | 132171.47                               | 151321.14                                 | (19149.67)          |
| 2019-20 | 130921.05                               | 151084.69                                 | (20163.64)          |

MGVCL also submitted that there is no impact on the depreciation of the previous years due to implementation of EAC opinion. The impact of the deferred tax arising due to implementation of EAC opinion has been considered in the Financial Statement for FY 2020-21 on the retained earnings. The impact of deferred grant is already incorporated in the Financial Statements. The impact on the Income Tax arising due to implementation of EAC opinion will be considered as per the opinion of Consultants' and will be passed on to the consumers as and when received.

MGVCL was asked to reconcile the amounts claimed as impact of restatement of Accounts. In reply, MGVCL submitted the reconciliation of amount claimed as impact of restatement of Accounts as under:

**Table 4-59: Reconciliation of amount claimed as impact of restatement of Accounts as submitted by MGVCL (Rs. Lakh)**

| Year    | Deferred grant as per books of Accounts | Revised deferred grant due to EAC Opinion | Cumulative Differential Impact | Yearly Differential Impact |
|---------|---|---|--------------------------------|----------------------------|
| 2005-06 | 9763.37                                 | 5393.49                                   | 4369.88                        | 4369.88                    |
| 2006-07 | 15940.49                                | 5124.52                                   | 10815.96                       | 6446.08                    |
| 2007-08 | 20443.38                                | 4855.56                                   | 15587.82                       | 4771.86                    |
| 2008-09 | 32398.54                                | 16545.24                                  | 15853.30                       | 265.48                     |
| 2009-10 | 44879.55                                | 32317.74                                  | 12561.81                       | (3291.49)                  |
| 2010-11 | 50929.01                                | 41774.83                                  | 9154.18                        | (3407.63)                  |



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| Year         | Deferred grant as per books of Accounts | Revised deferred grant due to EAC Opinion | Cumulative Differential Impact | Yearly Differential Impact |
|--------------|---|---|--------------------------------|----------------------------|
| 2011-12      | 71185.58                                | 65951.36                                  | 5234.22                        | (3919.96)                  |
| 2012-13      | 80005.62                                | 78736.32                                  | 1269.31                        | (3964.91)                  |
| 2013-14      | 90531.25                                | 93309.51                                  | (2778.26)                      | (4047.57)                  |
| 2014-15      | 94055.30                                | 102196.94                                 | (8141.64)                      | (5363.38)                  |
| 2015-16      | 97961.05                                | 118769.64                                 | (20808.59)                     | (12666.95)                 |
| 2016-17      | 106871.33                               | 126580.26                                 | (19708.93)                     | 1099.66                    |
| 2017-18      | 125942.10                               | 144858.34                                 | (18916.24)                     | 792.69                     |
| 2018-19      | 132171.47                               | 151321.14                                 | (19149.67)                     | (233.43)                   |
| 2019-20      | 130921.05                               | 151084.69                                 | (20163.64)                     | (1013.97)                  |
| <b>Total</b> |   |   |                                | <b>(20163.64)</b>          |

In reply to query, MGVCCL also submitted Annual Accounts from FY 2005-06 to FY 2019-20 and reconciliation of grants and consumer contribution transferred to P&L with figure shown in Annual Accounts. The Commission has gone through the submissions of MGVCCL and also verified the figures with Annual Accounts. The claimed impact is due to the change in methodology for recognition of deferred grants and consumer contribution in Annual Accounts because of change in accounting methodology, which is also recognised by CAG. Accordingly, till FY 2019-20 MGVCCL has passed on excess Rs. 201.64 Crore as NTI, which is being written back in FY 2020-21. In view of actual NTI of Rs. 139.39 Crore for FY 2020-21, the differential amount of Rs. (62.24) Crore has been claimed by MGVCCL.

After analysis of Annual Accounts and reconciliation submitted by DISCOMs, the claim of DISCOMs for impact of restatement of Accounts retrospectively is found justified. The Commission approves the net NTI as Rs. (62.24) Crore in the truing up for FY 2020-21. 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 2020-21, as detailed in the Table below:

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**Table 4-60: Approved Gains/(Losses) due to Non-Tariff Income in the truing up for FY 2020-21 (Rs. Crore)**

| Particulars       | Approved in MTR Order | Approved in Truing up | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|-------------------|-----------------------|-----------------------|---|---|
| Non-Tariff Income | 130.28                | (62.24)               | -                                       | 192.52                                    |

Further, the Commission directs MGVCCL to ensure that these written back amounts, which are a part of consumer contribution and deferred grants, are passed on to the consumers in future years, irrespective of the accounting treatment of considering these amounts under reserves and surplus.

#### 4.6 ARR approved in the Truing up for FY 2020-21

The ARR approved in the MTR Order dated 24<sup>th</sup> April, 2019, 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 4-61: ARR approved in truing up for FY 2020-21 (Rs. Crore)**

| Sr. No. | Annual Revenue Requirement | Approved in the MYT Order | Actual Claimed in Truing up | Approved in Truing up | Deviation +/- | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|---------|----------------------------|---------------------------|-----------------------------|-----------------------|---------------|---|---|
| 1       | Cost of Power Purchase     | 5,723.61                  | 5,237.60                    | 5,160.10              | 563.51        | 88.23                                   | 475.28                                    |
| 2       | O&M Expenses               | 682.86                    | 625.64                      | 620.95                | 61.91         | 78.51                                   | (16.59)                                   |
| 2.1     | Employee Cost              | 581.19                    | 499.47                      | 499.47                | 81.72         | 81.72                                   | -   |
| 2.2     | R&M Expenses               | 69.72                     | 77.42                       | 77.42                 | (7.70)        | (7.70)                                  | -   |
| 2.3     | A&G Expenses               | 88.01                     | 88.21                       | 83.52                 | 4.49          | 4.49                                    | -   |
| 2.4     | Other Expenses Capitalised | (56.05)                   | (39.46)                     | (39.46)               | (16.59)       | -                                       | (16.59)                                   |
| 3       | Depreciation               | 270.64                    | 270.72                      | 270.72                | (0.08)        | -                                       | (0.08)                                    |



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| Sr. No.   | Annual Revenue Requirement  | Approved in the MYT Order | Actual Claimed in Truing up | Approved in Truing up | Deviation +/- | Gain/(Loss) due to Controllable Factors | Gain/(Loss) due to Uncontrollable Factors |
|-----------|-----------------------------|---------------------------|-----------------------------|-----------------------|---------------|---|---|
| 4         | Interest & Finance Charges  | 63.38                     | 45.87                       | 45.23                 | 18.15         | -                                       | 18.15                                     |
| 5         | Interest on Working Capital | -                         | -                           | 0.00                  | -             | -                                       | -   |
| 6         | Provision for Bad Debts     | 0.00                      | 0.01                        | 0.01                  | (0.00)        | (0.00)                                  | -   |
| 7         | Return on Equity            | 158.12                    | 160.04                      | 159.98                | (1.85)        | -                                       | (1.85)                                    |
| 8         | Income Tax                  | 12.11                     | 19.58                       | 19.58                 | (7.47)        | -                                       | (7.47)                                    |
| <b>9</b>  | <b>ARR (1 to 8)</b>         | <b>6,910.73</b>           | <b>6,359.45</b>             | <b>6,276.56</b>       | <b>634.18</b> | <b>166.74</b>                           | <b>467.44</b>                             |
| 10        | Non-Tariff Income           | 130.28                    | (62.24)                     | (62.24)               | 192.52        | -                                       | 192.52                                    |
| <b>11</b> | <b>Total ARR (9-10)</b>     | <b>6,780.45</b>           | <b>6,421.69</b>             | <b>6,338.81</b>       | <b>441.65</b> | <b>166.74</b>                           | <b>274.91</b>                             |

#### 4.7 Revenue for FY 2020-21

MGVCL has claimed the total revenue of Rs. 6,401.24 Crore in the truing up for FY 2020-21 as against Rs. 6,772.42 Crore approved as detailed in the Table below:

**Table 4-62: Revenue submitted in the truing up for FY 2020-21 (Rs. Crore)**

| Sr. No.  | Particulars                                    | Approved in Tariff Order | Actual Claimed in Truing up |
|----------|--|--------------------------|-----------------------------|
| 1        | Revenue from Sale of Power                     | 4,847.96                 | 6,171.59                    |
| 2        | Revenue from FPPPA                             | 1,761.06                 |                             |
| 3        | Other Income (Consumer related)                | 83.62                    | 144.80                      |
| <b>4</b> | <b>Total Revenue excluding subsidy (1+2+3)</b> | <b>6,692.64</b>          | <b>6,316.39</b>             |
| 5        | Agriculture Subsidy                            | 79.78                    | 84.85                       |
| <b>6</b> | <b>Total Revenue including Subsidy (3+4)</b>   | <b>6,772.42</b>          | <b>6,401.24</b>             |



### Commission's Analysis

The Commission has verified the total category-wise revenue for FY 2020-21 from the audited Annual Accounts. The actual revenue from category-wise sales, as per audited Annual Accounts, is Rs. 6,171.59 Crore.

The Commission noted that DISCOMs have waived Delayed Payment Surcharge (DPS) of Rs. 0.98 Crore and Demand/ Fixed Charges of Rs. 44.75 Crore for LTMD / NRGP / HT consumers under Relief announced by the GoG due to COVID-19. Hence, the actual revenue for FY 2020-21 is lesser to that extent. DISCOMs have claimed this revenue loss from the ARR. The GR announced by the State Government clearly says that the DISCOMs shall bear the loss on account of such relief.

Therefore, the Commission has considered revenue of Rs. 44.75 Crore waived against Demand/ Fixed Charges for LTMD / NRGP / HT consumers in actual revenue for FY 2020-21. The Commission has not considered the amount of DPS of Rs. 0.98 Crore waived in the revenue, as the DPS is neither considered as income nor expense by the Commission.

The Other Income as per audited Annual Accounts is Rs. 144.80 Crore. The Commission has considered the actual Agriculture Subsidy Rs. 84.85 Crore separately as per the GERC (MYT) Regulations, 2016.

The Revenue approved in the truing up for MGVCCL for FY 2020-21 is shown in the Table below:

**Table 4-63: Revenue approved in the truing up for FY 2020-21 (Rs. Crore)**

| Sr. No.  | Particulars                                    | Approved in Tariff Order | Actual Claimed in Truing up | Approved in Truing up |
|----------|--|--------------------------|-----------------------------|-----------------------|
| 1        | Revenue from Sale of Power                     | 4,847.96                 | 6,171.59                    | 6,216.34              |
| 2        | Revenue from FPPPA                             | 1,761.06                 |                             |                       |
| 3        | Other Income (Consumer related)                | 83.62                    | 144.80                      | 144.80                |
| <b>4</b> | <b>Total Revenue excluding subsidy (1+2+3)</b> | <b>6,692.64</b>          | <b>6,316.39</b>             | <b>6,361.14</b>       |
| 5        | Agriculture Subsidy                            | 79.78                    | 84.85                       | 84.85                 |
| <b>6</b> | <b>Total Revenue (4+5)</b>                     | <b>6,772.42</b>          | <b>6,401.24</b>             | <b>6,445.99</b>       |



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The Commission, accordingly, approves the total revenue of Rs. 6,445.99 Crore, including consumer related income of Rs. 144.80 Crore and Agriculture Subsidy of Rs. 84.85 Crore, in the truing up for FY 2020-21.

#### 4.8 Revenue (Gap)/Surplus for FY 2020-21

As shown in the Table below, MGCVCL has claimed a Revenue Gap of Rs. 72.36 Crore in the truing up for FY 2020-21, considering the treatment of Gain/(Loss) due to controllable/uncontrollable factors, after comparing the performance with the Tariff Order for FY 2020-21:

**Table 4-64: Revenue Surplus/(Gap) claimed by MGCVCL for FY 2020-21 (Rs. Crore)**

| Sr. No. | Particulars   | Actual Claimed  |
|---------|---|-----------------|
| 1       | ARR originally approved for FY 2020-21  | 6,780.45        |
| 2       | Less: (Gap)/Surplus of FY 2018-19   | 44.88           |
| 3       | Less: Gain/(Loss) on account of Uncontrollable factors to be passed on to Consumer  | 195.40          |
| 4       | Less: Gain/(Loss) on account of Controllable factors to be passed on to Consumer (1/3 <sup>rd</sup> of Total Gain/(Loss)) | 54.45           |
| 5       | <b>Revised ARR for FY 2020-21 (1 - 2 - 3 - 4)</b>   | <b>6,485.71</b> |
| 6       | Revenue from Sale of Power  | 6,171.59        |
| 7       | Other Income (Consumer related)   | 144.80          |
| 8       | <b>Total Revenue excluding Subsidy (6 + 7)</b>  | <b>6,316.39</b> |
| 9       | Agriculture Subsidy   | 84.85           |
| 10      | GUVNL Profit / (Loss) Allocation  | 12.12           |
| 11      | <b>Total Revenue including Subsidy (8 + 9 + 10)</b>   | <b>6,413.36</b> |
| 12      | <b>Revised (Gap)/Surplus after treating gains/(losses) due to Controllable/ Uncontrollable factors (11 - 5)</b>           | <b>(72.36)</b>  |

#### Petitioner's Submission

The petitioner submitted that the Commission in the MTR Order dated 24<sup>th</sup> April, 2019 has approved the ARR of Rs. 6780.45 Crore for FY 2020-21. The Commission had



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also added Revenue (Gap) / Surplus of Rs. 44.88 Crore due to Truing up of FY 2018-19 in ARR.

As per the mechanism specified in the GERC (MYT) Regulations, 2016, MGCVCL proposed to pass on 1/3<sup>rd</sup> of total gain on account of controllable factors, i.e., Rs. 54.45 Crore and total loss on account of uncontrollable factors, i.e., Rs. 195.40 Crore to the consumers. Accordingly, MGCVCL has arrived at the revised ARR for FY 2020-21 at Rs. 6485.71 Crore as shown in the above Table.

The revised ARR is compared against the revised Revenue with Existing Tariff of Rs. 6171.59 Crore, Other Consumer related Income of Rs. 144.80 Crore, Agriculture Subsidy of Rs. 84.85 Crore and GUVNL profit allocation of Rs. 12.12 Crore, summing up to the total revenue of Rs. 6,413.36 Crore. Revenue (Gap)/Surplus of MGCVCL for FY 2020-21 after considering all the above adjustments is computed at Rs. (72.36) Crore.

**Commission's Analysis**

The Commission has computed the revised ARR and Revenue (Gap)/Surplus for FY 2020-21, based on the expenses and the Gain/(Loss) approved in the truing up for FY 2020-21, and after considering the earlier year's Revenue Surplus. MGCVCL's share of GUVNL profit has been considered as Rs. 12.12 Crore for FY 2020-21 as calculated by the Commission.

The Revenue (Gap)/Surplus approved by the Commission after truing up for FY 2020-21, is summarised in the Table below:

**Table 4-65: Revenue (Gap)/Surplus approved in the truing up for FY 2020-21 (Rs. Crore)**

| Sr. No. | Particulars   | Actual Claimed  | Approved after truing up |
|---------|---|-----------------|--------------------------|
| 1       | ARR originally approved for FY 2020-21  | 6,780.45        | 6,780.45                 |
| 2       | Less: (Gap) / Surplus of FY 2018-19   | 44.88           | 44.88                    |
| 3       | Less: Gain/(Loss) on account of Uncontrollable factors to be passed on to Consumer  | 195.40          | 274.91                   |
| 4       | Less: Gain / (Loss) on account of Controllable factors to be passed on to Consumer (1/3 <sup>rd</sup> of Total Gain/(Loss)) | 54.45           | 55.58                    |
| 5       | <b>Revised ARR for FY 2020-21 (1 - 2 - 3 - 4)</b>   | <b>6,485.71</b> | <b>6,405.07</b>          |





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| <b>Sr. No.</b> | <b>Particulars</b>   | <b>Actual Claimed</b> | <b>Approved after truing up</b> |
|----------------|--|-----------------------|---------------------------------|
| 6              | Revenue from Sale of Power   | 6,171.59              | 6,216.34                        |
| 7              | Other Income (Consumer related)  | 144.80                | 144.80                          |
| 8              | <b>Total Revenue excluding Subsidy (6 + 7)</b>   | <b>6,316.39</b>       | <b>6,361.14</b>                 |
| 9              | Agriculture Subsidy  | 84.85                 | 84.85                           |
| 10             | GUVNL Profit / (Loss) Allocation   | 12.12                 | 12.12                           |
| 11             | <b>Total Revenue including Subsidy (8 + 9 + 10)</b>  | <b>6,413.36</b>       | <b>6,458.11</b>                 |
| 12             | <b>Revised (Gap)/ Surplus after treating gains/(losses) due to Controllable/ Uncontrollable factors (11 - 5)</b> | <b>(72.36)</b>        | <b>53.03</b>                    |

The Revenue (Gap)/Surplus approved by the Commission after truing up for FY 2020-21, has been considered for computing the cumulative Revenue (Gap)/Surplus for FY 2022-23, as elaborated in subsequent Chapters of this Order.



## **5 ARR for FY 2022-23**

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### **5.1 ARR for FY 2022-23**

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 2022- 23.

### **5.2 Submission of MGVCL**

In accordance with above provision, MGVCL has submitted the petition for determination of ARR and Tariff for FY 2022-23.

### **5.3 Estimation of ARR for FY 2022-23**

The projection of ARR for FY 2022-23 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. However, COVID-19 pandemic has impacted the sale of power during FY 2020-21 and hence, FY 2020-21 does not represent picture of business as usual. Growth rates worked out considering FY 2020-21 data may not present the correct picture as sales to Commercial and Industrial establishments had decreased in FY 2020-21 due to shut down of factories and shops. To overcome this issue, DISCOMs have worked out growth rates considering FY 2019-20 as base year and the same has been applied on FY 2019-20 (except for Agriculture consumer category where actual sales of FY 2020-21 is considered). Wherever the trend has seemed unreasonable or unsustainable, the growth rates have been corrected by 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 2022-23. The analysis of the growth rate lends insight into the behaviour of each category and hence, forms the basis of forecasting the sales for each 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 2014-15 to FY 2019-20, the 4-year period from FY 2015-16 to FY 2019-20, the 3-year period from FY 2016-17 to FY 2019-20, and the 2-year period from FY 2017-18 to FY 2019-20, along with the Y-O-Y growth rate of FY 2019-20 over FY 2018-19 and the growth rate is applied on actual sales of FY 2019-20 (except for Agriculture consumer category where actual sales of FY 2020-21 is considered), as summarised in the Table below:

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

| Sr. No. | Sales                     | FY 2014-15   | FY 2015-16   | FY 2016-17   | FY 2017-18   | FY 2018-19    | FY 2019-20   | FY 2020-21   |
|---------|---------------------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|
|         | <b>Low Tension</b>        |              |              |              |              |               |              |              |
| 1       | RGP                       | 2,130        | 2,287        | 2,331        | 2,475        | 2,609         | 2,720        | 2,930        |
| 2       | GLP                       | 112          | 120          | 124          | 123          | 124           | 135          | 87           |
| 3       | Non-RGP & LTMD            | 1,250        | 1,326        | 1,390        | 1,465        | 1,543         | 1,604        | 1,471        |
| 4       | Public Water Works        | 199          | 220          | 235          | 286          | 302           | 314          | 354          |
| 5       | Agriculture- Unmetered    | 473          | 472          | 471          | 475          | 475           | 474          | 469          |
| 6       | Agriculture- Metered      | 579          | 710          | 695          | 753          | 857           | 739          | 911          |
| 7       | Electric Vehicle Charging | -            | -            | -            | -            | -             | -            | -            |
|         | <b>Sub-Total</b>          | <b>4,743</b> | <b>5,134</b> | <b>5,245</b> | <b>5,577</b> | <b>5,910</b>  | <b>5,987</b> | <b>6,222</b> |
|         | <b>High Tension</b>       |              |              |              |              |               |              |              |
| 1       | Industrial HT             | 3,161        | 3,250        | 3,046        | 3,703        | 4,094         | 3,767        | 3,734        |
| 2       | Railway Traction          | 391          | 291          | 39           | -            | -             | -            | -            |
|         | <b>Sub Total</b>          | <b>3,552</b> | <b>3,541</b> | <b>3,085</b> | <b>3,703</b> | <b>4,094</b>  | <b>3,767</b> | <b>3,734</b> |
|         | <b>Total</b>              | <b>8,295</b> | <b>8,675</b> | <b>8,330</b> | <b>9,281</b> | <b>10,004</b> | <b>9,754</b> | <b>9,956</b> |

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

| Sr. No. | Category                  | 5 years | 4 years | 3 years | 2 years | 1 year  |
|---------|---------------------------|---------|---------|---------|---------|---------|
|         | <b>Low Tension</b>        |         |         |         |         |         |
| 1       | RGP                       | 5.01%   | 4.44%   | 5.28%   | 4.82%   | 4.25%   |
| 2       | GLP                       | 3.79%   | 2.96%   | 2.86%   | 4.75%   | 8.61%   |
| 3       | Non-RGP & LTMD            | 5.12%   | 4.88%   | 4.90%   | 4.66%   | 4.00%   |
| 4       | Public Water Works        | 9.51%   | 9.35%   | 10.10%  | 4.84%   | 3.88%   |
| 5       | Agriculture- Unmetered    | 0.04%   | 0.12%   | 0.23%   | -0.14%  | -0.25%  |
| 6       | Agriculture- Metered      | 5.02%   | 1.01%   | 2.09%   | -0.93%  | -13.72% |
| 7       | Electric Vehicle Charging | 0.00%   | 0.00%   | 0.00%   | 0.00%   | 0.00%   |



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| Sr. No. | Category            | 5 years      | 4 years      | 3 years      | 2 years      | 1 year        |
|---------|---------------------|--------------|--------------|--------------|--------------|---------------|
|         | <b>Sub-Total</b>    | <b>4.77%</b> | <b>3.92%</b> | <b>4.50%</b> | <b>3.60%</b> | <b>1.29%</b>  |
|         | <b>High Tension</b> |              |              |              |              |               |
| 1       | Industrial HT       | 3.57%        | 3.76%        | 7.34%        | 0.86%        | -7.98%        |
|         | <b>Sub Total</b>    | <b>1.19%</b> | <b>1.56%</b> | <b>6.89%</b> | <b>0.86%</b> | <b>-7.98%</b> |
|         | <b>Total</b>        | <b>3.29%</b> | <b>2.97%</b> | <b>5.40%</b> | <b>2.52%</b> | <b>-2.50%</b> |

#### 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 2022-23 over the base number of FY 2019-20 and thereafter on FY 2020-21 are given below:

**Table 5-3: Growth rates used by MGVCL**

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



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

The projected energy sales, consumers and connected load for FY 2022-23 by applying above mentioned growth rates y-o-y basis over FY 2019-20 category-wise elements are shown in the Table below:

**Table 5-4: Sales, Consumers and Connected Load Projected by MGVCL for FY 2022-23**

| Sr. No. | Category                  | Sales (MUs)   | Consumers (Nos.) | Connected Load (MW/MVA) |
|---------|---------------------------|---------------|------------------|-------------------------|
|         | <b>Low Tension</b>        |               |                  |                         |
| 1       | RGP                       | 3,393         | 29,40,977        | 3,531                   |
| 2       | GLP                       | 95            | 37,203           | 132                     |
| 3       | Non-RGP & LTMD            | 1,698         | 3,93,770         | 2,043                   |
| 4       | Public Water Works        | 472           | 32,012           | 253                     |
| 5       | Agriculture-Unmetered     | 469           | 25,732           | 206                     |
| 6       | Agriculture-Metered       | 1,021         | 1,83,800         | 1,141                   |
| 7       | Electric Vehicle Charging | -             | -                | -                       |
|         | <b>Sub-Total</b>          | <b>7,147</b>  | <b>36,13,494</b> | <b>7,305</b>            |
|         | <b>High Tension</b>       |               |                  |                         |
| 1       | Industrial HT             | 4,323         | 2,768            | 2,079                   |
|         | <b>Sub Total</b>          | <b>4,323</b>  | <b>2,768</b>     | <b>2,079</b>            |
|         | <b>Total</b>              | <b>11,469</b> | <b>36,16,261</b> | <b>9,385</b>            |

#### 5.4.7 Revised Category-wise Projections for Sales, Consumers, and Connected Load

On analysis of projections submitted by MGVCL in the petition, linking error was observed wherein MGVCL, for projecting sales, consumers, and connected load for FY 2020-21, had applied growth rates on sales, consumers, and connected load of FY 2020-21 instead of FY 2019-20 numbers resulting in higher projections. In reply to data gaps, MGVCL has revised projections for sales, consumers, and connected load for FY 2022-23 after correcting linking error. This has impacted the energy balance and power purchase cost for all DISCOMs as discussed in the subsequent section.



