

**Revised**  
**Aggregate Revenue Requirement**  
**&**  
**Tariff Proposal**  
**for**  
**FY 2025-26**

**Submitted by: -**

**Madhya Pradesh Power Management Company Limited  
Shakti Bhawan, Vidyut Nagar, Jabalpur**



**Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited  
Block No. 7, Shakti Bhawan, Vidyut Nagar, Jabalpur**



**Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited  
Bijlee Nagar Colony, Nishtha Parisar, Govindpura, Bhopal**



**Madhya Pradesh Pashchim Kshetra Vidyut Vitaran Company Limited GPH  
Compound, Polo Ground, Indore**



**BEFORE THE HON'BLE MADHYA PRADESH  
ELECTRICITY REGULATORY COMMISSION, BHOPAL**

Petition No. \_\_\_\_\_ of 2024

- (1) Madhya Pradesh Power Management Company Limited  
Shakti Bhawan, Vidyut Nagar, Jabalpur (MP) ----- **Petitioner**
- (2) Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited  
Shakti Bhawan, Vidyut Nagar, Jabalpur (MP) ----- **Petitioner**
- (3) Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited  
GPH, Polo Ground, Indore (MP) ----- **Petitioner**
- (4) Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited  
Nishtha Parisar, Bijlee Nagar, Govindpura, Bhopal (MP) ----- **Petitioner**

**IN THE MATTER OF:**

**Filing of Petition for Determination of Revised ARR for FY 2025-26 and Tariff Proposal for Distribution & Retail Supply Business of Distribution licensees namely Madhya Pradesh Poorv Kshetra Vidyut Vitaran Co. Ltd. (East Discom), Madhya Pradesh Madhya Kshetra Vidyut Vitaran Co. Ltd. (Central Discom) & Madhya Pradesh Pashchim Kshetra Vidyut Vitaran Co. Ltd. (West Discom) and MP Power Management Co. Ltd. (MPPMCL) for FY 2025-26 under the tariff principles laid down in the “Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 dated 03<sup>rd</sup> December 2021” and its amendments thereof.**

The Applicants respectfully submit as under: -

1. Madhya Pradesh Power Management Company Ltd. is a Company incorporated under the Companies Act, 1956 (now Companies Act 2013) and having its registered office at Block No.11, Shakti Bhawan, Vidyut Nagar, Jabalpur.
2. Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Ltd. is a Company incorporated under the Companies Act, 1956 (now Companies Act 2013) and having its registered office at Block No.7, Shakti Bhawan, Vidyut Nagar, Jabalpur. The Petitioner is a deemed licensee under the Fifth Proviso to Section 14 of the Electricity Act, 2003. The area of supply of the Petitioner comprises of Jabalpur, Rewa, Sagar and Shahdol Commissionerary within the State of Madhya Pradesh ('MP').
3. Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Ltd. (MPMKVVCL) is a Company incorporated under the Companies Act, 1956 (now Companies Act 2013) and having its registered office at Nishtha Parisar, Bijlee Nagar Colony, Govindpura, Bhopal. The Petitioner is a deemed licensee under the Fifth Proviso to Section 14 of the Electricity Act, 2003. The area of supply of the Petitioner comprises of Bhopal, Gwalior, Hoshangabad and Chambal Commissionerary within the State of Madhya Pradesh ('MP').

4. Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Ltd. is a Company incorporated under the Companies Act, 1956 (now Companies Act 2013) and having its registered office at GPH, Polo Ground, Indore. The Petitioner is a deemed licensee under the Fifth Proviso to Section 14 of the Electricity Act, 2003. The area of supply of the Petitioner comprises of Indore and Ujjain Commissionerate within the State of Madhya Pradesh ('MP').
5. The MP Power Management Company is the holding company for all the three DISCOMS of MP. The Registrar of Companies, MP has issued the Certificate of Incorporation consequent upon change of name on 10<sup>th</sup> April 2012. The MPPMCL has been vested with several of functions and power that were earlier vested with the erstwhile M.P. State Electricity Board.
6. GoMP has entrusted MPPMCL with the responsibility inter alia of representing the Discoms before the Commission with regard to filing the tariff petition and facilitating all proceedings thereon. The Management and Corporate functions agreement signed by the MPPMCL with the three Discoms of MP also provide for the same.
7. MPPMCL has signed "Management and Corporate Functions Agreement" on 05<sup>th</sup> June 2012, with the three Discoms of the State, wherein it has been agreed that MPPMCL shall perform inter alia the following functions of common nature for the Discoms:
  - i. In consultation with Discoms, undertake long-term/ medium-term/short-term planning and assessment of the power purchase requirements for the three Discoms and explore opportunities for power procurement as per the regulations of MPERC;
  - ii. Allocation of power among the Discoms from the forthcoming projects as per retail tariff order and as per the GoMP notification and further instructions in this regard;
  - iii. Economic, reliable and cost-effective power procurement of Short-term, Medium-term and Long-term and sale of surplus power, if any, for the purpose of Banking / maximization of revenue;
  - iv. Exploring opportunities for procurement of power on long-term and medium-term basis, procure power and finalizing Power Purchase Agreements (PPAs);
  - v. The expenses of MPPMCL have been considered to be included as part of power purchase cost of the Discoms.
8. On 3<sup>rd</sup> December 2021, the Hon'ble Commission notified the "**Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 (Hereinafter referred to as "MPERC Tariff Regulations, 2021 or "Tariff Regulations, 2021")**". These Regulations are applicable for determination of Tariff for the Control Period, from FY 2022-23 to FY 2026-27.
9. On 31<sup>st</sup> March 2022, the Hon'ble Commission issued Retail Supply Tariff Order for FY 2022-23 along with Aggregate Revenue Requirement (ARR) for entire Control Period (Hereinafter referred to as "MYT Order"), i.e., from FY 2022-23 to FY 2026-27 in accordance with Regulation 8.7 of Tariff Regulations, 2021.
10. The Regulation 7.2 of MPERC Tariff Regulations, 2021 allows the Licensees to file a

revised ARR Petition and Tariff proposal from FY 2023-24 to FY 2025-26. Accordingly, based on the Petitioner's submissions the Hon'ble Commission on 28<sup>th</sup> March 2023 issued a revised ARR and Tariff Order for FY 2023-24 and on 6<sup>th</sup> March 2024 issued a revised ARR and Tariff Order for FY 2024-25. Meanwhile, the Hon'ble Commission vide its notification dated 7<sup>th</sup> December 2023 had issued Second Amendment to MPERC Tariff Regulations, 2021 wherein revised AT&C (distribution loss) trajectory has been specified.

11. In the backdrop of the above facts and circumstances, the present Petition is being filed by the Petitioners (MPPMCL, East Discom, Central Discom and West Discom) under Section 61 and Section 62 (1) (d) of the Electricity Act 2003, read with the "Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021" and its amendments thereof; for determination of the Revised ARR for FY 2025-26 and Tariff for distribution and Retail Supply Business for FY 2025-26.
12. The Revised ARR for FY 2025-26 & Tariff Proposal for FY 2025-26 has been prepared in accordance with the normative parameters and provisions as defined under Tariff Regulations 2021 and its amendments thereof. The Petitioners have endeavoured to comply with the various legal and regulatory directions and stipulations applicable, including the directions given by the Hon'ble Commission in the Business Rules of the Commission, the Guidelines, previous ARR and Tariff Orders to the possible extent on the basis of actual and reasonable assumptions and within the limitations of availability of data.
13. Based on the information available, the Petitioners have made sincere efforts to comply with the Regulations of the Hon'ble Commission and discharge its obligations to the best of its abilities and resources in its command. However, should any further material information or apparent error become obvious during the process of determination, the Petitioners may be permitted to file such additional information/amendment and consequently amend/ revise the petition.
14. In line with the Tariff Regulations 2021 and its amendment thereof, the Revised ARR estimated for the FY 2025-26 is shown below:

| Sr. no.  | Particular   | Unit  | Revised ARR for FY 2025-26 |               |               |               |
|----------|--|-------|----------------------------|---------------|---------------|---------------|
|          |  |       | MP State                   | East          | Central       | West          |
| <b>A</b> | <b>Revenue</b>   |       |                            |               |               |               |
| 1        | Revenue from sale of power at current Tariffs                  | Rs Cr | <b>54,637</b>              | <b>14,860</b> | <b>18,262</b> | <b>21,514</b> |
| <b>B</b> | <b>Expenditure</b>   |       |                            |               |               |               |
| 1        | Purchase of Power  | Rs Cr |                            |               |               |               |
| 2        | MPPMCL Cost  | Rs Cr | <b>40,987</b>              | 9,770         | 12,668        | 18,550        |
| 3        | Inter-State Transmission charges                               | Rs Cr |                            |               |               |               |
| 4        | Intra-State Transmission (MP Transco) Charges and SLDC Charges | Rs Cr | <b>5,316</b>               | 1,759         | 1,778         | 1,779         |
| 5        | R&M Expense  | Rs Cr | <b>1,203</b>               | 488           | 388           | 328           |
| 6        | Employee Expenses  | Rs Cr | <b>4,164</b>               | 1,387         | 1,350         | 1,427         |
| 7        | A&G Expense  | Rs Cr | <b>476</b>                 | 148           | 162           | 166           |
| 8        | Depreciation and Related debits                                | Rs Cr | <b>1,127</b>               | 434           | 342           | 352           |
| 9        | Interest & Finance Charges                                     | Rs Cr | <b>1,349</b>               | 490           | 602           | 256           |

| Sr. no.  | Particular  | Unit         | Revised ARR for FY 2025-26 |               |               |               |
|----------|---|--------------|----------------------------|---------------|---------------|---------------|
|          |   |              | MP State                   | East          | Central       | West          |
| 10       | Other Debits, Write-offs (Prior period and bad debts) | Rs Cr        | 12                         | 4             | 4             | 4             |
| 11       | Lease charges for Smart Meters                        | Rs Cr        | 545                        | 154           | 218           | 172           |
| 12       | <b>Total Expenses</b>                                 | <b>Rs Cr</b> | <b>55,179</b>              | <b>14,634</b> | <b>17,512</b> | <b>23,034</b> |
| 13       | RoE   | Rs Cr        | 695                        | 243           | 276           | 176           |
| 14       | <b>Total Expenses Including RoE</b>                   | <b>Rs Cr</b> | <b>55,874</b>              | <b>14,877</b> | <b>17,788</b> | <b>23,209</b> |
| 15       | Other income  | Rs Cr        | 617                        | 185           | 166           | 265           |
| <b>C</b> | <b>Total ARR</b>                                      | <b>Rs Cr</b> | <b>55,257</b>              | <b>14,692</b> | <b>17,621</b> | <b>22,944</b> |
| <b>D</b> | <b>Revenue Gap</b>                                    | <b>Rs Cr</b> | <b>620</b>                 | <b>(168)</b>  | <b>(641)</b>  | <b>1,430</b>  |
| 1        | Impact of True Up GENCO for FY 2023-24*               | Rs Cr        | (857)                      | (243)         | (291)         | (323)         |
| 2        | Impact of True Up Transco                             | Rs Cr        | -                          | -             | -             | -             |
| 3        | Impact of True Up Discoms for FY 2023-24#             | Rs Cr        | 4,344                      | 1,529         | 2,303         | 512           |
| <b>E</b> | <b>Total Revenue Gap (including true up if any)</b>   | <b>Rs Cr</b> | <b>4,107</b>               | <b>1,117</b>  | <b>1,372</b>  | <b>1,618</b>  |
| <b>F</b> | <b>Total ARR including true up</b>                    | <b>Rs Cr</b> | <b>58,744</b>              | <b>15,978</b> | <b>19,634</b> | <b>23,132</b> |

\*As per MPGENCO True-up claim for FY 2023-24

#As per MP Discom True-up Petition filed for FY 2023-24

15. For the Distribution & Retail Supply Business of MP Discoms during FY 2025-26 the Petitioners have estimated a net revised ARR (including the available True-up's of MP Genco and MP Discoms) of Rs 58,744/- Crores for MP State, Rs.15,978/- Crores for East Discom, Rs 19,634/- Crores for Central Discom and Rs 23,132/- Crores for West Discom and a Revenue Gap of Rs 4,107/- Crores for MP State, Rs 1,117/- Crores for East Discom, Rs 1,372/- Crores for Central Discom and Rs 1,618/- Crores for West Discom respectively for FY 2025-26.
16. Shri Lokesh Malviya, General Manager (Revenue Management) of MPPMCL; Shri Pradyumna K. Agrawal, General Manager (Commercial) of MPPoKVVCL; Shri D.P. Ahirwar, Chief General Manager (Regulatory Affairs) of MPMKVVCL and Shri Shailendra Jain, Deputy Director (Commercial) of MPPaKVVCL have been authorized to execute and file all the documents on behalf of the respective petitioner in this regard. Accordingly, the current petition filing is signed and verified by and backed by the affidavit of respective authorized signatories.

**PRAYER**

The Petitioners hereby prays to the Hon'ble Commission:

- a) To invoke the power conferred to it under Section 62 of the Electricity Act, 2003, and to admit the Petition seeking approval of revised ARR for FY 2025-26 & Tariff Petition for FY 2025-26;
- b) To approve the net ARR of Rs 58,744/- Crores for Discoms of MP, Rs.15,978/- Crores for East Discom, Rs 19,634/- Crores for Central Discom and Rs 23,132/- Crores for West Discom and a Revenue Gap of Rs 1,117/- Crores for East Discom, Rs 1,372/- Crores for Central Discom and Rs 1,618/- Crores for West Discom respectively, thus a collective gap of Rs 4,107/- Crores including the estimated gap of True-up for FY 23-24 for all the Discoms of MP, for FY 2025-26;
- c) To approve the CAPEX and Capitalisation as proposed by the Petitioners;
- d) To consider the impact of Technical Minimum Scheduling and factoring of sale of surplus power and banking of energy while determining the energy requirement and power purchase cost for FY 2025-26 in line with the methodology approved by the Commission in previous year's True-up Order;
- e) To approve the proposed lease charges and additional OPEX towards installation of Smart Meters under the Schemes approved by the Hon'ble Commission;
- f) To consider and approve the recovery of Research and Development Fund while determine the ARR for FY 2025-26;
- g) To approve Cross Subsidy Surcharge and all such other charges including Additional Surcharge, wheeling charges and wheeling losses for Open Access consumers as proposed in this Petition;
- h) To approve the Green Energy Charges for the purpose of certification and RPO obligation for consumers as proposed in this Petition;
- i) To allow kVAh based billing for HT category consumers;
- j) To continue the existing rebates/incentives as applicable for consumers for FY 2025-26 also;
- k) To introduce Time of Day Tariff for other LT Consumers (except agriculture) having contract/maximum demand more than ten Kilowatt and consumers with Smart Meters to comply with the Electricity (Rights of Consumers) Amendment Rules, 2023, as proposed in this Petition;
- l) To consider the outcome of SMP No. 38 of 2024 while determining the ARR for FY 2025-26;
- m) To consider and approve the proposed modalities for implementation of provisions of the

SOP issued by the Ministry of Power towards subsidy accounting and billing;

- n) To approve the merging of sub-categories/slabs and modifications under terms & conditions of tariff to simplify the tariff as proposed in this Petition;
- o) To consider and approve Petitioner's Tariff proposal for FY 2025-26 to recover the costs for the ensuing year;
- p) To grant other relief as the Hon'ble Commission may consider appropriate;
- q) To condone any inadvertent omissions/ errors/ shortcomings and permit the Petitioners to add/ change/ modify/ alter this filing and make further submissions as may be required at a later stage;
- r) To Pass such an order as the Hon'ble Commission deems fit and proper in the facts and circumstances of the case in the interest of justice.

**Date:** \_\_\_\_ November 2024

**Shri Lokesh Malviya**  
GM (Revenue Management)  
MP Power Management Co. Ltd.,  
Jabalpur

**Shri Pradyumna K. Agrawal**  
GM (Commercial)  
MP Poorv Kshetra Vidyut Vitaran  
Co. Ltd, Jabalpur

**Shri D.P. Ahirwar**  
CGM (Regulatory Affairs)  
MP Madhya Kshetra Vidyut Vitaran  
Co. Ltd, Bhopal

**Shri Shailendra Jain**  
Dy. Director (Commercial)  
MP Paschim Kshetra Vidyut Vitaran  
Co. Ltd, Indore

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## Notes and Abbreviations

### In this Petition:

✓ *All currency figures used in this Petition, unless specifically stated otherwise, are in ₹ Crores.*

| Abbreviation           | Full Description   |
|------------------------|--|
| <b>ARR</b>             | Aggregate Revenue Requirement  |
| <b>APTEL</b>           | Appellate Tribunal for Electricity                                       |
| <b>CAGR</b>            | Compound Annual Growth Rate  |
| <b>CERC</b>            | Central Electricity Regulatory Commission                                |
| <b>CGS</b>             | Central Generating Stations  |
| <b>Co-gen</b>          | Cogeneration Power Plant   |
| <b>CPP</b>             | Captive Power Plant  |
| <b>EA – 2003</b>       | The Electricity Act 2003   |
| <b>EV</b>              | Electric Vehicle   |
| <b>FAR</b>             | Fixed Asset Register   |
| <b>FY</b>              | Financial Year   |
| <b>GFA</b>             | Gross Fixed Assets   |
| <b>GoMP</b>            | Government of Madhya Pradesh   |
| <b>GoI</b>             | Government of India  |
| <b>GSC</b>             | Grid Support Charges   |
| <b>HT/ HV</b>          | High Tension/ High Voltage   |
| <b>IPPs</b>            | Independent Power Producers  |
| <b>kV / KVA / kVAh</b> | Kilo Volt / Kilo Volt Ampere / Kilo Volt Ampere Hour                     |
| <b>kW</b>              | Kilo Watt  |
| <b>LT/LV</b>           | Low Tension/ Low Voltage   |
| <b>MoP</b>             | Ministry of Power, Government of India                                   |
| <b>MPSEB</b>           | Madhya Pradesh State Electricity Board                                   |
| <b>MPERC</b>           | Madhya Pradesh Electricity Regulatory Commission                         |
| <b>MPMKVVCL/CZ</b>     | Madhya Pradesh Madhya Kshetra Vidyut Vitran Company Limited/Central Zone |
| <b>MPPaKVVCL/WZ</b>    | Madhya Pradesh Paschim Kshetra Vidyut Vitran Company Limited/West Zone   |
| <b>MPPoKVVCL/EZ</b>    | Madhya Pradesh Poorv Kshetra Vidyut Vitran Company Limited/East Zone     |
| <b>MPPMCL</b>          | Madhya Pradesh Power Management Company Limited                          |
| <b>MPPGCL</b>          | Madhya Pradesh Power Generation Company Limited                          |
| <b>MPPTCL</b>          | Madhya Pradesh Power Transmission Company Limited                        |
| <b>MU</b>              | Million Units  |
| <b>NCE / NCES</b>      | Non-Conventional Energy Sources  |
| <b>PGCIL</b>           | Power Grid Corporation India Limited                                     |
| <b>SOP</b>             | Standard Operating Procedure   |
| <b>SSGS</b>            | State Sector Generating Stations   |
| <b>SLDC</b>            | State Load Dispatch Centre   |
| <b>STOA</b>            | Short Term Open Access   |
| <b>TO</b>              | Tariff Order   |
| <b>WRLDC</b>           | Western Regional Load Dispatch Committee                                 |
| <b>WRPC</b>            | Western Regional Power Committee   |

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## **A1: CONTENTS OF THIS PETITION AND METHODOLOGY ADOPTED IN FILING OF THIS PETITION**

### **1.1 Contents**

1.1.1 The contents of this Petition provide detailed rationale against individual elements constituting the ARR for FY 2025-26 & Tariff Proposal for FY 2025-26 based on Tariff Regulations, 2021 and its amendment thereof. The various elements explained in this Petition are as follows:

- a. Energy Sales
- b. Distribution Loss and Energy Requirement
- c. Power Purchase from various sources to meet the Energy Requirement
- d. Computation of Other Expenses
  - i. O&M Expenses
  - ii. Investment Plan
  - iii. Lease charges for Smart Meters
  - iv. Depreciation
  - v. Interest & Finance Charges
  - vi. Interest on Working Capital
  - vii. Interest on Security Deposit
  - viii. Return on Equity
  - ix. Bad Debts
  - x. Research and Development Fund
  - xi. MPPMCL Cost/ (Income)
  - xii. Other Expenses, if any
  - xiii. Other Income & Non-Tariff Income
- e. Computation of Total ARR
- f. Computation of Category wise Revenue projection.
- g. Determination of Deficit/(Surplus) between Revenue and Expenses
- h. Wheeling Charges, Cross Subsidy Surcharge & Additional Surcharge
- i. Voltage wise Cost of Supply
- j. Tariff Proposal for FY 2025-26 and its Salient Features
- k. Introduction to kVAh Billing
- l. Green Energy Tariff
- m. Introduction of TOD for LT category as per Electricity (Rights of Consumer) Rules 2023
- n. Recovery of Backlog RPO
- o. Modalities for implementation of provision of SOP for Subsidy Accounting & Billing

p. Compliance of Directives

## 1.2 **Methodology**

1.2.1 The Petitioners are submitting the revised ARR for FY 2025-26 & Tariff Proposal for FY 2025-26 on the basis of actual and reasonable assumptions within the purview of the Electricity Act, 2003, Tariff Regulations, 2021 and its amendment thereof. This Petition consists of details of projected expenditures envisaged by the Petitioner and details of expected revenue leading to revenue deficit/ (surplus) for the FY 2025-26. It is humbly requested to the Hon'ble Commission to approve the revised ARR for FY 2025-26 & Tariff Petition for FY 2025-26 as claimed by the Petitioners in accordance with the applicable Regulations while issuing the Tariff Order for FY 2025-26.