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Revised energy sales, consumers and connected load projected by MGVCL for FY 2022-23 are shown in the table below:

**Table 5-5: Revised Sales, Consumers and Connected Load Projected by MGVCL for FY 2022-23**

| Sr. No. | Category                  | Sales (MUs)   | Consumers (Nos.) | Connected Load (MW/MVA) |
|---------|---------------------------|---------------|------------------|-------------------------|
|         | <b>Low Tension</b>        |               |                  |                         |
| 1       | RGP                       | 3,150         | 28,80,044        | 3,367                   |
| 2       | GLP                       | 147           | 36,670           | 128                     |
| 3       | Non-RGP & LTMD            | 1,852         | 3,85,475         | 1,931                   |
| 4       | Public Water Works        | 419           | 30,354           | 208                     |
| 5       | Agriculture-Unmetered     | 469           | 25,732           | 206                     |
| 6       | Agriculture-Metered       | 1,021         | 1,83,800         | 1,141                   |
| 7       | Electric Vehicle Charging | -             | -                | -                       |
|         | <b>Sub-Total</b>          | <b>7,057</b>  | <b>35,42,076</b> | <b>6,980</b>            |
|         | <b>High Tension</b>       |               |                  |                         |
| 1       | Industrial HT             | 4,361         | 2,653            | 1,902                   |
|         | <b>Sub Total</b>          | <b>4,361</b>  | <b>2,653</b>     | <b>1,902</b>            |
|         | <b>Total</b>              | <b>11,418</b> | <b>35,44,729</b> | <b>8,882</b>            |

#### 5.4.8 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 2022-23.

##### 5.4.8.1 RGP- Residential

###### Petitioner's submission

MGVCL submitted that the Company has witnessed a CAGR of 5.01% in the units sold between FY 2014-15 and FY 2019-20. The company expects this trend to continue in FY 2022-23. Moreover, the number of consumers added in the category has witnessed a 5-year CAGR of 2.26% between FY 2014-15 and FY 2019-20. The company expects this trend to continue going forward. The connected load added in the category has



witnessed a 5-year CAGR of 5.37% between FY 2014-15 and FY 2019-20, which is expected to continue going forward.

#### **Commission's Analysis**

The growth during the last 5 years in energy sales is 5.01% and MGCVCL expects the same growth rate to be continued for FY 2022-23. The Commission has examined the trend of sales growth between FY 2014-15 to FY 2019-20 and finds the growth rates considered for future projections as appropriate. The Commission, therefore, approves the energy sales to the RGP-residential category at 3,150 MUs for FY 2022-23.

**The Commission approves the energy sales to the RGP-residential category at 3,150 MUs for FY 2022-23.**

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

##### **Petitioner's submission**

MGVCL submitted that the 3-year CAGR for units sold between FY 2016-17 and FY 2019-20 is 2.86%. The Company expects this trend to continue in FY 2022-23.

Similarly, the number of consumers added in the category has witnessed a 3-year CAGR of 3.10% between FY 2016-17 and FY 2019-20. The Company expects this trend to continue going forward.

The connected load added in the category has witnessed a 3-year CAGR of 6.56% between FY 2016-17 and FY 2019-20, which is expected to continue going forward.

##### **Commission's Analysis**

The CAGR growth during past 3 years period from FY 2016-17 to FY 2019-20 is 2.86%, and MGCVCL expects the same growth rate to be continued for FY 2022-23. The Commission has examined the trend of sales growth between FY 2016-17 to FY 2019-20 and finds the growth rates considered for future projections as appropriate. The Commission, therefore, approves the energy sales at 147 MUs for FY 2022-23.

**The Commission approves the energy sales at 147 MUs for GLP category for FY 2022-23.**





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

#### **Petitioner's submission**

MGVCL submitted that for sales projection, the 3-year CAGR between FY 2016-17 and FY 2019-20 has been considered, which is 4.90%. The Company expects this trend to continue in FY 2022-23. Moreover, the number of consumers added in the category has witnessed a 3-year CAGR of 4.54% between FY 2016-17 and FY 2019-20. The Company expects this trend to continue going forward.

The connected load added in the category has witnessed a 3-year CAGR of 7.01% between FY 2016-17 and FY 2019-20, which is expected to continue going forward.

#### **Commission's Analysis**

The CAGR growth during past 3 years from FY 2016-17 to FY 2019-20 is 4.90%, and MGVCL expects the same growth rate to be continued for FY 2022-23. The Commission has examined the trend of sales growth between FY 2016-17 to FY 2019-20 and finds that growth of 4.90% adopted by MGVCL as reasonable. The Commission, therefore, approves the energy sales of 1,852 MUs to the Non-RGP & LTMD category for FY 2022-23.

**The Commission approves the energy sales of 1,852 MUs for Non-RGP & LTMD category for FY 2022-23.**

### **5.4.8.4 Public Water Works**

#### **Petitioner's submission**

MGVCL submitted that for sales projection, the 3-year CAGR between FY 2016-17 to FY 2019-20 has been considered, which is 10.10%. The Company expects this trend to continue going forward.

Similarly, number of consumers added in the category has witnessed a CAGR of 8.36% between FY 2016-17 and FY 2019-20. The Company expects this trend to continue going forward. The connected load added in the category has witnessed a CAGR of 6.11% between FY 2016-17 and FY 2019-20, which is expected to continue going forward.

### **Commission's Analysis**

The CAGR growth during past 3 years between FY 2016-17 to FY 2019-20 is 10.10%, and MGVCL expects the same growth rate to be continued for FY 2022-23. The Commission has examined the trend of sales growth between FY 2016-17 to FY 2019-20 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., 419 MUs.

**The Commission approves the energy sales of 419 MUs for PWW category for FY 2022-23.**

#### **5.4.8.5 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 2022-23.

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 5-6: New Connections to Agriculture Consumers as submitted by MGVCL**

| <b>Sr. No</b> | <b>Period</b> | <b>No. of Connections</b> |
|---------------|---------------|---------------------------|
| 1             | FY 2021-22    | 7,000                     |
| 2             | FY 2022-23    | 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



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estimate. Thus, based on the figures arrived from above, the total sales for FY 2022-23 has been calculated based on the average connected load per consumer for metered and unmetered categories combined in FY 2020-21 and the number of new connections to be added during each year.

**Table 5-7: Sales to Agriculture Consumers (Metered) as submitted by MGVCCL**

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

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

#### **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 2020-21, as MGVCCL has mentioned that there would be no additional connections under unmetered category in future years. The Commission has considered the approach considered by MGVCCL and accordingly, approves sales of 469 MUs for unmetered category.

For consumption under metered category, the Commission has examined the methodology considered by MGVCCL, 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 MGVCCL, i.e., 1,021 MUs.

**The Commission approves the energy sales of 469 MUs for Agriculture- Unmetered category and 1,021 MUs for Agriculture- Metered category for FY 2022-23.**

#### **5.4.8.6 Industrial HT**

##### **Petitioner's submission**

MGVCCL 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.



For the purpose of projection of sales, the 3-year CAGR of 7.34% between FY 2016-17 and FY 2019-20 has been considered. As the Covid-19 pandemic has affected the sales of this category, the Company expects a lower growth rate. Hence, a growth rate of 5% has been considered for FY 2022-23.

For addition of consumers in the category, the 3-year CAGR of 5.43% for the number of consumers is normally considered for projection. However, as the COVID-19 pandemic has affected the consumer addition of this category, the Company expects a lower growth rate. Hence a growth rate of 5% has been considered for FY 2022-23.

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

#### **Commission's Analysis**

The growth rate for energy sales considering 3-year CAGR between FY 2016-17 to FY 2019-20 is 7.34% for this category. However, MGVCCL considering the variation due to Open Access transaction and impact of COVID-19 pandemic, has adopted growth rate of 5% for projection of energy sales for FY 2022-23. 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 CAGR, which are 5.43% and 10.16%, respectively. The Commission has examined the methodology adopted MGVCCL for projection of sales in the category and finds growth rate considered by MGVCCL as appropriate. The Commission, accordingly, approves sales of 4,361 MUs for Industrial HT category.

**The Commission approves the energy sales of 4,361 MUs for Industrial HT category for FY 2022-23.**

Total energy sales approved by the Commission based on the above analysis is summarised for FY 2022-23 in the Table below:

**Table 5-8: Projection of Sales approved by the Commission for FY 2022-23 (MUs)**

| Sr. No. | Category                  | FY 2022-23    |
|---------|---------------------------|---------------|
|         | <b>Low Tension</b>        |               |
| 1       | RGP                       | 3,150         |
| 2       | GLP                       | 147           |
| 3       | Non-RGP & LTMD            | 1,852         |
| 4       | Public Water Works        | 419           |
| 5       | Agriculture-Unmetered     | 469           |
| 6       | Agriculture-Metered       | 1,021         |
| 7       | Electric Vehicle Charging | -             |
|         | <b>Sub-Total</b>          | <b>7,057</b>  |
|         | <b>High Tension</b>       |               |
| 1       | Industrial HT             | 4,361         |
|         | <b>Sub Total</b>          | <b>4,361</b>  |
|         | <b>Total</b>              | <b>11,418</b> |

## 5.5 Distribution Losses

MGVCL has projected the distribution losses for FY 2022-23 as given in the Table below:

**Table 5-9: Projection of Distribution Loss (%)**

| Particulars       | FY 2022-23 |
|-------------------|------------|
| Distribution Loss | 10.75%     |

### 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 2020-21, 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 the following:

- Day by day Open Access consumers are increasing and probability of increase in Open Access consumers for FY 2022-23 is high;

- Losses in Urban and JGY categories are increased in FY 2020-21 and increasing trend for FY 2021-22 is observed on account of affected financial health after post lockdown era;
- Day time power supply to AG consumers under SKY scheme started in a phased manner and all AG feeders are to be covered under SKY by March 2022, which will 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.

### **Commission's Analysis**

The Commission in the Tariff Order dated 31<sup>st</sup> March, 2021, had approved the distribution loss at 9.00% for FY 2021-22. Also, the Commission has approved the distribution loss at 9.96% for FY 2020-21. MGVCL has projected distribution loss for FY 2022-23 as 10.75%, which is higher as compared to actual distribution losses of 9.96% achieved during FY 2020-21 and the approved distribution loss of 9.00% for 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 does not find any rationale in allowing distribution losses higher than that approved for FY 2021-22. The Commission has approved distribution loss for FY 2022-23 same as approved for FY 2021-22, as shown in the Table below:

**Table 5-10: Approved Distribution Loss for FY 2022-23 (%)**

| <b>Particulars</b> | <b>Approved in this Order</b> |
|--------------------|-------------------------------|
| 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 2022-23. The inter-State transmission losses, viz., PGCIL pooled losses have been assumed at same level as in FY 2020-21. 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 MGVCCL for FY 2022-23 is as shown in the Table below:

**Table 5-11: Energy Balance for FY 2022-23 as submitted by MGVCCL**

| Sr. No. | Particulars                                     | Unit       | FY 2022-23       |
|---------|---|------------|------------------|
| 1       | Energy Sales                                    | MUs        | 11,469.44        |
| 2       | Distribution Losses                             | MUs        | 1,381.47         |
|         |   | %          | 10.75%           |
| 3       | Energy Requirement                              | MUs        | 12,850.91        |
| 4       | Less: Power Purchase from SSDSP                 | MUs        | 33.72            |
| 5       | Power Purchase required from GUVNL              | MUs        | 12,817.19        |
| 6       | Transmission Losses                             | MUs        | 495.22           |
|         |   | %          | 3.72%            |
| 7       | Total Energy to be input to Transmission System | MUs        | 13,312.41        |
| 8       | Pooled Losses in PGCIL System                   | MUs        | 171.03           |
| 9       | Add: Power Purchase from SSDSP                  | MUs        | 33.72            |
| 10      | <b>Total Energy Requirement</b>                 | <b>MUs</b> | <b>13,517.17</b> |

MGVCCL 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 5-12: Consolidated Energy Requirement for FY 2022-23 (MUs)**

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



**Commission's Analysis**

MGVCL has submitted the energy balance and the total energy requirement as discussed above. As mentioned earlier, in reply to data gaps, MGVCL has revised projections for sales for FY 2022-23 after correcting linking error. Based on the revised submission, energy requirement and energy balance have been revised by MGVCL, as shown in the Table below:

**Table 5-13: Revised Energy Balance for FY 2022-23 submitted by MGVCL**

| Sr. No. | Particulars                                     | Unit       | FY 2022-23       |
|---------|---|------------|------------------|
| 1       | Energy Sales                                    | MUs        | 11,418.33        |
| 2       | Distribution Losses                             | MUs        | 1,375.32         |
|         |   | %          | 10.75%           |
| 3       | Energy Requirement                              | MUs        | 12,793.65        |
| 4       | Less: Power Purchase from SSDSP                 | MUs        | 33.72            |
| 5       | Power Purchase required from GUVNL              | MUs        | 12,759.93        |
| 6       | Transmission Losses                             | MUs        | 493.01           |
|         |   | %          | 3.72%            |
| 7       | Total Energy to be input to Transmission System | MUs        | 13,252.94        |
| 8       | Pooled Losses in PGCIL System                   | MUs        | 171.03           |
| 9       | Add: Power Purchase from SSDSP                  | MUs        | 33.72            |
| 10      | <b>Total Energy Requirement</b>                 | <b>MUs</b> | <b>13,457.69</b> |

MGVCL has submitted the revised consolidated energy requirement for all the four Distribution Companies, as detailed below:

**Table 5-14: Revised Consolidated Energy Requirement for FY 2022-23 (MUs)**

| Sr. No. | Details                     | DGVCL         | MGVCL         | PGVCL         | UGVCL         | Total           |
|---------|-----------------------------|---------------|---------------|---------------|---------------|-----------------|
| 1       | Power Purchase from SSDSP   | 15            | 34            | 465           | 315           | 829             |
| 2       | Power Purchase from GUVNL   | 26,520        | 13,424        | 39,343        | 30,200        | 1,09,487        |
| 3       | <b>Total Power Purchase</b> | <b>26,535</b> | <b>13,458</b> | <b>39,808</b> | <b>30,515</b> | <b>1,10,316</b> |





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The Commission considering the projection of energy sales and approved distribution losses as discussed above, has approved the energy requirement for FY 2022-23, as shown in the Table below:

**Table 5-15: Approved Energy requirement for FY 2022-23**

| Sr. No. | Particulars         | Unit | FY 2022-23 |
|---------|---------------------|------|------------|
| 1       | Energy Sales        | MUs  | 11,418.33  |
| 2       | Distribution Losses | MUs  | 1,129.29   |
|         |                     | %    | 9.00%      |
| 3       | Energy Requirement  | MUs  | 12,547.62  |

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 2020-21. The approved Energy Balance for FY 2022-23 is shown in the Table below:

**Table 5-16: Approved Energy Balance for MGVL for FY 2022-23**

| Sr. No. | Particulars                                     | Unit       | FY 2022-23       |
|---------|---|------------|------------------|
| 1       | Energy Sales                                    | MUs        | 11,418.33        |
| 2       | Distribution Losses                             | MUs        | 1,129.29         |
|         |   | %          | 9.00%            |
| 3       | Energy Requirement                              | MUs        | 12,547.62        |
| 4       | Less: Power Purchase from SSDSP                 | MUs        | 33.72            |
| 5       | Power Purchase required from GUVNL              | MUs        | 12,513.90        |
| 6       | Transmission Losses                             | MUs        | 483.50           |
|         |   | %          | 3.72%            |
| 7       | Total Energy to be input to Transmission System | MUs        | 12,997.40        |
| 8       | Pooled Losses in PGCIL System                   | MUs        | 171.03           |
| 9       | Add: Power Purchase from SSDSP                  | MUs        | 33.72            |
| 10      | <b>Total Energy Requirement</b>                 | <b>MUs</b> | <b>13,202.15</b> |

The Commission has approved the energy balance and the total energy requirement for FY 2022-23 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 5-17: Approved Consolidated Energy Requirement for FY 2022-23 (MUs)**

| Particulars              | Unit | DGVCL  | MGVCL  | PGVCL  | UGVCL  | Total    |
|--------------------------|------|--------|--------|--------|--------|----------|
| Total Energy Requirement | MUs  | 26,141 | 13,202 | 39,108 | 29,383 | 1,07,835 |

## 5.7 Estimation of ARR for FY 2022-23

The components for the calculation of total expenses for determination of ARR for FY 2022-23 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 2022-23 - 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 6<sup>th</sup> 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 5-18: Power Purchase under SSDSP**

| <b>Sr. No.</b> | <b>Details</b>                        | <b>Unit</b>  | <b>DGVCL</b> | <b>MGVCL</b> | <b>PGVCL</b>  | <b>UGVCL</b>  |
|----------------|---------------------------------------|--------------|--------------|--------------|---------------|---------------|
| 1              | MW Capacity tie up under SSDSP        | MW           | 17.50        | 38.60        | 532.39        | 360.37        |
| 2              | Likely COD                            | mm/yy        | Sep-22       | Sep-22       | Sep-22        | Sep-22        |
| 3              | Expected CUF                          | %            | 20%          | 20%          | 20%           | 20%           |
| <b>4</b>       | <b>Expected Generation from SSDSP</b> | <b>MUs</b>   | <b>15.29</b> | <b>33.72</b> | <b>465.10</b> | <b>314.82</b> |
| 5              | Power Purchase Rate                   | Rs./kWh      | 2.83         | 2.83         | 2.83          | 2.83          |
| 6              | Power Purchase Cost                   | Rs.<br>Crore | 4.33         | 9.54         | 131.62        | 89.09         |

## 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) Existing capacity with GUVNL**

The existing contracted capacity tied up by GUVNL as on 1<sup>st</sup> October, 2021 is 25790 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 2020-21 are shown in the Table below. Necessary adjustment has been made in fixed cost in case of higher/lower payment made during FY 2020-21 due to specific reasons.



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**Table 5-19: Existing Capacity Allocation with GUVNL**

| Sr. No.          | Name of the Station                                  | Rated Capacity allocated to GUVNL (MW) | Aux. Consumption (%) | PLF (%) | Fixed Cost (Rs. Cr.) | Variable Cost (Rs./kWh) |
|------------------|--|--|----------------------|---------|----------------------|-------------------------|
| <b>GSECL</b>     |  |  |                      |         |                      |                         |
| 1                | GSECL Gandhinagar - 5                                | 210                                    | 9.50%                | 38.97%  | 64                   | 3.70                    |
| 2                | GSECL Wanakbori - 7                                  | 210                                    | 9.50%                | 31.17%  | 56                   | 3.83                    |
| 3                | GSECL Utran Expansion                                | 375                                    | 3.00%                | 54.11%  | 221                  | 2.84                    |
| 4                | GSECL Dhuvaran - 7                                   | 107                                    | 4.00%                | 36.07%  | 64                   | 2.64                    |
| 5                | GSECL Dhuvaran - 8                                   | 112                                    | 3.00%                | 34.12%  | 85                   | 2.91                    |
| 6                | GSECL Ukai   | 610                                    | 9.00%                | 38.96%  | 305                  | 3.62                    |
| 7                | GSECL Ukai Expansion                                 | 500                                    | 6.00%                | 56.83%  | 463                  | 3.18                    |
| 8                | GSECL Gandhinagar 3-4                                | 420                                    | 9.50%                | 20.08%  | 213                  | 4.02                    |
| 9                | GSECL Wanakbori 1-6                                  | 1,260                                  | 9.00%                | 22.14%  | 548                  | 3.90                    |
| 10               | GSECL Sikka Expansion                                | 500                                    | 9.00%                | 43.44%  | 559                  | 3.23                    |
| 11               | GSECL Kutch Lignite                                  | 75                                     | 12.00%               | 45.18%  | 90                   | 2.88                    |
| 12               | GSECL Kutch Lignite Exp unit 4                       | 75                                     | 12.00%               | 46.13%  | 54                   | 2.68                    |
| 13               | GSECL Ukai Hydro                                     | 305                                    | 0.60%                | 24.94%  | 33                   | -                       |
| 14               | GSECL Kadana Hydro                                   | 242                                    | 1.00%                | 15.21%  | 56                   | -                       |
| 15               | GSECL Dhuvaran CCPP III                              | 376                                    | 3.00%                | 29.34%  | 97                   | 2.91                    |
| 16               | GSECL BLTPS  | 500                                    | 11.00%               | 30.00%  | 222                  | 2.98                    |
| 17               | GSECL Wanakbori - 8                                  | 800                                    | 5.25%                | 85.00%  | 838                  | 3.23                    |
| <b>Sub Total</b> |  | <b>6677</b>                            |                      |         | <b>3968</b>          |                         |
| <b>IPP's</b>     |  |  |                      |         |                      |                         |
| 1                | Gujarat State Energy Generation                      | 156                                    | 2.90%                | 28.89%  | 50                   | 3.00                    |
| 2                | Gujarat State Energy Generation Expansion            | 351                                    | 3.00%                | 42.37%  | 205                  | 2.79                    |
| 3                | Gujarat Industries Power Co. Ltd. (165 MW)           | 165                                    | 0.00%                | 1.22%   | -                    | 3.54                    |
| 4                | Gujarat Industries Power Co. Ltd. (SLPP)             | 250                                    | 10.00%               | 59.96%  | 107                  | 1.85                    |
| 5                | Gujarat Mineral Development Corp.                    | 250                                    | 11.00%               | 14.95%  | 33                   | 1.44                    |
| 6                | Gujarat Industries Power Co. Ltd. (145 MW)           | 42                                     | 2.90%                | 26.97%  | 4                    | 2.21                    |
| 7                | Gujarat Industries Power Co. Ltd. (SLPP - Expansion) | 250                                    | 10.00%               | 76.70%  | 225                  | 1.43                    |
| 8                | GPPC Pipavav   | 702                                    | 3.00%                | 44.87%  | 319                  | 2.79                    |