## 1.3 **Unless otherwise specified, the years as mentioned below shall mean as under:**

- FY 2021-22 or FY 22 is from 01<sup>st</sup> April 21 to 31<sup>st</sup> March 22 (Actual)
- FY 2022-23 or FY 23 is from 01<sup>st</sup> April 22 to 31<sup>st</sup> March 23 (Actual)
- FY 2023-24 or FY 24 is from 01<sup>st</sup> April 23 to 31<sup>st</sup> March 24 (Actual)
- FY 2024-25 or FY 25 is from 01<sup>st</sup> April 24 to 31<sup>st</sup> March 25 (Revised Estimate)
- FY 2025-26 or FY 26 is from 01<sup>st</sup> April 25 to 31<sup>st</sup> March 26 (Projected)

## **A2: REGULATORY REQUIREMENT OF FILING OF THIS PETITION**

### **2.1 Regulations**

Regulation 7.2 of Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 dated 03<sup>rd</sup> December 2021 allows the Discoms to file a revised ARR Petition and Tariff Proposal for FY 2025-26. The relevant extract from the said Regulation is as extracted below:

*“7.2 The following Petitions for true-up, ARR & Tariff are to be filed by the Applicant under these Regulations:*

| <b><i>Timelines</i></b> | <b><i>Scope of the Petition</i></b>  |
|-------------------------|--|
| <i>30 November 2024</i> | <i>(a) True-up of FY 2023-24;<br/>(b) Revenue gap or revenue surplus for FY 2025-26 based on the Revised ARR and true-up for FY 2023-24;<br/>(c) Tariff proposals for FY 2025-26</i> |

Based on the above, this Petition has been prepared based on the provisions of the MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 dated 03<sup>rd</sup> December 2021- Applicable from FY 2022-23 to FY 2026-27 and its amendments thereof.

### **A3: ESTIMATION OF SALES**

#### **3.1 Sales forecast as projected by the Petitioners for FY 2025-26**

- 3.1.1 The Petitioners would like to submit that as per Regulation 18 of Tariff Regulations, 2021, sales mix and quantum of sales are considered as uncontrollable. The reason being that there are various factors, which can have an impact on the actual consumption of electricity and are often beyond the control of the Licensee, such as, economic climate, weather conditions, force-majeure events like natural disasters, change in consumption mix, Government Policy, etc.
- 3.1.2 The Hon'ble Commission in its MYT Order dated 31st March 2021, has approved the sales for each year of the Control Period, i.e., from FY 2022-23 to 2026-27. The sales so approved in the MYT order were based on the data available prior to FY 2022-23. Subsequently, based on the latest data of sales as available, the licensees approached the Hon'ble commission during the annual tariff proceeding to revise the sales, capturing the latest trends in consumer sales, demand or load for the respective years of the Control period. Accordingly, the Hon'ble Commission in its ARR Order dated 28th March 2023 and 6th March 2024, has approved the revised sales for second and third year of the Control Period, i.e. FY 2023-24 and FY 2024-25, respectively.
- 3.1.3 In line with the above the petitioners have revised the sales estimates for FY 2025-26 considering the last five years data from FY 2019-20 to FY 2023-24 and FY 2024-25 (up to August). The revision in sales estimates is necessary to capture the latest trend in consumer sales, demand or load in order to have a realistic projection for FY 2025-26.
- 3.1.4 The distribution licensees have considered the past growth trends for each consumer category. It is submitted that historical trend method has proved to be reasonably accurate and well accepted method for estimating the load, number of consumers and energy consumption. Further, as per the Regulation 25.1 of Tariff Regulations, 2021 category wise and slab wise sales are to be determined based on the actual/audited data of the preceding three years. However, for better forecasting, the Petitioners have analysed the data of past five years, i.e., from FY 2019-20 to FY 2023-24 and the sales data of FY 2024-25 up to the month of August 2024.
- 3.1.5 Category wise and slab wise actual data of the sale of electricity, number of consumers, connected / contracted load, etc. as per the Annual R15 statement corresponding to said period are taken and Compounded Annual Growth Rates (CAGR) of sales have been computed from the past sales for each category and sub-category. The approach being followed is as under:
- (a) Analyse 5-year, 4-year, 3-year and 2-year CAGRs and Year-on-Year growth rate in Number of Consumers, Sales and Demand of each category and its sub-



categories in respect of Urban & Rural consumers separately.

5 Year CAGR period: FY 2018-19 to FY 2023-24

4 Year CAGR period: FY 2019-20 to FY 2023-24

3 Year CAGR period: FY 2020-21 to FY 2023-24

2 Year CAGR period: FY 2021-22 to FY 2023-24

1 Year CAGR period: FY 2022-23 to FY 2023-24

- (b) After analysis of the data, appropriate / reasonable growth rates have been assumed for future consumer forecasts from the past CAGRs of the Category/Sub-category by the three Discoms.
- (c) During the analysis if an abnormal growth rate (high or low), relative to the current trend, is observed, then the same is normalized for the purpose of projection for ensuing year.
- (d) In cases where the past data shows a declining trend, a nil growth has been considered.
- (e) The growth rate assumed is then applied on sales per consumer / sales per kW and connected load while forecasting the connected load, number of consumer and sales in each category/sub-category.

3.1.6 The Petitioners have considered the specific consumption, i.e., consumption per consumer and / or consumption per unit load which is the basic forecasting variable and is widely used in load and energy sales forecasting. The basic intent in using this model is that the specific consumption per consumer and / or consumption per unit load captures the trends and variations in the usage of electricity over a growth cycle more precisely. This method has been recommended by the C.E.A. also.

3.1.7 The projections for each tariff category and the relevant assumptions of the three Discoms have been discussed in the following sections.

### 3.2 Category-wise sales Projection.

The methodology adopted by the petitioners for category-wise projection of sales for FY 2025-26 is elaborated in detail in the following paras:

#### 3.2.1 LV-1: Domestic

##### Assumptions for Projecting Unmetered Domestic Sales

The projections for consumption of un-metered domestic connections, in this petition, have been considered as NIL for urban areas (since all domestic consumers in urban areas have been metered).

After factoring the growth in consumers, the following projections have been arrived at for LV-1 category:

**Table 1: Energy Sales for LV 1 (MUs)**

| Area         | Sub Category | East Discom  |              |               | Central Discom |              |               | West Discom  |              |               | MP State      |               |               |
|--------------|--------------|--------------|--------------|---------------|----------------|--------------|---------------|--------------|--------------|---------------|---------------|---------------|---------------|
|              |              | FY 24        | FY 25 (RE)   | FY 26 (Proj.) | FY 24          | FY 25 (RE)   | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) | FY 24         | FY 25 (RE)    | FY 26 (Proj.) |
| Urban        | Metered      | 2,327        | 2,434        | 2,546         | 3,031          | 3,140        | 3,253         | 3,023        | 3,101        | 3,212         | 8,381         | 8,675         | 9,011         |
| Urban        | Un-metered   | 0            | 0            | 0             | 0              | 0            | 0             | 0            | 0            | 0             | 0             | 0             | 0             |
| Urban        | Temporary    | 29           | 31           | 32            | 33             | 41           | 50            | 53           | 62           | 72            | 116           | 134           | 155           |
| <b>Urban</b> | <b>Total</b> | <b>2,356</b> | <b>2,465</b> | <b>2,579</b>  | <b>3,064</b>   | <b>3,180</b> | <b>3,303</b>  | <b>3,077</b> | <b>3,163</b> | <b>3,284</b>  | <b>8,497</b>  | <b>8,808</b>  | <b>9,166</b>  |
| Rural        | Metered      | 3,675        | 4,056        | 4,475         | 2,886          | 3,152        | 3,329         | 3,235        | 3,302        | 3,408         | 9,796         | 10,510        | 11,212        |
| Rural        | Un-metered   | 170          | 29           | 24            | 220            | 126          | 85            | 18           | 12           | 11            | 408           | 166           | 120           |
| Rural        | Temporary    | 7            | 7            | 7             | 5              | 7            | 9             | 10           | 12           | 12            | 22            | 26            | 29            |
| <b>Rural</b> | <b>Total</b> | <b>3,852</b> | <b>4,091</b> | <b>4,507</b>  | <b>3,111</b>   | <b>3,285</b> | <b>3,423</b>  | <b>3,263</b> | <b>3,326</b> | <b>3,431</b>  | <b>10,226</b> | <b>10,702</b> | <b>11,361</b> |
| Total        | Metered      | 6,002        | 6,490        | 7,022         | 5,917          | 6,292        | 6,582         | 6,258        | 6,403        | 6,620         | 18,177        | 19,185        | 20,223        |
| Total        | Un-metered   | 170          | 29           | 24            | 220            | 126          | 85            | 18           | 12           | 11            | 408           | 166           | 120           |
| Total        | Temporary    | 36           | 38           | 39            | 38             | 48           | 60            | 64           | 74           | 84            | 138           | 159           | 183           |
| <b>Total</b> | <b>Total</b> | <b>6,208</b> | <b>6,556</b> | <b>7,085</b>  | <b>6,175</b>   | <b>6,466</b> | <b>6,726</b>  | <b>6,340</b> | <b>6,489</b> | <b>6,715</b>  | <b>18,723</b> | <b>19,511</b> | <b>20,527</b> |

3.2.1.1 **East Discom**

The growth percentages assumed for the category for the FY 2025-26 are as shown below:

**Table 2: Growth Percentage Assumption East Discom**

| Area       | Category                                   | Urban  |  | Rural   |  |
|------------|--|--------|--|---------|--|
| Metered    | Consumer                                   | 3.49%  | 3-year CAGR considered   | 4.37%   | 5-year CAGR considered   |
|            | Average Load (kW)                          | 11.41% | 5-year CAGR considered   | 3.96%   | 1-year growth considered   |
|            | Average consumption per consumer per month | 1.09%  | 5-year CAGR considered   | 5.73%   | 5 Month Variation considered   |
| Un-metered | Consumer                                   | 0.00%  | No growth rate has been considered as no consumers             | -4.71%  | Decreasing trend due to unmetered category, no growth rate has been considered |
|            | Average Load (kW)                          | 0.00%  | No growth rate has been considered as no consumers             | -14.40% | No growth rate has been considered   |
|            | Average consumption per consumer per month | 0.00%  | No growth rate has been considered                             | 0.00%   | No growth rate has been considered   |
| Temporary  | Consumer                                   | 5.00%  | Nominal Growth Considered                                      | 2.00%   | Nominal Growth Considered  |
|            | Average Load (kW)                          | 11.41% | Nominal Growth Considered                                      | 11.00%  | Nominal Growth Considered  |
|            | Average consumption per consumer per month | 0.00%  | No growth rate has been considered due to negative growth rate | 0.00%   | No growth rate has been considered due to negative growth rate                 |

3.2.1.2 **Central Discom**

The growth percentages assumed for the category for the FY 2025-26 are as shown below:

**Table 3: Growth Percentage Assumption Central Discom**

| Area       | Category                                   | Urban  |                                    | Rural   |                                    |
|------------|--|--------|------------------------------------|---------|------------------------------------|
| Metered    | Consumer                                   | 2.57%  | 2-year CAGR considered             | 2.32%   | 3-year CAGR considered             |
|            | Average Load (kW)                          | 4.70%  | 3-year CAGR considered             | 6.84%   | 1-year growth considered           |
|            | Average consumption per consumer per month | 1.00%  | Nominal Growth Considered          | 3.21%   | Nominal Growth Considered          |
| Un-metered | Consumer                                   | 0.00%  | No growth rate has been considered | -32.43% | No growth rate has been considered |
|            | Average Load (kW)                          | 0.00%  | No growth rate has been considered | 0.00%   | No growth rate has been considered |
|            | Average consumption per consumer per month | 0.00%  | No growth rate has been considered | 0.00%   | No growth rate has been considered |
| Temporary  | Consumer                                   | 23.46% | 5-year CAGR considered             | 27.22%  | 5-year CAGR considered             |
|            | Average Load per Consumer                  | 24.16% | 5-year CAGR considered             | 20.36%  | 5-year CAGR considered             |

|  |  |       |  |       |                                    |
|--|--|-------|--|-------|------------------------------------|
|  | Average consumption per consumer per month | 0.00% | No growth rate has been considered due to negative growth rate | 0.00% | No growth rate has been considered |
|--|--|-------|--|-------|------------------------------------|

### 3.2.1.3 West Discom

The growth percentages assumed for the category for the FY 2025-26 are as shown below:

**Table 4: Growth Percentage Assumption West Discom**

| Area       | Category                                   | Urban  |                                    | Rural  |                                    |
|------------|--|--------|------------------------------------|--------|------------------------------------|
| Metered    | Consumer                                   | 3.00%  | 2-year CAGR considered             | 1.11%  | 1-year growth considered           |
|            | Average Load (kW)                          | 3.00%  | Nominal Growth Considered          | 0.00%  | 1-year growth considered           |
|            | Average consumption per consumer per month | 0.55%  | 1-year growth considered           | 2.08%  | 1-year growth considered           |
| Un-metered | Consumer                                   | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|            | Average Load (kW)                          | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|            | Average consumption per consumer per month | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
| Temporary  | Consumer                                   | 10.00% | Nominal Growth Considered          | 15.00% | Nominal Growth Considered          |
|            | Average Load (kW)                          | 11.00% | Nominal Growth Considered          | 0.00%  | Nominal Growth Considered          |
|            | Average consumption per consumer per month | -4.23% | Negative growth considered         | -8.74% | Negative growth considered         |

### 3.2.2 LV-2: Non-Domestic

The future projections for FY 2025-26 are as below:

**Table 5 : Energy Sales for LV 2 (MUs)**

| Subcategory  | East Discom  |              |               | Central Discom |              |               | West Discom  |              |               | MP State     |              |               |
|--------------|--------------|--------------|---------------|----------------|--------------|---------------|--------------|--------------|---------------|--------------|--------------|---------------|
|              | FY 24        | FY 25 (RE)   | FY 26 (Proj.) | FY 24          | FY 25 (RE)   | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) |
| Metered      | 1218         | 1392         | 1592          | 1295           | 1426         | 1570          | 1,464        | 1,584        | 1,714         | 3,978        | 4,402        | 4,876         |
| Temporary    | 46           | 53           | 61            | 64             | 76           | 90            | 72           | 83           | 97            | 182          | 212          | 247           |
| <b>Total</b> | <b>1,264</b> | <b>1,445</b> | <b>1,653</b>  | <b>1,360</b>   | <b>1,502</b> | <b>1,660</b>  | <b>1,536</b> | <b>1,667</b> | <b>1,811</b>  | <b>4,160</b> | <b>4,614</b> | <b>5,123</b>  |

#### 3.2.2.1 East Discom

The growth percentages assumed for the category are as shown below:

**Table 6: Growth Percentage Assumption East Discom**

| Area      | Category                                   | Urban  |                                    | Rural  |                                    |
|-----------|--|--------|------------------------------------|--------|------------------------------------|
| Metered   | Consumer                                   | 4.36%  | 3-year CAGR considered             | 11.78% | 5-year CAGR considered             |
|           | Average Load (kW) per Consumer             | 6.40%  | 3-year CAGR considered             | 6.35%  | 3-year CAGR considered             |
|           | Average consumption per kW per month       | 0.32%  | 3-year CAGR considered             | 0.32%  | Nominal Growth Considered          |
| Temporary | Consumer                                   | 11.27% | 4-year CAGR considered             | 11.72% | 3-year CAGR considered             |
|           | Average Load (kW) per Consumer             | 2.27%  | 3-year CAGR considered             | 5.53%  | 3-year CAGR considered             |
|           | Average consumption per consumer per month | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |

**3.2.2.2 Central Discom**

The growth percentages assumed for the category are as shown below:

**Table 7: Growth Percentage Assumption Central Discom**

| Area      | Category                                   | Urban  |                                    | Rural  |                           |
|-----------|--|--------|------------------------------------|--------|---------------------------|
| Metered   | Consumer                                   | 5.24%  | 3-year CAGR considered             | 9.37%  | 2-year CAGR considered    |
|           | Average Load (kW) per Consumer             | 2.28%  | 4-year CAGR considered             | 0.56%  | 4-year CAGR considered    |
|           | Average consumption per kW per month       | 1.56%  | 5 Month Variation considered       | 2.37%  | 4-year CAGR considered    |
| Temporary | Consumer                                   | 14.44% | 5-year CAGR considered             | 11.65% | 5-year CAGR considered    |
|           | Average Load (kW) per Consumer             | 0.00%  | No growth rate has been considered | 2.35%  | 3-year CAGR considered    |
|           | Average consumption per consumer per month | 3.84%  | 5-year CAGR considered             | 1.00%  | Nominal Growth Considered |

**3.2.2.3 West Discom**

The growth percentages assumed for the category are as shown below:

**Table 8: Growth Percentage Assumption West Discom**

| Area      | Category                             | Urban  |   | Rural  |                          |
|-----------|--------------------------------------|--------|---|--------|--------------------------|
| Metered   | Consumer                             | 3.27%  | 3-year CAGR considered                                  | 7.80%  | 1-year growth considered |
|           | Average Load (kW) per Consumer       | 2.43%  | Nominal Growth Considered                               | 3.38%  | 2-year CAGR considered   |
|           | Average consumption per kW per month | 1.60%  | Nominal Growth Considered                               | -0.84% | 2-year CAGR considered   |
| Temporary | Consumer                             | 17.22% | 3-year CAGR considered                                  | 16.56% | 3-year CAGR considered   |
|           | Average Load (kW) per Consumer       | -1.16% | Negative growth rate considered due to decreasing trend | 0.83%  | 1-year growth considered |

| Area | Category                                   | Urban  |   | Rural |                          |
|------|--|--------|---|-------|--------------------------|
|      | Average consumption per consumer per month | -1.17% | Negative growth rate considered due to decreasing trend | 0.23% | 1-year growth considered |

### 3.2.3 LV-3.1: Public Water Works & Street Light

The projections for FY 2025-26 for Public Water Works are as follows:

**Table 9: Energy Sales for LV 3.1 (MUs)**

| Subcategory     | East Discom |            |               | Central Discom |            |               | West Discom |            |               | MP State     |              |               |
|-----------------|-------------|------------|---------------|----------------|------------|---------------|-------------|------------|---------------|--------------|--------------|---------------|
|                 | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24          | FY 25 (RE) | FY 26 (Proj.) | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) |
| Municipal Corp. | 37          | 39         | 41            | 117            | 124        | 132           | 65          | 68         | 72            | 219          | 232          | 245           |
| Nagar Panchayat | 73          | 77         | 82            | 83             | 89         | 94            | 61          | 64         | 67            | 217          | 230          | 244           |
| Gram Panchayat  | 207         | 233        | 261           | 254            | 282        | 312           | 368         | 429        | 491           | 830          | 943          | 1,064         |
| Temporary       | 10          | 11         | 12            | 4              | 4          | 4             | 7           | 7          | 7             | 21           | 22           | 24            |
| <b>Total</b>    | <b>327</b>  | <b>360</b> | <b>396</b>    | <b>458</b>     | <b>499</b> | <b>542</b>    | <b>501</b>  | <b>569</b> | <b>638</b>    | <b>1,286</b> | <b>1,427</b> | <b>1,576</b>  |

The projections for FY 2025-26 for Street Lights are as follows:

**Table 10: Energy Sales for LV 3.2 (MUs)**

| Subcategory     | East Discom |            |               | Central Discom |            |               | West Discom |            |               | MP State   |            |               |
|-----------------|-------------|------------|---------------|----------------|------------|---------------|-------------|------------|---------------|------------|------------|---------------|
|                 | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24          | FY 25 (RE) | FY 26 (Proj.) | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24      | FY 25 (RE) | FY 26 (Proj.) |
| Municipal Corp. | 58          | 62         | 67            | 70             | 70         | 72            | 68          | 71         | 72            | 197        | 204        | 212           |
| Nagar Panchayat | 62          | 64         | 66            | 63             | 49         | 51            | 44          | 46         | 49            | 169        | 159        | 165           |
| Gram Panchayat  | 32          | 33         | 34            | 17             | 26         | 41            | 65          | 70         | 75            | 113        | 129        | 150           |
| <b>Total</b>    | <b>152</b>  | <b>159</b> | <b>167</b>    | <b>149</b>     | <b>146</b> | <b>165</b>    | <b>177</b>  | <b>187</b> | <b>196</b>    | <b>479</b> | <b>492</b> | <b>527</b>    |

#### 3.2.3.1 Public Water Works

##### 3.2.3.1.1 East Discom

The growth percentages assumed for the category are as shown below:

**Table 11: Growth Percentage Assumption East Discom**

| Area                  | Category                       | Urban |                        | Rural |  |
|-----------------------|--------------------------------|-------|------------------------|-------|--|
| Municipal Corporation | Consumer                       | 3.37% | 3-year CAGR considered | 0.00% | No growth rate has been considered due to negative growth rate |
|                       | Average Load (kW) per Consumer | 0.43% | 4-year CAGR considered | 0.00% | No growth rate has been considered due to negative growth rate |

| Area            | Category                             | Urban  |  | Rural  |  |
|-----------------|--------------------------------------|--------|--|--------|--|
|                 | Average consumption per kW per month | 7.98%  | 2-year CAGR considered   | 0.00%  | No growth rate has been considered due to negative growth rate |
| Nagar Panchayat | Consumer                             | 3.43%  | 2-year CAGR considered   | 0.00%  | No growth rate has been considered due to negative growth rate |
|                 | Average Load (kW) per Consumer       | 0.63%  | 5 Month Variation considered                                   | 0.00%  | No growth rate has been considered due to negative growth rate |
|                 | Average consumption per kW per month | 3.28%  | 4-year CAGR considered   | 0.00%  | No growth rate has been considered due to negative growth rate |
| Gram Panchayat  | Consumer                             | 0.00%  | No growth rate has been considered due to negative growth rate | 16.89% | 5-year CAGR considered   |
|                 | Average Load (kW) per Consumer       | 0.00%  | No growth rate has been considered due to negative growth rate | 1.19%  | 1-year growth considered                                       |
|                 | Average consumption per kW per month | 0.00%  | No growth rate has been considered due to negative growth rate | 2.40%  | 3-year CAGR considered   |
| Temporary       | Consumer                             | 2.13%  | 4-year CAGR considered   | 2.87%  | 2-year CAGR considered   |
|                 | Average Load (kW) per Consumer       | 3.69%  | 3-year CAGR considered   | 2.43%  | 5-year CAGR considered   |
|                 | Average consumption per kW per month | 11.38% | 4-year CAGR considered   | 7.42%  | 3-year CAGR considered   |