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| Sr. No. | Name of the Station      | Rated Capacity allocated to GUVNL (MW) | Aux. Consumption (%) | PLF (%) | Fixed Cost (Rs. Cr.) | Variable Cost (Rs./kWh) |
|---------|--------------------------|--|----------------------|---------|----------------------|-------------------------|
|         | <b>Sub Total</b>         | <b>2166</b>                            |                      |         | <b>944</b>           |                         |
|         | <b>Central Sector</b>    |  |                      |         |                      |                         |
| 1       | NPC-Tarapur 1 & 2        | 160                                    | 10.00%               | 60.00%  | 0                    | 2.60                    |
| 2       | NPC-Tarapur 3 & 4        | 274                                    | 9.00%                | 80.00%  | 0                    | 3.42                    |
| 3       | NPC-Kakrapar             | 125                                    | 8.00%                | 85.00%  | 0                    | 2.31                    |
| 4       | NTPC-Vindhyachal - I     | 247                                    | 9.00%                | 85.00%  | 143                  | 1.72                    |
| 5       | NTPC-Vindhyachal - II    | 252                                    | 7.05%                | 85.00%  | 122                  | 1.62                    |
| 6       | NTPC-Vindhyachal - III   | 279                                    | 6.25%                | 85.00%  | 204                  | 1.60                    |
| 7       | NTPC-Korba               | 380                                    | 7.04%                | 85.00%  | 180                  | 1.48                    |
| 8       | NTPC-Korba -III          | 130                                    | 6.25%                | 85.00%  | 126                  | 1.46                    |
| 9       | NTPC-Kawas               | 187                                    | 2.75%                | 25.00%  | 114                  | 2.11                    |
| 10      | NTPC-Jhanor              | 237                                    | 2.75%                | 25.00%  | 182                  | 2.28                    |
| 11      | NTPC-Sipat-I             | 577                                    | 6.25%                | 85.00%  | 525                  | 1.46                    |
| 12      | NTPC-Sipat - II          | 286                                    | 6.25%                | 85.00%  | 247                  | 1.50                    |
| 13      | NTPC-Kahlagaon I         | 141                                    | 9.00%                | 85.00%  | 100                  | 2.19                    |
| 14      | NTPC-Vindhyachal - IV    | 258                                    | 6.25%                | 85.00%  | 282                  | 1.58                    |
| 15      | NTPC-Mauda               | 461                                    | 6.25%                | 60.00%  | 604                  | 2.77                    |
| 16      | NTPC-Vindhyachal - V     | 103                                    | 7.25%                | 85.00%  | 119                  | 1.63                    |
| 17      | NTPC-Mauda II            | 530                                    | 6.25%                | 60.00%  | 550                  | 2.93                    |
| 18      | NTPC-Gadarwara           | 333                                    | 6.25%                | 85.00%  | 483                  | 2.54                    |
| 19      | NTPC-LARA                | 186                                    | 6.25%                | 85.00%  | 217                  | 2.13                    |
| 20      | NTPC-Khargone            | 270                                    | 6.25%                | 85.00%  | 342                  | 2.77                    |
| 21      | NTPC-Farakka - 3         | 25                                     | 6.25%                | 85.00%  | 26                   | 2.59                    |
| 22      | NTPC-Kahalgaon II        | 146                                    | 6.25%                | 85.00%  | 111                  | 2.12                    |
| 23      | NTPC-Farakka - 1 & 2     | 244                                    | 6.78%                | 85.00%  | 140                  | 2.64                    |
| 24      | NTPC-Talcher             | 24                                     | 7.05%                | 85.00%  | 16                   | 1.91                    |
| 25      | NTPC-Darlipalli          | 14                                     | 6.25%                | 85.00%  | 21                   | 1.12                    |
| 26      | NTPC-Unchahar - 1        | 36                                     | 9.00%                | 60.00%  | 26                   | 3.06                    |
| 27      | NTPC-Tanda - 2           | 44                                     | 5.75%                | 85.00%  | 50                   | 2.58                    |
| 28      | NTPC Solapur             | 24                                     | 6.25%                | 60.00%  | 29                   | 3.80                    |
| 29      | NTPC Ramagundam - 1 & 2  | 358                                    | 6.25%                | 80.00%  | 229                  | 2.42                    |
| 30      | Sardar Sarovar Nigam Ltd | 232                                    | 0.70%                | 85.00%  | 148                  | 2.05                    |
|         | <b>Sub Total</b>         | <b>6206</b>                            |                      |         | <b>5107</b>          |                         |
|         | <b>Others</b>            |  |                      |         |                      |                         |
| 1       | Captive Power            | 6                                      | 0.00%                | 83.83%  | -                    | 2.14                    |
|         | <b>Renewable</b>         |  |                      |         |                      |                         |
| 1       | Wind Farms               | 4,262                                  | 0.00%                | 19.32%  | -                    | 3.64                    |



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| Sr. No.                    | Name of the Station            | Rated Capacity allocated to GUVNL (MW) | Aux. Consumption (%) | PLF (%) | Fixed Cost (Rs. Cr.) | Variable Cost (Rs./kWh) |
|----------------------------|--------------------------------|--|----------------------|---------|----------------------|-------------------------|
| 2                          | Solar                          | 3,016                                  | 0.00%                | 23.24%  | -                    | 4.96                    |
| 3                          | Small/Mini Hydal               | 22                                     | 0.00%                | 27.87%  | -                    | 5.86                    |
| 4                          | Biomass                        | 30                                     | 0.00%                | 35.21%  | -                    | 4.19                    |
| <b>Competitive Bidding</b> |                                |  |                      |         |                      |                         |
| 1                          | Essar Power Gujarat Ltd        | 1,000                                  | 0.00%                | 80.00%  | 631                  | 2.03                    |
| 2                          | Adani Power Ltd - (Unit 1 - 4) | 1,200                                  | 0.00%                | 80.00%  | 631                  | 2.30                    |
| 3                          | ACB India Ltd.                 | 200                                    | 0.00%                | 80.00%  | 203                  | 0.75                    |
| 4                          | Coastal Gujarat Power Co. Ltd. | 1,805                                  | 0.00%                | 80.00%  | 1,138                | 1.99                    |
| 5                          | MTOA                           | 1,000                                  | 0.00%                | 85.00%  | -                    | 3.68                    |
| 6                          | Power Exchange                 | -                                      | 0.00%                |         | -                    | 4.00                    |
| 7                          | Short term Bilateral           | -                                      | 0.00%                | 0.00%   | -                    | 4.00                    |
| <b>Sub Total</b>           |                                | <b>12541</b>                           |                      |         | <b>2603</b>          |                         |
| <b>TOTAL</b>               |                                | <b>25790</b>                           |                      |         | <b>12350</b>         |                         |

**(II) Capacity Addition**

The capacity addition envisaged during FY 2022-23 is around 520 MW. The operational parameters, annual Fixed Cost and variable cost per unit for these plants are shown in the Table below. The Annual Fixed Cost and the availability from the envisaged capacity during FY 2022-23 have been considered for full year as capacity will be available for 12 months of FY 2022-23.

**Table 5-20: Additional capacity envisaged for FY 2022-23**

| Sr. No. | Name of the Station | Rated Capacity allocated to GUVNL (MW) | Aux. Cons. (%) | PLF (%) | Fixed Cost (Rs. Cr.) | Variable Cost (Rs./kWh) |
|---------|---------------------|--|----------------|---------|----------------------|-------------------------|
| 1       | Ramagundam - I & II | 358                                    | 6.25%          | 80.00%  | 228.93               | 2.42                    |
| 2       | KahlaGaon I         | 51                                     | 9.00%          | 85.00%  | 46.91                | 2.19                    |
| 3       | Farakka - I & II    | 34                                     | 6.78%          | 85.00%  | 24.42                | 2.64                    |
| 4       | Unchahar I          | 44                                     | 9.00%          | 60.00%  | 41.63                | 3.06                    |
| 5       | Farakka III         | 33                                     | 6.25%          | 85.00%  | 43.07                | 2.59                    |



**(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 and 2018, 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 from FY 2017-18 to FY 2021-22. For FY 2021-22, RPO was 8.00% from Solar, 8.25% from Wind, and 0.75% from other sources like Biomass, Bagasse, MSW, Small/ Mini Hydel, etc. In absence of specific target of RPO for FY 2022-23, DISCOMs have considered RPO for FY 2022-23 same as RPO target specified for FY 2021-22.

GUVNL/DISCOMs have proposed to purchase renewable power from the tied-up sources only as per the PPA price. Hence, GUVNL/DISCOMs have considered RE purchase based on actual tied up capacity only.

Purchase from RE sources for FY 2022-23 based on actual tied up capacity is detailed in the Table below:

**Table 5-21: Additional RE Capacity envisaged for FY 2022-23**

| Particular                             | Solar      | Wind     | Others     | Total        |
|--|------------|----------|------------|--------------|
| Additional Power Purchase (MW)         | 2,390      | -        | 67         | 2,457        |
| Additional Power Purchase (MUs)        | 3,591      | -        | 471        | 4,062        |
| Power Purchase Cost (Rs./kWh)          | 2.33       | -        | 6.64       | 2.83         |
| <b>Power Purchase Cost (Rs. Crore)</b> | <b>835</b> | <b>-</b> | <b>313</b> | <b>1,148</b> |

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

**Table 5-22: Procurement from RE for meeting projected RPO**

| Particulars                | FY 2022-23    |       |        |        |
|----------------------------|---------------|-------|--------|--------|
|                            | Solar         | Wind  | Others | Total  |
| Total Power Purchase (MUs) | <b>109546</b> |       |        |        |
| RPO Target                 | 8.00%         | 8.25% | 0.75%  | 17%    |
| RPO Target                 | 8,764         | 9,038 | 822    | 18,623 |
| <b>RE Purchase</b>         |               |       |        |        |



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| Particulars                                 | FY 2022-23    |              |            |               |
|---|---------------|--------------|------------|---------------|
|   |               |              |            |               |
| RE Purchase capacity as on 01.10.2021 (MUs) | 6,140         | 7,214        | 145        | 13,500        |
| <b>New Capacity-Power Purchase (MUs)</b>    | <b>3,591</b>  | <b>-</b>     | <b>471</b> | <b>4,062</b>  |
| <b>RE Purchase under SSDSP (MUs)</b>        | <b>829</b>    | <b>-</b>     | <b>-</b>   | <b>829</b>    |
| <b>RE Purchase (MUs)</b>                    | <b>10,561</b> | <b>7,214</b> | <b>616</b> | <b>18,391</b> |

Further, MGCVCL 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 5% availability of each plant has been considered to take care of the peak loads and peak season requirements.
- Availability of Thermal Stations has been considered at 85% / 80% as defined in Regulations (CERC/GERC) and performance in previous years.
- The Fixed Cost (FC) and Variable Cost (VC) for existing GSECL, IPP, renewable and central sector plants have been taken as per actuals of FY 2020-21 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 5-23: Projected Power Purchase Cost for FY 2022-23**

| 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) |
|---------|--------------------------------------|-----------------|----------------|------------------------|---------------------------|---------------------------|------------------------|
|         | <b>GSECL</b>                         |                 |                |                        |                           |                           |                        |
| 1       | GSECL Gandhinagar - 5                | 649             | 117            | 64                     | 3.70                      | 43                        | 107                    |
| 2       | GSECL Wanakbori - 7                  | 519             | 117            | 56                     | 3.83                      | 45                        | 100                    |
| 3       | GSECL Utran Expansion                | 1,724           | 1,724          | 221                    | 2.84                      | 489                       | 710                    |
| 4       | GSECL Dhuvaran - 7                   | 325             | 325            | 64                     | 2.64                      | 86                        | 149                    |
| 5       | GSECL Dhuvaran - 8                   | 325             | 325            | 85                     | 2.91                      | 94                        | 180                    |
| 6       | GSECL Ukai                           | 1,895           | 340            | 305                    | 3.62                      | 123                       | 429                    |
| 7       | GSECL Ukai Expansion                 | 2,340           | 288            | 463                    | 3.18                      | 92                        | 555                    |
| 8       | GSECL Gandhinagar 3-4                | 669             | 233            | 213                    | 4.02                      | 94                        | 307                    |
| 9       | GSECL Wanakbori 1-6                  | 2,224           | 703            | 548                    | 3.90                      | 274                       | 823                    |
| 10      | GSECL Sikka Expansion                | 1,732           | 279            | 559                    | 3.23                      | 90                        | 649                    |
| 11      | GSECL Kutch Lignite                  | 261             | 261            | 90                     | 2.88                      | 75                        | 165                    |
| 12      | GSECL Kutch Lignite Expansion Unit 4 | 267             | 267            | 54                     | 2.68                      | 71                        | 125                    |
| 13      | GSECL Ukai Hydro                     | 662             | 662            | 33                     | -                         | -                         | 33                     |
| 14      | GSECL Kadana Hydro                   | 319             | 319            | 56                     | -                         | -                         | 56                     |
| 15      | GSECL Dhuvaran CCPP III              | 937             | 716            | 97                     | 2.91                      | 209                       | 306                    |
| 16      | GSECL BLTPS                          | 1,169           | 273            | 222                    | 2.98                      | 81                        | 303                    |
| 17      | GSECL Wanakbori - 8                  | 5,644           | 465            | 838                    | 3.23                      | 150                       | 988                    |
|         | <b>Sub Total</b>                     | <b>21,660</b>   | <b>7,414</b>   | <b>3,968</b>           |                           | <b>2,017</b>              | <b>5,984</b>           |
|         | <b>IPP's</b>                         |                 |                |                        |                           |                           |                        |



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| <b>Sr. No.</b> | <b>Name of the Station</b>                     | <b>Available (MUs)</b> | <b>Dispatch (MUs)</b> | <b>Fixed Cost (Rs. Crore)</b> | <b>Variable Cost (Rs. / kWh)</b> | <b>Variable Cost (Rs. Crore)</b> | <b>Total Cost (Rs. Crore)</b> |
|----------------|--|------------------------|-----------------------|-------------------------------|----------------------------------|----------------------------------|-------------------------------|
| 1              | Gujarat State Energy Generation                | 383                    | 93                    | 50                            | 3.00                             | 28                               | 78                            |
| 2              | Gujarat State Energy Generation Expansion      | 1,265                  | 1,265                 | 205                           | 2.79                             | 353                              | 559                           |
| 3              | Gujarat Industries Power Co. Ltd. (165 MW)     | 18                     | 18                    | -                             | 3.54                             | 6                                | 6                             |
| 4              | Gujarat Industries Power Co. Ltd. (SLPP)       | 1,182                  | 1,182                 | 107                           | 1.85                             | 219                              | 325                           |
| 5              | Gujarat Mineral Development Corp.              | 291                    | 291                   | 33                            | 1.44                             | 42                               | 75                            |
| 6              | Gujarat Industries Power Co. Ltd. (145 MW)     | 96                     | 96                    | 4                             | 2.21                             | 21                               | 26                            |
| 7              | Gujarat Industries Power Co. Ltd. (SLPP - Exp) | 1,512                  | 1,512                 | 225                           | 1.43                             | 216                              | 441                           |
| 8              | GPPC Pipavav                                   | 2,677                  | 2,677                 | 319                           | 2.79                             | 747                              | 1,066                         |
| 9              | Essar Power Gujarat Ltd.                       | 7,008                  | 7,008                 | 631                           | 2.03                             | 1,421                            | 2,052                         |
| 10             | Adani Power Ltd (Unit 1 – 4)                   | 8,410                  | 8,410                 | 631                           | 2.30                             | 1,936                            | 2,566                         |
| 11             | ACB India Ltd.                                 | 1,402                  | 1,402                 | 203                           | 0.75                             | 106                              | 309                           |
| 12             | Coastal Gujarat Power Co. Ltd.                 | 12,649                 | 12,649                | 1,138                         | 1.99                             | 2,522                            | 3,660                         |
| 13             | MTOA   | 7,446                  | 613                   | -                             | 3.68                             | 226                              | 226                           |
| 14             | Power Exchange                                 | 6,166                  | 6,166                 | -                             | 4.00                             | 2,466                            | 2,466                         |
| 15             | Short term Bilateral                           | 2,000                  | 2,000                 | -                             | 4.00                             | 800                              | 800                           |
|                | <b>Sub Total</b>                               | <b>52,505</b>          | <b>45,382</b>         | <b>3,547</b>                  |                                  | <b>11,109</b>                    | <b>14,656</b>                 |
|                | <b>Central Sector</b>                          |                        |                       |                               |                                  |                                  |                               |
| 1              | NPC-Tarapur 1 & 2                              | 757                    | 757                   | -                             | 2.60                             | 197                              | 197                           |
| 2              | NPC-Tarapur 3 & 4                              | 1,747                  | 1,747                 | -                             | 3.42                             | 597                              | 597                           |
| 3              | NPC-Kakrapar                                   | 856                    | 856                   | -                             | 2.31                             | 198                              | 198                           |
| 4              | NTPC-Vindhyachal - I                           | 1,676                  | 1,676                 | 143                           | 1.72                             | 288                              | 431                           |
| 5              | NTPC-Vindhyachal - II                          | 1,746                  | 1,746                 | 122                           | 1.62                             | 283                              | 405                           |
| 6              | NTPC-Vindhyachal - III                         | 1,950                  | 1,950                 | 204                           | 1.60                             | 313                              | 516                           |
| 7              | NTPC-Korba                                     | 2,630                  | 2,630                 | 180                           | 1.48                             | 390                              | 571                           |



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| 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) |
|---------|--------------------------|-----------------|----------------|------------------------|---------------------------|---------------------------|------------------------|
| 8       | NTPC-Korba -III          | 909             | 909            | 126                    | 1.46                      | 133                       | 259                    |
| 9       | NTPC-Kawas               | 398             | 398            | 114                    | 2.11                      | 84                        | 198                    |
| 10      | NTPC-Jhanor              | 505             | 505            | 182                    | 2.28                      | 115                       | 297                    |
| 11      | NTPC-Sipat-I             | 4,024           | 4,024          | 525                    | 1.46                      | 586                       | 1,111                  |
| 12      | NTPC-Sipat - II          | 1,994           | 1,994          | 247                    | 1.50                      | 299                       | 546                    |
| 13      | NTPC-Kahlagaon I         | 1,301           | 1,301          | 147                    | 2.19                      | 284                       | 431                    |
| 14      | NTPC-Vindhyachal - IV    | 1,804           | 1,804          | 282                    | 1.58                      | 284                       | 567                    |
| 15      | NTPC-Mauda               | 2,271           | 2,271          | 604                    | 2.77                      | 630                       | 1,234                  |
| 16      | NTPC-Vindhyachal - V     | 709             | 709            | 119                    | 1.63                      | 115                       | 234                    |
| 17      | NTPC-Mauda II            | 2,612           | 305            | 550                    | 2.93                      | 89                        | 639                    |
| 18      | NTPC-Gadarwara           | 2,328           | 2,328          | 483                    | 2.54                      | 592                       | 1,076                  |
| 19      | NTPC-LARA                | 1,299           | 1,299          | 217                    | 2.13                      | 277                       | 494                    |
| 20      | NTPC-Khargone            | 1,884           | 1,884          | 342                    | 2.77                      | 523                       | 864                    |
| 21      | NTPC-Farakka - 3         | 405             | 405            | 69                     | 2.59                      | 105                       | 174                    |
| 22      | NTPC-Kahalgaoon II       | 1,019           | 1,019          | 111                    | 2.12                      | 216                       | 327                    |
| 23      | NTPC-Farakka - 1 & 2     | 1,930           | 1,930          | 164                    | 2.64                      | 510                       | 674                    |
| 24      | NTPC-Talcher             | 166             | 166            | 16                     | 1.91                      | 32                        | 48                     |
| 25      | NTPC-Darlipalli          | 98              | 98             | 21                     | 1.12                      | 11                        | 32                     |
| 26      | NTPC-Unchahar - 1        | 383             | 45             | 68                     | 3.06                      | 14                        | 82                     |
| 27      | NTPC-Tanda - 2           | 309             | 309            | 50                     | 2.58                      | 80                        | 129                    |
| 28      | NTPC Solapur             | 120             | 14             | 29                     | 3.80                      | 5                         | 35                     |
| 29      | NTPC Ramagundam - 1 & 2  | 2,352           | 2,352          | 229                    | 2.42                      | 569                       | 798                    |
| 30      | Sardar Sarovar Nigam Ltd | 1,715           | 1,715          | 148                    | 2.05                      | 352                       | 499                    |
|         | <b>Sub Total</b>         | <b>41,896</b>   | <b>39,144</b>  | <b>5,491</b>           |                           | <b>8,172</b>              | <b>13,663</b>          |
|         | <b>Others</b>            |                 |                |                        |                           |                           |                        |
| 1       | Captive Power            | 44              | 44             | -                      | 2.14                      | 9                         | 9                      |
|         | <b>Renewable</b>         |                 |                |                        |                           |                           |                        |
| 1       | Wind Farms               | 7,214           | 7,214          | -                      | 3.64                      | 2,628                     | 2,628                  |
| 2       | Solar                    | 6,140           | 6,140          | -                      | 4.96                      | 3,048                     | 3,048                  |
| 3       | Small/Mini Hydel         | 53              | 53             | -                      | 5.86                      | 31                        | 31                     |
| 4       | Biomass                  | 93              | 93             | -                      | 4.19                      | 39                        | 39                     |
| 5       | Solar (New)              | 3,591           | 3,591          | -                      | 2.33                      | 835                       | 835                    |



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| 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) |
|---------|---------------------|-----------------|-----------------|------------------------|---------------------------|---------------------------|------------------------|
| 6       | Wind (New)          | -               | -               | -                      | -                         | -                         | -                      |
| 7       | Others (New)        | 471             | 471             | -                      | 6.64                      | 313                       | 313                    |
|         | <b>Sub Total</b>    | <b>17,606</b>   | <b>17,606</b>   | <b>-</b>               |                           | <b>6,903</b>              | <b>6,903</b>           |
|         | <b>TOTAL</b>        | <b>1,33,668</b> | <b>1,09,546</b> | <b>13,005</b>          |                           | <b>28,200</b>             | <b>41,206</b>          |

### 5.8.5 Transmission and other Cost

#### Petitioner's submission

MGVCL has submitted that the total power purchase cost for FY 2022-23 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 2022-23.
- PGCIL charges for FY 2022-23 are considered based on actual payment made in latest month of FY 2021-22.
- SLDC Fees and Charges have also been considered as per the Draft Tariff petition of SLDC for FY 2022-23.

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 5-24: Projected Transmission Charges for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars                          | FY 2022-23 |
|---------|--------------------------------------|------------|
| 1       | PGCIL Charges                        | 3,075      |
| 2       | Annual Transmission Charges of GETCO | 4,444      |
| 3       | SLDC Charges                         | 23         |



**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 2022-23.

**Table 5-25: GUVNL Cost for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars                       | FY 2022-23 |
|---------|-----------------------------------|------------|
| 1       | GUVNL Cost at 4.00 Paisa per Unit | 438        |

**5.8.6 Total Power Purchase Cost**

**Petitioner’s submission**

**Fixed Cost**

The Table below shows the total fixed cost projected for FY 2022-23:

**Table 5-26: Projected Fixed Cost for DISCOMs for FY 2022-23 (Rs. Crore)**

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

**Variable Cost**

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

**Table 5-27: Projected Variable Cost for DISCOMs for FY 2022-23**

| Variable cost | GUVNL Cost | Total variable Cost | Despatched (MUs) | Variable Cost per Unit (Rs./kWh) | DISCOM (MUs) | Variable Cost |
|---------------|------------|---------------------|------------------|----------------------------------|--------------|---------------|
| 28,200        | 438        | 28,639              | 1,09,546         | 2.61                             | 1,09,546     | 28,639        |

### 5.8.7 Net Power Purchase Cost

#### Petitioner's submission

The net power purchase cost is shown below:

**Table 5-28: Projected Net Power Purchase Cost for FY 2022-23 (Rs. Crore)**

| DISCOMs Fixed cost | DISCOMs Variable Cost | Total Power purchase cost |
|--------------------|-----------------------|---------------------------|
| 20,547             | 28,639                | 49,186                    |

### 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 2022-23 based on the methodology adopted by the Commission in the MYT Order dated 31<sup>st</sup> March 2017. As per this methodology, the amount available to 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.

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**Table 5-29: Allocation of Power Purchase Cost (Rs. Crore)**

| Sr. No.  | Particulars  | DGVCL         | MGVCL        | PGVCL         | UGVCL         |
|----------|--|---------------|--------------|---------------|---------------|
| 1        | Sales (MUs)  | 23,324        | 11,469       | 31,141        | 25,909        |
| 2        | Revenue from Existing Tariff                               | 11,689        | 5,257        | 12,563        | 8,997         |
| 3        | Revenue from FPPPA @ Rs. 1.80/ unit                        | 4,198         | 2,064        | 5,605         | 4,664         |
| 4        | Other Income (Consumer Related)                            | 400           | 145          | 306           | 243           |
| 5        | Agricultural Subsidy                                       | 51            | 77           | 424           | 548           |
| <b>6</b> | <b>Total</b>   | <b>16,339</b> | <b>7,543</b> | <b>18,898</b> | <b>14,452</b> |
| 7        | Expense other than Power Purchase                          | 1,713         | 1,296        | 3,849         | 1,521         |
| 8        | Power Purchase Cost of SSDSP                               | 4             | 10           | 132           | 89            |
| 9        | Amount Available with DISCOM for Power purchase from GUVNL | 14,621        | 6,238        | 14,917        | 12,842        |

**Table 5-30: Total Revenue (Gap)/ Surplus (Rs. Crore)**

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

**Table 5-31: Bulk Supply Tariff for FY 2022-23 (Rs. Crore)**

| Sr. | Particulars  | DGVCL         | MGVCL        | PGVCL         | UGVCL         |
|-----|--|---------------|--------------|---------------|---------------|
| 1   | <b>Revenue (Gap)/Surplus</b>                               | <b>(568)</b>  |              |               |               |
| 2   | Ratio of allocation of Revenue (Gap)/Surplus               | 24%           | 12%          | 36%           | 28%           |
| 3   | Revenue (Gap)/ Surplus allocation                          | (137)         | (70)         | (204)         | (157)         |
| 4   | Amount Available with DISCOM for Power purchase from GUVNL | 14,621        | 6,238        | 14,917        | 12,842        |
| 5   | <b>Power purchase cost of GUVNL</b>                        | 14,759        | 6,308        | 15,121        | 12,998        |
| 6   | <b>Power purchase cost of SSDSP</b>                        | 4             | 10           | 132           | 89            |
| 7   | <b>Power purchase cost of DISCOM</b>                       | <b>14,763</b> | <b>6,317</b> | <b>15,253</b> | <b>13,087</b> |
| 8   | Energy Purchase in DISCOM (MUs)                            | 26,535        | 13,517       | 39,808        | 30,515        |
| 9   | <b>Bulk Supply Tariff (Rs. / kWh)</b>                      | <b>5.56</b>   | <b>4.67</b>  | <b>3.83</b>   | <b>4.29</b>   |





### 5.8.10 Revised Power Purchase Cost

As mentioned earlier, in reply to data gaps, MGVCCL has revised projections for sales for FY 2022-23 after correcting linking error. This has also led to revision in power purchase cost of MGVCCL as well as other DISCOMs. MGVCCL has submitted the revised power purchase cost as shown in the Tables below:

#### Variable Cost

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

**Table 5-32: Revised Projected Variable Cost for DISCOMs for FY 2022-23 (Rs. Crore)**

| Variable cost | GUVNL Cost | Total variable Cost | Despatched (MUs) | Variable Cost per Unit (Rs./kWh) | DISCOM (MUs) | Variable Cost |
|---------------|------------|---------------------|------------------|----------------------------------|--------------|---------------|
| 28,183        | 438        | 28,621              | 1,09,487         | 2.61                             | 1,09,487     | 28,621        |

The revised net power purchase cost is shown below:

**Table 5-33: Revised Projected Net Power Purchase Cost for FY 2022-23 (Rs. Crore)**

| DISCOMs Fixed cost | DISCOMs Variable Cost | Total Power purchase cost |
|--------------------|-----------------------|---------------------------|
| 20,547             | 28,621                | 49,168                    |

### 5.8.11 Revised Allocation of Power Purchase Cost under BST mechanism

The revised allocation of Power Purchase Cost, revised total Revenue (Gap)/Surplus and revised BST for FY 2022-23 have been submitted as below:

**Table 5-34: Revised Allocation of Power Purchase Cost (Rs. Crore)**

| Sr. No. | Particulars                         | DGVCL  | MGVCL  | PGVCL  | UGVCL  |
|---------|-------------------------------------|--------|--------|--------|--------|
| 1       | Sales (MUs)                         | 23,324 | 11,418 | 31,141 | 25,909 |
| 2       | Revenue from Existing Tariff        | 11,689 | 5,166  | 12,563 | 8,997  |
| 3       | Revenue from FPPPA @ Rs. 1.80/ unit | 4,198  | 2,055  | 5,605  | 4,664  |
| 4       | Other Income (Consumer Related)     | 400    | 145    | 306    | 243    |
| 5       | Agricultural Subsidy                | 51     | 77     | 424    | 548    |



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| Sr. No.  | Particulars  | DGVCL         | MGVCL        | PGVCL         | UGVCL         |
|----------|--|---------------|--------------|---------------|---------------|
| <b>6</b> | <b>Total</b>   | <b>16,339</b> | <b>7,444</b> | <b>18,898</b> | <b>14,452</b> |
| 7        | Expense other than Power Purchase                          | 1,713         | 1,296        | 3,849         | 1,521         |
| 8        | Power Purchase Cost of SSDSP                               | 4             | 10           | 132           | 89            |
| 9        | Amount Available with DISCOM for Power purchase from GUVNL | 14,621        | 6,138        | 14,917        | 12,842        |

**Table 5-35: Revised Total Revenue (GAP)/ Surplus (Rs. Crore)**

| Sr. No. | Particulars  | 2022-23      |
|---------|--|--------------|
| 1       | Power Purchase Cost of GUVNL                             | 49,168       |
| 2       | Aggregate Amount available for power purchase from GUVNL | 48,519       |
| 3       | <b>Revenue (Gap) / Surplus</b>                           | <b>(650)</b> |

**Table 5-36: Revised Bulk Supply Tariff for FY 2022-23 (Rs. Crore)**

| Sr. No. | Details  | FY 2022-23    |              |               |               |
|---------|--|---------------|--------------|---------------|---------------|
|         |  | DGVCL         | MGVCL        | PGVCL         | UGVCL         |
| 1       | <b>Revenue (Gap)/Surplus</b>                               | <b>(650)</b>  |              |               |               |
| 2       | Ratio of allocation of Revenue (Gap)/Surplus               | 24%           | 12%          | 36%           | 28%           |
| 3       | Revenue (Gap)/ Surplus allocation                          | (157)         | (80)         | (233)         | (179)         |
| 4       | Amount Available with DISCOM for Power purchase from GUVNL | 14,621        | 6,138        | 14,917        | 12,842        |
| 5       | Power purchase cost of GUVNL                               | 14,779        | 6,218        | 15,151        | 13,021        |
| 6       | Power purchase cost of SSDSP                               | 4             | 10           | 132           | 89            |
| 7       | <b>Power purchase cost of DISCOM</b>                       | <b>14,783</b> | <b>6,228</b> | <b>15,283</b> | <b>13,110</b> |
| 8       | Energy Purchase in DISCOM (MUs)                            | 26,535        | 13,458       | 39,808        | 30,515        |
| 9       | <b>Bulk Supply Tariff (Rs./kWh)</b>                        | <b>5.57</b>   | <b>4.63</b>  | <b>3.84</b>   | <b>4.30</b>   |



## 5.9 Power Purchase Cost for FY 2022-23- 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 5-37: Approved Power Purchase under SSDSP**

| Sr. No.  | Details                               | Unit       | DGVCL        | MGVCL        | PGVCL         | UGVCL         |
|----------|---------------------------------------|------------|--------------|--------------|---------------|---------------|
| 1        | MW Capacity tied-up under SSDSP       | MW         | 17.50        | 38.60        | 532.39        | 360.37        |
| 2        | Likely COD                            | MM/YY      | Sep-22       | Sep-22       | Sep-22        | Sep-22        |
| 3        | Expected CUF                          | %          | 20%          | 20%          | 20%           | 20%           |
| <b>4</b> | <b>Expected Generation from SSDSP</b> | <b>MUs</b> | <b>15.29</b> | <b>33.72</b> | <b>465.10</b> | <b>314.82</b> |
| 5        | Power Purchase Rate                   | Rs./kWh    | 2.83         | 2.83         | 2.83          | 2.83          |
| 6        | Power Purchase Cost                   | Rs. Crore  | 4.33         | 9.54         | 131.62        | 89.09         |

### 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 5-19. GUVNL has also entered into contracts for additional capacity likely to be commissioned in FY 2022-23. The details of additional plants likely to be commissioned in FY 2022-23 are given in Table 5-20.



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

**Table 5-38: Capacity Contracted Source-Wise by GUVNL for FY 2022-23 as submitted by MGVCL (MW)**

| Sr. No | Particulars                 | FY 2022-23   |
|--------|-----------------------------|--------------|
| 1      | GSECL                       | 6677         |
| 2      | IPPs                        | 2166         |
| 3      | Central Generating Stations | 6726         |
| 4      | Renewable                   | 7330         |
| 5      | Competitive Bidding & PX    | 5205         |
| 6      | Other- CPP                  | 6            |
|        | <b>Total</b>                | <b>28110</b> |

**Renewable Purchase Obligation (RPO)**

The petitioner has submitted the details for RPO compliance for FY 2022-23 as discussed in earlier in Section 5.8.2 (III). The Commission has approved the total energy requirement of 1,07,006 MUs for all the four DISCOMs for FY 2022-23 based on the energy balance and energy requirement approved for the respective DISCOMs.

As the RPO targets for FY 2022-23 are yet to be specified, the Commission has considered the RPO target specified for FY 2021-22 as applicable for FY 2022-23 also, for the purpose of approving the power purchase cost for FY 2022-23. However, the DISCOMs will have to comply with the RPO targets specified for FY 2022-23 through a separate ongoing process. Also, while computing the RE capacity for FY 2022-23, the petitioner has considered only existing tied up sources, though there are new RE plants expected to be commissioned in FY 2022-23. The list of new plants expected to be operational in FY 2022-23 are shown in the Table below:

**Table 5-39: New MSW Plants coming up in FY 2022-23**

| Sr. No. | Name of the Station | Capacity | Variable Cost (Rs./kWh) | Generation (MUs) | Variable Cost (Rs. Crore) |
|---------|---------------------|----------|-------------------------|------------------|---------------------------|
| 1       | Goodwatts WTE Ltd.  | 14.90    | 7.03                    | 104              | 73.41                     |



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| Sr. No. | Name of the Station                       | Capacity | Variable Cost (Rs./kWh) | Generation (MUs) | Variable Cost (Rs. Crore) |
|---------|---|----------|-------------------------|------------------|---------------------------|
| 2       | JITF Urban Waste Mgmt Ahmedabad Pvt. Ltd. | 15.00    | 7.07                    | 105              | 74.32                     |
| 3       | Goodwatts WTE Jamnagar Pvt. Ltd.          | 7.50     | 6.31                    | 53               | 33.17                     |
| 4       | Goodwatts WTE Rajkot Pvt. Ltd.            | 14.90    | 6.31                    | 104              | 65.89                     |
| 5       | Goodwatts WTE Vadodara Pvt. Ltd.          | 14.90    | 6.31                    | 104              | 65.89                     |

**Table 5-40: New Solar Plants coming up in FY 2022-23**

| S No. | Name of the Station                       | Rated Capacity allocated to GUVNL (MW) | Variable Cost (Rs./kWh) | Generation (MUs) | Variable Cost (Rs. Crore) |
|-------|---|--|-------------------------|------------------|---------------------------|
| 1     | Vena Energy Clean Power Pvt Ltd           | 40.00                                  | 2.61                    | 140              | 36.58                     |
| 2     | Gujarat State Electricity Corporation Ltd | 540.00                                 | 1.50                    | 552              | 82.78                     |
| 3     | Gujarat State Electricity Corporation Ltd | 100.00                                 | 2.68                    | 219              | 58.69                     |
| 4     | Tata Power Renewable Energy Ltd.          | 250.00                                 | 2.75                    | 585              | 160.92                    |
| 5     | Gujarat State Electricity Corporation Ltd | 100.00                                 | 2.65                    | 219              | 58.04                     |
| 6     | Tata Power Renewable Energy Ltd.          | 50.00                                  | 2.75                    | 125              | 34.33                     |
| 7     | Juniper Green Three Pvt Ltd               | 190.00                                 | 2.63                    | 444              | 116.88                    |
| 8     | Tata Power Renewable Energy Ltd.          | 120.00                                 | 2.64                    | 285              | 75.23                     |
| 9     | Torrent Solar Power Pvt Ltd.              | 100.00                                 | 1.99                    | 123              | 24.41                     |
| 10    | NTPC Renewable Energy Ltd.                | 200.00                                 | 1.99                    | 245              | 48.81                     |
| 11    | ABReL SPV2 Ltd.                           | 120.00                                 | 1.99                    | 147              | 29.29                     |
| 12    | AEW India West One Pvt Ltd.               | 80.00                                  | 1.99                    | 98               | 19.52                     |
| 13    | NTPC Renewable Energy Ltd.                | 150.00                                 | 2.20                    | 123              | 26.98                     |
| 14    | Sprng Ujjvala Energy Pvt Ltd.             | 120.00                                 | 2.20                    | 98               | 21.58                     |
| 15    | SJVN Ltd.                                 | 70.00                                  | 2.21                    | 57               | 12.65                     |



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| S No. | Name of the Station | Rated Capacity allocated to GUVNL (MW) | Variable Cost (Rs./kWh) | Generation (MUs) | Variable Cost (Rs. Crore) |
|-------|---------------------|--|-------------------------|------------------|---------------------------|
| 16    | TP Saurya Ltd.      | 60.00                                  | 2.20                    | 49               | 10.79                     |
| 17    | Coal India Ltd.     | 100.00                                 | 2.20                    | 82               | 17.99                     |

The list of plants mentioned in the Table above are expected to be completed and operational by March 2022. Therefore, the Commission has considered generation from these plants for RPO compliance of FY 2022-23. Thus, the Commission has considered exiting tied up sources and capacity of new plants expected to be operational during FY 2022-23.

Accordingly, the Commission has approved the procurement of RE power for meeting RPO target for FY 2022-23, as detailed in the Table below:

**Table 5-41: Procurement from RE for meeting projected RPO for FY 2022-23 (MUs)**

| Particulars          | Solar           | Wind  | Others | Total  |
|----------------------|-----------------|-------|--------|--------|
| Total Power Purchase | <b>1,07,006</b> |       |        |        |
| RPO Target (%)       | 8.00%           | 8.25% | 0.75%  | 17.00% |
| RPO Target           | 8560            | 8828  | 803    | 18191  |
| <b>RE Purchase</b>   | 9732            | 7214  | 616    | 17562  |
| Unmet RPO            | 0               | 1614  | 186    | 1800   |

Further, for the purpose of the ARR for FY 2022-23, the Commission has considered unmet RPO to be purchased from Green Term Ahead Market (GTAM) at Rs. 4.02 per kWh, which is the average price discovered in the Power Exchanges till quarter 3 of FY 2021-22. However, the DISCOMs should endeavour to purchase the balance RE power to meet the RPO target for FY 2022-23 from the cheapest sources available.

The Commission noted that DISCOMs have proposed to purchase 6166 MUs of energy through Power Exchange in FY 2022-23. The Commission has deducted the unmet RPO purchased from GTAM from the power proposed to be purchased from the Power Exchange. The net power purchase from Power Exchange is worked out to be 4366 MUs for FY 2022-23. The rate of power purchase from Power Exchange proposed by

DISCOMs is Rs. 4.00 per unit, which is reasonable, considering the actual average rate of power purchase from Power Exchange at Rs. 3.92/kWh for the 12 months of 2021. Therefore, there is a marginal difference in the cost of power purchase due to consideration of GTAM power.

### **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 5-42: Energy requirement and Energy dispatchable as projected by the DISCOMs (MUs)**

| Sr. No | DISCOM                             | FY 2022-23      |
|--------|------------------------------------|-----------------|
| 1      | DGVCL                              | 26,520          |
| 2      | MGVCL                              | 13,424          |
| 3      | UGVCL                              | 39,343          |
| 4      | PGVCL                              | 30,200          |
| 5      | Total requirement at four DISCOMs  | 1,09,487        |
| 6      | Tradable energy projected by GUVNL | -               |
| 7      | <b>Total Despatch units</b>        | <b>1,09,487</b> |

Though the availability is in the order of 1,33,668 MUs during FY 2022-23, DISCOMs have limited the despatch to 1,09,487 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 2022-23.

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:

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**Table 5-43: Energy requirement and Energy dispatchable as projected by the DISCOMs (MUs)**

| Sr. No | DISCOM                             | Energy Requirement for FY 2022-23 |                 |
|--------|------------------------------------|-----------------------------------|-----------------|
|        |                                    | Projected                         | Approved        |
| 1      | DGVCL                              | 26,520                            | 26,126          |
| 2      | MGVCL                              | 13,424                            | 13,168          |
| 3      | UGVCL                              | 39,343                            | 38,643          |
| 4      | PGVCL                              | 30,200                            | 29,069          |
| 5      | Total requirement at four DISCOMs  | 1,09,487                          | <b>1,07,006</b> |
| 6      | Tradable energy projected by GUVNL | -                                 | -               |
| 7      | <b>Total Despatch units</b>        | <b>1,09,487</b>                   | <b>1,07,006</b> |

#### 5.9.4 Power Purchase during FY 2022-23

The power purchase for FY 2022-23 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 2022-23 are given in the Table below:

**Table 5-44: Energy Available & Dispatchable projected for FY 2022-23**

| Sr. No. | Name of the Station            | Available (MUs) | Dispatch (MUs) |
|---------|--------------------------------|-----------------|----------------|
|         | <b>GSECL</b>                   |                 |                |
| 1       | GSECL Gandhinagar - 5          | 1,249           | 117            |
| 2       | GSECL Wanakbori - 7            | 1,165           | 117            |
| 3       | GSECL Utran Expan              | 797             | 598            |
| 4       | GSECL Dhuvaran - 7             | 225             | 225            |
| 5       | GSECL Dhuvaran - 8             | 238             | 67             |
| 6       | GSECL Ukai                     | 2,918           | 340            |
| 7       | GSECL Ukai Expan               | 3,088           | 288            |
| 8       | GSECL Gandhinagar 3-4          | 1,831           | 233            |
| 9       | GSECL Wanakbori 1-6            | 5,524           | 703            |
| 10      | GSECL Sikka Expansion          | 2,790           | 279            |
| 11      | GSECL Kutch Lignite            | 434             | 40             |
| 12      | GSECL Kutch Lignite Exp unit 4 | 434             | 434            |





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| <b>Sr. No.</b> | <b>Name of the Station</b>                   | <b>Available (MUs)</b> | <b>Dispatch (MUs)</b> |
|----------------|--|------------------------|-----------------------|
| 13             | GSECL Ukai Hydro                             | 345                    | 345                   |
| 14             | GSECL Kadana Hydro                           | 126                    | 126                   |
| 15             | GSECL Dhuvaran CCPP III                      | 799                    | 224                   |
| 16             | GSECL BLTPS                                  | 2,339                  | 273                   |
| 17             | GSECL Wanakbori - 8                          | 5,312                  | 465                   |
|                | <b>Sub Total</b>                             | <b>29,613</b>          | <b>4,873</b>          |
|                | <b>IPP's</b>                                 |                        |                       |
| 1              | Gujarat State Energy Generation              | 383                    | 93                    |
| 2              | Gujarat State Energy Generation Expansion    | 1,265                  | 1,265                 |
| 3              | Gujarat Industries Power Co Ltd (165 MW)     | 18                     | 18                    |
| 4              | Gujarat Industries Power Co Ltd (SLPP)       | 1,182                  | 1,182                 |
| 5              | Gujarat Mineral Development Corp.            | 291                    | 291                   |
| 6              | Gujarat Industries Power Co Ltd (145 MW)     | 96                     | 96                    |
| 7              | Gujarat Industries Power Co Ltd (SLPP - Exp) | 1,512                  | 1,512                 |
| 8              | GPPC Pipavav                                 | 2,677                  | 2,677                 |
| 9              | Essar Power Gujarat Ltd                      | 7,008                  | 7,008                 |
| 10             | Adani Power Ltd - (Unit 1 - 4)               | 8,410                  | 8,410                 |
| 11             | ACB India Ltd.                               | 1,402                  | 1,402                 |
| 12             | Coastal Gujarat Power Co Ltd                 | 12,649                 | 12,649                |
| 13             | MTOA   | 7,446                  | 613                   |
| 14             | Power Exchange                               | 4,366                  | 4,366                 |
| 15             | Short term Bilateral                         | 2,000                  | 2,000                 |
|                | <b>Sub Total</b>                             | <b>50,705</b>          | <b>43,582</b>         |
|                | <b>Central Sector</b>                        |                        |                       |
| 1              | NPC-Tarapur 1 & 2                            | 757                    | 757                   |
| 2              | NPC-Tarapur 3 & 4                            | 1,747                  | 1,747                 |
| 3              | NPC-Kakrapar                                 | 856                    | 856                   |
| 4              | NTPC-Vindhyachal - I                         | 1,676                  | 1,676                 |
| 5              | NTPC-Vindhyachal - II                        | 1,746                  | 1,746                 |
| 6              | NTPC-Vindhyachal - III                       | 1,950                  | 1,950                 |
| 7              | NTPC-Korba                                   | 2,630                  | 2,630                 |
| 8              | NTPC-Korba -III                              | 909                    | 909                   |
| 9              | NTPC-Kawas                                   | 398                    | 398                   |
| 10             | NTPC-Jhanor                                  | 505                    | 505                   |
| 11             | NTPC-Sipat-I                                 | 4,024                  | 4,024                 |
| 12             | NTPC-Sipat - II                              | 1,994                  | 1,994                 |



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| <b>Sr. No.</b> | <b>Name of the Station</b> | <b>Available (MUs)</b> | <b>Dispatch (MUs)</b> |
|----------------|----------------------------|------------------------|-----------------------|
| 13             | NTPC-Kahalgaon I           | 1,301                  | 1,301                 |
| 14             | NTPC-Vindhyachal - IV      | 1,804                  | 1,804                 |
| 15             | NTPC-Mauda                 | 2,271                  | 2,271                 |
| 16             | NTPC-Vindhyachal - V       | 709                    | 709                   |
| 17             | NTPC-Mauda II              | 2,612                  | 305                   |
| 18             | NTPC-Gadarwara             | 2,328                  | 2,328                 |
| 19             | NTPC-LARA                  | 1,299                  | 1,299                 |
| 20             | NTPC-Khargone              | 1,884                  | 1,884                 |
| 21             | NTPC-Farakka - 3           | 405                    | 405                   |
| 22             | NTPC-Kahalgaon II          | 1,019                  | 1,019                 |
| 23             | NTPC-Farakka - 1 & 2       | 1,930                  | 1,930                 |
| 24             | NTPC-Talcher               | 166                    | 166                   |
| 25             | NTPC-Darlipalli            | 98                     | 98                    |
| 26             | NTPC-Unchahar - 1          | 383                    | 45                    |
| 27             | NTPC-Tanda - 2             | 309                    | 309                   |
| 28             | NTPC Solapur               | 120                    | 14                    |
| 29             | NTPC Ramagundam - 1 & 2    | 2,352                  | 2,352                 |
| 30             | Sardar Sarovar Nigam Ltd   | 1,715                  | 1,715                 |
|                | <b>Sub Total</b>           | <b>41,896</b>          | <b>39,144</b>         |
|                | <b>Others</b>              |                        |                       |
| 1              | Captive Power              | 44                     | 44                    |
|                | <b>Renewable</b>           |                        |                       |
| 1              | Wind Farms                 | 7,214                  | 7,214                 |
| 2              | Solar                      | 6,140                  | 6,140                 |
| 3              | Small/Mini Hydal           | 53                     | 53                    |
| 4              | Biomass                    | 93                     | 93                    |
| 5              | Solar (New)                | 3,591                  | 3,591                 |
| 6              | Wind (New)                 | -                      | -                     |
| 7              | Others (New)               | 471                    | 471                   |
| 8              | Purchase from GTAM         |                        | 1,800                 |
|                | <b>Sub Total</b>           | <b>17,606</b>          | <b>19,406</b>         |
|                | <b>TOTAL</b>               | <b>1,39,820</b>        | <b>1,07,006</b>       |



### **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 5% availability of each plant has been considered to take care of the peak loads and peak season requirements.
- Availability of Thermal Stations has been considered at 85% / 80% as defined in applicable ERC Regulations and performance in previous years.
- 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. 2025 of 2021.
- The Fixed Cost and Variable Cost for IPP, renewable and central sector plants have been taken as per actuals of FY 2020-21 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 2022-23 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. 2025 of 2021. For purchases from central generating stations, IPPs and others, the fixed and variable costs are taken based on actuals for FY 2020-21 except Vindhyachal-1, which has been taken from latest CERC Order. The Commission has also considered the RPO target for DISCOMs and considered unmet RPO from GTAM at Rs. 4.02 per kWh. The unmet amount of RPO of 1800 MUs have been deducted from energy projected to be purchased from Power Exchange by DISCOMs.