### 3.2.3.1.2 Central Discom

The growth percentages assumed for the category are as shown below:

**Table 12: Growth Percentage Assumption Central Discom**

| Area                  | Category                             | Urban |  | Rural  |                                    |
|-----------------------|--------------------------------------|-------|--|--------|------------------------------------|
| Municipal Corporation | Consumer                             | 0.00% | No growth rate has been considered due to no consumer addition | 0.00%  | No growth rate has been considered |
|                       | Average Load (kW) per Consumer       | 2.82% | 4-year CAGR considered   | 0.00%  | No growth rate has been considered |
|                       | Average consumption per kW per month | 3.42% | 3-year CAGR considered   | 0.00%  | No growth rate has been considered |
| Nagar Panchayat       | Consumer                             | 1.52% | 1-year growth considered                                       | 0.00%  | No growth rate has been considered |
|                       | Average Load (kW) per Consumer       | 4.88% | 3-year CAGR considered   | 0.00%  | No growth rate has been considered |
|                       | Average consumption per kW per month | 0.00% | No growth rate has been considered                             | 0.00%  | No growth rate has been considered |
| Gram Panchayat        | Consumer                             | 0.00% | No growth rate has been considered                             | 10.00% | Nominal Growth Considered          |
|                       | Average Load (kW) per Consumer       | 0.00% | No growth rate has been considered                             | 0.67%  | 1-year growth considered           |
|                       | Average consumption per kW per month | 0.00% | No growth rate has been considered                             | 0.00%  | No growth rate has been considered |
| Temporary             | Consumer                             | 1.00% | 2-year CAGR considered   | 0.00%  | No growth rate has been considered |

| Area | Category                             | Urban  |                                  | Rural |                                    |
|------|--------------------------------------|--------|----------------------------------|-------|------------------------------------|
|      | Average Load (kW) per Consumer       | 3.20%  | 1-year growth considered         | 2.14% | 5-year CAGR considered             |
|      | Average consumption per kW per month | -4.08% | Negative trend has been observed | 0.00% | No growth rate has been considered |

### 3.2.3.1.3 West Discom

The growth percentages assumed for the category are as shown below:

**Table 13: Growth Percentage Assumption West Discom**

| Area                  | Category                             | Urban |                                    | Rural |                                    |
|-----------------------|--------------------------------------|-------|------------------------------------|-------|------------------------------------|
| Municipal Corporation | Consumer                             | 2.00% | Nominal Growth Considered          | 0.00% | No growth rate has been considered |
|                       | Average Load (kW) per Consumer       | 1.56% | 1-year growth considered           | 0.00% | No growth rate has been considered |
|                       | Average consumption per kW per month | 0.96% | 1-year growth considered           | 6.51% | 2-year CAGR considered             |
| Nagar Panchayat       | Consumer                             | 2.00% | Nominal Growth Considered          | 0.00% | No growth rate has been considered |
|                       | Average Load (kW) per Consumer       | 0.00% | No growth rate has been considered | 2.50% | Nominal Growth Considered          |
|                       | Average consumption per kW per month | 2.27% | 2-year CAGR considered             | 5.29% | 3-year CAGR considered             |
| Gram Panchayat        | Consumer                             | 0.00% | No growth rate has been considered | 9.00% | Nominal Growth Considered          |
|                       | Average Load (kW) per Consumer       | 0.00% | No growth rate has been considered | 0.05% | Nominal Growth Considered          |
|                       | Average consumption per kW per month | 1.00% | No growth rate has been considered | 5.00% | Nominal Growth Considered          |
| Temporary             | Consumer                             | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|                       | Average Load (kW) per Consumer       | 2.80% | 5 Month Variation considered       | 2.07% | 2-year CAGR considered             |
|                       | Average consumption per kW per month | 6.93% | 3-year CAGR considered             | 0.00% | No growth rate has been considered |

### 3.2.3.2 LV-3.2: Street Light

#### 3.2.3.2.1 East Discom

The growth percentages assumed for the category are as shown below:

**Table 14: Growth Percentage Assumption East Discom**

| Area                  | Category                             | Urban  |                           | Rural |                                    |
|-----------------------|--------------------------------------|--------|---------------------------|-------|------------------------------------|
| Municipal Corporation | Consumer                             | 11.89% | 4-year CAGR considered    | 0.00% | No growth rate has been considered |
|                       | Average Load (kW) per Consumer       | 3.00%  | Nominal Growth Considered | 0.00% | No growth rate has been considered |
|                       | Average consumption per kW per month | 2.00%  | Nominal Growth Considered | 0.00% | No growth rate has been considered |
| Nagar Panchayat       | Consumer                             | 6.80%  | 5-year CAGR considered    | 0.00% | No growth rate has been considered |
|                       | Average Load (kW) per Consumer       | 2.00%  | Nominal Growth Considered | 0.00% | No growth rate has been considered |



| Area           | Category                             | Urban |                                    | Rural |                                    |
|----------------|--------------------------------------|-------|------------------------------------|-------|------------------------------------|
|                | Average consumption per kW per month | 5.48% | 2-year CAGR considered             | 0.00% | No growth rate has been considered |
| Gram Panchayat | Consumer                             | 0.00% | No growth rate has been considered | 4.64% | 2-year CAGR considered             |
|                | Average Load (kW) per Consumer       | 0.00% | No growth rate has been considered | 4.81% | 3-year CAGR considered             |
|                | Average consumption per kW per month | 0.00% | No growth rate has been considered | 2.00% | Nominal Growth Considered          |

### 3.2.3.2.2 Central Discom

The growth percentages assumed for the category are as shown below:

**Table 15: Growth Percentage Assumption Central Discom**

| Area                  | Category                             | Urban  |   | Rural  |                                    |
|-----------------------|--------------------------------------|--------|---|--------|------------------------------------|
| Municipal Corporation | Consumer                             | 3.54%  | 1-year growth considered                    | 0.00%  | No growth rate has been considered |
|                       | Average Load (kW) per Consumer       | -3.07% | No growth/Negative rate has been considered | 0.00%  | No growth rate has been considered |
|                       | Average consumption per kW per month | 2.78%  | 2-year CAGR considered                      | 0.00%  | No growth rate has been considered |
| Nagar Panchayat       | Consumer                             | 3.25%  | 5-year CAGR considered                      | 0.00%  | No growth rate has been considered |
|                       | Average Load (kW) per Consumer       | 0.00%  | No growth rate has been considered          | 0.00%  | No growth rate has been considered |
|                       | Average consumption per kW per month | 0.00%  | No growth rate has been considered          | 0.00%  | No growth rate has been considered |
| Gram Panchayat        | Consumer                             | 0.00%  | No growth rate has been considered          | 2.54%  | 1-year growth considered           |
|                       | Average Load (kW) per Consumer       | 0.00%  | No growth rate has been considered          | 4.78%  | 5-year CAGR considered             |
|                       | Average consumption per kW per month | 0.00%  | No growth rate has been considered          | 45.83% | 2-year CAGR considered             |

### 3.2.3.2.3 West Discom

The growth percentages assumed for the category are as shown below:

**Table 16: Growth Percentage Assumption West Discom**

| Area                  | Category                             | Urban |                                    | Rural |                                    |
|-----------------------|--------------------------------------|-------|------------------------------------|-------|------------------------------------|
| Municipal Corporation | Consumer                             | 1.50% | Nominal Growth Considered          | 0.00% | No growth rate has been considered |
|                       | Average Load (kW) per Consumer       | 0.50% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|                       | Average consumption per kW per month | 0.00% | 2-year CAGR considered             | 4.00% | No growth rate has been considered |
| Nagar Panchayat       | Consumer                             | 3.00% | Nominal Growth Considered          | 0.00% | No growth rate has been considered |
|                       | Average Load (kW) per Consumer       | 0.09% | 2-year CAGR considered             | 2.00% | 2-year CAGR considered             |
|                       | Average consumption per kW per month | 2.45% | Nominal Growth Considered          | 0.00% | 2-year CAGR considered             |

|                |                                      |        |                                    |       |                                    |
|----------------|--------------------------------------|--------|------------------------------------|-------|------------------------------------|
| Gram Panchayat | Consumer                             | 0.00%  | No growth rate has been considered | 0.50% | No growth rate has been considered |
|                | Average Load (kW) per Consumer       | 2.50%  | 2-year CAGR considered             | 1.00% | 2-year CAGR considered             |
|                | Average consumption per kW per month | 10.00% | 1-year growth considered           | 6.00% | 3-year CAGR considered             |

### 3.2.4 LV-4. Industrial

The projections for FY 2025-26 for LV 4.1 Non- Seasonal Industrial are as follows:

**Table 17: Energy Sales for LV-4.1 (MUs)**

| Subcategory         | East Discom  |              |               | Central Discom |              |               | West Discom  |              |               | MP State       |                |                |
|---------------------|--------------|--------------|---------------|----------------|--------------|---------------|--------------|--------------|---------------|----------------|----------------|----------------|
|                     | FY 24        | FY 25 (RE)   | FY 26 (Proj.) | FY 24          | FY 25 (RE)   | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) | FY 24          | FY 25 (RE)     | FY 26 (Proj.)  |
| Up to 25HP          | 176.1        | 179.3        | 182.6         | 146.5          | 149.5        | 152.6         | 265.7        | 270.2        | 274.7         | 588.2          | 599.0          | 609.9          |
| Above 25HP to 100HP | 124.7        | 129.7        | 135.0         | 123.1          | 144.7        | 156.6         | 270.0        | 281.3        | 293.3         | 517.8          | 555.7          | 584.8          |
| Above 100HP         | 140.7        | 146.4        | 152.4         | 64.5           | 74.9         | 87.1          | 219.0        | 234.8        | 252.2         | 424.2          | 456.2          | 491.6          |
| Temporary LT Ind.   | 10.4         | 11.1         | 11.9          | 4.0            | 4.7          | 5.4           | 3.2          | 3.6          | 4.1           | 17.6           | 19.4           | 21.3           |
| <b>Total</b>        | <b>451.9</b> | <b>466.6</b> | <b>481.8</b>  | <b>338.2</b>   | <b>373.8</b> | <b>401.6</b>  | <b>757.8</b> | <b>789.9</b> | <b>824.2</b>  | <b>1,547.9</b> | <b>1,630.2</b> | <b>1,707.7</b> |

The projections for FY 2025-26 for LV 4.2 Seasonal Industrial are as follows:

**Table 18: Energy Sales for LV-4.2 (MUs)**

| Subcategory         | East Discom |            |               | Central Discom |            |               | West Discom |            |               | MP State   |            |               |
|---------------------|-------------|------------|---------------|----------------|------------|---------------|-------------|------------|---------------|------------|------------|---------------|
|                     | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24          | FY 25 (RE) | FY 26 (Proj.) | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24      | FY 25 (RE) | FY 26 (Proj.) |
| Up to 25HP          | 0.2         | 0.2        | 0.2           | 0.2            | 0.3        | 0.4           | 2.6         | 2.7        | 2.8           | 3.1        | 3.2        | 3.4           |
| Above 25HP to 100HP | 0.7         | 0.8        | 0.8           | 1.0            | 1.1        | 1.4           | 1.9         | 2.1        | 2.3           | 3.6        | 4.0        | 4.5           |
| Above 100HP         | 1.0         | 1.0        | 1.1           | 0.2            | 0.2        | 0.2           | 1.0         | 1.1        | 1.3           | 2.2        | 2.3        | 2.5           |
| <b>Total</b>        | <b>1.9</b>  | <b>2.0</b> | <b>2.2</b>    | <b>1.4</b>     | <b>1.6</b> | <b>1.9</b>    | <b>5.6</b>  | <b>6.0</b> | <b>6.3</b>    | <b>8.9</b> | <b>9.6</b> | <b>10.4</b>   |

#### 3.2.4.1 LV-4.1 Non- Seasonal Industrial

##### 3.2.4.1.1 East Discom

The assumptions for sales forecast for the category are given below:

**Table 19: Growth Percentage Assumption East Discom**

| Area      | Category                       | Urban |                           | Rural |                        |
|-----------|--------------------------------|-------|---------------------------|-------|------------------------|
| Upto 25HP | Consumer                       | 0.30% | 5-year CAGR considered    | 5.00% | 5-year CAGR considered |
|           | Average Load (kW) per Consumer | 7.00% | Nominal Growth Considered | 0.78% | 3-year CAGR considered |

| Area                | Category                             | Urban  |                           | Rural  |                           |
|---------------------|--------------------------------------|--------|---------------------------|--------|---------------------------|
|                     | Average consumption per kW per month | 0.03%  | 3-year CAGR considered    | 2.00%  | Nominal Growth Considered |
| Above 25HP to 100HP | Consumer                             | 2.51%  | 3-year CAGR considered    | 4.81%  | 3-year CAGR considered    |
|                     | Average Load (kW) per Consumer       | 8.00%  | Nominal Growth Considered | 8.00%  | Nominal Growth Considered |
|                     | Average consumption per kW per month | 2.08%  | 3-year CAGR considered    | 2.08%  | Nominal Growth Considered |
| Above 100HP         | Consumer                             | 14.25% | 2-year CAGR considered    | 14.51% | 3-year CAGR considered    |
|                     | Average Load (kW) per Consumer       | 0.61%  | 3-year CAGR considered    | 0.29%  | 5-year CAGR considered    |
|                     | Average consumption per kW per month | 0.61%  | 3-year CAGR considered    | 4.12%  | 3-year CAGR considered    |
| Temporary           | Consumer                             | 4.08%  | 2-year CAGR considered    | 11.67% | 2-year CAGR considered    |
|                     | Average Load (kW) per Consumer       | 2.10%  | 4-year CAGR considered    | 0.20%  | 4-year CAGR considered    |
|                     | Average consumption per kW per month | 2.10%  | Nominal Growth Considered | 2.10%  | Nominal Growth Considered |

### 3.2.4.1.2 Central Discom

The growth percentages assumed are as follows:

**Table 20: Growth Percentage Assumption Central Discom**

| Area                | Category                             | Urban  |                                    | Rural  |                                    |
|---------------------|--------------------------------------|--------|------------------------------------|--------|------------------------------------|
| Upto 25HP           | Consumer                             | 0.00%  | No growth rate has been considered | -0.57% | No growth rate has been considered |
|                     | Average Load (kW) per Consumer       | 0.72%  | 3-year CAGR considered             | 1.20%  | 3-year CAGR considered             |
|                     | Average consumption per kW per month | 2.14%  | 3-year CAGR considered             | 0.00%  | No growth rate has been considered |
| Above 25HP to 100HP | Consumer                             | 3.54%  | 5-year CAGR considered             | 8.06%  | 3-year CAGR considered             |
|                     | Average Load (kW) per Consumer       | 0.23%  | 2-year CAGR considered             | 0.00%  | No growth rate has been considered |
|                     | Average consumption per kW per month | 3.42%  | 2-year CAGR considered             | 3.89%  | 3-year CAGR considered             |
| Above 100HP         | Consumer                             | 14.00% | 2-year CAGR considered             | 11.12% | 2-year CAGR considered             |
|                     | Average Load (kW) per Consumer       | 0.08%  | 3-year CAGR considered             | 0.00%  | No growth rate has been considered |
|                     | Average consumption per kW per month | 0.82%  | 3-year CAGR considered             | 6.19%  | 1-year growth considered           |
| Temporary           | Consumer                             | 20.00% | Nominal Growth Considered          | 0.00%  | No growth rate has been considered |
|                     | Average Load (kW) per Consumer       | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|                     | Average consumption per kW per month | 0.00%  | No growth rate has been considered | 6.57%  | 3-year CAGR considered             |

### 3.2.4.1.3 West Discom

The growth percentages assumed are as follows:

**Table 21: Growth Percentage Assumption West Discom**

| Area                | Category                             | Urban  |                                    | Rural |                                    |
|---------------------|--------------------------------------|--------|------------------------------------|-------|------------------------------------|
| Upto 25HP           | Consumer                             | -0.49% | No growth rate has been considered | 0.61% | 1-year growth considered           |
|                     | Average Load (kW) per Consumer       | 1.20%  | 1-year growth considered           | 2.15% | Nominal Growth Considered          |
|                     | Average consumption per kW per month | 0.53%  | 1-year growth considered           | 0.00% | No growth rate has been considered |
| Above 25HP to 100HP | Consumer                             | 2.85%  | 1-year growth considered           | 8.96% | 1-year growth considered           |
|                     | Average Load (kW) per Consumer       | 0.00%  | No growth rate has been considered | 0.00% | Nominal Growth Considered          |
|                     | Average consumption per kW per month | 0.18%  | 1-year growth considered           | 1.51% | 1-year growth considered           |
| Above 100HP         | Consumer                             | 4.17%  | 2-year CAGR considered             | 5.51% | 1-year growth considered           |
|                     | Average Load (kW) per Consumer       | 0.21%  | Nominal Growth Considered          | 0.43% | Nominal Growth Considered          |
|                     | Average consumption per kW per month | 0.49%  | 4-year CAGR considered             | 6.69% | Nominal Growth Considered          |
| Temporary           | Consumer                             | 0.00%  | No growth rate has been considered | 4.69% | 1-year growth considered           |
|                     | Average Load (kW) per Consumer       | 1.00%  | Nominal Growth Considered          | 8.07% | Nominal Growth Considered          |
|                     | Average consumption per kW per month | 13.46% | 3-year CAGR considered             | 0.00% | 1-year growth considered           |

**3.2.4.2 LV-4.2: Seasonal Industrial**

The future projections are as follows:

**3.2.4.2.1 East Discom**

The growth percentages assumed are as follows:

**Table 22: Growth Percentage Assumption East Discom**

| Area                | Category                             | Urban  |                           | Rural  |                           |
|---------------------|--------------------------------------|--------|---------------------------|--------|---------------------------|
| Upto 25HP           | Consumer                             | 5.00%  | Nominal Growth Considered | 5.00%  | Nominal Growth Considered |
|                     | Average Load (kW) per Consumer       | 0.53%  | 5-year CAGR considered    | 6.90%  | 3-year CAGR considered    |
|                     | Average consumption per kW per month | 4.29%  | 4-year CAGR considered    | 2.00%  | Nominal Growth Considered |
| Above 25HP to 100HP | Consumer                             | 7.17%  | Nominal Growth Considered | 11.84% | 5-year CAGR considered    |
|                     | Average Load (kW) per Consumer       | 0.53%  | Nominal Growth Considered | 11.46% | 3-year CAGR considered    |
|                     | Average consumption per kW per month | 3.55%  | 4-year CAGR considered    | 2.00%  | Nominal Growth Considered |
| Above 100HP         | Consumer                             | 6.00%  | Nominal Growth Considered | 5.00%  | Nominal Growth Considered |
|                     | Average Load (kW) per Consumer       | 1.49%  | 3-year CAGR considered    | 2.00%  | Nominal Growth Considered |
|                     | Average consumption per kW per month | 19.82% | 2-year CAGR considered    | 1.57%  | 5-year CAGR considered    |

**3.2.4.2.2 Central Discom**

The growth percentages assumed are as follows:

**Table 23: Growth Percentage Assumption Central Discom**

| Area                | Category                             | Urban  |                                    | Rural  |                                    |
|---------------------|--------------------------------------|--------|------------------------------------|--------|------------------------------------|
| Upto 25HP           | Consumer                             | 7.61%  | 2-year CAGR considered             | 20.00% | Nominal Growth Considered          |
|                     | Average Load (kW) per Consumer       | 0.30%  | Nominal Growth Considered          | 0.00%  | 3-year CAGR considered             |
|                     | Average consumption per kW per month | 0.00%  | No growth rate has been considered | 20.00% | Nominal Growth Considered          |
| Above 25HP to 100HP | Consumer                             | 6.27%  | 3-year CAGR considered             | 20.00% | Nominal Growth Considered          |
|                     | Average Load (kW) per Consumer       | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|                     | Average consumption per kW per month | 10.00% | Nominal Growth Considered          | 10.00% | No growth rate has been considered |
| Above 100HP         | Consumer                             | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|                     | Average Load (kW) per Consumer       | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|                     | Average consumption per kW per month | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |

**3.2.4.2.3 West Discom**

The growth rates assumed are as follows:

**Table 24: Growth Percentage Assumption West Discom**

| Area                | Category                             | Urban  |                                    | Rural  |                                    |
|---------------------|--------------------------------------|--------|------------------------------------|--------|------------------------------------|
| Upto 25HP           | Consumer                             | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|                     | Average Load (kW) per Consumer       | 1.00%  | 3-year CAGR considered             | 4.91%  | 1-year growth considered           |
|                     | Average consumption per kW per month | 0.00%  | 3-year CAGR considered             | 0.00%  | No growth rate has been considered |
| Above 25HP to 100HP | Consumer                             | 0.00%  | No growth rate has been considered | 2.60%  | 2-year CAGR considered             |
|                     | Average Load (kW) per Consumer       | 0.29%  | No growth rate has been considered | 4.08%  | 1-year growth considered           |
|                     | Average consumption per kW per month | 0.00%  | No growth rate has been considered | 10.04% | Nominal Growth Considered          |
| Above 100HP         | Consumer                             | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|                     | Average Load (kW) per Consumer       | 0.29%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|                     | Average consumption per kW per month | 10.18% | No growth rate has been considered | 0.00%  | No growth rate has been considered |

### 3.2.5 LV-5.1: Agricultural

The projections for LV 5.1 Agricultural category are as follows:

**Table 25: Energy Sales for LV 5.1 (MUs)**

| Area         | Sub-category        | East Discom  |                 |                 | Central Discom |               |               | West Discom   |               |               | MP State     |              |               |
|--------------|---------------------|--------------|-----------------|-----------------|----------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|---------------|
|              |                     | FY 24        | FY 25 (RE)      | FY 26 (Proj.)   | FY 24          | FY 25 (RE)    | FY 26 (Proj.) | FY 24         | FY 25 (RE)    | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) |
| Urban        | Metered General     | 10           | 11              | 12              | 64             | 63            | 66            | 20            | 22            | 24            | 95           | 96           | 102           |
| Urban        | Metered Temporary   | 2            | 2               | 2               | 10             | 10            | 11            | 1             | 2             | 2             | 13           | 14           | 14            |
| Urban        | Unmetered General   | 252          | 260             | 273             | 171            | 138           | 134           | 160           | 158           | 158           | 583          | 556          | 565           |
| Urban        | Unmetered Temporary | 25           | 27              | 28              | 2              | 1             | 1             | 18            | 18            | 19            | 46           | 46           | 48            |
| <b>Urban</b> | <b>Total</b>        | <b>290</b>   | <b>300</b>      | <b>315</b>      | <b>247</b>     | <b>213</b>    | <b>212</b>    | <b>199</b>    | <b>199</b>    | <b>202</b>    | <b>737</b>   | <b>712</b>   | <b>729</b>    |
| Rural        | Metered General     | 2            | 2               | 2               | 10             | 8             | 8             | 5             | 6             | 7             | 17           | 16           | 18            |
| Rural        | Metered Temporary   | 1            | 1               | 1               | 4              | 4             | 4             | 1             | 1             | 1             | 6            | 6            | 6             |
| Rural        | Unmetered General   | 6,141        | 6,428           | 6,750           | 9,344          | 9,810         | 10,285        | 10,864        | 11,336        | 11,687        | 26349        | 27574        | 28722         |
| Rural        | Unmetered Temporary | 263          | 276             | 290             | 253            | 371           | 371           | 252           | 257           | 262           | 768          | 904          | 923           |
| <b>Rural</b> | <b>Total</b>        | <b>6,407</b> | <b>6,708</b>    | <b>7,043</b>    | <b>9,610</b>   | <b>10,193</b> | <b>10,669</b> | <b>11,122</b> | <b>11,600</b> | <b>11,957</b> | <b>27139</b> | <b>28500</b> | <b>29669</b>  |
| Total        | Metered General     | 12           | 13              | 14              | 74             | 71            | 74            | 25            | 28            | 31            | 112          | 112          | 119           |
| Total        | Metered Temporary   | 3            | 3               | 3               | 14             | 14            | 15            | 2             | 2             | 2             | 18           | 20           | 20            |
| Total        | Unmetered General   | 6,393        | 6,688           | 7,023           | 9,514          | 9,948         | 10,419        | 11,024        | 11,494        | 11,845        | 26932        | 28130        | 29287         |
| Total        | Unmetered Temporary | 289          | 303             | 318             | 255            | 372           | 372           | 270           | 275           | 281           | 814          | 950          | 971           |
| <b>Total</b> | <b>Total</b>        | <b>6,696</b> | <b>7,007.25</b> | <b>7,358.27</b> | <b>9,858</b>   | <b>10,406</b> | <b>10,880</b> | <b>11,322</b> | <b>11,799</b> | <b>12,159</b> | <b>27876</b> | <b>29212</b> | <b>30397</b>  |

3.2.5.1 For Temporary Metered & Temporary Permanent Connections, the estimation of Consumers and Load has been carried out on Monthly basis instead of directly applying the growth rate to annual figures. For unmetered temporary agriculture consumers under this category, the assessed consumption is considered as per the norms stipulated by Hon'ble Commission in the Tariff order for FY 2024-25. The same is shown as below:

**Table 26: Phase Wise Assessment for Un-metered Temporary Agriculture Connections**

| Phase        | Figures in Unit |         |
|--------------|-----------------|---------|
|              | Urban           | Rural   |
|              | 2024-25         | 2024-25 |
| Three Phase  | 220             | 195     |
| Single Phase | 230             | 205     |

3.2.5.2 The month-wise segregation of norms for assessed consumption of unmetered permanent agricultural connections are as shown below:

**Table 27: Phase Wise Assessment for Unmetered Permanent Agriculture Connections**

| Figures in Unit | Three Phase |       | Single Phase |       |
|-----------------|-------------|-------|--------------|-------|
|                 | Urban       | Rural | Urban        | Rural |
| Months          |             |       |              |       |
| April           | 95          | 95    | 95           | 95    |
| May             | 95          | 95    | 95           | 95    |
| June            | 95          | 95    | 95           | 95    |
| July            | 95          | 95    | 95           | 95    |
| Aug             | 95          | 95    | 95           | 95    |
| Sept            | 95          | 95    | 95           | 95    |
| Oct             | 170         | 170   | 180          | 180   |
| Nov             | 170         | 170   | 180          | 180   |
| Dec             | 170         | 170   | 180          | 180   |
| Jan             | 170         | 170   | 180          | 180   |
| Feb             | 170         | 170   | 180          | 180   |
| March           | 170         | 170   | 180          | 180   |

3.2.5.3 The Hon'ble Commission had increased the normative units for permanent agriculture consumers in the Tariff Order for FY 2018-19 from 1560 Units to 1650 Units per HP per Annum. Till FY 2013-14, agriculture pump consumers were being supplied with 8 Hrs of electricity per day in groups. From FY 2014-15, feeder separation work started and as a result 10 Hours of electricity was supplied on daily basis on separated feeders to agriculture consumers whereas for mixed feeders it was on 24 Hours supply. On mixed feeders there are many agriculture pump connections that are being supplied by more than 20 Hours of supply.

#### 3.2.5.4 East Discom

The growth rates assumed for future projections and revised estimates for this category by East Discom are as follows:

**Table 28: Growth Percentage Assumption East Discom**

| Area            | Category    | Urban |                           | Rural |                           |
|-----------------|-------------|-------|---------------------------|-------|---------------------------|
|                 |             |       |                           |       |                           |
| Metered General | Consumer    | 10%   | Nominal Growth Considered | 10%   | Nominal Growth Considered |
|                 | Load        | 10%   | Nominal Growth Considered | 10%   | Nominal Growth Considered |
|                 | Consumption | 10%   | Nominal Growth Considered | 10%   | Nominal Growth Considered |

| Area                | Category    | Urban |                           | Rural |                           |
|---------------------|-------------|-------|---------------------------|-------|---------------------------|
| Unmetered Permanent | Consumer    | 5%    | Nominal Growth Considered | 5%    | Nominal Growth Considered |
|                     | Load        | 5%    | Nominal Growth Considered | 5%    | Nominal Growth Considered |
|                     | Consumption | 5%    | Nominal Growth Considered | 5%    | Nominal Growth Considered |
| Metered Temporary   | Consumer    | 5%    | Nominal Growth Considered | 5%    | Nominal Growth Considered |
|                     | Load        | 5%    | Nominal Growth Considered | 5%    | Nominal Growth Considered |
|                     | Consumption | 5%    | Nominal Growth Considered | 5%    | Nominal Growth Considered |

### 3.2.5.5 Central Discom

The growth rates assumed for future projections and revised estimates for this category by Central Discom are as follows:

**Table 29: Growth Percentage Assumption Central Discom**

| Area                | Category    | Urban |  | Rural |                           |
|---------------------|-------------|-------|--|-------|---------------------------|
| Metered General     | Consumer    | 4.1%  | Nominal Growth Considered                | 5.0%  | Nominal Growth Considered |
|                     | Load        | 3.8%  | Nominal Growth Considered                | 3.0%  | Nominal Growth Considered |
|                     | Consumption | 3.5%  | Nominal Growth Considered                | 3.0%  | Nominal Growth Considered |
| Unmetered Permanent | Consumer    | -5.9% | Negative growth rate has been considered | 3.7%  | Nominal Growth Considered |
|                     | Load        | -2.8% | Negative growth rate has been considered | 4.8%  | Nominal Growth Considered |
|                     | Consumption | -2.8% | Negative growth rate has been considered | 4.8%  | Nominal Growth Considered |
| Metered Temporary   | Consumer    | 10.0% | Nominal Growth Considered                | 10.0% | Nominal Growth Considered |
|                     | Load        | 7.8%  | Nominal Growth Considered                | 7.8%  | Nominal Growth Considered |
|                     | Consumption | 5.0%  | Nominal Growth Considered                | 5.0%  | Nominal Growth Considered |

### 3.2.5.6 West Discom

With the conversion of most of the Agricultural Temporary Connections to Permanent Unmetered Connections under Mukhya Mantri Sthayi Krishi Pump Yojna (MMSKPY) introduced in 2016, the petitioner has taken zero growth in FY 2025-26.

**Table 30: Growth Percentage Assumption West Discom**

| Area                | Category    | Urban |                                    | Rural |                           |
|---------------------|-------------|-------|------------------------------------|-------|---------------------------|
| Metered General     | Consumer    | 2%    | Nominal Growth Considered          | 2%    | Nominal Growth Considered |
|                     | Load        | 4%    | Nominal Growth Considered          | 4%    | Nominal Growth Considered |
|                     | Consumption | 9%    | Nominal Growth Considered          | 21%   | Nominal Growth Considered |
| Unmetered Permanent | Consumer    | 0%    | No growth rate has been considered | 1%    | Nominal Growth Considered |
|                     | Load        | 0%    | No growth rate has been considered | 3%    | Nominal Growth Considered |
|                     | Consumption | 0%    | No growth rate has been considered | 3%    | Nominal Growth Considered |



| Area                 | Category    | Urban |                           | Rural |                           |
|----------------------|-------------|-------|---------------------------|-------|---------------------------|
| Metered<br>Temporary | Consumer    | 2%    | Nominal Growth Considered | 2%    | Nominal Growth Considered |
|                      | Load        | 2%    | Nominal Growth Considered | 2%    | Nominal Growth Considered |
|                      | Consumption | 2%    | Nominal Growth Considered | 2%    | Nominal Growth Considered |

### 3.2.6 LV-5.2: Other agricultural Use

The projections for LV 5.2 Agricultural category are as follows:

**Table 31: Energy Sales for LV 5.2 (MUs)**

| Sub-category      | East Discom  |              |               | Central Discom |             |               | West Discom |             |               | MP State     |              |               |
|-------------------|--------------|--------------|---------------|----------------|-------------|---------------|-------------|-------------|---------------|--------------|--------------|---------------|
|                   | FY 24        | FY 25 (RE)   | FY 26 (Proj.) | FY 24          | FY 25 (RE)  | FY 26 (Proj.) | FY 24       | FY 25 (RE)  | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) |
| Upto 20HP         | 5.06         | 5.74         | 6.52          | 4.55           | 4.95        | 5.41          | 3.26        | 1.97        | 2.17          | 12.87        | 12.66        | 14.10         |
| greater than 20HP | 5.37         | 6.64         | 8.24          | 2.33           | 2.68        | 3.08          | 1.48        | 1.51        | 1.57          | 9.19         | 10.83        | 12.88         |
| Temporary         | 0.10         | 0.11         | 0.12          | 0.08           | 0.08        | 0.08          | 0.09        | 0.12        | 0.15          | 0.27         | 0.30         | 0.35          |
| <b>Total</b>      | <b>10.53</b> | <b>12.49</b> | <b>14.87</b>  | <b>6.96</b>    | <b>7.71</b> | <b>8.57</b>   | <b>4.83</b> | <b>3.60</b> | <b>3.90</b>   | <b>22.32</b> | <b>23.80</b> | <b>27.34</b>  |

#### 3.2.6.1 East Discom

The growth rates assumed for future projections and revised estimates for this category by East Discom are as follows:

**Table 32: Growth Percentage Assumption East Discom**

| Area               | Category            | Urban  |                                    | Rural  |                        |
|--------------------|---------------------|--------|------------------------------------|--------|------------------------|
| Up to 3HP          | Consumer            | 2.28%  | 3-year CAGR considered             | 15.76% | 3-year CAGR considered |
|                    | Load (kW)           | 2.66%  | 3-year CAGR considered             | 18.38% | 3-year CAGR considered |
|                    | Consumption (Units) | 4.96%  | 5-year CAGR considered             | 13.72% | 3-year CAGR considered |
| Above 3HP to 5HP   | Consumer            | 3.73%  | 3-year CAGR considered             | 12.86% | 3-year CAGR considered |
|                    | Load (kW)           | 3.90%  | 3-year CAGR considered             | 13.09% | 3-year CAGR considered |
|                    | Consumption (Units) | 11.22% | 2-year CAGR considered             | 14.93% | 3-year CAGR considered |
| Above 5HP to 10HP  | Consumer            | 0.00%  | No growth rate has been considered | 13.63% | 3-year CAGR considered |
|                    | Load (kW)           | 0.00%  | No growth rate has been considered | 12.18% | 3-year CAGR considered |
|                    | Consumption (Units) | 0.27%  | 1-year growth considered           | 12.29% | 3-year CAGR considered |
| Above 10HP to 20HP | Consumer            | 15.52% | 3-year CAGR considered             | 15.55% | 3-year CAGR considered |
|                    | Load (kW)           | 15.90% | 3-year CAGR considered             | 15.91% | 3-year CAGR considered |
|                    | Consumption (Units) | 6.72%  | 3-year CAGR considered             | 24.71% | 3-year CAGR considered |
| Above 20HP         | Consumer            | 8.20%  | 3-year CAGR considered             | 7.62%  | 3-year CAGR considered |
|                    | Load (kW)           | 6.82%  | 3-year CAGR considered             | 13.75% | 3-year CAGR considered |

| Area      | Category            | Urban |                                    | Rural  |                        |
|-----------|---------------------|-------|------------------------------------|--------|------------------------|
|           | Consumption (Units) | 3.26% | 3-year CAGR considered             | 26.72% | 3-year CAGR considered |
| Temporary | Consumer            | 0.00% | No growth rate has been considered | 18.29% | 5-year CAGR considered |
|           | Load (kW)           | 0.00% | No growth rate has been considered | 12.37% | 5-year CAGR considered |
|           | Consumption (Units) | 0.00% | No growth rate has been considered | 9.20%  | 3-year CAGR considered |

### 3.2.6.2 Central Discom

The growth rates assumed for future projections and revised estimates for this category by Central Discom are as follows:

**Table 33: Growth Percentage Assumption Central Discom**

| Area               | Category            | Urban  |   | Rural  |                                    |
|--------------------|---------------------|--------|---|--------|------------------------------------|
| Up to 3HP          | Consumer            | 8.56%  | 2-year CAGR considered  | 0.00%  | No growth rate has been considered |
|                    | Load (kW)           | 9.54%  | 2-year CAGR considered  | 0.00%  | No growth rate has been considered |
|                    | Consumption (Units) | 14.37% | 4-year CAGR considered  | 0.00%  | No growth rate has been considered |
| Above 3HP to 5HP   | Consumer            | 6.04%  | 3-year CAGR considered  | 4.27%  | 5-year CAGR considered             |
|                    | Load (kW)           | 5.27%  | 3-year CAGR considered  | 9.33%  | 4-year CAGR considered             |
|                    | Consumption (Units) | 7.07%  | 4-year CAGR considered  | 5.00%  | Nominal Growth Considered          |
| Above 5HP to 10HP  | Consumer            | 9.26%  | 4-year CAGR considered  | 4.65%  | 5-year CAGR considered             |
|                    | Load (kW)           | 10.14% | 3-year CAGR considered  | 5.12%  | 1-year growth considered           |
|                    | Consumption (Units) | 9.07%  | 3-year CAGR considered  | 2.68%  | 5-year CAGR considered             |
| Above 10HP to 20HP | Consumer            | 10.00% | Nominal Growth Considered                                     | 6.25%  | 1-year growth considered           |
|                    | Load (kW)           | 10.00% | Nominal Growth Considered                                     | 5.53%  | 1-year growth considered           |
|                    | Consumption (Units) | 10.00% | Nominal Growth Considered                                     | 20.00% | Nominal Growth Considered          |
| Above 20HP         | Consumer            | 8.71%  | 2-year CAGR considered  | 7.17%  | 3-year CAGR considered             |
|                    | Load (kW)           | 4.11%  | 3-year CAGR considered  | 11.74% | 1-year growth considered           |
|                    | Consumption (Units) | -4.20% | Negative growth considered due to consecutive negative growth | 17.03% | 1-year growth considered           |
| Temporary          | Consumer            | 0.00%  | No growth rate has been considered                            | 0.00%  | No growth rate has been considered |
|                    | Load (kW)           | 0.00%  | No growth rate has been considered                            | 0.00%  | No growth rate has been considered |
|                    | Consumption (Units) | 0.00%  | No growth rate has been considered                            | 0.00%  | No growth rate has been considered |

### 3.2.6.3 West Discom

The growth rates assumed for future projections and revised estimates for this category by West Discom are as follows:

**Table 34: Growth Percentage Assumption West Discom**

| Area               | Category            | Urban  |  | Rural  |  |
|--------------------|---------------------|--------|--|--------|--|
| Up to 3HP          | Consumer            | 3.08%  | 2-year CAGR considered   | 0.00%  | No growth rate has been considered due to decreasing trend |
|                    | Load (kW)           | 4.17%  | 3-year CAGR considered   | 0.00%  | No growth rate has been considered due to decreasing trend |
|                    | Consumption (Units) | 0.00%  | No growth rate has been considered                             | 0.00%  | No growth rate has been considered due to decreasing trend |
| Above 3HP to 5HP   | Consumer            | 0.00%  | No growth rate has been considered                             | 5.29%  | 2-year CAGR considered                                     |
|                    | Load (kW)           | 5.00%  | Nominal Growth Considered                                      | 11.18% | 1-year growth considered                                   |
|                    | Consumption (Units) | 1.73%  | 3-year CAGR considered   | 5.62%  | 2-year CAGR considered                                     |
| Above 5HP to 10HP  | Consumer            | 9.19%  | 3-year CAGR considered   | 8.24%  | 1-year growth considered                                   |
|                    | Load (kW)           | 1.22%  | Nominal Growth Considered                                      | 8.06%  | 1-year growth considered                                   |
|                    | Consumption (Units) | 13.55% | 5-year CAGR considered   | 13.29% | 3-year CAGR considered                                     |
| Above 10HP to 20HP | Consumer            | 20.14% | Nominal Growth Considered                                      | 6.71%  | Nominal Growth Considered                                  |
|                    | Load (kW)           | 23.38% | Nominal Growth Considered                                      | 8.29%  | 2-year CAGR considered                                     |
|                    | Consumption (Units) | 15.52% | 5-year CAGR considered   | 10.00% | Nominal Growth Considered                                  |
| Above 20HP         | Consumer            | 0.00%  | No growth rate has been considered                             | 9.52%  | 1-year growth considered                                   |
|                    | Load (kW)           | 0.00%  | No growth rate has been considered                             | 2.10%  | 1-year growth considered                                   |
|                    | Consumption (Units) | 2.56%  | 1-year growth considered                                       | 4.89%  | 1-year growth considered                                   |
| Temporary          | Consumer            | 0.00%  | No growth rate has been considered                             | 11.87% | 3-year CAGR considered                                     |
|                    | Load (kW)           | 0.00%  | No growth rate has been considered                             | 11.87% | 3-year CAGR considered                                     |
|                    | Consumption (Units) | 20.00% | Nominal Growth Considered as actual is growth of a year is 50% | 35.41% | 3-year CAGR considered                                     |

### 3.2.7 LV-6 E- Vehicle / E-Rickshaw Charging Station

The projection of sales for this category is as follows:

**Table 35: Energy Sales for LV 6 (MUs)**

| Sub-category              | East Discom |            |               | Central Discom |            |               | West Discom |            |               | MP State |            |               |
|---------------------------|-------------|------------|---------------|----------------|------------|---------------|-------------|------------|---------------|----------|------------|---------------|
|                           | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24          | FY 25 (RE) | FY 26 (Proj.) | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24    | FY 25 (RE) | FY 26 (Proj.) |
| LV-6 EV Charging Stations | 0.25        | 0.44       | 0.79          | 0.57           | 0.71       | 0.88          | 0.87        | 1.60       | 2.99          | 1.69     | 2.75       | 4.66          |

#### 3.2.7.1 East Discom

The growth rates assumed for future projections are as follows:

**Table 36: Growth Percentage Assumption East Discom**

| Area    | Category    | Urban  |                           | Rural  |                           |
|---------|-------------|--------|---------------------------|--------|---------------------------|
| Metered | Consumer    | 77.42% | 1-year growth considered  | 75.00% | Nominal Growth Considered |
|         | Load (kW)   | 77.4%  | Nominal Growth Considered | 75.00% | Nominal Growth Considered |
|         | Units (MUs) | 77.4%  | Nominal Growth Considered | 75.00% | Nominal Growth Considered |

**3.2.7.2 Central Discom**

The growth rates assumed for future projections are as follows: -

**Table 37: Growth Percentage Assumption Central Discom**

| Area    | Category    | Urban   |                           | Rural  |                           |
|---------|-------------|---------|---------------------------|--------|---------------------------|
| Metered | Consumer    | 100.00% | Nominal Growth Considered | 10.00% | Nominal Growth Considered |
|         | Load (kW)   | 50.00%  | Nominal Growth Considered | 15.00% | Nominal Growth Considered |
|         | Units (MUs) | 25.00%  | Nominal Growth Considered | 15.00% | Nominal Growth Considered |

**3.2.7.3 West Discom**

The growth rates assumed for future projections are as follows:

**Table 38: Growth Percentage Assumption West Discom**

| Area    | Category     | Urban   |                              | Rural |                           |
|---------|--------------|---------|------------------------------|-------|---------------------------|
| Metered | Consumer     | 27.50%  | Nominal Growth Considered    | 5.00% | Nominal Growth Considered |
|         | Load (kW)    | 172.26% | 5 Month Variation considered | 5.00% | Nominal Growth Considered |
|         | Units ( MUs) | 90.56%  | 5 Month Variation considered | 5.00% | Nominal Growth Considered |

**3.2.8 HV-1: Railway Traction**

The Petitioners have signed a contract with Railways in FY 2020-21 for on-demand supply of electricity. Considering the development activities across corridor between Itarsi and Katni new connections are expected for Central. Accordingly, the sales projection for this category is as follows:

**Table 39: Energy Sales for HV 1 (MUs)**

| Sub-Category          | East Discom |            |               | Central Discom |            |               | West Discom |            |               | MP State |            |               |
|-----------------------|-------------|------------|---------------|----------------|------------|---------------|-------------|------------|---------------|----------|------------|---------------|
|                       | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24          | FY 25 (RE) | FY 26 (Proj.) | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24    | FY 25 (RE) | FY 26 (Proj.) |
| HV-1 Railway Traction | -           | -          | -             | 55.32          | 55.32      | 55.32         | -           | -          | -             | 55.32    | 55.32      | 55.32         |

### 3.2.8.1 Central Discom

There has been no sale to Railways in FY 2018-19 to 2022-23 and FY 2023-24. However, owing to the new contract signed with Railways, and looking at the historic trend of sales from the time when, Railways used to draw power from Discom's, One Connection of 10,000 kVA is expected in the year FY 2025-26. With a load factor of 30% and power factor of 0.95, approximately 55 MUs worth of sales is expected.

### 3.2.9 HV -2: Coal Mines

The projection of sales for this category is as shown below:

**Table 40: Energy Sales for HV 2 (MUs)**

| Sub-Category | East Discom  |              |               | Central Discom |             |               | West Discom |            |               | MP State     |              |               |
|--------------|--------------|--------------|---------------|----------------|-------------|---------------|-------------|------------|---------------|--------------|--------------|---------------|
|              | FY 24        | FY 25 (RE)   | FY 26 (Proj.) | FY 24          | FY 25 (RE)  | FY 26 (Proj.) | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) |
| 132 kV       | 260.9        | 285.4        | 312.1         | -              | -           | -             | -           | -          | -             | 260.9        | 285.4        | 312.1         |
| 33 kV        | 243.8        | 246.2        | 249.1         | 23.7           | 24.3        | 24.8          | -           | -          | -             | 267.5        | 270.4        | 274.0         |
| 11 kV        | 0.7          | 0.5          | 0.5           | -              | -           | -             | -           | -          | -             | 0.7          | 0.5          | 0.5           |
| <b>Total</b> | <b>505.3</b> | <b>532.0</b> | <b>561.8</b>  | <b>23.7</b>    | <b>24.3</b> | <b>24.8</b>   | -           | -          | -             | <b>529.0</b> | <b>556.3</b> | <b>586.6</b>  |

#### 3.2.9.1 East Discom

**Table 41: Growth Percentage Assumption East Discom**

| Voltage level | Category    | Urban |                                    | Rural |                                    |
|---------------|-------------|-------|------------------------------------|-------|------------------------------------|
| 132 kV        | Consumer    | 2.00% | Nominal Growth Considered          | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 4.00% | 3-year CAGR considered             | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 9.38% | 3-year CAGR considered             | 0.00% | No growth rate has been considered |
| 33 kV         | Consumer    | 4.00% | 3-year CAGR considered             | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 1.11% | 3-year CAGR considered             | 3.20% | 3-year CAGR considered             |
|               | Units (MUs) | 0.00% | No growth rate has been considered | 3.74% | 3-year CAGR considered             |
| 11 kV         | Consumer    | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |

#### 3.2.9.2 Central Discom

No Growth has been considered except nominal growth in urban area.

**Table 42: Growth Percentage Assumption Central Discom**

| Voltage level | Category    | Urban |                                    | Rural |                                    |
|---------------|-------------|-------|------------------------------------|-------|------------------------------------|
| 132 kV        | Consumer    | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
| 33 kV         | Consumer    | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 2.50% | Nominal Growth Considered          | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 2.36% | 2-year CAGR considered             | 0.00% | No growth rate has been considered |
| 11 kV         | Consumer    | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |

**3.2.9.3 West Discom**

West Discom lacks any consumer base for this category.

| Voltage level | Category    | Urban |                                    | Rural |                                    |
|---------------|-------------|-------|------------------------------------|-------|------------------------------------|
| 132 kV        | Consumer    | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
| 33 kV         | Consumer    | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
| 11 kV         | Consumer    | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |

**3.2.10 HV 3: Industrial and Non-Industrial**

The future projections are as follows:

**Table 43: Energy Sales for HV 3 (MUs)**

| Sub-Category               |              | East Discom    |                |                | Central Discom |                |                | West Discom    |                |                | MP State        |                 |                 |
|----------------------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|
|                            |              | FY 24          | FY 25 (RE)     | FY 26 (Proj.)  | FY 24          | FY 25 (RE)     | FY 26 (Proj.)  | FY 24          | FY 25 (RE)     | FY 26 (Proj.)  | FY 24           | FY 25 (RE)      | FY 26 (Proj.)   |
| Industrial Unit (MU)       | 440/220 kV   | 310.6          | 332.6          | 356.6          | 419.2          | 461.2          | 507.3          | 36.7           | 37.6           | 38.4           | 766.6           | 831.3           | 902.3           |
|                            | 132 kV       | 1,369.9        | 1,485.0        | 1,611.6        | 1,725.2        | 1,852.9        | 1,990.4        | 1,604.4        | 1,715.9        | 1,876.1        | 4,699.5         | 5,053.8         | 5,478.1         |
|                            | 33 kV        | 1,183.1        | 1,325.8        | 1,485.6        | 2,030.7        | 2,155.5        | 2,289.0        | 3,954.4        | 4,133.0        | 4,436.8        | 7,168.3         | 7,614.3         | 8,211.4         |
|                            | 11 kV        | 158.3          | 165.9          | 173.9          | 82.1           | 86.1           | 90.3           | 253.1          | 264.7          | 290.3          | 493.6           | 516.8           | 554.6           |
|                            | <b>Total</b> | <b>3,022.0</b> | <b>3,309.3</b> | <b>3,627.8</b> | <b>4,257.3</b> | <b>4,555.7</b> | <b>4,877.0</b> | <b>5,848.7</b> | <b>6,151.1</b> | <b>6,641.6</b> | <b>13,127.9</b> | <b>14,016.2</b> | <b>15,146.4</b> |
| Non-Industrial - Unit (MU) | 132 kV       | 0.3            | 0.3            | 0.4            | 0.1            | 0.1            | 0.1            | 46.6           | 48.4           | 50.3           | 47.0            | 48.9            | 50.8            |
|                            | 33 kV        | 195.7          | 223.3          | 254.8          | 413.5          | 454.0          | 498.6          | 385.1          | 414.4          | 446.8          | 994.3           | 1,091.7         | 1,200.2         |
|                            | 11 kV        | 101.1          | 114.8          | 130.5          | 126.8          | 128.5          | 130.2          | 136.8          | 140.6          | 144.5          | 364.7           | 383.9           | 405.2           |
|                            | <b>Total</b> | <b>297.1</b>   | <b>338.4</b>   | <b>385.7</b>   | <b>540.5</b>   | <b>582.7</b>   | <b>628.9</b>   | <b>568.5</b>   | <b>603.4</b>   | <b>641.7</b>   | <b>1,406.0</b>  | <b>1,524.6</b>  | <b>1,656.3</b>  |

**3.2.10.1 East Discom**

The assumptions for sales forecast for the Industrial category HV 3.1 are as given below:

**Table 44: Growth Percentage Assumption East Discom**

| Area       | Category    | Urban  |                                    | Rural  |                                    |
|------------|-------------|--------|------------------------------------|--------|------------------------------------|
| 440/220 kV | Consumer    | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|            | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|            | Units (MUs) | 9.19%  | 3-year CAGR considered             | 0.10%  | 4-year CAGR considered             |
| 132 kV     | Consumer    | 6.90%  | 2-year CAGR considered             | 7.46%  | 4-year CAGR considered             |
|            | Load (kW)   | 4.71%  | 5-year CAGR considered             | 4.86%  | 3-year CAGR considered             |
|            | Units (MUs) | 12.94% | 5-year CAGR considered             | 5.56%  | 4-year CAGR considered             |
| 33 kV      | Consumer    | 13.53% | 5-year CAGR considered             | 2.16%  | 4-year CAGR considered             |
|            | Load (kW)   | 10.64% | 5-year CAGR considered             | 1.46%  | 3-year CAGR considered             |
|            | Units (MUs) | 12.17% | 5-year CAGR considered             | 11.75% | 4-year CAGR considered             |
| 11 kV      | Consumer    | 6.39%  | 5-year CAGR considered             | 0.00%  | No growth rate has been considered |
|            | Load (kW)   | 5.88%  | 5-year CAGR considered             | 0.00%  | No growth rate has been considered |
|            | Units (MUs) | 4.43%  | 5-year CAGR considered             | 6.53%  | 4-year CAGR considered             |

The assumptions for sales forecast for the non-Industrial category HV 3.2 are as given below:

**Table 45: Growth Percentage Assumption East Discom**

| Area   | Category    | Urban  |                                    | Rural  |                                    |
|--------|-------------|--------|------------------------------------|--------|------------------------------------|
| 132 kV | Consumer    | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|        | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|        | Units (MUs) | 12.56% | 5-year CAGR considered             | 0.00%  | No growth rate has been considered |
| 33 kV  | Consumer    | 7.86%  | 4-year CAGR considered             | 9.77%  | 5-year CAGR considered             |
|        | Load (kW)   | 7.89%  | 3-year CAGR considered             | 9.67%  | 5-year CAGR considered             |
|        | Units (MUs) | 12.80% | 3-year CAGR considered             | 17.12% | 5-year CAGR considered             |
| 11 kV  | Consumer    | 5.38%  | 4-year CAGR considered             | 0.00%  | No growth rate has been considered |
|        | Load (kW)   | 9.94%  | 3-year CAGR considered             | 1.43%  | No growth rate has been considered |
|        | Units (MUs) | 14.37% | 3-year CAGR considered             | 6.85%  | 5-year CAGR considered             |

**3.2.10.2 Central Discom**

The assumptions for sales forecast for the Industrial category HV 3.1 are as given below:

**Table 46: Growth Percentage Assumption Central Discom**

| Area       | Category    | Urban  |                                    | Rural |                                    |
|------------|-------------|--------|------------------------------------|-------|------------------------------------|
| 440/220 kV | Consumer    | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|            | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|            | Units (MUs) | 10.00% | Nominal Growth Considered          | 0.00% | No growth rate has been considered |
| 132 kV     | Consumer    | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|            | Load (kW)   | 2.41%  | 3-year CAGR considered             | 0.00% | No growth rate has been considered |
|            | Units (MUs) | 7.73%  | 3-year CAGR considered             | 0.00% | No growth rate has been considered |
| 33 kV      | Consumer    | 6.81%  | 5 Month Variation considered       | 0.00% | No growth rate has been considered |
|            | Load (kW)   | 2.34%  | 5 Month Variation considered       | 2.04% | 3-year CAGR considered             |
|            | Units (MUs) | 7.31%  | 1-year growth considered           | 1.82% | 4-year CAGR considered             |
| 11 kV      | Consumer    | 3.23%  | 5 Month Variation considered       | 0.00% | No growth rate has been considered |
|            | Load (kW)   | 5.19%  | 5 Month Variation considered       | 0.00% | No growth rate has been considered |
|            | Units (MUs) | 5.00%  | Nominal Growth Considered          | 2.70% | 3-year CAGR considered             |

The assumptions for sales forecast for the non-Industrial category HV 3.2 are as given in the Table below:



**Table 47: Growth Percentage Assumption Central Discom**

| Area   | Category    | Urban |                                    | Rural |                                    |
|--------|-------------|-------|------------------------------------|-------|------------------------------------|
| 132 kV | Consumer    | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|        | Load (kW)   | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|        | Units (MUs) | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
| 33 kV  | Consumer    | 6.99% | 3-year CAGR considered             | 4.81% | 3-year CAGR considered             |
|        | Load (kW)   | 9.88% | 3-year CAGR considered             | 2.46% | 3-year CAGR considered             |
|        | Units (MUs) | 9.98% | 1-year growth considered           | 5.00% | Nominal Growth Considered          |
| 11 kV  | Consumer    | 3.81% | 3-year CAGR considered             | 0.00% | No growth rate has been considered |
|        | Load (kW)   | 5.43% | 3-year CAGR considered             | 0.00% | No growth rate has been considered |
|        | Units (MUs) | 1.24% | 5-year CAGR considered             | 5.00% | Nominal Growth Considered          |

**3.2.10.3 West Discom**

The assumptions for sales forecast for the Industrial category HV 3.1 are as given below:

**Table 48: Growth Percentage Assumption West Discom**

| Area       | Category    | Urban  |                                    | Rural |                                    |
|------------|-------------|--------|------------------------------------|-------|------------------------------------|
| 440/220 kV | Consumer    | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|            | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|            | Units (MUs) | 2.23%  | 5 Month Variation considered       | 0.00% | No growth rate has been considered |
| 132 kV     | Consumer    | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|            | Load (kW)   | 12.64% | 3-year CAGR considered             | 0.00% | No growth rate has been considered |
|            | Units (MUs) | 9.73%  | 5-year CAGR considered             | 0.00% | No growth rate has been considered |
| 33 kV      | Consumer    | 4.69%  | 3-year CAGR considered             | 5.00% | Nominal Growth Considered          |
|            | Load (kW)   | 9.57%  | 3-year CAGR considered             | 5.00% | Nominal Growth Considered          |
|            | Units (MUs) | 8.00%  | Nominal Growth Considered          | 1.09% | 1-year growth considered           |
| 11 kV      | Consumer    | 7.54%  | 3-year CAGR considered             | 5.00% | Nominal Growth Considered          |
|            | Load (kW)   | 9.14%  | 1-year growth considered           | 0.00% | Nominal Growth Considered          |
|            | Units (MUs) | 9.91%  | Nominal Growth Considered          | 3.68% | 2-year CAGR considered             |

The assumptions for sales forecast for the Non-Industrial category HV 3.2 are as given below:

**Table 49: Growth Percentage Assumption West Discom**

| Area   | Category    | Urban  |                           |  | Rural |                                    |
|--------|-------------|--------|---------------------------|--|-------|------------------------------------|
| 132 kV | Consumer    | 12.00% | Nominal Growth Considered |  | 0.00% | No growth rate has been considered |
|        | Load (kW)   | 5.00%  | Nominal Growth Considered |  | 0.00% | No growth rate has been considered |
|        | Units (MUs) | 3.95%  | 5-year CAGR considered    |  | 0.00% | No growth rate has been considered |
| 33 kV  | Consumer    | 3.31%  | 2-year CAGR considered    |  | 1.49% | 3-year CAGR considered             |
|        | Load (kW)   | 6.58%  | 2-year CAGR considered    |  | 2.75% | 4-year CAGR considered             |
|        | Units (MUs) | 8.13%  | 4-year CAGR considered    |  | 3.45% | Nominal Growth Considered          |
| 11 kV  | Consumer    | 3.96%  | 2-year CAGR considered    |  | 0.00% | No growth rate has been considered |
|        | Load (kW)   | 5.90%  | 2-year CAGR considered    |  | 1.42% | 1-year growth considered           |
|        | Units (MUs) | 2.97%  | 1-year growth considered  |  | 0.00% | No growth rate has been considered |

**3.2.11 HV 4: Seasonal**

The future projections are as follows:

**Table 50: Energy Sales for HV 4 (MUs)**

| Sub-Category | East Discom  |              |               | Central Discom |               |               | West Discom  |              |               | MP State     |              |               |
|--------------|--------------|--------------|---------------|----------------|---------------|---------------|--------------|--------------|---------------|--------------|--------------|---------------|
|              | FY 24        | FY 25 (RE)   | FY 26 (Proj.) | FY 25 (RE)     | FY 26 (Proj.) | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) |
| 33 kV        | 9.61         | 10.72        | 12.00         | 0.80           | 0.92          | 1.06          | 10.91        | 11.35        | 11.82         | 21.32        | 23.00        | 24.87         |
| 11 kV        | 0.68         | 0.68         | 0.68          | -              | 0.07          | 0.07          | 2.28         | 2.38         | 2.50          | 2.96         | 3.14         | 3.25          |
| <b>Total</b> | <b>10.29</b> | <b>11.41</b> | <b>12.68</b>  | <b>0.80</b>    | <b>0.99</b>   | <b>1.13</b>   | <b>13.19</b> | <b>13.74</b> | <b>14.31</b>  | <b>24.28</b> | <b>26.13</b> | <b>28.12</b>  |

**3.2.11.1 East Discom**

The assumptions for sales forecast for the category are given below:

**Table 51: Growth Percentage Assumption East Discom**

| Voltage level | Category    | Urban  |                                    | Rural |       |                                    |
|---------------|-------------|--------|------------------------------------|-------|-------|------------------------------------|
| 33 kV         | Consumer    | 18.71% | 5-year CAGR considered             |       | 4.56% | 5-year CAGR considered             |
|               | Load (kW)   | 18.71% | Nominal Growth Considered          |       | 4.97% | 3-year CAGR considered             |
|               | Units (MUs) | 14.62% | 5-year CAGR considered             |       | 0.00% | No growth rate has been considered |
| 11 kV         | Consumer    | 9.86%  | 5-year CAGR considered             |       | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 14.80% | 5-year CAGR considered             |       | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.00%  | No growth rate has been considered |       | 0.00% | No growth rate has been considered |

**3.2.11.2 Central Discom**

The assumptions for sales forecast for the category are given below:

**Table 52: Growth Percentage Assumption Central Discom**

| Voltage level | Category    | Urban  |                                    | Rural |                                    |
|---------------|-------------|--------|------------------------------------|-------|------------------------------------|
| 33 kV         | Consumer    | 2.00%  | Nominal Growth Considered          | 2.00% | Nominal Growth Considered          |
|               | Load (kW)   | 3.00%  | Nominal Growth Considered          | 2.00% | Nominal Growth Considered          |
|               | Units (MUs) | 15.07% | 5-year CAGR considered             | 2.00% | Nominal Growth Considered          |
| 11 kV         | Consumer    | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |

**3.2.11.3 West Discom**

The assumptions for sales forecast for the category are given below:

**Table 53: Growth Percentage Assumption West Discom**

| Voltage level | Category    | Urban  |                                    | Rural |                                    |
|---------------|-------------|--------|------------------------------------|-------|------------------------------------|
| 33 kV         | Consumer    | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 5.20%  | No growth rate has been considered | 1.00% | Nominal Growth Considered          |
| 11 kV         | Consumer    | 12.50% | 5 Month Variation considered       | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00% | Nominal Growth Considered          |
|               | Units (MUs) | 5.25%  | 3-year CAGR considered             | 0.50% | Nominal Growth Considered          |

**3.2.12 HV 5: Water Works, Lift Irrigation & Other Agricultural use**

The future projections are as follows:

**Table 54: Energy Sales for HV 5 (MUs)**

| Sub-Category             |              | East Discom |             |               | Central Discom |              |               | West Discom  |              |               | MP State     |              |               |
|--------------------------|--------------|-------------|-------------|---------------|----------------|--------------|---------------|--------------|--------------|---------------|--------------|--------------|---------------|
|                          |              | FY 24       | FY 25 (RE)  | FY 26 (Proj.) | FY 24          | FY 25 (RE)   | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) |
| Irrigation - Units (MU)  | 132 kV       | -           | -           | -             | 54.8           | 82.2         | 98.7          | 310.3        | 327.2        | 352.7         | 365.1        | 409.4        | 451.3         |
|                          | 33 kV        | 17.4        | 20.6        | 24.5          | 37.8           | 44.0         | 50.1          | 251.2        | 260.9        | 274.8         | 306.4        | 325.5        | 349.4         |
|                          | 11 kV        | 0.0         | 0.0         | 0.0           | 0.2            | 0.2          | 0.2           | -            | -            | -             | 0.2          | 0.2          | 0.2           |
|                          | <b>Total</b> | <b>17.5</b> | <b>20.7</b> | <b>24.6</b>   | <b>92.8</b>    | <b>126.4</b> | <b>149.0</b>  | <b>561.5</b> | <b>588.0</b> | <b>627.4</b>  | <b>671.8</b> | <b>735.1</b> | <b>801.0</b>  |
| Water Works - Units (MU) | 132 kV       | 0.4         | 0.5         | 0.5           | 55.5           | 56.6         | 57.7          | 404.5        | 405.0        | 406.7         | 460.4        | 462.1        | 464.9         |
|                          | 33 kV        | 185.7       | 215.1       | 249.2         | 217.1          | 232.9        | 249.8         | 196.6        | 205.6        | 214.2         | 599.4        | 653.5        | 713.2         |
|                          | 11 kV        | 10.2        | 10.7        | 11.1          | 16.8           | 18.1         | 19.5          | 13.8         | 14.3         | 15.2          | 40.9         | 43.0         | 45.8          |

| Sub-Category                        | East Discom  |             |               | Central Discom |             |               | West Discom |            |               | MP State   |             |               |             |
|-------------------------------------|--------------|-------------|---------------|----------------|-------------|---------------|-------------|------------|---------------|------------|-------------|---------------|-------------|
|                                     | FY 24        | FY 25 (RE)  | FY 26 (Proj.) | FY 24          | FY 25 (RE)  | FY 26 (Proj.) | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24      | FY 25 (RE)  | FY 26 (Proj.) |             |
|                                     | Total        | 196.4       | 226.2         | 260.8          | 289.4       | 307.6         | 327.0       | 614.9      | 624.9         | 636.0      | 1,100.6     | 1,158.7       | 1,223.9     |
| Other than Agricultural -Units (MU) | 132 kV       | -           | -             | -              | -           | -             | -           | -          | -             | -          | -           | -             | -           |
|                                     | 33 kV        | 5.4         | 6.0           | 6.8            | 8.3         | 8.8           | 9.3         | 0.7        | 0.8           | 0.9        | 14.4        | 15.6          | 17.0        |
|                                     | 11 kV        | 12.0        | 12.0          | 12.0           | 2.9         | 3.1           | 3.4         | 6.0        | 6.9           | 8.0        | 20.8        | 22.0          | 23.4        |
|                                     | <b>Total</b> | <b>17.3</b> | <b>18.0</b>   | <b>18.8</b>    | <b>11.2</b> | <b>11.9</b>   | <b>12.7</b> | <b>6.7</b> | <b>7.7</b>    | <b>8.9</b> | <b>35.2</b> | <b>37.6</b>   | <b>40.4</b> |