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The power purchase costs for FY 2022-23 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 2022-23 as approved by the Commission is shown in the Table below:

**Table 5-45: Approved Power Purchase Cost for FY 2022-23**

| 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.) |
|---------|--|-----------------|----------------|-------------------------|-------------------------|----------------------------|-------------------------|
|         | <b>GSECL</b>                               |                 |                |                         |                         |                            |                         |
| 1       | GSECL Gandhinagar - 5                      | 1,249           | 117            | 142                     | 3.78                    | 44                         | 186                     |
| 2       | GSECL Wanakbori - 7                        | 1,165           | 117            | 148                     | 4.07                    | 47                         | 195                     |
| 3       | GSECL Utran Expansion                      | 797             | 598            | 221                     | 2.83                    | 169                        | 390                     |
| 4       | GSECL Dhuvaran - 7                         | 225             | 225            | 64                      | 2.66                    | 60                         | 124                     |
| 5       | GSECL Dhuvaran - 8                         | 238             | 67             | 85                      | 2.94                    | 20                         | 105                     |
| 6       | GSECL Ukai                                 | 2,918           | 340            | 305                     | 3.91                    | 133                        | 439                     |
| 7       | GSECL Ukai Expansion                       | 3,088           | 288            | 463                     | 3.45                    | 100                        | 562                     |
| 8       | GSECL Gandhinagar 3-4                      | 1,831           | 233            | 213                     | 4.29                    | 100                        | 313                     |
| 9       | GSECL Wanakbori 1-6                        | 5,524           | 703            | 548                     | 4.23                    | 298                        | 846                     |
| 10      | GSECL Sikka Expansion                      | 2,790           | 279            | 559                     | 3.96                    | 110                        | 669                     |
| 11      | GSECL Kutch Lignite                        | 434             | 40             | 90                      | 3.19                    | 13                         | 103                     |
| 12      | GSECL Kutch Lignite Expansion Unit 4       | 434             | 434            | 54                      | 3.04                    | 132                        | 185                     |
| 13      | GSECL Ukai Hydro                           | 345             | 345            | 33                      | -                       | -                          | 33                      |
| 14      | GSECL Kadana Hydro                         | 126             | 126            | 56                      | -                       | -                          | 56                      |
| 15      | GSECL Dhuvaran CCPP III                    | 799             | 224            | 97                      | 2.90                    | 65                         | 162                     |
| 16      | GSECL BLTPS                                | 2,339           | 273            | 222                     | 2.98                    | 81                         | 303                     |
| 17      | GSECL Wanakbori - 8                        | 5,312           | 465            | 838                     | 3.58                    | 167                        | 1,004                   |
|         | <b>Sub Total</b>                           | <b>29,613</b>   | <b>4,873</b>   | <b>4,138</b>            |                         | <b>1,538</b>               | <b>5,676</b>            |
|         | <b>IPP's</b>                               |                 |                |                         |                         |                            |                         |
| 1       | Gujarat State Energy Generation            | 383             | 93             | 50                      | 3.00                    | 28                         | 78                      |
| 2       | Gujarat State Energy Generation Expansion  | 1,265           | 1,265          | 205                     | 2.79                    | 353                        | 559                     |
| 3       | Gujarat Industries Power Co. Ltd. (165 MW) | 18              | 18             | -                       | 3.54                    | 6                          | 6                       |
| 4       | Gujarat Industries Power Co. Ltd. (SLPP)   | 1,182           | 1,182          | 107                     | 1.85                    | 219                        | 325                     |



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| 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.) |
|---------|--|-----------------|----------------|-------------------------|-------------------------|----------------------------|-------------------------|
| 5       | Gujarat Mineral Development Corp.                    | 291             | 291            | 33                      | 1.44                    | 42                         | 75                      |
| 6       | Gujarat Industries Power Co. Ltd. (145 MW)           | 96              | 96             | 4                       | 2.21                    | 21                         | 26                      |
| 7       | Gujarat Industries Power Co. Ltd. (SLPP - Expansion) | 1,512           | 1,512          | 225                     | 1.43                    | 216                        | 441                     |
| 8       | GPPC Pipavav   | 2,677           | 2,677          | 319                     | 2.79                    | 747                        | 1,066                   |
| 9       | Essar Power Gujarat Ltd.                             | 7,008           | 7,008          | 631                     | 2.03                    | 1,421                      | 2,052                   |
| 10      | Adani Power Ltd - (Unit 1 - 4)                       | 8,410           | 8,410          | 631                     | 2.30                    | 1,936                      | 2,566                   |
| 11      | ACB India Ltd.                                       | 1,402           | 1,402          | 203                     | 0.75                    | 106                        | 309                     |
| 12      | Coastal Gujarat Power Co. Ltd.                       | 12,649          | 12,649         | 1,138                   | 1.99                    | 2,522                      | 3,660                   |
| 13      | MTOA   | 7,446           | 613            | -                       | 3.68                    | 226                        | 226                     |
| 14      | Power Exchange                                       | 4,366           | 4,366          | -                       | 4.00                    | 1,746                      | 1,746                   |
| 15      | Short term Bilateral                                 | 2,000           | 2,000          | -                       | 4.00                    | 800                        | 800                     |
|         | <b>Sub Total</b>                                     | <b>50,705</b>   | <b>43,582</b>  | <b>3,547</b>            |                         | <b>10,389</b>              | <b>13,936</b>           |
|         | <b>Central Sector</b>                                |                 |                |                         |                         |                            |                         |
| 1       | NPC-Tarapur 1 & 2                                    | 757             | 757            | -                       | 2.60                    | 197                        | 197                     |
| 2       | NPC-Tarapur 3 & 4                                    | 1,747           | 1,747          | -                       | 3.42                    | 597                        | 597                     |
| 3       | NPC-Kakrapar   | 856             | 856            | -                       | 2.31                    | 198                        | 198                     |
| 4       | NTPC-Vindhyachal - I                                 | 1,676           | 1,676          | 150                     | 1.695                   | 284                        | 434                     |
| 5       | NTPC-Vindhyachal - II                                | 1,746           | 1,746          | 122                     | 1.62                    | 283                        | 405                     |
| 6       | NTPC-Vindhyachal - III                               | 1,950           | 1,950          | 204                     | 1.60                    | 313                        | 516                     |
| 7       | NTPC-Korba   | 2,630           | 2,630          | 180                     | 1.48                    | 390                        | 571                     |
| 8       | NTPC-Korba -III                                      | 909             | 909            | 126                     | 1.46                    | 133                        | 259                     |
| 9       | NTPC-Kawas   | 398             | 398            | 114                     | 2.11                    | 84                         | 198                     |
| 10      | NTPC-Jhanor  | 505             | 505            | 182                     | 2.28                    | 115                        | 297                     |
| 11      | NTPC-Sipat-I   | 4,024           | 4,024          | 525                     | 1.46                    | 586                        | 1,111                   |
| 12      | NTPC-Sipat - II                                      | 1,994           | 1,994          | 247                     | 1.50                    | 299                        | 546                     |
| 13      | NTPC-Kahlagaon I                                     | 1,301           | 1,301          | 147                     | 2.19                    | 284                        | 431                     |
| 14      | NTPC-Vindhyachal - IV                                | 1,804           | 1,804          | 282                     | 1.58                    | 284                        | 567                     |
| 15      | NTPC-Mauda   | 2,271           | 2,271          | 604                     | 2.77                    | 630                        | 1,234                   |
| 16      | NTPC-Vindhyachal - V                                 | 709             | 709            | 119                     | 1.63                    | 115                        | 234                     |
| 17      | NTPC-Mauda II  | 2,612           | 305            | 550                     | 2.93                    | 89                         | 639                     |
| 18      | NTPC-Gadarwara                                       | 2,328           | 2,328          | 483                     | 2.54                    | 592                        | 1,076                   |
| 19      | NTPC-LARA  | 1,299           | 1,299          | 217                     | 2.13                    | 277                        | 494                     |



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| 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.) |
|---------|--------------------------|-----------------|-----------------|-------------------------|-------------------------|----------------------------|-------------------------|
| 20      | NTPC-Khargone            | 1,884           | 1,884           | 342                     | 2.77                    | 523                        | 864                     |
| 21      | NTPC-Farakka - 3         | 405             | 405             | 69                      | 2.59                    | 105                        | 174                     |
| 22      | NTPC-Kahalgaoon II       | 1,019           | 1,019           | 111                     | 2.12                    | 216                        | 327                     |
| 23      | NTPC-Farakka - 1 & 2     | 1,930           | 1,930           | 164                     | 2.64                    | 510                        | 674                     |
| 24      | NTPC-Talcher             | 166             | 166             | 16                      | 1.91                    | 32                         | 48                      |
| 25      | NTPC-Darlipalli          | 98              | 98              | 21                      | 1.12                    | 11                         | 32                      |
| 26      | NTPC-Unchahar - 1        | 383             | 45              | 68                      | 3.06                    | 14                         | 82                      |
| 27      | NTPC-Tanda - 2           | 309             | 309             | 50                      | 2.58                    | 80                         | 129                     |
| 28      | NTPC Solapur             | 120             | 14              | 29                      | 3.80                    | 5                          | 35                      |
| 29      | NTPC Ramagundam - 1 & 2  | 2,352           | 2,352           | 229                     | 2.42                    | 569                        | 798                     |
| 30      | Sardar Sarovar Nigam Ltd | 1,715           | 1,715           | 148                     | 2.05                    | 352                        | 499                     |
|         | <b>Sub Total</b>         | <b>41,896</b>   | <b>39,144</b>   | <b>5,497</b>            |                         | <b>8,168</b>               | <b>13,665</b>           |
|         | <b>Others</b>            |                 |                 |                         |                         |                            |                         |
| 1       | Captive Power            | 44              | 44              | -                       | 2.14                    | 9                          | 9                       |
|         | <b>Renewable</b>         |                 |                 |                         |                         |                            |                         |
| 1       | Wind Farms               | 7,214           | 7,214           | -                       | 3.64                    | 2,628                      | 2,628                   |
| 2       | Solar                    | 6,140           | 6,140           | -                       | 4.96                    | 3,048                      | 3,048                   |
| 3       | Small/Mini Hydal         | 53              | 53              | -                       | 5.86                    | 31                         | 31                      |
| 4       | Biomass                  | 93              | 93              | -                       | 4.19                    | 39                         | 39                      |
| 5       | Solar (New)              | 3,591           | 3,591           | -                       | 2.33                    | 835                        | 835                     |
| 6       | Wind (New)               | -               | -               | -                       | -                       | -                          | -                       |
| 7       | Others (New)             | 471             | 471             | -                       | 6.64                    | 313                        | 313                     |
| 8       | Purchase from GTAM       |                 | 1,800           |                         | 4.02                    | 724                        | 724                     |
|         | <b>Sub Total</b>         | <b>17,606</b>   | <b>19,406</b>   | <b>-</b>                |                         | <b>7,627</b>               | <b>7,627</b>            |
|         | <b>TOTAL</b>             | <b>1,39,820</b> | <b>1,07,006</b> | <b>13,182</b>           |                         | <b>27,722</b>              | <b>40,904</b>           |

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 2022-23, 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 MGVCCL for FY 2022-23 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 93.35% of the Transmission Charges approved in the Tariff Order of GETCO for FY 2022-23 in Case No. 2026 of 2021.
- PGCIL charges for FY 2022-23 are considered based on actual payment made in latest month of FY 2021-22.
- SLDC Fees and Charges also have been considered as 93.35% of the SLDC Charges approved in the Tariff Order of SLDC for FY 2022-23 in Case No. 2027 of 2021.

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 5-46: Approved Transmission Charges for FY 2022-23**

| <b>Sr. No.</b> | <b>Particulars</b>                               | <b>FY 2022-23</b> |
|----------------|--|-------------------|
| 1              | PGCIL Charges (Rs. Crore)                        | 3,075             |
| 2              | Annual Transmission Charges of GETCO (Rs. Crore) | 4,597             |
| 3              | SLDC Charges (Rs. Crore)                         | 25                |

**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 2022-23:

**Table 5-47: Approved GUVNL Cost for FY 2022-23**

| <b>Sr. No.</b> | <b>Particulars</b>                            | <b>FY 2022-23</b> |
|----------------|---|-------------------|
| 1              | Energy handled (MUs)                          | 1,07,006          |
| 2              | GUVNL Cost at 4.00 Paise per Unit (Rs. Crore) | 428               |



### 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 5-48: Approved Fixed Cost of DISCOMs for FY 2022-23 (Rs. Crore)**

| Fixed cost | GETCO Cost | PGCIL Charges | SLDC Charges | Total Fixed Cost | DISCOM Fixed Cost |
|------------|------------|---------------|--------------|------------------|-------------------|
| 13,182     | 4,597      | 3,075         | 25           | 20,878           | 20,878            |

#### Variable Cost

The Commission has approved variable cost for DISCOMs for FY 2022-23, as detailed in the Table below:

**Table 5-49: Approved Variable Cost of DISCOMs for FY 2022-23 (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     |
| 27,722        | 428        | 28,150              | 1,07,006   | 2.63                   | 1,07,006 | 28,150        |

### 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 2022-23, as detailed in the Table below:

**Table 5-50: Approved Total Power Purchase Cost for FY 2022-23 (Rs. Crore)**

| DISCOMs Fixed cost | DISCOMs Variable Cost | Total Power Purchase Cost for DISCOMs |
|--------------------|-----------------------|---------------------------------------|
| 20,878             | 28,150                | 49,028                                |



### 5.9.10 Allocation of Power Purchase Cost under BST mechanism-Commission's Analysis

Power Purchase cost worked out as above for FY 2022-23 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 5-51: Approved Allocation of Power Purchase Cost (Rs. Crore)**

| Sr. No.  | Particulars  | DGVCL         | MGVCL        | PGVCL         | UGVCL         |
|----------|--|---------------|--------------|---------------|---------------|
| 1        | Sales (MUs)  | 23,324        | 11,418       | 31,141        | 25,909        |
| 2        | Revenue from Existing Tariff                               | 11,689        | 5,166        | 12,563        | 8,997         |
| 3        | Revenue from FPPPA @ Rs. 1.90/ unit                        | 4,433         | 2,170        | 5,918         | 4,924         |
| 4        | Other Income (Consumer Related)                            | 400           | 145          | 306           | 243           |
| 5        | Agricultural Subsidy                                       | 51            | 77           | 424           | 548           |
| <b>6</b> | <b>Total</b>   | <b>16,573</b> | <b>7,558</b> | <b>19,211</b> | <b>14,712</b> |
| 7        | Expense other than Power Purchase                          | 1,466         | 1,170        | 3,512         | 1,282         |
| 8        | Power Purchase Cost of SSDSP                               | 4             | 10           | 132           | 89            |
| 9        | Amount Available with DISCOM for Power purchase from GUVNL | 15,103        | 6,379        | 15,567        | 13,341        |

**Table 5-52: Approved total Revenue (GAP)/ Surplus (Rs. Crore)**

| S. No. | Particulars  | 2022-23 |
|--------|--|---------|
| 1      | Power Purchase Cost of GUVNL                             | 49,028  |
| 2      | Aggregate Amount available for power purchase from GUVNL | 50,390  |
| 3      | <b>Revenue (Gap)/Surplus</b>                             | 1,362   |



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**Table 5-53: Approved Bulk Supply Tariff for FY 2022-23 (Rs. Crore)**

| Sr. No. | Details  | 2022-23       |              |               |               |
|---------|--|---------------|--------------|---------------|---------------|
|         |  | DGVCL         | MGVCL        | PGVCL         | UGVCL         |
| 1       | <b>Revenue (Gap)/Surplus</b>                               | <b>1,362</b>  |              |               |               |
| 2       | Ratio of allocation of Revenue (Gap)/Surplus               | 24%           | 12%          | 36%           | 27%           |
| 3       | Revenue (Gap)/ Surplus allocation                          | 333           | 168          | 492           | 370           |
| 4       | Amount Available with DISCOM for Power purchase from GUVNL | 15,103        | 6,379        | 15,567        | 13,341        |
| 5       | Power purchase cost of GUVNL                               | <b>14,770</b> | <b>6,212</b> | <b>15,076</b> | <b>12,971</b> |
| 6       | Power purchase cost of SSDSP                               | 4             | 10           | 132           | 89            |
| 7       | <b>Power purchase cost of DISCOM</b>                       | 14,775        | 6,221        | 15,207        | 13,060        |
| 8       | Energy Purchase in DISCOM (MUs)                            | 26,141        | 13,202       | 39,108        | 29,383        |
| 9       | <b>Bulk Supply Tariff (Rs./kWh)</b>                        | <b>5.65</b>   | <b>4.71</b>  | <b>3.89</b>   | <b>4.44</b>   |

### 5.10 Capital Expenditure

MGVCL has claimed capital expenditure of Rs. 310.44 Crore for FY 2022-23, as detailed in the Table below:

**Table 5-54: Capital Expenditure Plan for FY 2022-23 (Rs. Crore)**

| Sr. No.  | Particulars                                  | FY 2022-23    |
|----------|--|---------------|
| <b>A</b> | <b>Distribution Schemes</b>                  |               |
|          | Normal Development Scheme                    | 80.00         |
|          | Distribution Infra & Shifting Schemes (DISS) | 20.00         |
|          | Electrification of hutments                  | 2.25          |
|          | Kutir Jyoti Scheme                           | 1.80          |
|          | Others Harijan Basti – Petapara              | 0.30          |
|          | System Improvement                           | 9.00          |
|          | <b>Total</b>                                 | <b>113.35</b> |
| <b>B</b> | <b>Rural Electrification Schemes</b>         |               |
|          | TASP (Wells & Petapara)                      | 65.00         |
|          | Special Component plan                       | 1.35          |
|          | RE Wells (OA +SPA)                           | 79.20         |



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| Sr. No.  | Particulars                             | FY 2022-23    |
|----------|---|---------------|
|          | Dark Zone                               | 10.39         |
|          | Surya Shakti Kisan Yojana               | -             |
|          | <b>Total</b>                            | <b>155.94</b> |
| <b>C</b> | <b>Central Government Scheme - Plan</b> |               |
|          | PSDF                                    | -             |
|          | <b>Total</b>                            | -             |
| <b>D</b> | <b>Other New Schemes</b>                |               |
|          | Sagar Khedu                             | 1.50          |
|          | Energy Conservation (HVDS)              | 4.50          |
|          | Vehicle                                 | -             |
|          | Sardar Krushi Jyoti Yojna               | 6.98          |
|          | Misc Civil + Electrical Works           | 25.54         |
|          | Furniture                               | 2.63          |
|          | <b>Total</b>                            | <b>41.15</b>  |
|          | <b>Capital Expenditure Total</b>        | <b>310.44</b> |

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 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.

**Distribution Infrastructure Shifting Scheme:**

Fund is booked under the scheme, as proposal from Municipal Corporation and Nagar Palika is essential as per the stipulation of the scheme. Based on proposal received from NP, MNP and GP, funds are booked.



**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. Fund utilized is Rs. 1.50 Crore.

**HVDS:**

HVDS is a High Voltage Distribution System of installing smaller size of Distribution Transformers and thereby reducing LT Lines up to negligible level by converting it into HT Line. To improve voltage profile in rural area, the small capacity of Distribution Transformers are to be installed by extending 11 kV Line as 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.

**SKJY (Sardar Krushi Jyoti Yojana):**

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

**TASP (Wells & Petapara)**

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

**SI Scheme:**

The prime objectives of MGCVCL's operations are to reduce Distribution and Commercial losses, to enhance revenue collection efficiency, to improve quality of power supply and

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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.

**Commission’s Analysis**

The Commission accepts the justification submitted by MGCVCL for the projected capital expenditure of Rs. 310.44 Crore for FY 2022-23. The Commission has approved the scheme-wise CAPEX as proposed by MGCVCL for FY 2022-23. 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 5-55: Approved Capital Expenditure Plan for FY 2022-23 (Rs. Crore)**

| Sr. No.  | Particulars                                  | Approved      |
|----------|--|---------------|
| <b>A</b> | <b>Distribution Schemes</b>                  |               |
|          | Normal Development Scheme                    | 80.00         |
|          | Distribution Infra & Shifting Schemes (DISS) | 20.00         |
|          | Electrification of hutments                  | 2.25          |
|          | Kutir Jyoti Scheme                           | 1.80          |
|          | Others Harijan Basti – Petapara              | 0.30          |
|          | System Improvement                           | 9.00          |
|          | <b>Total</b>                                 | <b>113.35</b> |
| <b>B</b> | <b>Rural Electrification Schemes</b>         |               |
|          | TASP (Wells & Petapara)                      | 65.00         |
|          | Special Component plan                       | 1.35          |
|          | RE Wells (OA +SPA)                           | 79.20         |
|          | Dark Zone                                    | 10.39         |
|          | Surya Shakti Kishan Yojana                   | -             |
|          | <b>Total</b>                                 | <b>155.94</b> |



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| Sr. No.  | Particulars                             | Approved      |
|----------|---|---------------|
| <b>C</b> | <b>Central Government Scheme - Plan</b> |               |
|          | PSDF                                    | -             |
|          | <b>Total</b>                            | -             |
| <b>D</b> | <b>Other New Schemes</b>                |               |
|          | Sagar Khedu                             | 1.50          |
|          | Energy Conservation (HVDS)              | 4.50          |
|          | Vehicle                                 | -             |
|          | Sardar Krushi Jyoti Yojna               | 6.98          |
|          | Misc Civil + Electrical Works           | 25.54         |
|          | Furniture                               | 2.63          |
|          | <b>Total</b>                            | <b>41.15</b>  |
|          | <b>Capital Expenditure Total</b>        | <b>310.44</b> |

### 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. 310.44 Crore for FY 2022-23, as detailed in the Table below:

**Table 5-56: Funding of Capitalisation for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars                | FY 2022-23    |
|---------|----------------------------|---------------|
| 1       | <b>Capitalization</b>      | <b>310.44</b> |
| 2       | Consumer Contribution      | 100.00        |
| 3       | Grants                     | 17.33         |
| 4       | Balance CAPEX for the Year | 193.11        |



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| Sr. No. | Particulars | FY 2022-23 |
|---------|-------------|------------|
| 5       | Debt @70%   | 135.18     |
| 6       | Equity @30% | 57.93      |

**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 2022-23 is detailed in the Table below:

**Table 5-57: Approved funding of Capital Expenditure Plan for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars                | Approved      |
|---------|----------------------------|---------------|
| 1       | <b>Capitalization</b>      | <b>310.44</b> |
| 2       | Consumer Contribution      | 100.00        |
| 3       | Grants                     | 17.33         |
| 4       | Balance CAPEX for the Year | 193.11        |
| 5       | Debt @70%                  | 135.18        |
| 6       | Equity @30%                | 57.93         |

**5.12 Operation and Maintenance (O&M) Expenses**

MGVCL has projected O&M expenses of Rs. 820.11 Crore for FY 2022-23, as detailed in the Table below:

**Table 5-58: Proposed O&M Expenses for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars                | FY 2022-23    |
|---------|----------------------------|---------------|
| 1       | Employee Cost              | 644.75        |
| 2       | R&M Expenses               | 67.62         |
| 3       | A&G Expenses               | 98.80         |
| 4       | RDSS Metering Opex         | 73.50         |
| 5       | Other Expenses Capitalised | (64.56)       |
| 6       | <b>O&amp;M Expenses</b>    | <b>820.11</b> |



**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 2022-23. However, due to unavoidable circumstances, there is a delay in framing the GERC (MYT) Regulations for the next Control Period, and hence, the applicability of the GERC (MYT) Regulations, 2016 has been extended by two years, to include FY 2022-23 also.

In the last Tariff Order, the Commission has given effect to the above-mentioned principle and calculated O&M expenses for FY 2021-22 based on actual O&M Expenses in the previous years, by adopting the same principles as adopted in the previous MYT Order. Adopting the similar principle, O&M expenses for FY 2022-23 would have been approved by allowing escalation rate of 5.72% on approved O&M expenses of FY 2021-22.

Considering the same, the O&M expenses for FY 2022-23 have been computed by applying escalation rate of 5.72% (as approved by the Commission in the GERC (MYT) Regulations, 2016) on the O&M expenses of FY 2021-22 as approved in Tariff Order dated 30<sup>th</sup> March, 2021.

**RDSS Metering Opex:** The Ministry of Power (MOP), New Delhi, has announced Revamped Distribution Sector Scheme (RDSS) vide Office Memorandum dated 20<sup>th</sup> 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.



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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 2022-23 will be as shown below:

**Table 5-59: Proposed Operational Cost under RDSS Metering Opex for FY 2022-23 (Rs. Crore)**

| <b>Sr. No.</b> | <b>Particular</b>                               | <b>Number of Meters</b> | <b>Annual Rate (Rs.)</b> | <b>Cost (Rs. Crore)</b> |
|----------------|---|-------------------------|--------------------------|-------------------------|
| <b>A</b>       | <b>B</b>  | <b>C</b>                | <b>D</b>                 | <b>E = (C*D)</b>        |
| 1              | Target for Single Phase Meters (New + Existing) | 6,30,000                | 1,020                    | 64.26                   |
| 2              | Target for Three Phase Meters (New + Existing)  | 70,000                  | 1,320                    | 9.24                    |

**Commission's Analysis**

The Employee expenses, R&M expenses and A&G expenses are commonly considered as O&M expenses. MGCVCL 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 2021-22 and 5.72% escalation rate. The Commission has gone through the computations of MGVCL in this regard.

In the background chapter, the Commission has stated that determination of ARR and Tariff for FY 2022-23 shall be taken as per GERC (MYT) Regulations, 2016. Accordingly, the Regulation 94.8 of the GERC (MYT) Regulations, 2016, provides for computation of O&M Expenses. The said Regulation is reproduced below:

*“94.8 Operation and Maintenance expenses:*

*a) The Operation and Maintenance expenses shall be derived on the basis of the average of the actual Operation and Maintenance expenses for the three (3) years ending March 31, 2015, subject to prudence check by the Commission.*

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

*Provided that in case, the Distribution Licensee has been in operation for less than three (3) years as on the date of effectiveness of these Regulations, the O&M Expenses shall be determined on case to case basis.”*

The Commission has considered FY 2022-23 as the extended year of the Control Period. Accordingly, GERC has computed the O&M Expenses for FY 2022-23 on the basis of the average of the actual approved O&M Expenses for the three (3) years ending 31<sup>st</sup> March, 2020, i.e., from FY 2017-18 to FY 2019-20. The Commission has not considered O&M Expenses of FY 2020-21 as there was a freeze on DA payments in this year. The average of such O&M Expenses has been considered as O&M Expenses for the financial year ended with 31<sup>st</sup> March, 2019 as a base year (FY 2018-19). Further, the y-o-y escalation @ 5.72% p.a. is applied on the O&M Expenses of the base year for computing the O&M Expenses for FY 2021-22. Further, O&M Expenses for FY 2021-22 have been escalated by 5.72% to derive Employee Cost, R&M Expenses, A&G Expenses for FY 2021-22 of FY 2022-23.

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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, Gol has allowed the amount of Rs. 73.50 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 2022-23, as detailed in Table below:

**Table 5-60: Approved O&M Expenses for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars                | FY 2022-23    |
|---------|----------------------------|---------------|
| 1       | Employee Cost              | 644.75        |
| 2       | R&M Expenses               | 67.62         |
| 3       | A&G Expenses               | 98.80         |
| 4       | RDSS Metering Opex         | 73.50         |
| 5       | Other Expenses Capitalised | (64.56)       |
| 6       | <b>O&amp;M Expenses</b>    | <b>820.11</b> |

### 5.13 Depreciation

MGVCL has projected depreciation of Rs. 300.26 Crore for FY 2022-23, as detailed in the Table below:

**Table 5-61: Depreciation for FY 2022-23 (Rs. Crore)**

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



### **Petitioner's submission**

MGVCL submitted that it has considered the closing Gross block of fixed assets of FY 2020-21 as the opening Gross block of fixed assets for FY 2021-22. The addition during FY 2021-22 is considered same as approved by the Commission in the Tariff Order dated 31<sup>st</sup> March 2021.

Accordingly, the closing balance of GFA for FY 2021-22 thus worked out is considered as opening balance of GFA for FY 2022-23. Addition for FY 2022-23 has been projected considering capitalisation during the year. Depreciation has been calculated taking into consideration the opening balance of assets in the beginning of the year and the projected capitalisation during the year. Depreciation rate for FY 2022-23 is considered same as actual depreciation rate of FY 2020-21.

### **Commission's Analysis**

The Commission notes that MGVCL has computed the depreciation for FY 2022-23, adopting the average rate of depreciation as per GERC MYT Regulations, 2016. The Commission has accordingly considered the Closing GFA as on 31<sup>st</sup> March, 2021 as approved for FY 2020-21 as the Opening GFA for FY 2021-22 and has considered the additions as proposed by MGVCL for FY 2021-22 to arrive at the Closing GFA for 2021-22, which in turn is considered as the Opening GFA as on 1st April, 2022. The additions during FY 2022-23 are considered as approved by the Commission. Accordingly, the Commission has approved the Depreciation as given in the Table below:

**Table 5-62: Approved Depreciation for FY 2022-23 (Rs. Crore)**

| <b>Sr. No.</b> | <b>Particulars</b>                   | <b>FY 2022-23</b> |
|----------------|--------------------------------------|-------------------|
| 1              | Gross Block in Beginning of the year | 6,487.24          |
| 2              | Additions during the Year (Net)      | 310.44            |
| 3              | Gross Block in closing of the year   | 6,797.68          |
| 4              | Average Gross Block of the year      | 6,642.46          |
| 5              | <b>Depreciation for the Year</b>     | <b>300.28</b>     |
| 6              | Average Rate of Depreciation         | 4.52%             |

### **5.14 Interest on Loan**

MGVCL has projected the interest on Loan as detailed in the Table below:

**Table 5-63: Interest and Finance Charge for FY 2022-23 (Rs. Crore)**

| <b>Sr. No</b> | <b>Particulars</b>                            | <b>FY 2022-23</b> |
|---------------|---|-------------------|
| 1             | Opening Loans                                 | -                 |
| 2             | Loan Additions during the Year                | 135.18            |
| 3             | Repayment during the Year                     | 135.18            |
| 4             | Closing Loans                                 | -                 |
| 5             | Average Loans                                 | -                 |
| <b>6</b>      | <b>Weighted average rate of interest</b>      | <b>6.30%</b>      |
| 7             | Interest on Loan                              | -                 |
| 8             | Interest on security deposit                  | 44.56             |
| 9             | Other Bank Charges                            | 1.18              |
| <b>10</b>     | <b>Total Interest &amp; Financial Charges</b> | <b>45.74</b>      |

#### **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 2020-21 is considered as opening balance of FY 2021-22. Addition and repayment during FY 2021-22 are considered same as approved by the Commission in the Tariff Order dated 31<sup>st</sup> March 2021 to work out closing balance of FY 2021-22. The closing balance of FY 2021-22 thus worked out has been considered as opening balance of normative loan for FY 2022-23.

The loan addition for FY 2022-23 is considered as 70% of the capitalisation excluding consumer contribution and grants and repayment during the year is equivalent to the depreciation for FY 2022-23. The rate of interest has been taken as the weighted average rate of interest on the actual loan portfolio for FY 2020-21, i.e., 6.30%.

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 2020-21.



### **Commission's Analysis**

The Commission has considered the Closing normative loan as on 31<sup>st</sup> March, 2021 as approved for FY 2020-21 as the Opening normative loan for FY 2021-22 and has considered the additions as proposed by MGVCCL for FY 2021-22 to arrive at the Closing normative loan for 2021-22, which in turn is considered as the Opening normative loan as on 1st April, 2022. The additions during FY 2022-23 are considered as approved by the Commission.

The Commission has considered the rate of interest on long-term loans and consumer security deposit as 6.30% and 4.25%, respectively.

Further, MGVCCL has considered other bank charges of Rs. 1.18 Crore as claimed in FY 2020-21. The Commission has considered the other bank charges for FY 2022-23 at the level of actuals for FY 2020-21. Considering all the above, the Commission has computed the interest and finance charges for FY 2022-23, as detailed in the Table below:

**Table 5-64: Approved Interest and Finance Charge for FY 2022-23 (Rs. Crore)**

| <b>Sr. No</b> | <b>Particulars</b>                            | <b>FY 2022-23</b> |
|---------------|---|-------------------|
| 1             | Opening Loans                                 | -                 |
| 2             | Loan Additions during the Year                | 135.18            |
| 3             | Repayment during the Year                     | 135.18            |
| 4             | Closing Loans                                 | -                 |
| 5             | Average Loans                                 | -                 |
| <b>6</b>      | <b>Weighted average rate of interest</b>      | <b>6.30%</b>      |
| 7             | Interest on Loan                              | -                 |
| 8             | Interest on security deposit                  | 44.56             |
| 9             | Other Bank Charges                            | 0.54              |
| <b>10</b>     | <b>Total Interest &amp; Financial Charges</b> | <b>45.10</b>      |

### **5.15 Interest on Working Capital**

MGVCCL has projected the interest on working capital for FY 2022-23, as detailed in the Table below:



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**Table 5-65: Interest on Working Capital for FY 2022-23 (Rs. Crore)**

| <b>Sr. No.</b> | <b>Particulars</b>                  | <b>FY 2022-23</b> |
|----------------|-------------------------------------|-------------------|
| 1              | O & M expenses                      | 68.34             |
| 2              | Maintenance Spares                  | 64.86             |
| 3              | Receivables                         | 620.31            |
| 4              | Less: Consumers' security deposit   | 1,048.52          |
| 5              | <b>Total Working Capital</b>        | <b>(295.01)</b>   |
| 6              | Rate of Interest on Working Capital | 9.50%             |
| 7              | <b>Interest on Working Capital</b>  | <b>-</b>          |

**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 2022-23.

**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 5-66: Approved Interest on Working Capital for FY 2022-23 (Rs. Crore)**

| <b>Sr. No.</b> | <b>Particulars</b>                  | <b>FY 2022-23</b> |
|----------------|-------------------------------------|-------------------|
| 1              | O & M expenses                      | 68.34             |
| 2              | Maintenance Spares                  | 64.87             |
| 3              | Receivables                         | 629.86            |
| 4              | Less: Consumers' security deposit   | 1,048.52          |
| 5              | <b>Total Working Capital</b>        | <b>(285.44)</b>   |
| 6              | Rate of Interest on Working Capital | 9.50%             |
| 7              | <b>Interest on Working Capital</b>  | <b>-</b>          |



The Commission, accordingly, approves the interest on working capital as Nil as detailed in the above Table for FY 2022-23.

#### **5.16 Return on equity**

MGVCL has projected the Return on Equity for FY 2022-23, as detailed in the Table below:

**Table 5-67: Return on Equity for FY 2022-23 (Rs. Crore)**

| <b>Sr. No.</b> | <b>Particulars</b>           | <b>FY 2022-23</b> |
|----------------|------------------------------|-------------------|
| 1              | Opening Equity Capital       | 1,236.38          |
| 2              | Additions during the year    | 57.93             |
| 3              | Closing Equity               | 1,294.31          |
| 4              | Average Equity               | 1,265.34          |
| 5              | Rate of Return on the Equity | 14%               |
| 6              | <b>Return on Equity</b>      | <b>177.15</b>     |

#### **Petitioner's submission**

MGVCL submitted that the closing balance of equity for FY 2020-21 as calculated in this petition is taken as opening balance of FY 2021-22. Addition during FY 2021-22 is considered same as approved by the Commission in its Tariff Order dated 31<sup>st</sup> March, 2021 to work out closing balance of FY 2021-22. Closing balance of FY 2021-22 thus worked out has been considered as opening balance of equity for FY 2022-23.

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 2022-23 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 2022-23, as approved in the Table below:



**Table 5-68: Approved Return on Equity for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars                  | FY 2022-23    |
|---------|------------------------------|---------------|
| 1       | Opening Equity Capital       | 1,235.53      |
| 2       | Additions during the year    | 57.93         |
| 3       | Closing Equity               | 1,293.47      |
| 4       | Average Equity               | 1,264.50      |
| 5       | Rate of Return on the Equity | 14%           |
| 6       | <b>Return on Equity</b>      | <b>177.03</b> |

### 5.17 Provision for Bad and Doubtful Debt

#### Petitioner's submission

MGVCL submitted that provision for bad & doubtful debts is considered same as actuals of FY 2020-21. It is a very legitimate expenditure, which is associated with the business risk and is a consumer related expense as MGVCL is in the distribution business. MGVCL has considered provision for bad debts as under:

**Table 5-69: Bad and Doubtful Debt for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars             | FY 2022-23 |
|---------|-------------------------|------------|
| 1       | Provision for Bad Debts | 0.01       |

#### 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.0.01 Crore in the truing up for FY 2020-21 and same has been considered for FY 2022-23 also. The provision of Bad and Doubtful Debts for FY 2022-23 approved by the Commission is as under:

**Table 5-70: Approved Bad and Doubtful Debts (Rs. Crore)**

| Sr. No. | Particulars             | FY 2022-23 |
|---------|-------------------------|------------|
| 1       | Provision for Bad Debts | 0.01       |



## 5.18 Provision for Tax

### Petitioner's submission

MGVCL submitted that provision for tax is considered as actual tax paid for FY 2020-21, which is as under:

**Table 5-71: Income Tax Projected for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars       | FY 2022-23 |
|---------|-------------------|------------|
| 1       | Provision for Tax | 19.58      |

### 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 2020-21 and the Income Tax admitted in the truing up for FY 2020-21 is Rs. 19.58 Crore. Therefore, provision of Tax approved for FY 2022-23 is shown in the Table below:

**Table 5-72: Approved Income Tax for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars       | FY 2022-23 |
|---------|-------------------|------------|
| 1       | Provision for Tax | 19.58      |

## 5.19 Non-Tariff Income

### Petitioner's submission

MGVCL has considered the Non-Tariff Income for FY 2022-23 same as actuals of FY 2020-21, as shown in the Table below:

**Table 5-73: Non-Tariff Income FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars       | FY 2022-23 |
|---------|-------------------|------------|
| 1       | Non-Tariff Income | 139.39     |

**Commission’s Analysis**

The Commission has approved NTI for FY 2022-23 same as actuals of FY 2020-21, as shown in the Table below:

**Table 5-74: Approved Non-Tariff Income FY 2022-23 (Rs. Crore)**

| Sr. No. | Particular        | Approved |
|---------|-------------------|----------|
| 1       | Non-Tariff Income | 139.39   |

**5.20 ARR for FY 2022-23**

**Petitioner’s submission**

The ARR projected by MGVCCL for FY 2022-23 is detailed in the Table below:

**Table 5-75: Projected ARR for FY 2022-23 (Rs. Crore)**

| Sr. No.   | Particulars                                    | FY 2022-23      |
|-----------|--|-----------------|
| 1         | Cost of Power Purchase                         | 6,317.26        |
| 2         | Operation & Maintenance Expenses               | 820.11          |
| 2.1       | Employee Cost                                  | 644.75          |
| 2.2       | Repair & Maintenance                           | 67.62           |
| 2.3       | Administration & General Charges               | 98.80           |
| 2.4       | RDSS Metering Opex                             | 73.50           |
| 2.5       | Other Expenses Capitalised                     | (64.56)         |
| 3         | Depreciation                                   | 300.26          |
| 4         | Interest & Finance Charges                     | 45.74           |
| 5         | Interest on Working Capital                    | -               |
| 6         | Provision for Bad Debts                        | 0.01            |
| <b>7</b>  | <b>Sub-Total [1 to 6]</b>                      | <b>7,483.37</b> |
| 8         | Return on Equity                               | 177.15          |
| 9         | Provision for Tax                              | 19.58           |
| <b>10</b> | <b>Total Expenditure (7 to 9)</b>              | <b>7,680.09</b> |
| 11        | Less: Non-Tariff Income                        | 139.39          |
| <b>12</b> | <b>Aggregate Revenue Requirement (10 - 11)</b> | <b>7,540.70</b> |



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**Commission's Analysis**

As mentioned earlier in Section 5.8.11 of this Order, MGVCL has revised the power purchase cost for FY 2022-23. Accordingly, MGVCL has submitted the revised ARR for FY 2022-23 as shown below:

**Table 5-76: Revised Projected ARR for FY 2022-23 (Rs. Crore)**

| <b>Sr. No.</b> | <b>Particulars</b>                             | <b>FY 2022-23</b> |
|----------------|--|-------------------|
| 1              | Cost of Power Purchase                         | 6,227.54          |
| 2              | Operation & Maintenance Expenses               | 820.11            |
| 2.1            | Employee Cost                                  | 644.75            |
| 2.2            | Repair & Maintenance                           | 67.62             |
| 2.3            | Administration & General Charges               | 98.80             |
| 2.4            | RDSS Metering Opex                             | 73.50             |
| 2.5            | Other Expenses Capitalised                     | (64.56)           |
| 3              | Depreciation                                   | 300.26            |
| 4              | Interest & Finance Charges                     | 45.74             |
| 5              | Interest on Working Capital                    | -                 |
| 6              | Provision for Bad Debts                        | 0.01              |
| <b>7</b>       | <b>Sub-Total [1 to 6]</b>                      | <b>7,393.65</b>   |
| 8              | Return on Equity                               | 177.15            |
| 9              | Provision for Tax                              | 19.58             |
| <b>10</b>      | <b>Total Expenditure (7 to 9)</b>              | <b>7,590.37</b>   |
| 11             | Less: Non-Tariff Income                        | 139.39            |
| <b>12</b>      | <b>Aggregate Revenue Requirement (10 - 11)</b> | <b>7,450.98</b>   |

The Commission has analysed the components of ARR in the foregoing paragraphs and approved ARR for FY 2022-23 as summarised in the Table below:

**Table 5-77: Approved ARR for FY 2022-23 (Rs. Crore)**

| <b>Sr. No.</b> | <b>Particulars</b>               | <b>FY 2022-23</b> |
|----------------|----------------------------------|-------------------|
| 1              | Cost of Power Purchase           | 6,221.05          |
| 2              | Operation & Maintenance Expenses | 820.11            |
| 2.1            | Employee Cost                    | 644.75            |

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| <b>Sr. No.</b> | <b>Particulars</b>                             | <b>FY 2022-23</b> |
|----------------|--|-------------------|
| 2.2            | Repair & Maintenance                           | 67.62             |
| 2.3            | Administration & General Charges               | 98.80             |
| 2.4            | RDSS Metering Opex                             | 73.50             |
| 2.5            | Other Expenses Capitalised                     | (64.56)           |
| 3              | Depreciation                                   | 300.28            |
| 4              | Interest & Finance Charges                     | 45.10             |
| 5              | Interest on Working Capital                    | -                 |
| 6              | Provision for Bad Debts                        | 0.01              |
| <b>7</b>       | <b>Sub-Total [1 to 6]</b>                      | <b>7,386.54</b>   |
| 8              | Return on Equity                               | 177.03            |
| 9              | Provision for Tax / Tax Paid                   | 19.58             |
| <b>10</b>      | <b>Total Expenditure (7 to 9)</b>              | <b>7,583.15</b>   |
| 11             | Less: Non-Tariff Income                        | 139.39            |
| <b>12</b>      | <b>Aggregate Revenue Requirement (10 - 11)</b> | <b>7,443.76</b>   |



## 6 Revenue (Gap)/Surplus for FY 2022-23

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### 6.1 Revenue for FY 2022-23 with Existing Tariff

MGVCL has projected the category-wise revenue from existing tariff for FY 2022-23, as shown in the Table below:

**Table 6-1: Revenue at Existing Tariff for FY 2022-23 (Rs. Crore)**

| Sr. No.  | Particulars                | Revenue excluding<br>FPPPA |
|----------|----------------------------|----------------------------|
| <b>A</b> | <b>LT Consumers</b>        |                            |
| 1        | RGP                        | 1,342.28                   |
| 2        | GLP                        | 40.03                      |
| 3        | Non-RGP & LTMD             | 965.79                     |
| 4        | Public Water Works         | 156.83                     |
| 5        | Agriculture-Unmetered      | 66.30                      |
| 6        | Agriculture-Metered        | 98.31                      |
| 7        | Electric Vehicle Charging  | 0.00                       |
|          | <b>LT Total (A)</b>        | <b>2,669.54</b>            |
| <b>B</b> | <b>HT Consumers</b>        |                            |
| 8        | Industrial HT              | 2,587.03                   |
|          | <b>HT Total (B)</b>        | <b>2,587.03</b>            |
|          | <b>Grand Total (A + B)</b> | <b>5,256.58</b>            |

#### **Petitioner's submission**

MGVCL has projected revenue from existing tariff for FY 2022-23 by considering projected sales and existing tariff, as Rs. 5,257 Crore.

#### **Commission's Analysis**

In the petition, MGVCL has projected revenue of Rs. 5,257 Crore by considering projected sales for FY 2022-23 and current retail Tariff. As discussed earlier, MGVCL revised the sales for FY 2022-23, and the projected revenue for FY 2022-23 as shown in the Table below:

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**Table 6-2: Revised Revenue at Existing Tariff for FY 2022-23 (Rs. Crore)**

| S. No.   | Particulars                | Revenue excluding<br>FPPPA |
|----------|----------------------------|----------------------------|
| <b>A</b> | <b>LT Consumers</b>        |                            |
| 1        | RGP                        | 1,242.10                   |
| 2        | GLP                        | 60.30                      |
| 3        | Non-RGP & LTMD             | 1,023.28                   |
| 4        | Public Water Works         | 139.16                     |
| 5        | Agriculture-Unmetered      | 66.30                      |
| 6        | Agriculture-Metered        | 98.31                      |
| 7        | Electric Vehicle Charging  |                            |
|          | <b>LT Total (A)</b>        | <b>2,629.44</b>            |
| <b>B</b> | <b>HT Consumers</b>        |                            |
| 8        | Industrial HT              | 2,536.84                   |
|          | <b>HT Total (B)</b>        | <b>2,536.84</b>            |
|          | <b>Grand Total (A + B)</b> | <b>5,166.28</b>            |

The Commission has approved the category-wise sales for FY 2022-23, 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 2022-23, as shown in the Table below:

**Table 6-3: Approved Revenue at Existing Tariff for FY 2022-23 (Rs. Crore)**

| S. No.   | Particulars           | Approved Revenue<br>excluding<br>FPPPA |
|----------|-----------------------|--|
| <b>A</b> | <b>LT Consumers</b>   |  |
| 1        | RGP                   | 1,242.10                               |
| 2        | GLP                   | 60.30                                  |
| 3        | Non-RGP & LTMD        | 1,023.28                               |
| 4        | Public Water Works    | 139.16                                 |
| 5        | Agriculture-Unmetered | 66.30                                  |
| 6        | Agriculture-Metered   | 98.31                                  |



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| S. No.   | Particulars                | Approved Revenue<br>excluding<br>FPPPA |
|----------|----------------------------|--|
| 7        | Electric Vehicle Charging  |  |
|          | <b>LT Total (A)</b>        | <b>2,629.44</b>                        |
| <b>B</b> | <b>HT Consumers</b>        |  |
| 8        | Industrial HT              | 2,536.84                               |
|          | <b>HT Total (B)</b>        | <b>2,536.84</b>                        |
|          | <b>Grand Total (A + B)</b> | <b>5,166.28</b>                        |

## 6.2 Revenue from FPPPA Charges

The petitioner has estimated revenue from FPPPA charges for FY 2022-23, as detailed in the Table below:

**Table 6-4: Revenue from FPPA Charges for FY 2022-23 (Rs. Crore)**

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

### Petitioner's submission

MGVCL submitted that in the Tariff Order dated 31<sup>st</sup> March 2021, the Commission had considered the base power purchase cost at Rs. 4.481/unit and base FPPPA at Rs. 1.80/unit. As per approved FPPPA formula, any increase in power purchase cost during the year, over and above base power purchase cost of Rs. 4.481/unit is to be recovered through FPPPA, over and above base FPPPA of Rs. 1.80/unit on quarterly basis. As per the projected ARR for FY 2022-23, the weighted average power purchase cost works out to Rs. 4.48/unit, same as of FY 2021-22.