3.2.12.1 **East Discom**

The growth percentages for sales forecast for the HT Water Works category are given below:

**Table 55: Growth Percentage Assumption East Discom**

| Voltage level | Category    | Urban  |                                    | Rural  |                                    |
|---------------|-------------|--------|------------------------------------|--------|------------------------------------|
|               |             |        |                                    |        |                                    |
| 132 kV        | Consumer    | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 0.00%  | No growth rate has been considered | 12.92% | 4-year CAGR considered             |
| 33 kV         | Consumer    | 18.98% | 5-year CAGR considered             | 3.39%  | 4-year CAGR considered             |
|               | Load (kW)   | 18.85% | 5-year CAGR considered             | 3.55%  | 4-year CAGR considered             |
|               | Units (MUs) | 17.24% | 4-year CAGR considered             | 12.85% | 4-year CAGR considered             |
| 11 kV         | Consumer    | 7.39%  | 5-year CAGR considered             | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 3.57%  | 5-year CAGR considered             | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 4.61%  | 4-year CAGR considered             | 0.66%  | 4-year CAGR considered             |

The growth percentages for sales forecast for the HT – Irrigation category are given below:

**Table 56: Growth Percentage Assumption East Discom**

| Voltage level | Category    | Urban  |                                    | Rural  |                                    |
|---------------|-------------|--------|------------------------------------|--------|------------------------------------|
|               |             |        |                                    |        |                                    |
| 132 kV        | Consumer    | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
| 33 kV         | Consumer    | 28.56% | 3-year CAGR considered             | 10.06% | 3-year CAGR considered             |
|               | Load (kW)   | 28.56% | Nominal Growth Considered          | 1.36%  | 2-year CAGR considered             |
|               | Units (MUs) | 25.04% | 2-year CAGR considered             | 7.99%  | 4-year CAGR considered             |
| 11 kV         | Consumer    | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |

The growth percentages for sales forecast for the HT – Other Agricultural category are given below:

**Table 57: Growth Percentage Assumption East Discom**

| Voltage level | Category    | Urban  |                                    | Rural |                                    |
|---------------|-------------|--------|------------------------------------|-------|------------------------------------|
| 132 kV        | Consumer    | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
| 33 kV         | Consumer    | 6.27%  | 3-year CAGR considered             | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 10.86% | 3-year CAGR considered             | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 13.02% | 2-year CAGR considered             | 0.00% | No growth rate has been considered |
| 11 kV         | Consumer    | 4.00%  | 3-year CAGR considered             | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.52%  | 2-year CAGR considered             | 0.00% | No growth rate has been considered |

### 3.2.12.2 Central Discom

The growth percentages for sales forecast for the HT water works category are given below:

**Table 58: Growth Percentage Assumption Central Discom**

| Voltage level | Category    | Urban  |                                    | Rural  |                                    |
|---------------|-------------|--------|------------------------------------|--------|------------------------------------|
| 132 kV        | Consumer    | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 2.00%  | Nominal Growth Considered          | 0.00%  | No growth rate has been considered |
| 33 kV         | Consumer    | 9.21%  | 2-year CAGR considered             | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 4.33%  | 2-year CAGR considered             | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 7.27%  | 1-year growth considered           | 7.09%  | 2-year CAGR considered             |
| 11 kV         | Consumer    | 10.00% | Nominal Growth Considered          | 10.00% | Nominal Growth Considered          |
|               | Load (kW)   | 10.00% | Nominal Growth Considered          | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 8.04%  | 4-year CAGR considered             | 4.04%  | 3-year CAGR considered             |

The growth percentages for sales forecast for the HT Irrigation category are given below:

**Table 59: Growth Percentage Assumption Central Discom**

| Voltage level | Category    | Urban  |                                    | Rural |                                    |
|---------------|-------------|--------|------------------------------------|-------|------------------------------------|
| 132 kV        | Consumer    | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 20.00% | Nominal Growth Considered          | 0.00% | No growth rate has been considered |
| 33 kV         | Consumer    | 10.00% | Nominal Growth Considered          | 2.00% | Nominal Growth Considered          |
|               | Load (kW)   | 25.15% | 5 Month Variation considered       | 5.00% | Nominal Growth Considered          |
|               | Units (MUs) | 20.00% | Nominal Growth Considered          | 0.00% | No growth rate has been considered |
| 11 kV         | Consumer    | 10.00% | Nominal Growth Considered          | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |

The growth percentages for sales forecast for the HT- Other Agricultural category are given below:

**Table 60: Growth Percentage Assumption Central Discom**

| Voltage level | Category    | Urban  |                                    | Rural  |                                    |
|---------------|-------------|--------|------------------------------------|--------|------------------------------------|
| 132 kV        | Consumer    | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
| 33 kV         | Consumer    | 2.00%  | Nominal Growth Considered          | 5.00%  | Nominal Growth Considered          |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 5.00%  | Nominal Growth Considered          |
|               | Units (MUs) | 0.33%  | 2-year CAGR considered             | 11.97% | 4-year CAGR considered             |
| 11 kV         | Consumer    | 10.00% | Nominal Growth Considered          | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 10.00% | Nominal Growth Considered          | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 10.00% | Nominal Growth Considered          | 0.00%  | No growth rate has been considered |

### 3.2.12.3 West Discom

The growth percentages for sales forecast for the HT Water Works category are given below:

**Table 61: Growth Percentage Assumption West Discom**

| Voltage level | Category    | Urban |                                    | Rural |                                    |
|---------------|-------------|-------|------------------------------------|-------|------------------------------------|
| 132 kV        | Consumer    | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 5.70% | 3-year CAGR considered             | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.00% | No growth rate has been considered | 0.40% | Nominal Growth Considered          |
| 33 kV         | Consumer    | 7.69% | 1-year growth considered           | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 4.80% | 1-year growth considered           | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 4.62% | 2-year CAGR considered             | 2.26% | 1-year growth considered           |
| 11 kV         | Consumer    | 4.35% | 1-year growth considered           | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 5.85% | 3-year CAGR considered             | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 9.68% | 3-year CAGR considered             | 2.50% | Nominal Growth Considered          |

The growth percentages for sales forecast for the HT Irrigation category are given below:

**Table 62: Growth Percentage Assumption West Discom**

| Voltage level | Category    | Urban  |                                    | Rural  |                                    |
|---------------|-------------|--------|------------------------------------|--------|------------------------------------|
| 132 kV        | Consumer    | 20.00% | Nominal Growth Considered          | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 20.00% | Nominal Growth Considered          | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 8.00%  | 5 Month Variation considered       | 7.33%  | 3-year CAGR considered             |
| 33 kV         | Consumer    | 24.24% | 5 Month Variation considered       | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 21.00% | Nominal Growth Considered          | 10.00% | Nominal Growth Considered          |
|               | Units (MUs) | 5.77%  | 1-year growth considered           | 4.40%  | Nominal Growth Considered          |
| 11 kV         | Consumer    | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |

The growth percentages for sales forecast for the HT- Other Agricultural category are given below:

**Table 63: Growth Percentage Assumption West Discom**

| Voltage level | Category | Urban |                                    | Rural |                                    |
|---------------|----------|-------|------------------------------------|-------|------------------------------------|
| 132 kV        | Consumer | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |

|       |             |        |                                    |       |                                    |
|-------|-------------|--------|------------------------------------|-------|------------------------------------|
|       | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|       | Units (MUs) | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
| 33 kV | Consumer    | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|       | Load (kW)   | 12.86% | 1-year growth considered           | 0.00% | No growth rate has been considered |
|       | Units (MUs) | 15.55% | Nominal Growth Considered          | 0.00% | No growth rate has been considered |
| 11 kV | Consumer    | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|       | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |
|       | Units (MUs) | 0.00%  | No growth rate has been considered | 0.00% | No growth rate has been considered |

### 3.2.13 HV 6: Bulk Residential users

The future projections are as follows:

**Table 64: Energy Sales for HV 6 (MUs)**

| Sub-Category | East Discom  |              |               | Central Discom |              |               | West Discom |             |               | MP State     |              |               |
|--------------|--------------|--------------|---------------|----------------|--------------|---------------|-------------|-------------|---------------|--------------|--------------|---------------|
|              | FY 24        | FY 25 (RE)   | FY 26 (Proj.) | FY 24          | FY 25 (RE)   | FY 26 (Proj.) | FY 24       | FY 25 (RE)  | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) |
| 132 KV       |              |              |               |                |              |               | -           | -           | -             | -            | -            | -             |
| 33 kV        | 217.7        | 219.7        | 221.7         | 135.9          | 139.8        | 144.0         | 35.2        | 37.6        | 40.1          | 388.8        | 397.1        | 405.8         |
| 11 kV        | 14.2         | 14.3         | 14.5          | 16.5           | 16.7         | 16.9          | 5.6         | 5.9         | 6.2           | 36.3         | 36.9         | 37.5          |
| <b>Total</b> | <b>231.9</b> | <b>234.0</b> | <b>236.1</b>  | <b>152.3</b>   | <b>156.5</b> | <b>160.8</b>  | <b>40.8</b> | <b>43.5</b> | <b>46.3</b>   | <b>425.1</b> | <b>434.0</b> | <b>443.2</b>  |

#### 3.2.13.1 East Discom

The assumptions for sales forecast for the category are given below:

**Table 65: Growth Percentage Assumption East Discom**

| Voltage level | Category    | Urban |                           | Rural |                                    |
|---------------|-------------|-------|---------------------------|-------|------------------------------------|
| 33 kV         | Consumer    | 1.00% | Nominal Growth Considered | 3.71% | 5-year CAGR considered             |
|               | Load (kW)   | 1.00% | Nominal Growth Considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 1.00% | Nominal Growth Considered | 0.50% | 5-year CAGR considered             |
| 11 kV         | Consumer    | 1.00% | Nominal Growth Considered | 4.56% | 5-year CAGR considered             |
|               | Load (kW)   | 1.00% | Nominal Growth Considered | 2.75% | 5-year CAGR considered             |
|               | Units (MUs) | 1.00% | Nominal Growth Considered | 0.00% | No growth rate has been considered |

#### 3.2.13.2 Central Discom



The assumptions for sales forecast for the category are given below:

**Table 66: Growth Percentage Assumption Central Discom**

| Voltage level | Category    | Urban |                                    | Rural |                                    |
|---------------|-------------|-------|------------------------------------|-------|------------------------------------|
| 33 kV         | Consumer    | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.37% | 2-year CAGR considered             | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 3.00% | Nominal Growth Considered          | 0.00% | No growth rate has been considered |
| 11 kV         | Consumer    | 8.71% | 2-year CAGR considered             | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 8.90% | 5-year CAGR considered             | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 4.44% | 4-year CAGR considered             | 0.00% | No growth rate has been considered |

### 3.2.13.3 West Discom

The assumptions for sales forecast for the category are given below:

**Table 67: Growth Percentage Assumption West Discom**

| Voltage level | Category    | Urban |                                    | Rural |                                    |
|---------------|-------------|-------|------------------------------------|-------|------------------------------------|
| 33 kV         | Consumer    | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 6.92% | 1-year growth considered           | 1.00% | Nominal Growth Considered          |
| 11 kV         | Consumer    | 5.00% | Nominal Growth Considered          | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 4.46% | 4-year CAGR considered             | 0.00% | No growth rate has been considered |

### 3.2.14 **HV-7: Requirement of Power for Generators Connected to the grid**

The future projections are as follows:

**Table 68: Requirement of Power for Generators Connected to the grid (MUs)**

| Sub-Category | East Discom |             |               | Central Discom |             |               | West Discom  |              |               | MP State     |              |               |
|--------------|-------------|-------------|---------------|----------------|-------------|---------------|--------------|--------------|---------------|--------------|--------------|---------------|
|              | FY 24       | FY 25 (RE)  | FY 26 (Proj.) | FY 24          | FY 25 (RE)  | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) | FY 24        | FY 25 (RE)   | FY 26 (Proj.) |
| 132 KV       | -           | -           | -             | 4.50           | 4.90        | 5.33          | 25.27        | 26.96        | 28.76         | 29.77        | 31.86        | 34.10         |
| 33 kV        | -           | -           | -             | -              | -           | -             | -            | -            | -             | -            | -            | -             |
| 11 kV        | 3.39        | 4.06        | 4.88          | -              | -           | -             | -            | -            | -             | 3.39         | 4.06         | 4.88          |
| <b>Total</b> | <b>3.39</b> | <b>4.06</b> | <b>4.88</b>   | <b>4.50</b>    | <b>4.90</b> | <b>5.33</b>   | <b>25.27</b> | <b>26.96</b> | <b>28.76</b>  | <b>33.16</b> | <b>35.92</b> | <b>38.98</b>  |

#### 3.2.14.1 East Discom

The assumptions for sales forecast for the category are given below:

**Table 69: Growth Percentage Assumption East Discom**

| Voltage level | Category    | Urban  |                                    | Rural  |                                    |
|---------------|-------------|--------|------------------------------------|--------|------------------------------------|
| 132 kV        | Consumer    | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
| 33 KV         | Consumer    | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
| 11 kV         | Consumer    | 10.00% | Nominal Growth Considered          | 10.00% | Nominal Growth Considered          |
|               | Load (kW)   | 14.41% | 1-year growth considered           | 10.00% | Nominal Growth Considered          |
|               | Units (MUs) | 20.00% | Nominal Growth Considered          | 10.00% | Nominal Growth Considered          |

### 3.2.14.2 Central Discom

The assumptions for sales forecast for the category are given below:

**Table 70: Growth Percentage Assumption Central Discom**

| Voltage level | Category    | Urban  |                                    | Rural  |                                    |
|---------------|-------------|--------|------------------------------------|--------|------------------------------------|
| 132 kV        | Consumer    | 10.55% | 2-year CAGR considered             | 20.00% | Nominal Growth Considered          |
|               | Load (kW)   | 10.00% | Nominal Growth Considered          | 2.00%  | Nominal Growth Considered          |
|               | Units (MUs) | 10.04% | 5 Month Variation considered       | 5.00%  | Nominal Growth Considered          |
| 33 KV         | Consumer    | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 0.00%  | Nominal Growth Considered          | 0.00%  | No growth rate has been considered |
| 11 kV         | Consumer    | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Load (kW)   | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |
|               | Units (MUs) | 0.00%  | No growth rate has been considered | 0.00%  | No growth rate has been considered |

### 3.2.14.3 West Discom

The assumptions for sales forecast for the category are given below:

**Table 71: Growth Percentage Assumption West Discom**

| Voltage level | Category    | Urban |                                    | Rural |                                    |
|---------------|-------------|-------|------------------------------------|-------|------------------------------------|
| 132 kV        | Consumer    | 4.73% | 2-year CAGR considered             | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 1.81% | 1-year growth considered           | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 7.20% | 1-year growth considered           | 5.30% | Nominal Growth Considered          |
| 33 KV         | Consumer    | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
| 11 kV         | Consumer    | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Load (kW)   | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |
|               | Units (MUs) | 0.00% | No growth rate has been considered | 0.00% | No growth rate has been considered |

### 3.2.15 HV-8 E- Vehicle / E-Rickshaws Charging Station

The projection of sales for this category is as follows:

**Table 72: Energy Sales for HV 8 (MUs)**

| Sub-Category               | East Discom |            |               | Central Discom |            |               | West Discom |            |               | MP State |            |               |
|----------------------------|-------------|------------|---------------|----------------|------------|---------------|-------------|------------|---------------|----------|------------|---------------|
|                            | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24          | FY 25 (RE) | FY 26 (Proj.) | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24    | FY 25 (RE) | FY 26 (Proj.) |
| LV- 8 EV Charging Stations | -           | 6.92       | 7.26          | 2.47           | 19.08      | 20.98         | 4.51        | 7.48       | 12.40         | 6.98     | 33.47      | 40.65         |

#### 3.2.15.1 East Discom

The growth rates assumed for future projections are as follows: -

**Table 73: Growth Percentage Assumption East Discom**

| Sub-Category | Category    | Urban |                           | Rural |                                    |
|--------------|-------------|-------|---------------------------|-------|------------------------------------|
| Metered      | Consumer    | 5.00% | Nominal Growth Considered | 0.00% | No growth rate has been considered |
|              | Load (kW)   | 5.00% | Nominal Growth Considered | 0.00% | No growth rate has been considered |
|              | Units (MUs) | 5.00% | Nominal Growth Considered | 0.00% | No growth rate has been considered |

#### 3.2.15.2 Central Discom

The growth rates assumed for future projections are as follows: -

**Table 74: Growth Percentage Assumption Central Discom**

| Sub-Category | Category    | Urban  |                           | Rural  |                           |
|--------------|-------------|--------|---------------------------|--------|---------------------------|
| Metered      | Consumer    | 50.00% | Nominal Growth Considered | 5.00%  | Nominal Growth Considered |
|              | Load (kW)   | 10.00% | Nominal Growth Considered | 5.00%  | Nominal Growth Considered |
|              | Units (MUs) | 10.00% | Nominal Growth Considered | 10.00% | Nominal Growth Considered |

### 3.2.15.3 West Discom

The growth rates assumed for future projections are as follows: -

**Table 75: Growth Percentage Assumption West Discom**

| Sub-Category | Category    | Urban  |                          | Rural  |                                    |
|--------------|-------------|--------|--------------------------|--------|------------------------------------|
| Metered      | Consumer    | 66.67% | 1-year growth considered | 0.00%  | No growth rate has been considered |
|              | Load (kW)   | 61.76% | 1-year growth considered | 0.00%  | No growth rate has been considered |
|              | Units (MUs) | 65.87% | 1-year growth considered | 10.00% | Nominal Growth Considered          |

### 3.2.16 **HV-9 Metro Rail**

The MPMRCL mentioned that the initial Projected Electric Power requirements for both Bhopal and Indore Metro Projects to be 4 MVA at each Subhash Nagar RSS (Bhopal) & Gandhi Nagar RSS (Indore). Considering the data submitted by MPMRCL and taking cognizance of the recent development the projection of sales for this category is as follows:

**Table 76: Energy Sales for HV 9 (MUs)**

| Sub-Category     | East Discom |            |               | Central Discom |            |               | West Discom |            |               | MP State |            |               |
|------------------|-------------|------------|---------------|----------------|------------|---------------|-------------|------------|---------------|----------|------------|---------------|
|                  | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24          | FY 25 (RE) | FY 26 (Proj.) | FY 24       | FY 25 (RE) | FY 26 (Proj.) | FY 24    | FY 25 (RE) | FY 26 (Proj.) |
| LV- 9 Metro Rail | -           | -          | -             | 0.16           | 7.81       | 13.57         | -           | 6.75       | 7.76          | 0.16     | 14.55      | 21.33         |

3.2.17 Based on the above, the summary of category wise total sales as estimated for FY 2025-26 is shown in the Table below:

Table 77 : Summary of Energy Sales Projections for FY 2025-26 (MU)

| TC     | Category                     | East Discom   |               |                  | Central Discom |               |                  | West Discom   |               |                 | MP state      |               |               |
|--------|------------------------------|---------------|---------------|------------------|----------------|---------------|------------------|---------------|---------------|-----------------|---------------|---------------|---------------|
|        |                              | FY 24         | FY 25 (RE)    | FY 26 (Proj.)    | FY 24          | FY 25 (RE)    | FY 26 (Proj.)    | FY 24         | FY 25 (RE)    | FY 26 (Proj.)   | FY 24         | FY 25 (RE)    | FY 26 (Proj.) |
| LV 1   | Domestic                     | 6,208         | 6,556         | 7,085            | 6,175          | 6,466         | 6,726            | 6,340         | 6,489         | 6,715           | 18,723        | 19,511        | 20,527        |
| LV 2   | Non-Domestic                 | 1,264         | 1,445         | 1,653            | 1,360          | 1,502         | 1,660            | 1,536         | 1,667         | 1,811           | 4,160         | 4,614         | 5,123         |
| LV 3   | WW & Street Light            | 479           | 519           | 563              | 612            | 644           | 707              | 681           | 756           | 834             | 1,773         | 1,919         | 2,103         |
| LV 4   | LT Industrial                | 454           | 469           | 484              | 342            | 375           | 404              | 768           | 796           | 830             | 1,564         | 1,640         | 1,718         |
| LV 5.1 | Agriculture Irrigation Pumps | 6,696         | 7,007         | 7,358            | 9,871          | 10,406        | 10,880           | 11,322        | 11,799        | 12,159          | 27,889        | 29,212        | 30,397        |
| LV 5.2 | Agriculture related Use      | 11            | 12            | 15               | 7              | 8             | 9                | 3             | 4             | 4               | 21            | 24            | 27            |
| LV6    | LT EV                        | 0             | 0             | 1                | 0              | 1             | 1                | 1             | 2             | 3               | 1             | 3             | 4             |
|        | <b>Total (LT)</b>            | <b>15,113</b> | <b>16,008</b> | <b>17,159</b>    | <b>18,367</b>  | <b>19,401</b> | <b>20,386</b>    | <b>20,651</b> | <b>21,512</b> | <b>22,356</b>   | <b>54,131</b> | <b>56,922</b> | <b>59,900</b> |
| HV 1   | Railway Traction             | -             | -             | -                | 0              | 55            | 55               | 0             | 0             | 0               | 0             | 55            | 55            |
| HV 2   | Coal Mines                   | 505           | 532           | 562              | 24             | 24            | 25               | 0             | 0             | 0               | 529           | 556           | 587           |
| HV 3.1 | Industrial                   | 3,022         | 3,309         | 3,628            | 4257           | 4556          | 4877             | 5,849         | 6,151         | 6,642           | 13,128        | 14,016        | 15,146        |
| HV 3.2 | Non-Industrial               | 297           | 338           | 386              | 540            | 583           | 629              | 568           | 603           | 642             | 1,406         | 1,525         | 1,656         |
| HV 4   | Seasonal                     | 10            | 11            | 13               | 1              | 1             | 1                | 13            | 14            | 14              | 24            | 26            | 28            |
| HV 5   | Public Water Works           | 196           | 226           | 261              | 289            | 308           | 327              | 561           | 588           | 627             | 1,047         | 1,122         | 1,215         |
| HV 5   | Irrigation                   | 17            | 21            | 25               | 93             | 126           | 149              | 7             | 8             | 9               | 117           | 155           | 182           |
| HV 5   | Other Agricultural           | 17            | 18            | 19               | 11             | 12            | 13               | 615           | 625           | 636             | 643           | 655           | 668           |
| HV 6   | Bulk Residential Users       | 232           | 234           | 236              | 152            | 157           | 161              | 41            | 43            | 46              | 425           | 434           | 443           |
| HV 7   | Start Up Power               | 3             | 4             | 5                | 4              | 5             | 5                | 25            | 27            | 29              | 33            | 36            | 39            |
| HV 8   | HT EV                        | -             | 7             | 7                | 2              | 19            | 21               | 5             | 7             | 12              | 7             | 33            | 41            |
| HV 9   | Metro                        |               |               |                  | 0              | 8             | 14               | 0             | 7             | 8               | 0             | 15            | 21            |
|        | <b>Total (HT)</b>            | <b>4,301</b>  | <b>4,701</b>  | <b>5,140</b>     | <b>5,375</b>   | <b>5,853</b>  | <b>6,277</b>     | <b>7,684</b>  | <b>8,074</b>  | <b>8,665</b>    | <b>17,360</b> | <b>18,628</b> | <b>20,082</b> |
|        | <b>TOTAL LT+HT</b>           | <b>19,414</b> | <b>20,710</b> | <b>22,298.91</b> | <b>23,743</b>  | <b>25,254</b> | <b>26,662.71</b> | <b>28,335</b> | <b>29,586</b> | <b>31,020.9</b> | <b>71,491</b> | <b>75,550</b> | <b>79,983</b> |

**A4: ENERGY REQUIREMENT AT DISCOM BOUNDARY & EX-BUS REQUIREMENT****4.1 Conversion of Annual Sales into Monthly Sales**

4.1.1 The annual sales of the Discoms have been converted into monthly sales using the sales profile actually observed over the past years for each Discom. This profile is then used to compute monthly sales for FY 2025-26. The profiling for all Discoms is given in the table below:

**Table 78: Month wise Sales Profile**

| Month-wise Sales Profile Mix (%) |  |       |       |       |       |       |       |       |       |       |       |       |       |         |
|----------------------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| Sr.no.                           | Discom   | Apr   | May   | Jun   | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   | Jan   | Feb   | Mar   | Total   |
| <b>1</b>                         | <b>FY 2022-23 (Actual)</b>                     |       |       |       |       |       |       |       |       |       |       |       |       |         |
| a                                | East   | 7.60% | 7.88% | 8.04% | 7.63% | 7.41% | 7.25% | 8.75% | 8.78% | 9.00% | 9.38% | 9.29% | 9.00% | 100.00% |
| b                                | Central  | 7.52% | 7.52% | 7.88% | 7.70% | 7.40% | 7.17% | 8.93% | 8.95% | 8.98% | 9.42% | 9.43% | 9.10% | 100.00% |
| c                                | West   | 7.32% | 7.52% | 7.87% | 7.43% | 7.05% | 7.19% | 8.87% | 9.00% | 9.21% | 9.55% | 9.63% | 9.37% | 100.00% |
| <b>2</b>                         | <b>FY 2023-24 (Actual)</b>                     |       |       |       |       |       |       |       |       |       |       |       |       |         |
| a                                | East   | 7.59% | 7.59% | 8.09% | 7.61% | 7.55% | 7.55% | 8.91% | 8.69% | 8.90% | 9.26% | 9.20% | 9.05% | 100.00% |
| b                                | Central  | 7.28% | 7.45% | 7.76% | 7.59% | 7.54% | 7.59% | 8.95% | 9.09% | 9.00% | 9.36% | 9.43% | 8.95% | 100.00% |
| c                                | West   | 7.31% | 7.48% | 7.91% | 7.40% | 7.31% | 7.21% | 9.00% | 9.01% | 9.11% | 9.41% | 9.53% | 9.31% | 100.00% |
| <b>3</b>                         | <b>FY 2024-25 &amp; FY 2025-26 (Projected)</b> |       |       |       |       |       |       |       |       |       |       |       |       |         |
| a                                | East   | 7.60% | 7.73% | 8.06% | 7.62% | 7.48% | 7.40% | 8.83% | 8.73% | 8.95% | 9.32% | 9.24% | 9.03% | 100.00% |
| b                                | Central  | 7.40% | 7.49% | 7.82% | 7.64% | 7.48% | 7.39% | 8.94% | 9.02% | 8.99% | 9.39% | 9.43% | 9.02% | 100.00% |
| c                                | West   | 7.32% | 7.50% | 7.89% | 7.42% | 7.18% | 7.20% | 8.94% | 9.01% | 9.16% | 9.48% | 9.58% | 9.34% | 100.00% |

## 4.2 Distribution Losses

4.2.1 It is to be noted that the Hon'ble Commission in its Regulation 26.1 of the MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 had notified normative distribution loss levels for the MYT period FY 2022-23 to FY 2026-27 as shown in the Table below:

**Table 79: Trajectory of normative Distribution Losses (%)**

| Sr.no. | Discom         | FY 2022-23 | FY 2023-24 | FY 2024-25 | FY 2025-26 | FY 2026-27 |
|--------|----------------|------------|------------|------------|------------|------------|
| 1      | East Discom    | 15.75%     | 15.50%     | 15.25%     | 15.00%     | 14.75%     |
| 2      | Central Discom | 16.75%     | 16.50%     | 16.25%     | 16.00%     | 15.75%     |
| 3      | West Discom    | 14.75%     | 14.50%     | 14.25%     | 14.00%     | 13.75%     |

4.2.2 Subsequently, the Hon'ble Commission vide its public notice dated 14<sup>th</sup> November, 2023 has issued Draft Second Amendment to Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) (2nd Amendment) Regulations, 2021 {ARG-35(III)(ii) of 2023; wherein it has revised the normative loss reduction trajectory for FY 2024-25 to FY 2026-27. The aforesaid draft amendment was finalized on 7<sup>th</sup> December 2023.

4.2.3 The relevant extract from the notified Second Amendment to MPERC Tariff Regulations 2021 is as reproduced below:

*"26.2 The Commission specifies following normative Aggregate Technical & Commercial (AT&C) Loss reduction trajectory, Billing Efficiency, Collection Efficiency and Distribution Losses for Distribution Licensees for FY 2024-25 to FY 2026-27 under the Control Period of these Regulations:*

| FY         | Distribution Licensee | AT&C Losses | Billing Efficiency | Collection Efficiency | Distribution Losses |
|------------|-----------------------|-------------|--------------------|-----------------------|---------------------|
| FY 2024-25 | East Discom           | 19.49%      | 80.51%             | 100%                  | 19.49%              |
|            | West Discom           | 13.40%      | 86.60%             | 100%                  | 13.40%              |
|            | Central Discom        | 19.57%      | 80.43%             | 100%                  | 19.57%              |
|            | SEZ, Pithampur        | 1.35%       | 98.65%             | 100%                  | 1.35%               |
| FY 2025-26 | East Discom           | 17.00%      | 83.00%             | 100%                  | 17.00%              |
|            | West Discom           | 13.00%      | 87.00%             | 100%                  | 13.00%              |
|            | Central Discom        | 17.00%      | 83.00%             | 100%                  | 17.00%              |
|            | SEZ, Pithampur        | 1.30%       | 98.70%             | 100%                  | 1.30%               |
| FY 2026-27 | East Discom           | 14.00%      | 86.00%             | 100%                  | 14.00%              |
|            | West Discom           | 12.00%      | 88.00%             | 100%                  | 12.00%              |
|            | Central Discom        | 14.00%      | 86.00%             | 100%                  | 14.00%              |
|            | SEZ, Pithampur        | 1.25%       | 98.75%             | 100%                  | 1.25%               |

- 4.2.4 It is submitted that for determining the power purchase requirement and hence, cost for FY 2025-26, the Petitioners have considered the distribution loss levels for FY 2025-26 as per the revised trajectory as approved by the Hon'ble Commission.
- 4.2.5 The Petitioners therefore request the Hon'ble Commission to kindly consider the distribution loss levels for FY 2025-26 as approved by the Hon'ble Commission under the Regulation 26.2 as per Second Amendment to MPERC Tariff Regulations, 2021.

**Assessment of Monthly normative Distribution Losses:**

- 4.2.6 The Petitioners further wish to highlight that while assessing the monthly normative energy requirement for the Licensees, the Hon'ble Commission considers constant distribution losses (being equal to yearly approved Discoms wise distribution losses) for all **the months of a particular year**. In actual scenario the Distribution Losses cannot be constant throughout the year for any Distribution Licensee. There are various factors which affect the Distribution Losses such as input energy, output energy/billing units, ambient temperature, average current flow etc. Further, the Distribution losses are calculated with formula as  $\{Distribution\ Losses = 1 - (Billed\ Units / Input\ Units)\}$  which in general nothing but  $(1 - billing\ Efficiency)$ . In case of Madhya Pradesh, the majority portion of monthly billing attributable to agriculture consumers are being done on normative basis. Due to this there are many instances where the Distribution Losses have even arrived as negative.
- 4.2.7 It is submitted that for the Distribution Licensees the normative Distribution Losses are approved for a year as specified in the applicable Tariff Order or Regulations, nowhere it has been specified that Distribution Licensee has to maintain constant Distribution losses throughout the year. It is to be noted that similar to year wise approval of normative Distribution Losses for Discoms, the Hon'ble Commission also approves Renewable Energy Purchase Obligation (RPO) target on yearly basis. Further, the Normative Plant Availability Factor (NPAF) for allowance of Fixed Charges to Generating Companies are being approved by the Hon'ble Commission as 85% which is also on yearly basis. Similarly, the Hon'ble Commission also approves Normative Plant Load Factor (NPLF) for allowance of incentives to Generating Companies as 85% for the year. It is submitted that the assessment of RPO target or NPAF or NPLF are being done on cumulative basis at the end of the year. However, for the assessment of Distribution Losses different approach has been adopted which results not only in differential treatment for Discoms but also in disallowance of actual legitimate cost being incurred corresponding to scheduling of Stations which as per the Hon'ble Commission's methodology will never get schedule.
- 4.2.8 The Petitioners understand that the intention of the Hon'ble Commission is to restrict the energy requirement up to normative level. In this regard it is submitted that the same can also be done with normative profiling of Distribution Losses in tandem with actual Distribution Losses in such a manner that at the end of the year the Distribution Losses comes out within the norms. The basic intention here is that the methodology for assessment of Distribution Losses should be so designed that in case the Distribution



Licensee achieves the normative level of losses, then there should not be any disallowance.

4.2.9 The Petitioners have therefore assessed the normative profiling of distribution losses for FY 2025-26 in tandem with actual Distribution losses recorded during FY 2023-24. It is to be noted that in any of the method, i.e., with constant distribution losses over the year or with profiled distribution losses in tandem with actuals, the total normative energy requirement for a particular year would remain the same. It is only that the month wise normative scheduling of stations would differ which tantamount to actual scheduling only if the profiling with actual losses is considered.

4.2.10 The Hon'ble Commission is therefore requested to consider the normative profiling in tandem with actual loss profiling as submitted by the Petitioners while assessing the month wise Distribution Losses for FY 2025-26.

### **4.3 Intra State Transmission Losses**

4.3.1 The Discoms have considered the actual Intra-state Transmission Losses of 2.61% for FY 2023-24 as reported by MPPTCL. The same has been considered for FY 2025-26 also.

### **4.4 Inter-State Transmission Losses**

4.4.1 The Hon'ble CERC notified CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 on 04th May, 2020; w.e.f. 1st November, 2020. As per clause (10) of these regulations, transmission losses for ISTS shall be calculated on all India average basis for each week, from Monday to Sunday.

4.4.2 The Petitioners have considered the Inter-State transmission losses as per monthly actual PGCIL losses on all India Average basis considering the weekly losses for the period of 17<sup>th</sup> September, 2024 to 22<sup>th</sup> September 2024 (52-weeks data).

### **4.5 Energy Requirement at Discom Boundary and Ex-Bus Requirement**

4.5.1 The annual distribution loss trajectory is converted into monthly loss trajectory based on the standard deviation of monthly losses from the cumulative annual losses during the past 3 years. In this method, the actual monthly loss levels and the cumulative annual losses of the Discoms for the past years are taken and standard deviation of loss levels of each month from the cumulative annual average has been calculated. The monthly standard deviations are then used to calculate the monthly loss levels using the annual loss level trajectory as formulated by MoP and proposed by MPERC in its Second amendment to Tariff Regulations, 2021.

4.5.2 The energy requirement is computed for all three Discoms and MP State at the State boundary as shown in Table below:

Table 80: Monthly Energy Requirement- Discom &amp; Ex-Bus (MUs) for FY 2025-26 (projected)

| Sr.no.   | Particulars                        | Apr          | May          | Jun          | Jul          | Aug          | Sep          | Oct          | Nov          | Dec          | Jan          | Feb          | Mar          | Total         |
|----------|------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| <b>1</b> | <b>Sales</b>                       | <b>5,935</b> | <b>6,046</b> | <b>6,330</b> | <b>6,038</b> | <b>5,888</b> | <b>5,853</b> | <b>7,125</b> | <b>7,147</b> | <b>7,232</b> | <b>7,524</b> | <b>7,546</b> | <b>7,317</b> | <b>79,983</b> |
| a        | East                               | 1,694        | 1,724        | 1,798        | 1,700        | 1,668        | 1,651        | 1,970        | 1,947        | 1,996        | 2,078        | 2,061        | 2,013        | 22,299        |
| b        | Central                            | 1,972        | 1,996        | 2,084        | 2,038        | 1,993        | 1,969        | 2,383        | 2,406        | 2,396        | 2,505        | 2,514        | 2,406        | 26,663        |
| c        | West                               | 2,270        | 2,327        | 2,448        | 2,300        | 2,227        | 2,234        | 2,773        | 2,794        | 2,840        | 2,941        | 2,971        | 2,898        | 31,021        |
| <b>2</b> | <b>Distribution Loss (%)</b>       |              |              |              |              |              |              |              |              |              |              |              |              |               |
| a        | East                               | 22.00%       | 20.38%       | 9.53%        | 20.61%       | 19.98%       | 19.99%       | 15.53%       | 15.44%       | 19.09%       | 13.38%       | 16.17%       | 12.30%       | 17.00%        |
| b        | Central                            | 20.49%       | 22.14%       | 11.08%       | 18.71%       | 21.05%       | 21.70%       | 17.45%       | 16.77%       | 21.30%       | 14.22%       | 15.20%       | 3.13%        | 17.00%        |
| c        | West                               | 21.67%       | 17.24%       | 7.04%        | 0.57%        | 3.32%        | 0.86%        | -1.08%       | 23.25%       | 22.75%       | 21.75%       | 14.11%       | 8.57%        | 13.00%        |
| <b>3</b> | <b>Distribution Loss</b>           | <b>1,614</b> | <b>1,493</b> | <b>635</b>   | <b>924</b>   | <b>1,024</b> | <b>978</b>   | <b>836</b>   | <b>1,687</b> | <b>1,956</b> | <b>1,554</b> | <b>1,336</b> | <b>632</b>   | <b>14,668</b> |
| a        | East                               | 478          | 441          | 189          | 441          | 416          | 413          | 362          | 356          | 471          | 321          | 398          | 282          | 4,568         |
| b        | Central                            | 508          | 567          | 260          | 469          | 531          | 546          | 504          | 485          | 649          | 415          | 451          | 78           | 5,462         |
| c        | West                               | 628          | 484          | 185          | 13           | 77           | 19           | -30          | 846          | 836          | 817          | 488          | 272          | 4,637         |
| <b>4</b> | <b>Energy at Discom Periphery</b>  | <b>7,549</b> | <b>7,540</b> | <b>6,965</b> | <b>6,961</b> | <b>6,912</b> | <b>6,831</b> | <b>7,961</b> | <b>8,834</b> | <b>9,188</b> | <b>9,077</b> | <b>8,883</b> | <b>7,949</b> | <b>94,650</b> |
| a        | East                               | 2,171        | 2,165        | 1,988        | 2,141        | 2,085        | 2,063        | 2,332        | 2,303        | 2,467        | 2,399        | 2,458        | 2,295        | 26,867        |
| b        | Central                            | 2,480        | 2,563        | 2,344        | 2,507        | 2,524        | 2,515        | 2,887        | 2,891        | 3,045        | 2,920        | 2,965        | 2,484        | 32,125        |
| c        | West                               | 2,897        | 2,811        | 2,633        | 2,314        | 2,304        | 2,253        | 2,743        | 3,640        | 3,676        | 3,758        | 3,459        | 3,170        | 35,658        |
| <b>5</b> | <b>State Transmission Losses</b>   | <b>202</b>   | <b>202</b>   | <b>187</b>   | <b>187</b>   | <b>185</b>   | <b>183</b>   | <b>213</b>   | <b>237</b>   | <b>246</b>   | <b>243</b>   | <b>238</b>   | <b>213</b>   | <b>2,537</b>  |
| a        | East                               | 58           | 58           | 53           | 57           | 56           | 55           | 62           | 62           | 66           | 64           | 66           | 62           | 720           |
| b        | Central                            | 66           | 69           | 63           | 67           | 68           | 67           | 77           | 77           | 82           | 78           | 79           | 67           | 861           |
| c        | West                               | 78           | 75           | 71           | 62           | 62           | 60           | 74           | 98           | 99           | 101          | 93           | 85           | 956           |
| <b>6</b> | <b>Energy at State Boundary</b>    | <b>7,751</b> | <b>7,742</b> | <b>7,151</b> | <b>7,148</b> | <b>7,098</b> | <b>7,014</b> | <b>8,175</b> | <b>9,071</b> | <b>9,434</b> | <b>9,321</b> | <b>9,121</b> | <b>8,162</b> | <b>97,187</b> |
| a        | East                               | 2,230        | 2,223        | 2,041        | 2,198        | 2,140        | 2,118        | 2,394        | 2,365        | 2,533        | 2,463        | 2,524        | 2,357        | 27,587        |
| b        | Central                            | 2,547        | 2,632        | 2,407        | 2,574        | 2,592        | 2,582        | 2,964        | 2,969        | 3,127        | 2,998        | 3,044        | 2,550        | 32,986        |
| c        | West                               | 2,975        | 2,886        | 2,704        | 2,376        | 2,365        | 2,313        | 2,817        | 3,738        | 3,775        | 3,859        | 3,552        | 3,255        | 36,614        |
| <b>7</b> | <b>External /PGCIL Losses</b>      | <b>151</b>   | <b>145</b>   | <b>139</b>   | <b>156</b>   | <b>127</b>   | <b>123</b>   | <b>154</b>   | <b>171</b>   | <b>200</b>   | <b>199</b>   | <b>178</b>   | <b>159</b>   | <b>1,902</b>  |
| a        | East                               | 43           | 41           | 40           | 44           | 36           | 35           | 43           | 46           | 55           | 55           | 49           | 44           | 530           |
| b        | Central                            | 50           | 48           | 46           | 53           | 43           | 41           | 52           | 57           | 66           | 66           | 59           | 52           | 634           |
| c        | West                               | 58           | 56           | 54           | 60           | 48           | 47           | 60           | 67           | 78           | 78           | 70           | 63           | 738           |
| <b>8</b> | <b>Energy Requirement (Ex-Bus)</b> | <b>7,903</b> | <b>7,886</b> | <b>7,290</b> | <b>7,304</b> | <b>7,224</b> | <b>7,137</b> | <b>8,329</b> | <b>9,241</b> | <b>9,634</b> | <b>9,519</b> | <b>9,299</b> | <b>8,321</b> | <b>99,089</b> |
| a        | East                               | 2,273        | 2,265        | 2,080        | 2,242        | 2,176        | 2,153        | 2,437        | 2,411        | 2,588        | 2,518        | 2,573        | 2,401        | 28,117        |
| b        | Central                            | 2,597        | 2,680        | 2,453        | 2,627        | 2,635        | 2,624        | 3,015        | 3,026        | 3,193        | 3,064        | 3,104        | 2,603        | 33,620        |
| c        | West                               | 3,033        | 2,942        | 2,757        | 2,435        | 2,413        | 2,360        | 2,877        | 3,804        | 3,853        | 3,937        | 3,622        | 3,318        | 37,351        |

4.5.3 It is prayed before the Hon'ble Commission to kindly approve energy requirement as shown above.

## A5: ASSESSMENT OF AVAILABILITY, RENEWABLE PURCHASE OBLIGATIONS, BACKING DOWN & SALE OF SURPLUS POWER

### 5.1 Upcoming/New Capacity Addition

5.1.1 The Discoms have broadly categorised the sources of energy into State-Owned Generation, i.e., Generation from MPPGCL (MP Genco), Allocation (firm and non-firm) from Central Generating Stations (CGS), Independent Power Producers (IPPs), Biomass, Wind, Hydro and Solar Power Plants etc.