Therefore, MGVCL has proposed change in power purchase cost as Nil for FY 2022-23 and accordingly, it has proposed no change in Base FPPPA also. Therefore, estimated revenue from FPPPA for FY 2022-23 has been considered at Rs. 1.80 /unit (i.e.,





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grossing up by approved losses). MGVCL has submitted FPPPA computation for FY 2022-23, as shown in the Table below:

**Table 6-5: FPPA Computation for FY 2022-23 (Rs. Crore)**

| No.       | Particulars  | FY 2021-22  | FY 2022-23  |
|-----------|--|-------------|-------------|
| 1         | Fixed Cost   | 11,592      | 13,005      |
| 2         | Variable Cost  | 27,106      | 28,418      |
| 3         | GETCO Cost   | 4,480       | 4,444       |
| 4         | GUVNL Cost   | 411         | 438         |
| 5         | PGCIL Charges  | 2,443       | 3,075       |
| 6         | SLDC Charges   | 21          | 23          |
| 7         | Total Power Purchase Cost  | 46,053      | 49,403      |
| 8         | Total Energy Requirement (MUs)                                       | 1,02,775    | 1,10,316    |
| <b>9</b>  | <b>Power Purchase Cost (Rs./kWh)</b>                                 | <b>4.48</b> | <b>4.48</b> |
| 10        | Increase in Power Purchase Cost (Rs./ kWh)                           |             | (0.00)      |
| 11        | Additional FPPPA Charges (Grossed up by Distribution Loss) (Rs./kWh) |             | (0.00)      |
| 12        | Existing FPPPA Charges (Rs./kWh)                                     |             | 1.80        |
| <b>13</b> | <b>Revised FPPPA Charges (Rs./kWh)</b>                               |             | <b>1.80</b> |

**Commission's Analysis**

As mentioned earlier, MGVCL has submitted the revised sales for FY 2022-23 which has led to revised estimated revenue from FPPPA charges for FY 2022-23 as detailed in the Table below:

**Table 6-6: Revised Revenue from FPPA Charges for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars                    | FY 2022-23 |
|---------|--------------------------------|------------|
| 1       | Projected Sales (MUs )         | 11,418.33  |
| 2       | FPPPA Rate (Rs./kWh)           | 1.80       |
| 3       | Revenue from FPPPA (Rs. Crore) | 2,055.30   |

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The Commission has approved the base power purchase cost for FY 2022-23 as Rs. 4.57/kWh. Thus, there is an increase of Rs. 0.09/kWh in the base power purchase cost of DISCOMs for FY 2022-23 over that of for FY 2021-22 before grossing up with approved loss and Rs.0.10/ kWh after grossing up with overall loss. The revised Base FPPPA charge for FY 2022-23 is shown in the Table below:

**Table 6-7: Approved FPPA for FY 2022-23 (Rs. Crore)**

| <b>No.</b> | <b>Particulars</b>   | <b>FY 2021-22</b> | <b>FY 2022-23</b> |
|------------|--|-------------------|-------------------|
| 1          | Fixed Cost   | 11,592            | 13,182            |
| 2          | Variable Cost  | 27,106            | 27,956            |
| 3          | GETCO Cost   | 4,480             | 4,597             |
| 4          | GUVNL Cost   | 411               | 428               |
| 5          | PGCIL Charges  | 2,443             | 3,075             |
| 6          | SLDC Charges   | 21                | 25                |
| 7          | Total Power Purchase Cost  | 46,053            | 49,263            |
| 8          | Total Energy Requirement (MUs)                                       | 1,02,775          | 1,07,835          |
| <b>9</b>   | <b>Power Purchase Cost (Rs./kWh)</b>                                 | <b>4.48</b>       | <b>4.57</b>       |
| 10         | Increase in Power Purchase Cost (Rs./ kWh)                           |                   | 0.09              |
| 11         | Additional FPPPA Charges (Grossed up by Distribution Loss) (Rs./kWh) |                   | 0.10              |
| 12         | Existing FPPPA Charges (Rs./kWh)                                     |                   | 1.80              |
| <b>13</b>  | <b>Revised FPPPA Charges (Rs./kWh)</b>                               |                   | <b>1.90</b>       |

In view of the above, the Commission has revised the Base FPPPA for FY 2022-23 as Rs. 1.90/kWh.

Accordingly, the Commission allows Base FPPPA charges and revenue therefrom on the approved sales of 11,469.44 MUs for FY 2022-23 at Rs.1.90/kWh as shown in the table below:

**Table 6-8: Approved revenue from FPPA charges for FY 2022-23**

| <b>Sr. No.</b> | <b>Particulars</b>    | <b>FY 2022-23</b> |
|----------------|-----------------------|-------------------|
| 1              | Projected Sales (MUs) | 11,418.33         |

| Sr. No. | Particulars                           | FY 2022-23 |
|---------|---------------------------------------|------------|
| 2       | FPPPA Rate (Rs./kWh)                  | 1.90       |
| 3       | <b>Revenue from FPPPA (Rs. Crore)</b> | 2,169.97   |

### 6.3 Other consumer related Income

MGVCL has projected the other consumer related income as Rs. 144.80 Crore for FY 2022-23, i.e., at the same levels as actuals for FY 2020-21, as shown in the Table below:

**Table 6-9: Other Consumer related income for FY 2022-23**

| Sr. No. | Particulars                   | FY 2022-23 |
|---------|-------------------------------|------------|
| 1       | Other Consumer related income | 144.80     |

#### **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 2022-23 same as actual of FY 2020-21.

#### **Commission's Analysis**

The Commission observes that MGVCL has projected the other consumer related income for FY 2022-23 at actuals of FY 2020-21 as per audited Annual Accounts. The Commission, accordingly, approves the other consumer related income at Rs. 144.80 Crore for FY 2022-23, as shown in the Table below:

**Table 6-10: Approved Other Consumer related income for FY 2022-23**

| Sr. No. | Particulars                   | FY 2022-23 |
|---------|-------------------------------|------------|
| 1       | Other Consumer related income | 144.80     |



## 6.4 Agriculture Subsidy

MGVCL has projected Agriculture Subsidy as Rs. 77.31 Crore for FY 2022-23, i.e., at the same levels as actuals for FY 2020-21, as shown in the Table below:

**Table 6-11: Agriculture Subsidy for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars         | FY 2022-23 |
|---------|---------------------|------------|
| 1       | Agriculture Subsidy | 77.31      |

### 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 2022-23 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. 77.31 Crore for FY 2022-23, as shown in the Table below:

**Table 6-12: Agriculture Subsidy for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars         | Approved |
|---------|---------------------|----------|
| 1       | Agriculture Subsidy | 77.31    |

## 6.5 Total Expected Revenue for FY 2022-23

MGVCL has projected total revenue of Rs. 7,543.18 Crore for FY 2022-23, as shown in the Table below:

**Table 6-13: Total projected revenue for FY 2022-23 (Rs. Crore)**

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

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| Sr. No. | Particulars                                     | FY 2022-23      |
|---------|---|-----------------|
| 4       | Agriculture Subsidy                             | 77.31           |
| 5       | <b>Total Revenue including subsidy (1 to 4)</b> | <b>7,543.18</b> |

**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**

As discussed earlier, MGVCL has revised sales for FY 2022-23, which has resulted in revision of the total revenue for FY 2022-23 as shown in the Table below:

**Table 6-14: Revised Total Revenue for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars                                     | FY 2022-23      |
|---------|---|-----------------|
| 1       | Revenue with Existing Tariff                    | 5,166.28        |
| 2       | FPPPA Charges @ Rs. 1.80/ unit                  | 2,055.30        |
| 3       | Other Income (Consumer related)                 | 144.80          |
| 4       | Agriculture Subsidy                             | 77.31           |
| 5       | <b>Total Revenue including subsidy (1 to 4)</b> | <b>7,443.69</b> |

The Commission has approved the total revenue for FY 2022-23, as shown in the Table below:

**Table 6-15: Approved Total Revenue for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars                                     | FY 2022-23      |
|---------|---|-----------------|
| 1       | Revenue with Existing Tariff                    | 5,166.28        |
| 2       | FPPPA Charges @ Rs. 1.90/ unit                  | 2,169.97        |
| 3       | Other Income (Consumer related)                 | 144.80          |
| 4       | Agriculture Subsidy                             | 77.31           |
| 5       | <b>Total Revenue including subsidy (1 to 4)</b> | <b>7,558.36</b> |



## 6.6 Revenue (Gap)/Surplus for FY 2022-23

### Petitioner's submission

MGVCL has estimated the cumulative Revenue (Gap)/Surplus for FY 2022-23 as shown in the Table below:

**Table 6-16: Estimated Revenue (Gap)/ Surplus for FY 2022-23 (Rs. Crore)**

| Sr. No.  | Particulars  | FY 2022-23      |
|----------|--|-----------------|
| 1        | Aggregate Revenue Requirement                          | 7,540.70        |
| 2        | Less: Revenue (Gap)/Surplus from True up of FY 2020-21 | (72.36)         |
| <b>3</b> | <b>Total Aggregate Revenue Requirement</b>             | <b>7,613.06</b> |
| 4        | Revenue with Existing Tariff                           | 5,256.58        |
| 5        | FPPPA Charges @ Rs. 1.80/ unit                         | 2,064.50        |
| 6        | Other Income (Consumer related)                        | 144.80          |
| 7        | Agriculture Subsidy                                    | 77.31           |
| <b>8</b> | <b>Total Revenue including subsidy (4 to 7)</b>        | <b>7,543.18</b> |
| <b>9</b> | <b>Revenue (Gap)/Surplus (8 - 3)</b>                   | <b>(69.87)</b>  |

### Commission's Analysis

As discussed earlier, MGVCL has revised sales for FY 2022-23, which has resulted in revision of the total revenue and the Revenue (Gap)/ Surplus for FY 2022-23 as shown in the Table below:

**Table 6-17: Revised Revenue (Gap)/ Surplus for FY 2022-23 (Rs. Crore)**

| Sr. No.  | Particulars   | FY 2022-23      |
|----------|---|-----------------|
| 1        | Aggregate Revenue Requirement                           | 7,450.98        |
| 2        | Less: Revenue (Gap)/ Surplus from True up of FY 2020-21 | (72.36)         |
| <b>3</b> | <b>Total Aggregate Revenue Requirement</b>              | <b>7,523.34</b> |
| 4        | Revenue with Existing Tariff                            | 5,166.28        |
| 5        | FPPPA Charges @ Rs. 1.80/ unit                          | 2,055.30        |
| 6        | Other Income (Consumer related)                         | 144.80          |



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| Sr. No.  | Particulars                                     | FY 2022-23      |
|----------|---|-----------------|
| 7        | Agriculture Subsidy                             | 77.31           |
| <b>8</b> | <b>Total Revenue including subsidy (4 to 7)</b> | <b>7,443.69</b> |
| <b>9</b> | <b>Revenue (Gap) / Surplus (8 - 3)</b>          | <b>(79.65)</b>  |

The Commission has estimated the total Revenue (Gap)/ Surplus for FY 2022-23 at the existing tariff, as shown in the Table below:

**Table 6-18: Approved Revenue (Gap)/ Surplus for FY 2022-23 (Rs. Crore)**

| Sr. No.  | Particulars  | FY 2022-23      |
|----------|--|-----------------|
| 1        | Aggregate Revenue Requirement                          | 7,443.76        |
| 2        | Less: Revenue (Gap)/Surplus from True up of FY 2020-21 | 53.03           |
| <b>3</b> | <b>Total Aggregate Revenue Requirement</b>             | <b>7,390.73</b> |
| 4        | Revenue with Existing Tariff                           | 5,166.28        |
| 5        | FPPPA Charges @ Rs. 1.90/ unit                         | 2,169.97        |
| 6        | Other Income (Consumer related)                        | 144.80          |
| 7        | Agriculture Subsidy                                    | 77.31           |
| <b>8</b> | <b>Total Revenue including subsidy (4 to 7)</b>        | <b>7,558.36</b> |
| <b>9</b> | <b>Revenue (Gap) / Surplus (8 - 3)</b>                 | <b>167.63</b>   |

## 6.7 Consolidated ARR of the State Owned DISCOMs

### Commission's Analysis

Based on the approved ARR for individual DISCOM for FY 2022-23, the consolidated position of the DISCOMS is shown in the table below:

**Table 6-19: Approved Consolidated ARR for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars                      | Projected In ARR | Approved  |
|---------|----------------------------------|------------------|-----------|
| 1       | Cost of Power Purchase           | 49,403.07        | 49,262.90 |
| 2       | Operation & Maintenance Expenses | 3,792.42         | 3,792.42  |
| 2.1     | Employee Cost                    | 3,156.81         | 3,156.81  |



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| <b>Sr. No.</b> | <b>Particulars</b>                           | <b>Projected<br/>In ARR</b> | <b>Approved</b>  |
|----------------|--|-----------------------------|------------------|
| 2.2            | Repair & Maintenance                         | 421.64                      | 421.64           |
| 2.3            | Administration & General Charges             | 545.26                      | 545.26           |
| 2.4            | RDSS Metering Opex                           | 268.07                      | 268.07           |
| 2.5            | Other Expenses Capitalised                   | (599.36)                    | (599.36)         |
| 3              | Depreciation                                 | 2,158.47                    | 2,158.49         |
| 4              | Interest & Finance Charges                   | 606.42                      | 605.05           |
| 5              | Interest on Working Capital                  | -                           | -                |
| 6              | Provision for Bad Debts                      | 0.46                        | 0.46             |
| <b>7</b>       | <b>Sub-Total (1 to 6)</b>                    | <b>55,960.84</b>            | <b>55,819.33</b> |
| 8              | Return on Equity                             | 1,362.55                    | 1,360.76         |
| 9              | Provision for Tax                            | 99.20                       | 99.20            |
| <b>10</b>      | <b>Total Expenditure (7 to 9)</b>            | <b>57,422.60</b>            | <b>57,279.29</b> |
| 11             | Less: Non-Tariff Income                      | 765.74                      | 765.74           |
| <b>12</b>      | <b>Aggregate Revenue Requirement (10-11)</b> | <b>56,656.86</b>            | <b>56,513.55</b> |

## **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. (568) Crore.

### **Commission's Analysis**

Due to revised sales and revenue for FY 2022-23 for MGVCL in revised Tariff Model, MGVCL has revised the consolidated Revenue (Gap)/ Surplus to Rs. (649.63) Crore.

Since, the uniform tariff for State-owned DISCOMs has been envisaged in the MYT Order dated 31<sup>st</sup> March 2017 and MTR Order dated 24<sup>th</sup> April, 2019, it is necessary to consider the consolidated (Gap)/Surplus of FY 2022-23 for all the State-owned DISCOMs, while determining the tariff for FY 2022-23. The consolidated (Gap)/ Surplus computed for FY 2022-23 is shown in the Table below:



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**Table 6-20: DISCOM-wise (Gap)/ Surplus computed for FY 2022-23 (Rs. Crore)**

| Sr. No. | Particulars                           | DGVCL    | MGVCL  | PGVCL    | UGVCL  | Total    |
|---------|---------------------------------------|----------|--------|----------|--------|----------|
| 1       | Trued up (Gap)/ Surplus of FY 2020-21 | (224.00) | 53.03  | (296.80) | 288.82 | (178.94) |
| 2       | Total (Gap)/Surplus for FY 2022-23    | 332.58   | 167.63 | 491.91   | 370.04 | 1,362.16 |

The consolidated Revenue Surplus approved by the Commission for FY 2022-23 as shown in the Table above, is Rs. 1,362.16 Crore, as compared to Revenue Gap of Rs. 649.63 Crore estimated by the State-owned DISCOMs. The computations are shown in the Table below:

**Table 6-21: Consolidated (Gap)/ Surplus computed for FY 2022-23 (Rs. Crore)**

| Sr. No.  | Particulars                          | Projected by DISCOMs | Approved         |
|----------|--------------------------------------|----------------------|------------------|
| 1        | ARR for FY 2022-23                   | 56,656.86            | 56,513.55        |
| 2        | Revenue (Gap)/Surplus for FY 2020-21 | (1,125.58)           | (178.94)         |
| <b>3</b> | <b>Net ARR for FY 2022-23</b>        | <b>57,782.44</b>     | <b>56,692.50</b> |
| 4        | Revenue with existing Tariff         | 38,415.88            | 38,415.88        |
| 5        | FPPPA Charges                        | 16,522.50            | 17,444.33        |
| 6        | Other Income (Consumer Related)      | 1,094.43             | 1,094.46         |
| 7        | Agriculture Subsidy                  | 1,100.00             | 1,100.00         |
| <b>8</b> | <b>Total Revenue</b>                 | <b>57,132.81</b>     | <b>58,054.66</b> |
| <b>9</b> | <b>(Gap)/Surplus for FY 2022-23</b>  | <b>(649.63)</b>      | <b>1,362.16</b>  |

There is a Cumulative Revenue Surplus of Rs. 1,362.16 Crore (Consolidated for all DISCOMs) while determining the ARR for FY 2022-23.

As discussed in Chapter 4, DISCOMs have booked the amount of Rs. 2,621.54 Crore against payment liability towards power purchase expenses as per the Judgment of Hon'ble Supreme Court (Rs. 2015 Crore) and as per the order of lower forum (Rs. 606.54 Crore). The Commission has not considered this provisioning amount as an expense in the true-up of FY 2020-21. However, such payment obligations are likely to



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get materialised in future, with the actual amounts being crystallised at that stage. Further, the Cumulative Revenue Surplus of Rs. 1,362.16 Crore is on estimate basis and also an exception in the extended MYT period of one year, i.e., FY 2022-23. In view of this, the Commission is not giving any treatment of the projected amount of Revenue Surplus at this stage.



## **7 Compliance to Directives**

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### **7.1 Compliance to earlier directives**

The Commission had given various directives to MGVCL in the Order dated 31<sup>st</sup> March 2021, compliance of which is mentioned below:

#### **Directive 1: Details of LT and HT Lift Irrigation Category consumers**

MGVCL should keep the record of number of consumers, their consumption during day and night period, etc., and report to the Commission on completion of FY 2020-21.

#### **Compliance:**

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

#### **Commission's comments:**

The response of the petitioner is noted.

#### **Directive 2: Power Purchase Rationalization**

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

#### **Compliance:**

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

#### **Commission's comments:**

The response of the petitioner is noted.

**Directive 3: 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 Commission has issued above directive in Tariff Order dated 31<sup>st</sup> March, 2021. Subsequently, the Commission vide suo-motu Order dated 24<sup>th</sup> September 2021 has directed the utilities to file their tariff applications for approval of true-up for FY 2020-21 and for determination of Annual ARR and Tariff for FY 2022-23 on or before 30<sup>th</sup> November, 2021 based on the principles and methodologies as provided in the GERC (MYT) Regulations, 2016. As DISCOM is not seeking any tariff revision and this not being MYT petition, DISCOM has not carried out study of tariff rationalization and reduction in number of slabs in present petition. DISCOM will carry out study of tariff slabs of major consumer categories with reference to its rationalization and reduction in number of slabs and submit necessary modification in Tariff structure, if needed as and when MYT petition will be filed.

**Commission's comments:**

The response of the petitioner is noted. The Commission directs the petitioner to study the tariff slabs of major consumer categories in other leading / neighbouring States, explore options for further rationalization and reduction in number of slabs and submit the details along with next MYT petition.

**Directive 4: Conversion of Loan into Grant**

The Commission has directed DISCOM to prepare status report highlighting the efforts made for follow-up with concerned stakeholders, the amount of Interest and Loan likely to be converted into grant and submit the report by 31<sup>st</sup> July, 2021 to the Commission.

**Compliance:**

With reference to above directive, MGCVCL had written letters to Power Finance Corporation (PFC) on 15<sup>th</sup> July, 2019, 16<sup>th</sup> May, 2020, 19<sup>th</sup> May, 2020 and 1<sup>st</sup> June, 2021. Compliance status was submitted to the Commission vide letter no.

MGVCL/EE(R&C)/Tariff/125 dated 21<sup>st</sup> October, 2021. MGVCL is carrying out time to time necessary communication with PFC for conversion of loan into Grant.

**Commission's comments:**

The response of the petitioner is noted.

**Directive 5: Green Tariff**

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

**Compliance:**

MGVCL has submitted its Proposal for introduction of Green Tariff for its consumers based on study of the mechanism adopted in four other States and by the Commission for Deendayal Port Trust (DPT).

**Commission's comments:**

The response of the petitioner is noted. The Commission's views and ruling on the Green Tariff proposed by the petitioner are detailed in the Tariff Philosophy Chapter.

**Directive 6: 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:**

The Ministry of Power, Government of India, has launched Revamped Distribution Sector Scheme (RDSS). Part A, Component I of the scheme covers Prepaid smart metering for consumers and system metering at feeder and Distribution Transformer level with communicating feature with Advanced Metering Infrastructure (AMI), which will be done in TOTEX mode through PPP, to facilitate reduction of Distribution losses

and enable automatic measurement of energy flows and energy accounting and auditing.

MGVCL has prepared the Detailed Project Report (DPR) under RDSS covering implementation of smart pre-paid meters and it is under approval. For FY 2022-23, it is planned to provide 7,00,000 nos. of pre-paid smart meters under the scheme.

Operational expense (monthly payment to agency for supply, maintain and operating Metering infrastructure for the purpose of meter related data and services to DISCOM) of 7,00,000 nos. of pre-paid smart meters for FY 2022-23 is covered in present tariff petition.

**Commission's comments:**

The response of the Petitioner is noted. As mentioned in relevant paras of this Order, the Commission considering the initiatives of MoP, GoI has allowed the amount of Rs. 73.50 Crore claimed by MGVCL in O&M expenses for FY 2022-23 for RDSS Metering Opex, which is subject to prudence check during true up. The DISCOMs are directed to expedite the implementation of smart pre-paid metering in accordance with the national plan for the same.

**Directive 7: 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:**

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

**Commission's comments:**

The response of the Petitioner is noted. However, the petitioner should seriously consider investing in such facilities, because unless such facilities are created and are easily accessible to vehicle owners, the Government of India's target of moving to Electric Vehicles in a big way will not be achieved.

## 7.2 Fresh Directives

**Directive 1:**

The Commission vide Order dated 31<sup>st</sup> March, 2020 carried out certain rationalisation in the Tariff of HT and LT Lift Irrigation category, enhanced the Night Time Rebate for utilisation of electricity by HT category consumers and enhancement of Rebate for supply at EHV level. In order to analyse the impact of such rationalisation, DISCOMs were directed to keep the record of number of consumers, their consumption during day and night period etc. and report to the Commission on completion of FY 2020-21. Accordingly, the DISCOMs have reported the Commission. However, the presentation of such reports by each DISCOM is different. In order to carry out fruitful analysis, DISCOMs are directed to report in the following format by 30<sup>th</sup> September, 2022;

Report on Night Time Consumption

| Tariff Category    | Number of consumers      |                      | Day time consumption in MUs |                      | Night time consumption in MUs |                      | Total consumption in MUs |                      |
|--------------------|--------------------------|----------------------|-----------------------------|----------------------|-------------------------------|----------------------|--------------------------|----------------------|
|                    | (N-1) <sup>th</sup> Year | N <sup>th</sup> Year | (N-1) <sup>th</sup> Year    | N <sup>th</sup> Year | (N-1) <sup>th</sup> Year      | N <sup>th</sup> Year | (N-1) <sup>th</sup> Year | N <sup>th</sup> Year |
| HT                 |                          |                      |                             |                      |                               |                      |                          |                      |
| HT supplied at EHT |                          |                      |                             |                      |                               |                      |                          |                      |
| HTP-V              |                          |                      |                             |                      |                               |                      |                          |                      |



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|                        |  |  |  |  |  |  |  |  |
|------------------------|--|--|--|--|--|--|--|--|
| LTP-Lift<br>Irrigation |  |  |  |  |  |  |  |  |
|------------------------|--|--|--|--|--|--|--|--|

Report on Rebate to EHV category consumers

| Consumption (in MUs) (N-1) <sup>th</sup> Year | Consumption (in MUs) N <sup>th</sup> Year | EHV Rebate (In Lakh) (N-1) <sup>th</sup> Year | EHV Rebate (In Lakh) N <sup>th</sup> Year |
|---|---|---|---|
|   |   |   |   |

Report on SKY Scheme

| No. of feeders | No. of SKY consumers | No. of SKY consumers on recoverable side | No. of SKY consumers on payable side | Amount of recovery to be done from farmers (In Lakh) | Amount payable to the farmers (In Lakh) | Total Contracted load of SKY consumers in HP | Total SPV Capacity in MW-AC |
|----------------|----------------------|--|--------------------------------------|--|---|--|-----------------------------|
|                |                      |  |                                      |  |   |  |                             |





## **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,**

|                  |   |
|------------------|---|
| <b>PPCA</b>      | 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. |
| <b>PPCB</b>      | 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  |
| <b>Loss in %</b> | 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,



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PGCIL charges, SLDC charges for FY 2022-23 from various sources as given in the Table below:

**Table 8-1: Base FPPA Working for FY 2022-23**

| Sr. No.   | Particulars  | FY 2021-22  | FY 2022-23  |
|-----------|--|-------------|-------------|
| 1         | Fixed Cost (Rs. Crore)   | 11,592      | 13,182      |
| 2         | Variable Cost (Rs. Crore)  | 27,106      | 27,956      |
| 3         | GETCO Cost (Rs. Crore)   | 4,480       | 4,597       |
| 4         | GUVNL Cost (Rs. Crore)   | 411         | 428         |
| 5         | PGCIL Charges (Rs. Crore)  | 2,443       | 3,075       |
| 6         | SLDC Charges (Rs. Crore)   | 21          | 25          |
| 7         | Total Power Purchase Cost (Rs. Crore)                                | 46,053      | 49,263      |
| 8         | Total Energy Requirement (MUs )                                      | 1,02,775    | 1,07,835    |
| <b>9</b>  | <b>Power Purchase Cost (Rs./kWh)</b>                                 | <b>4.48</b> | <b>4.57</b> |
| 10        | Increase in Power Purchase Cost (Rs./ kWh)                           |             | 0.09        |
| 11        | Additional FPPPA Charges (Grossed up by Distribution Loss) (Rs./kWh) |             | 0.10        |
| 12        | Existing FPPPA Charges (Rs./kWh)                                     |             | 1.80        |
| <b>13</b> | <b>Revised FPPPA Charges (Rs./kWh)</b>                               |             | <b>1.90</b> |

As mentioned above, the base Power Purchase cost for the DISCOMs is Rs. 4.57/kWh. Further, based on the above computations, the Commission has revised the Base FPPPA as Rs. 1.90/kWh for FY 2022-23.

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 2022-23 as Rs. 4.57/kWh. Thus, there is an increase of Rs. 0.09/kWh in the base power purchase cost of DISCOMs for FY 2022-23 over that of for FY 2021-22 before grossing up with approved loss and Rs. 0.10/kWh after grossing up with approved loss.**

**Accordingly, the base FPPPA for FY 2022-23 is approved as Rs. 1.90/unit, considering the base power purchase cost of Rs. 4.57/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.



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Based on the above Allocation Matrix, the approved ARR for Wires Business and Retail Supply Business for FY 2022-23 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 2022-23 (Rs. Crore)**

| Sr. No. | Particulars                             | Distribution     | Wire Business   | Retail Business | Supply           |
|---------|---|------------------|-----------------|-----------------|------------------|
| 1       | Power Purchase Expenses                 | 49,262.90        | -               |                 | 49,262.90        |
| 2       | O & M Expenses                          | 3,792.42         | 2,484.62        |                 | 1,307.81         |
| 2.1     | Employee Cost                           | 3,156.81         | 1,894.09        |                 | 1,262.72         |
| 2.2     | Repair & Maintenance Expenses           | 421.64           | 379.48          |                 | 42.16            |
| 2.3     | Administration & General Expenses       | 545.26           | 272.63          |                 | 272.63           |
| 2.4     | Other Debits                            | -                | -               |                 | -                |
| 2.5     | RDSS Metering Opex                      | 268.07           | 268.07          |                 | -                |
| 2.5     | Extraordinary Items                     | -                | -               |                 | -                |
| 2.6     | Net Prior Period Expenses<br>/(Income)  | -                | -               |                 | -                |
| 2.7     | Other Expenses Capitalized              | (599.36)         | (329.65)        |                 | (269.71)         |
| 3       | Depreciation                            | 2,158.49         | 1,942.64        |                 | 215.85           |
| 4       | Interest & Finance Charges              | 605.05           | 544.55          |                 | 60.51            |
| 5       | Interest on Security Deposit            | 298.52           | 29.85           |                 | 268.67           |
| 6       | Interest on Working Capital             | -                | -               |                 | -                |
| 7       | Bad Debts written Off                   | 0.46             | -               |                 | 0.46             |
| 8       | Contribution to contingency<br>reserves | -                | -               |                 | -                |
| 9       | <b>Total Revenue Expenditure</b>        | <b>56,117.84</b> | <b>5,001.65</b> |                 | <b>51,116.19</b> |
| 10      | Return on Equity Capital                | 1,360.76         | 1,224.69        |                 | 136.08           |
| 11      | Income Tax                              | 99.20            | 89.28           |                 | 9.92             |
| 12      | <b>Aggregate Revenue Requirement</b>    | <b>57,577.81</b> | <b>6,315.62</b> |                 | <b>51,262.19</b> |
| 13      | Less: Non-Tariff Income                 | 765.74           | 76.57           |                 | 689.16           |
| 14      | <b>Aggregate Revenue Requirement</b>    | <b>56,812.07</b> | <b>6,239.05</b> |                 | <b>50,573.02</b> |



## 9.1 Wheeling charges

The Wheeling Charges for the four Distribution Companies, viz., DGVCL, MGVCL, PGVCL and UGVCL for FY 2022-23, 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 2022-23**

| Sr. No.  | Particulars   | Units          | Amount       |
|----------|---|----------------|--------------|
| 1        | Distribution costs of the four DISCOMs  | Rs. Crore      | 6,239.05     |
| 2        | Distribution cost of the four DISCOMs at 11 kV level (30% of total distribution cost) | Rs. Crore      | 1,871.72     |
| 3        | Distribution cost of the four DISCOMs at LT level (70% of total distribution cost)    | Rs. Crore      | 4,367.34     |
| 4        | Energy input at 11 kV   | MUs            | 1,02,424     |
| <b>5</b> | <b>Wheeling charges at 11 kV</b>  | <b>Ps./kWh</b> | <b>18.27</b> |
| 6        | Energy Input at 400 V   | MUs            | 54,546       |
| <b>7</b> | <b>Wheeling charges at 400 V (LT)</b>   | <b>Ps./kWh</b> | <b>80.07</b> |

Accordingly, the Commission approves Wheeling Charges for HT network (11 kV system) at 18.27 Paise per kWh and Wheeling Charges for LT network (400 V system) at 80.07 Paise per kWh.

### **Distribution losses:**

The distribution losses applicable for Open Access during FY 2022-23 are as given below:

| Sr. No. | Particulars            | Point of Energy Delivered |           |
|---------|------------------------|---------------------------|-----------|
|         |                        | 11 kV                     | 400 Volts |
| 1       | 11 kV, 22 kV and 33 kV | 10%                       | 10.38%    |
| 2       | 400 Volts              |                           | 0.71%     |



The losses in HT and LT network are 10.38% and 0.71% 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 10.38% 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.

## 9.2 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 2022-23**

| Sr. No. | Particulars | Units      | HT Industry |
|---------|-------------|------------|-------------|
| 1       | T           | Rs./ kWh   | 7.52        |
| 2       | C           | Rs./ kWh   | 4.57        |
| 3       | D           | Paise/ kWh | 18.27       |



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| Sr. No. | Particulars                 | Units   | HT Industry |
|---------|-----------------------------|---------|-------------|
| 4       | L                           | %       | 10%         |
| 5       | S (Cross Subsidy Surcharge) | Rs./kWh | 2.26        |

$$S = 7.52 - [4.57 / (1 - 10\% / 100) + 18.27 / 100 + 0] = \text{Rs. } 2.26 / \text{kWh}$$

Thus, CSS as per Tariff Policy, 2016 works out to Rs. 2.26/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 2022-23 works out to Rs. 1.50/kWh.

Accordingly, CSS for HT Category = Rs. 1.50/kWh for FY 2022-23.





## **10 Tariff Philosophy and Tariff Proposals**

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### **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 Rationalisation of Tariff**

The Commission in the Tariff Order dated 31<sup>st</sup> March, 2021 had directed DISCOMs to prepare a Report on Introduction of Green Tariff for the consumers in the State of Gujarat who are willing to procure such Power and submit the Report to the Commission along with next tariff petition. Accordingly, in compliance to directions, DISCOM has submitted the details on the Green Tariff introduced in four States, i.e., Andhra Pradesh, Karnataka, Maharashtra and Gujarat as discussed below:

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

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



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

**Andhra Pradesh**

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

**“1.2.4 CATEGORY- II (D): GREEN POWER – LT**

***Applicability***

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

| <b>Fixed Charges<br/>(Rs./kW/month)</b> | <b>Energy Charges<br/>(Rs./kWh or kVAh)</b> |
|---|---|
| NIL                                     | 12.25                                       |
| Monthly minimum charges: NIL            |   |

Note:

*(i) The Tariff shall be optional and can be extended to any consumer without reference to end use purpose.*

*(ii) A consumer shall be entitled to Renewable Energy Certificates (RECs) as may be admissible.*

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

***Applicability***

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



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| <i>Voltage Supply</i>               | <i>Energy Charges (Rs / kVAh)</i> |
|-------------------------------------|-----------------------------------|
| <i>All Voltages</i>                 | <i>12.25</i>                      |
| <i>Monthly minimum charges: NIL</i> |                                   |

Note:

*(i) The Tariff shall be optional and can be extended to any consumer without reference to end use purpose.*

*(ii) A consumer shall be entitled to Renewable Energy Certificates (RECs) as may be admissible.”*

### **Karnataka**

Karnataka Electricity Regulatory Commission (KERC) in its Tariff Order dated 9<sup>th</sup> June, 2021 has approved Green Tariff premium over and above normal tariff of respective category of consumers. Consumer has to pay premium of Rs. 0.50 / Unit for Green Tariff over and above normal tariff of respective category of consumers. Relevant part of the Tariff Order is reproduced here below:

#### **“6.10 Other Issues**

*i) Tariff for Green Power:*

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

### **Maharashtra**

Maharashtra Electricity Regulatory Commission (MERC) in its Order dated 22<sup>nd</sup> March, 2021 has approved green tariff premium over and above normal tariff of respective category of consumers. Consumer has to pay premium of Rs. 0.66 / Unit for Green tariff



over and above normal tariff of respective category of consumers. Relevant part of the same is reproduced here below:

“

1. Case No 134 of 2020 is allowed.
2. Green Power Tariff of Rs 0.66/ kWh, which is over and above the normal tariff of the respective category as per Tariff Orders, be levied to the consumers opting for meeting their demand by 100% green energy.
3. Revenue earned through Green Power Tariff shall be treated as non-tariff income of Supply Business and thereby be fully accounted for reduction in ARR of supply business.
4. All consumers (Extra High Voltage, High Voltage and Low Voltage) shall be eligible for opting 100% RE power on payment of Green Power Tariff.
5. The Commission may take overview of the scheme at the time of MTR Proceedings.”

### **Gujarat**

GERC in its Tariff Order dated 4<sup>th</sup> September, 2021 has approved Green Tariff premium over and above normal tariff of respective category of consumers of Deendayal Port Trust (DPT). Consumer has to pay premium of Rs. 0.50 / Unit for Green Tariff over and above normal tariff of respective category of consumers. Relevant part of the Tariff Order is reproduced here below:

#### **“Introduction of Green Tariff**

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

*Government of India is also promoting RE in a big way and has kept an aggressive target of 175 GW of RE by 2022. Indian corporates are also playing key role in achieving the aggressive target of the Government as*

*corporate citizens and other resultant advantage of being zero carbon companies.*

*Further, Green Power Tariff will have the following advantages:*

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

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

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

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

### **Approach suggested by DISCOM**

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

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

**Commission's view**

The Commission notes that DISCOMs have submitted the details on the Green Tariff introduced in four States, i.e., Andhra Pradesh, Karnataka, Maharashtra and Gujarat for encouraging generation and use of green power. DISCOM has also suggested to consider introduction of Green Tariff at premium of Rs. 0.50/Unit in line with Tariff Order for DPT, as being more appropriate and reasonable as compared to approach considered by other States.

The Commission is of the view that it is meaningful to introduce the Green Tariff when RE procurement by the DISCOMs is in excess of RPO target. Such is the case with DPT. However, the Commission has observed that all the four State DISCOMs are facing shortfall in meeting their RPO targets. DISCOMs will not be able to supply additional RE power to consumers desirous of the same, when they themselves are not meeting the RPO targets. Therefore, the Commission at this stage is not introducing the Green Tariff for State DISCOMs. The Commission will take appropriate view on the same in future looking at the performance of State DISCOMs in meeting their RPO targets.

The Commission has also noted that the DISCOMs have not proposed any change in the tariff structure or category-wise tariffs for FY 2022-23. Further, this is an additional year of MYT Control Period and as already discussed in earlier Chapter, the Commission is not considering any change in the present tariff structure.



## **Commission's Order**

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The Commission approves the Aggregate Revenue Requirement (ARR) for MGVCL for FY 2022-23 as shown in the Table below:

**ARR approved for FY 2022-23 (Rs. Crore)**

| <b>Sr. No.</b> | <b>Particulars</b>                             | <b>FY 2022-23</b> |
|----------------|--|-------------------|
| 1              | Cost of Power Purchase                         | 6,221.05          |
| 2              | Operation & Maintenance Expenses               | 820.11            |
| 2.1            | Employee Cost                                  | 644.75            |
| 2.2            | Repair & Maintenance                           | 67.62             |
| 2.3            | Administration & General Charges               | 98.80             |
| 2.4            | RDSS Metering Opex                             | 73.50             |
| 2.5            | Other Expenses Capitalised                     | (64.56)           |
| 3              | Depreciation                                   | 300.28            |
| 4              | Interest & Finance Charges                     | 45.10             |
| 5              | Interest on Working Capital                    | -                 |
| 6              | Provision for Bad Debts                        | 0.01              |
| <b>7</b>       | <b>Sub-Total [1 to 6]</b>                      | <b>7,386.54</b>   |
| 8              | Return on Equity                               | 177.03            |
| 9              | Provision for Tax / Tax Paid                   | 19.58             |
| <b>10</b>      | <b>Total Expenditure (7 to 9)</b>              | <b>7,583.15</b>   |
| 11             | Less: Non-Tariff Income                        | 139.39            |
| <b>12</b>      | <b>Aggregate Revenue Requirement (10 - 11)</b> | <b>7,443.76</b>   |

The retail supply tariffs for MGVCL distribution area for FY 2022-23 determined by the Commission are annexed to this Order. This Order shall come into force with effect from the 1<sup>st</sup> April 2022. The revised rate shall be applicable for the electricity consumption from the 1<sup>st</sup> April, 2022 onwards.

**Sd/-**  
**S. R. PANDEY**  
**Member**

**Sd/-**  
**MEHUL M. GANDHI**  
**Member**

**Sd/-**  
**ANIL MUKIM**  
**Chairman**

Place: Gandhinagar

Date: 31/03/2022



## **ANNEXURE: TARIFF SCHEDULE**

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

**Effective from 1st April, 2022**

#### **General**

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





11. Contract Demand shall mean the maximum kW / kVA for the supply of which licensee undertakes to provide facilities to the consumer from time to time.
12. Fuel Cost and Power Purchase Adjustment Charges shall be applicable in accordance with the Formula approved by the Gujarat Electricity Regulatory Commission from time to time.
13. Payment of penal charges for usage in excess of contract demand / load for any billing period does not entitle the consumer to draw in excess of contract demand / load as a matter of right.
14. The payment of power factor penalty does not exempt the consumer from taking steps to improve the power factor to the levels specified in the Regulations notified under the Electricity Act, 2003 and licensee shall be entitled to take any other action deemed necessary and authorized under the Act.
15. Delayed payment charges for all consumers:
  - No delayed payment charges shall be levied if the bill is paid within ten days from the date of billing (excluding date of billing).
  - Delayed payment charges will be levied at the rate of 15% per annum in case of all consumers except Agricultural category for the period from the due date till the date of payment if the bill is paid after due date. Delayed payment charges will be levied at the rate of 12% per annum for the consumer governed under Rate AG from the due date till the date of payment if the bill is paid after due date.
  - For Government dues, the delayed payment charges will be levied at the rate provided under the relevant Electricity Duty Act.



**PART - I**

**SCHEDULE OF TARIFF FOR SUPPLY OF ELECTRICITY**

**AT LOW AND MEDIUM VOLTAGE**

**1. RATE: RGP**

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

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

**1.1. FIXED CHARGES / MONTH:**

Range of Connected Load: (Other than BPL Consumers)

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

For BPL Household Consumers

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

**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    |



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\*\*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.



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- 4.3.4.** The units consumed during the off-season period shall be charged for at a flat rate of 480 Paise per unit.
- 4.3.5.** The electricity bills related to the off-season period shall not be taken into account towards the amount payable against the annual minimum bill. The amount paid by the consumer towards the electricity bills related to the seasonal period only under the heads “Fixed Charges” and “Energy Charges”, shall be taken into account while determining the amount of short-fall payable towards the annual minimum bill as specified under sub-clause 4.3.3 above.
- 4.3.6.** Seasonal consumer is required to submit to the Distribution Licensee an irrevocable Bank Guarantee from a Nationalised or Scheduled Commercial Bank equal to the difference of amount/ Bank Guarantee lying with the Distribution Licensee as Security Deposit and minimum bill calculated at the rate shown in para 4.3.3 with the Contracted Load/ Sanctioned Load of such consumer. If the Contracted Load/ Sanctioned Load is revised upward during the calendar year, the consumer shall submit a revised Bank Guarantee or additional Bank Guarantee as calculated above to the Licensee. The cost of such Bank Guarantee/s shall be borne by the consumer. It shall be the responsibility of the consumer to keep the bank guarantee/s valid at all times and to renew the bank guarantee/s at least 1 months prior to its expiry.

**5. RATE: LTMD**

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

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

**5.1. DEMAND CHARGE:**

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



**PLUS**

**5.2. ENERGY CHARGE:**

|   |                    |
|---|--------------------|
| For the entire consumption during the month | 460 Paise per Unit |
|---|--------------------|

**PLUS**

**5.3. REACTIVE ENERGY CHARGES:**

|   |                    |
|---|--------------------|
| For all the reactive units (kVARh) during the month | 10 Paise per kVARh |
|---|--------------------|

**5.4. BILLING DEMAND**

The billing demand shall be highest of the following:

- a) Eighty-five percent of the contract demand
- b) Actual maximum demand registered during the month
- c) 6 kW

**5.5. MINIMUM BILL**

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

**5.6. SEASONAL CONSUMERS TAKING LTMD SUPPLY:**

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

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

- 5.6.3** The total minimum amount under the head “Demand and Energy Charges” payable by a seasonal consumer satisfying the eligibility criteria under sub-clause 5.6.1 above and complying with provisions stipulated under sub-clause 5.6.2 above shall be Rs. 2970 per annum per kW of the billing demand.
- 5.6.4** The billing demand shall be the highest of the following:
- a) The highest of the actual maximum demand registered during the calendar year.
  - b) Eighty-five percent of the arithmetic average of contract demand during the year.
  - c) 6 kW
- 5.6.5** Units consumed during the off-season period shall be charged for at the flat rate of 470 Paise per unit.
- 5.6.6** Seasonal consumer is required to submit to the Distribution Licensee an irrevocable Bank Guarantee from a Nationalised or Scheduled Commercial Bank equal to the difference of amount/ Bank Guarantee lying with the Licensee as Security Deposit and minimum bill calculated at the rate shown in para 5.6.3 for the higher of Contract Demand or Billing Demand. If the Contract Demand is revised upward during the calendar year, the consumer shall submit a revised Bank Guarantee or additional Bank Guarantee as calculated above to the Licensee. The cost of such Bank Guarantee/s shall be borne by the consumer. It shall be the responsibility of the consumer to keep the bank guarantee/s valid at all times and to renew the bank guarantee/s at least 1 months prior to its expiry.

## **6. RATE: NON-RGP NIGHT**

This tariff is applicable for aggregate load up to 40 kW and using electricity **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 <b>LTMD</b> 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.



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|     |                         |                 |
|-----|-------------------------|-----------------|
| (a) | Fixed charges per month | Rs. 20/- per HP |
|-----|-------------------------|-----------------|

**PLUS**

|     |  |                   |
|-----|--|-------------------|
| (b) | Energy charges per month;<br>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;<br>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;<br>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;<br>For entire consumption during the month | 320 Paise /Unit |
|--|-----------------|

**9.4 TIME OF USE DISCOUNT:**

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



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|   |                   |
|---|-------------------|
| 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 NERGY CHARGES**

|  |   |                    |
|--|---|--------------------|
| <b>For entire consumption during the month</b> |   |                    |
| (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**

|   |                                  |                   |
|---|----------------------------------|-------------------|
| <b>For energy consumption during the two peak periods, viz, 0700 Hrs to 1100 Hrs and 1800 Hrs. to 2200 Hrs.</b> |                                  |                   |
| (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:**

| <b>On Energy charges:</b> |  | <b>Rebate @</b> |
|---------------------------|--|-----------------|
| (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:**

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

- |  |  |                             |
|--|--|-----------------------------|
| <p><b>14.4</b> Billing Demand</p> <p><b>14.5</b> Minimum Bill</p> <p><b>14.6</b> Maximum demand and its measurement</p> <p><b>14.7</b> Contract Demand</p> <p><b>14.8</b> Rebate for supply at EHV</p> <p><b>14.9</b> Concession for use of electricity during night hours</p> |  | <p>Same as HTP-I Tariff</p> |
|--|--|-----------------------------|

**14.10 POWER FACTOR ADJUSTMENT CHARGES**

**14.10.1 Penalty for poor Power Factor:**

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



**14.10.2 Power Factor Rebate:**

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

**15. RATE- HTP-III**

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

**15.1 DEMAND CHARGES:**

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

**15.2 ENERGY CHARGES:**

|   |                |
|---|----------------|
| For all units consumed during the month | 660 Paise/Unit |
|---|----------------|

**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

**15.5** Minimum bill

**15.6** Maximum demand and its measurement

**15.7** Contract Demand

**15.8** Rebate for supply at EHV



Same as HTP-I Tariff



**15.9 POWER FACTOR ADJUSTMENT CHARGES**

**15.9.1 Penalty for poor Power Factor:**

- 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:**

|  |
|--|
| 1/3 <sup>rd</sup> 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 |
|---|----------------|



|             |                                    |   |                      |
|-------------|------------------------------------|---|----------------------|
| <b>16.3</b> | Billing Demand                     | } | Same as HTP-I Tariff |
| <b>16.4</b> | Minimum Bill                       |   |                      |
| <b>16.5</b> | Maximum demand and its measurement |   |                      |
| <b>16.6</b> | Contract Demand                    |   |                      |
| <b>16.7</b> | Rebate for supply at EHV           |   |                      |

**16.8 POWER FACTOR ADJUSTMENT CHARGES:**

**16.8.1 Penalty for poor Power Factor:**

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

**16.8.2 Power Factor Rebate:**

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

**NOTE:**

1. 15% of the contracted demand can be availed beyond the night hours prescribed as per para 16 above.
2. 10% of total units consumed during the billing period can be availed beyond the night hours prescribed as per para 16 above.

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

**17. RATE- HTP-V**

**HT - Agricultural (for HT Lift Irrigation scheme only)**

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

**17.1 DEMAND CHARGES:**

|   |
|---|
| Demand Charges Rs. 25 per kVA per month |
|---|

**PLUS**

**17.2 ENERGY CHARGES:**

|   |               |
|---|---------------|
| For all units consumed during the month | 80 Paise/Unit |
|---|---------------|



|             |                                    |   |                          |
|-------------|------------------------------------|---|--------------------------|
| <b>17.3</b> | Billing Demand                     | } | Same as per HTP-I Tariff |
| <b>17.4</b> | Minimum bill                       |   |                          |
| <b>17.5</b> | Maximum demand and its measurement |   |                          |
| <b>17.6</b> | Contract Demand                    |   |                          |
| <b>17.7</b> | Rebate for supply at EHV           |   |                          |

### **17.8 POWER FACTOR ADJUSTMENT CHARGES**

#### **17.8.1 Penalty for poor power factor**

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

#### **17.8.2 Power Factor Rebate**

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

## **18. RATE- RAILWAY TRACTION**

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

### **18.1 DEMAND CHARGES:**

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



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

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

**PLUS**

**18.2 ENERGY CHARGES:**

|   |                    |
|---|--------------------|
| For all the units consumed during the month | 500 Paise per Unit |
|---|--------------------|

**18.3** Billing Demand:

**18.4** Minimum Bill

**18.5** Maximum demand and its measurement

**18.6** Contract Demand

**18.7** Rebate for supply at EHV

} Same as HTP-I Tariff

**18.8 POWER FACTOR ADJUSTMENT CHARGES**

**18.8.1 Penalty for poor Power Factor:**

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





bill for that month under the head “Energy Charges”, arrived at using tariff as per para 18.2 of this schedule, will be charged.

**18.8.2 Power Factor Rebate:**

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

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

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

Other consumers can use their regular electricity supply for charging electric vehicle under same regular category, i.e., HTP-I, HTP-II, HTP-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



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