5.1.2 This section details the availability of power and related costs for the ensuing years for the State of Madhya Pradesh. The projection takes into account the following aspects:

- Existing long term allocated generation capacity of MP.
- New generation capacity additions during the FY 2025-26 for Renewables, Central Sector, Joint venture, and by Private players awarded through competitive bidding if any.
- Impact of change in generation capacity allocation in WR, NR and ER

5.1.3 Based on the above available information, power purchase for the ensuing years has been projected. The same has been detailed in the subsequent sections.

5.1.4 Further, the details of upcoming capacity additions anticipated during the FY 2025-26 with respect to Renewables is as shown in the Tables below:

**Table 81: Details of Capacity Addition with respect to Solar Projects during FY 2025-26**

| Year    | Project            | SPD  | Capacity (MW) | Expected commissioning    | Annual Energy (MU) | Energy assessed for FY25 (MU) | Rate (Rs./KWh)       |
|---------|--------------------|------|---------------|---------------------------|--------------------|-------------------------------|----------------------|
| 2025-26 | KUSUM A            |      | 37.52         | Expected up to March 2026 | 69.00              | 0                             | 3.07                 |
|         | KUSUM C            |      | 124.4         | Expected up to March 2026 | 228.89             | 0                             | 2.94                 |
|         | CPSU               | NTPC | 500           | Expected in April 2025    | 1147.5             | 1051.88                       | 2.57                 |
|         |                    | SECI | 500           | Expected in Jan 2026      | 1147.5             | 191.25                        | 2.57                 |
|         | Neemuch Solar Park |      | 170           | Expected in March 2026    | 311                | 0                             | Yet to be determined |
|         | <b>G. Total</b>    |      |               | <b>1331.92</b>            |                    | <b>2903.89</b>                | <b>1243.13</b>       |

**Table 82: Details of Capacity Addition with respect to Wind Projects during FY 2025-26**

| Year    | Project                                    | Capacity (MW) | Expected commissioning | Annual Energy (MU) | Operational Months during FY26 | Energy assessed for FY26 (MU) | Rate (Rs./K Wh) |
|---------|--|---------------|------------------------|--------------------|--------------------------------|-------------------------------|-----------------|
| 2025-26 | Green Infra Wind Energy Ltd                | 66            | Jul-25                 | 211.03             | 9                              | 158.27                        | 2.69            |
|         | Renew Naveen Urja Pvt Ltd                  | 110           | Jul-25                 | 356.53             | 9                              | 267.40                        | 2.69            |
|         | Anupavan Renewable Energy Pvt Ltd          | 55            | Jul-25                 | 144.54             | 9                              | 108.41                        | 2.69            |
|         | Adani Renewable Energy Holding Fifteen Ltd | 165           | Jul-25                 | 534.80             | 9                              | 401.10                        | 2.70            |
|         | Azure Power India Pvt Ltd                  | 44            | Jul-25                 | 138.76             | 9                              | 104.07                        | 2.70            |
|         | <b>G. Total</b>                            | <b>440</b>    |                        | <b>1385.66</b>     |                                | <b>1039.24</b>                |                 |

**Table 83: Details of Capacity Addition with respect to Hydro Projects during FY 2025-26**

| Year    | Project                 | Capacity (MW) | Expected commissioning | Annual Energy (MU) | Energy assessed for FY25 (MU) | Rate (Rs./KWh) |
|---------|-------------------------|---------------|------------------------|--------------------|-------------------------------|----------------|
| 2025-26 | Amhata-IV               | 3.80          | Jul-25                 | 5.00               | 3.33                          | 5.97           |
|         | NHPC - Lower Subhansiri | 13.13         | Mar-25                 | 48.70              | 48.70                         | 5.09           |
|         |                         | 13.13         | Mar-25                 | 48.70              | 48.70                         | 5.09           |
|         |                         | 13.13         | Mar-25                 | 48.70              | 48.70                         | 5.09           |
|         | NHPC - Rangit 120 MW    | 43.00         | May-25                 | 180.81             | 150.67                        | 4.37           |
|         | <b>G. Total</b>         | <b>86.18</b>  |                        | <b>331.92</b>      | <b>300.12</b>                 |                |

5.1.5 Considering the above new capacity addition and existing tied up capacity taking cognizance of latest CGS allocation, the station wise contracted capacity as considered for FY 2025-26 is shown in the Table below:

**Table 84: Estimated Contracted Capacity – MP State for FY 2025-26 (Existing & New)**

| Sl No    | Source                                   | Plant Capacity (MW) | MP's Share in % | MP's Share in MW |
|----------|--|---------------------|-----------------|------------------|
| 1        | Amarkantak TPS Ph-III                    | 210.00              | 100.00%         | 210.00           |
| 2        | Satpura TPS Ph-IV                        | 500.00              | 100.00%         | 500.00           |
| 3        | SGTPS Ph-I & II                          | 840.00              | 100.00%         | 840.00           |
| 4        | SGTPS Ph-III                             | 500.00              | 100.00%         | 500.00           |
| 5        | Shri Singaji STPS Phase-I                | 1200.00             | 100.00%         | 1200.00          |
| 6        | Shri Singaji STPS Phase-II               | 1320.00             | 100.00%         | 1320.00          |
| <b>A</b> | <b>Total (MP Genco Thermal-MP Share)</b> | <b>4570.00</b>      |                 | <b>4570.00</b>   |
|          |  |                     |                 |                  |
| 7        | Rani Awanti Bai Sagar, Bargi HPS         | 90.00               | 100.00%         | 90.00            |
| 8        | Bansagar Ph I HPS (Tons)                 | 315.00              | 100.00%         | 315.00           |
| 9        | Bansagar Ph-II HPS (Silpara)             | 30.00               | 100.00%         | 30.00            |

| Sl No    | Source                             | Plant Capacity (MW) | MP's Share in % | MP's Share in MW |
|----------|------------------------------------|---------------------|-----------------|------------------|
| 10       | Bansagar Ph-III HPS (Deolond)      | 60.00               | 100.00%         | 60.00            |
| 11       | Bansagar Ph-IV HPS (Jhinna)        | 20.00               | 100.00%         | 20.00            |
| 12       | Birsinghpur HPS                    | 20.00               | 100.00%         | 20.00            |
| 13       | Madikheda HPS                      | 60.00               | 100.00%         | 60.00            |
| 14       | Rajghat HPS                        | 45.00               | 60.00%          | 27.00            |
| 15       | Gandhisagar HPS                    | 115.00              | 50.00%          | 57.50            |
| 16       | Ranapratap Sagar HPS               | 172.00              | 50.00%          | 86.00            |
| 17       | Jawahar Sagar HPS                  | 99.00               | 50.00%          | 49.50            |
| 18       | Pench HPS                          | 160.00              | 66.67%          | 106.67           |
| <b>B</b> | <b>Total (MP Genco Hydrel)</b>     | <b>1186.00</b>      |                 | <b>921.67</b>    |
| 19       | NHDC Indira Sagar HPS              | 1000.00             | 100.00%         | 1000.00          |
| 20       | NHDC Omkareshwar HPS               | 520.00              | 100.00%         | 520.00           |
| 21       | NVDA Sardar Sarovar HPS            | 1450.00             | 57.00%          | 826.50           |
| 22       | Rihand HPS                         | 300.00              | 15.00%          | 45.00            |
| 23       | Matatila HPS                       | 31.00               | 32.68%          | 10.13            |
| 24       | SJVN Rampur HPS                    | 412.02              | 0.22%           | 0.92             |
| 25       | SJVN Jhakri HPS                    | 1500.00             | 0.24%           | 3.63             |
| 26       | Tehri HPS                          | 1000.00             | 0.24%           | 2.41             |
| 27       | Koteshwar HPP                      | 400.00              | 0.24%           | 0.96             |
| 28       | NHPC Parbati III                   | 520.00              | 0.37%           | 1.90             |
| 29       | NHPC Chamera II                    | 300.00              | 0.44%           | 1.31             |
| 30       | NHPC Chamera III                   | 231.00              | 0.37%           | 0.84             |
| 31       | NHPC Dulhasti                      | 390.00              | 0.37%           | 1.42             |
| 32       | NHPC Dhauliganga                   | 280.00              | 0.37%           | 1.02             |
| 33       | NHPC Sewa II                       | 120.00              | 0.37%           | 0.44             |
| 34       | NHPC Uri II                        | 240.00              | 0.00%           | 0.00             |
| 35       | NHPC Kishanganga                   | 330.00              | 0.37%           | 1.20             |
| 36       | NTPC Koldam HPP I                  | 800.00              | 0.17%           | 1.35             |
| 37       | NTPC Singrauli Small HPP           | 8.00                | 0.37%           | 0.03             |
| 38       | NHPC Lower Subansiri HEP Units     | 2000.00             | 5.25%           | 105.00           |
| 39       | NHPC -Tiesta                       | 500.00              | 18.00%          | 90.00            |
| 40       | NHPC - Rangit                      | 120.00              | 35.83%          | 43.00            |
| 41       | SAS Hydrel Project Pvt Ltd.        | 0.00                | 0.00%           | 9.75             |
| 42       | Amhata Hydro Energy Pvt. Ltd.      | 3.60                | 100.00%         | 3.60             |
| 43       | Amhata Hydro Energy Pvt. Ltd. - II | 3.60                | 100.00%         | 3.60             |
| 44       | Amhata Hydro Energy Pvt. Ltd. - IV | 3.60                | 100.00%         | 3.60             |
| 45       | Sirmour Small Hydrel Pvt. Ltd.     | 0.00                | 0.00%           | 24.00            |
| 46       | NVDA Indira sagar LBC HPS          | 15.00               | 0.00%           | 15.00            |
| 47       | NVDA Bargi LBC HPS                 | 10.00               | 0.00%           | 10.00            |
| 48       | Mini & Micro Hydrel Plants         | 0.00                | 0.00%           | 7.26             |

| SI No    | Source                                    | Plant Capacity (MW) | MP's Share in % | MP's Share in MW |
|----------|---|---------------------|-----------------|------------------|
| <b>C</b> | <b>Total (JV Hydel &amp; Other Hydel)</b> | <b>12487.82</b>     |                 | <b>2733.88</b>   |
|          |   |                     |                 |                  |
| 49       | NTPC Korba                                | 2100.00             | 22.47%          | 471.97           |
| 50       | NTPC Korba III                            | 500.00              | 14.23%          | 71.17            |
| 51       | NTPC Vindiyachal I                        | 1260.00             | 34.42%          | 433.72           |
| 52       | NTPC Vindiyachal II                       | 1000.00             | 31.11%          | 311.12           |
| 53       | NTPC Vindiyachal III                      | 1000.00             | 23.81%          | 238.12           |
| 54       | NTPC Vindiyachal IV                       | 1000.00             | 27.37%          | 273.74           |
| 55       | NTPC Vindiyachal V Unit 1                 | 500.00              | 27.31%          | 136.53           |
| 56       | NTPC Sipat I                              | 1980.00             | 16.03%          | 317.32           |
| 57       | NTPC Sipat II                             | 1000.00             | 18.05%          | 180.55           |
| 58       | NTPC Mouda I                              | 1000.00             | 1.29%           | 12.93            |
| 59       | NTPC Mouda II Unit 1                      | 1320.00             | 1.72%           | 22.68            |
| 60       | NTPC Solapur STPS                         | 1320.00             | 24.15%          | 318.76           |
| 61       | NTPC Gadawara STPS, Unit-1                | 800.00              | 51.73%          | 413.87           |
| 62       | NTPC Lara STPS, Raigarh, Unit I           | 1600.00             | 10.93%          | 174.92           |
| 63       | NTPC Khargone STPS, Unit-I & II           | 1320.00             | 51.73%          | 682.88           |
| 64       | NTPC Kawas GPP                            | 656.20              | 0.02%           | 0.13             |
| 65       | NTPC Gandhar GPP                          | 657.39              | 0.02%           | 0.15             |
| 66       | KAPP Kakrapar                             | 440.00              | 24.93%          | 360.06           |
| 67       | KAPP Kakrapar Unit 3 & 4                  | 1400.00             | 17.88%          |                  |
| 68       | TAPP Tarapur                              | 1080.00             | 20.94%          | 226.11           |
| 69       | NTPC Gadawara STPS, Unit-2                | 800.00              | 51.73%          | 827.73           |
| <b>D</b> | <b>Total WR Region</b>                    | <b>22733.59</b>     |                 | <b>5060.69</b>   |
|          |   |                     |                 |                  |
| 70       | NTPC Kahalgaon II                         | 1500.00             | 4.93%           | 74.00            |
| 71       | LoI through DVC (Sep-2020 to Mar-2032)    | 1000.00             | 10.00%          | 100.00           |
| <b>E</b> | <b>Total ER Region</b>                    | <b>2500.00</b>      |                 | <b>174.00</b>    |
|          |   |                     |                 |                  |
| 72       | NTPC Auraiya GPP                          | 663.00              | 0.36%           | 2.41             |
| 73       | NTPC Dadri GPP                            | 830.00              | 0.38%           | 3.14             |
| 74       | NTPC Anta GPP                             | 419.33              | 0.37%           | 1.54             |
| 75       | NTPC Firoz Gandhi Unchahar I              | 420.00              | 0.03%           | 0.13             |
| 76       | NTPC Firoz Gandhi Unchahar II             | 420.00              | 0.10%           | 0.40             |
| 77       | NTPC Firoz Gandhi Unchahar III            | 210.00              | 0.09%           | 0.20             |
| 78       | NTPC Firoz Gandhi Unchahar IV             | 500.00              | 0.10%           | 0.48             |
| 79       | NTPC Rihand TPS-I                         | 1000.00             | 0.08%           | 0.79             |
| 80       | NTPC Rihand TPS-II                        | 1000.00             | 0.09%           | 0.86             |
| 81       | NTPC Rihand TPS-III                       | 1000.00             | 0.10%           | 0.96             |
| 82       | NTPC NCTP Dadri II                        | 980.00              | 0.09%           | 0.86             |
| 83       | NTPC Singrauli                            | 2000.00             | 0.08%           | 1.60             |
| 84       | NTPC IGPS I Jhajjar                       | 1500.00             | 0.18%           | 2.77             |

| SI No    | Source                              | Plant Capacity (MW) | MP's Share in % | MP's Share in MW |
|----------|-------------------------------------|---------------------|-----------------|------------------|
| 85       | MEJA Urja Nigam                     | 1320.00             | 0.18%           | 2.41             |
| 86       | NTPC Tanda                          | 660.00              | 0.06%           | 0.42             |
| 87       | Rajasthan (NPCIL)                   | 440.00              | 0.00%           | 0.00             |
| 88       | NARORA (NPCIL)                      | 440.00              | 0.35%           | 1.56             |
| <b>F</b> | <b>Total NR Region</b>              | <b>13802.33</b>     |                 | <b>20.53</b>     |
|          |                                     |                     |                 |                  |
| 89       | Torrent Power                       | 1147.50             | 4.36%           | 50.00            |
| 90       | BLA Power, Unit-I & II              | 45.00               | 35.00%          | 15.75            |
| 91       | Jaypee Bina Power                   | 500.00              | 65.00%          | 350.00           |
| 92       | Lanco Amarkantak TPS Unit 1         | 300.00              | 100.00%         | 300.00           |
| 93       | Reliance UMPP, Sasan                | 3960.00             | 37.50%          | 1485.00          |
| 94       | Essar Power STPS                    | 1200.00             | 5.00%           | 60.00            |
| 95       | Jaiprakash Power STPS, Nigri        | 1320.00             | 37.50%          | 495.00           |
| 96       | MB Power STPS, Unit-I               | 600.00              | 35.00%          | 210.00           |
| 97       | MB Power STPS, Unit-II              | 600.00              | 35.00%          | 210.00           |
| 98       | Jhabua Power STPS, Unit-1           | 600.00              | 35.00%          | 210.00           |
| <b>G</b> | <b>Total (IPPs)</b>                 | <b>10272.50</b>     |                 | <b>3385.75</b>   |
|          |                                     |                     |                 |                  |
| 99       | Renewable Energy (Solar)            | 6357.93             | 100.00%         | 6357.93          |
| 100      | Renewable Energy (other than Solar) | 3684.05             | 100.00%         | 3684.05          |
| 101      | Bio Mass/Bio gas/MSW                | 42.90               | 100.00%         | 42.90            |
| <b>H</b> | <b>Total Renewable Energy</b>       | <b>10084.88</b>     |                 | <b>10084.88</b>  |
| <b>I</b> | <b>Grand Total</b>                  | <b>77637.12</b>     |                 | <b>26951.31</b>  |

5.1.6 It is submitted that while calculating the above contracted capacity, the Petitioners have considered the revised Allocation of Power to the State of MP, from Central Sector stations as specified by **Western Regional Power Committee** in their letter No. WRPC/Comml-I/6/Alloc/2024/4769-4798 dated 30<sup>th</sup> October'2024 and from **Eastern Region** NTPC Kahalgaon-2 vide GoI MoP letter no. I/31/2006-Th.2 dated 21<sup>st</sup> February 2007 **and Northern Region** as per Northern Regional Power Committee letter dated 9<sup>th</sup> October, 2024. Allocation from MP Genco and other sources have been considered based on inputs provided and latest updates from their concerned office.

5.1.7 As can be seen from the above Table, some relevant information for FY 2025-26 are as follows:

- As submitted in the previous year's ARR Petitions, MPPMCL has already decided to foreclose the PPAs with DVC for 400 MW from DVC (MTPS & CTPS) and 100 MW (DTPS) w.e.f. 01<sup>st</sup> March 2018 & 15<sup>th</sup> May 2017 respectively. As such no regular power is being scheduled from these stations after the said date. However, since Sept-2020, power on STOA basis is being scheduled from 100 MW DVC (DTPS) through LOI dtd.10.07.2020. Similarly, LOI for 100MW from DVC (CTPS) on STOA basis has also been issued on 10.07.2020. Thus, costs of these plants have

also been considered while calculating the power purchase cost for FY 2025-26.

- During FY 2024-25, power from Essar (5%), Sugan Torrent Generating Stations has been scheduled following MoD. However, in the past Tariff Orders the Hon'ble Commission has not considered availability and hence, cost from these plants. It is humbly requested before the Hon'ble Commission to consider the availability from these plants for FY 2025-26 as the PPAs with these plants remain in force.

## 5.2 Ex-Bus Availability

5.2.1 It is submitted that the Hon'ble Commission vide dated 24<sup>th</sup> February, 2023 has issued MPERC (Power Purchase and Procurement Process) Regulations, 2023 {RG-19(II) of 2023}; wherein, under Section B of Part IV – Framework for Power Procurement Planning the Hon'ble Commission has stipulated the provisions for assessment of Availability. The relevant extract from the said Regulations is as reproduced below:

***“B. Assessment of Availability:***

.....

.....

*4.16 The Plant Availability Factor (PAF) of operational State/ Central Thermal Generating stations and Independent Power Producers (IPPs) shall be considered based on past performance for last 3 years to estimate the availability of power. PAF for all new/upcoming thermal projects shall be considered as per norms provided in State/Central Tariff Regulations.*

*4.17 The Capacity Utilization Factor (CUF) of existing solar and non-solar power plants shall be considered on the basis of past performance of the plant. For new/upcoming projects the CUF shall be estimated as per PPA of the plant.*

*4.18 For estimating availability from Hydro Power Plants (HPPs), the Licensee shall also consider past years rainfall pattern and corresponding actual month wise energy availability in consultation with concerned Reservoir Authority for their water discharge programme along with State Load Dispatch Center (SLDC) and State Generating Company, thereby reflecting the seasonal variation in generation pattern for estimating the quantum of energy for forthcoming years.*

*4.19 For operational State/Central Generating Stations and IPPS, the Auxiliary Consumption shall be determined based on past performance for last 3 years. For new/upcoming power projects the Auxiliary Consumption shall be determined based on normative parameters as laid down in State/Central Tariff Regulations.*



4.20 The quantum of energy to be procured from renewable energy plants shall be determined considering the RPO trajectory in the MPERC (Co-generation and generation of electricity from Renewable Sources of Energy) (Revision-II) Regulations 2021 and amendments thereof.

4.21 While estimating the energy availability, the Licensee shall explore other options like banking/power market and bilateral arrangements with other state-owned utilities to ensure power availability during Peak Periods.

4.22 Any new Capacity arrangement/tie-up shall be subject to the prior approval of the Commission in view of necessity, reasonableness of cost of power purchase and promotion of working in an efficient, economical and equitable manner.

4.23 All procurement of long/medium/short-term power from various sources shall be carried out as per the Guidelines Rules / Regulations / Policies issued by the Central Government/Commission from time to time.

4.24 Any new power purchase agreement for long/medium-term or amendments to existing long/medium-term Power Purchase Agreements (PPA's) Power Sale Agreement (PSA) entered into by the Distribution Licensee shall be subject to the prior approval of the Commission:

*Provided that in case of short-term purchases, the Licensees shall submit details within 45 days of such procurement for information of the Commission.”*

5.2.2 It is submitted that for the purpose of assessment of availability for FY 2025-26 from various tied up & upcoming sources, the Petitioners have relied on the aforementioned provisions of the MPERC (Power Purchase and Procurement Process) Regulations, 2023.

**Energy Availability from State Generating Stations**

5.2.3 The Petitioners vide its letter dated 09<sup>th</sup> September 2024 has sought the Actual Plant Availability Factor (PAF) and Plant Load Factor (PLF) for Thermal and Hydel Generating Stations of MPPGCL for FY 2021-22, FY 2022-23, FY 2023-24 and FY 2024-25 (upto September 2024). Further, the Petitioners have also sought the expected energy availability from MPPGCL’s Thermal and Hydro Stations for the FY 2025-26.

5.2.4 The MPPGCL vide its letter dated 18 October, 2024 have provided the required data as shown in the Table below:

**Table 85: Historical PLF and PAF of Thermal Power Stations of MPPGCL**

| POWER STATION |           | 2021-22  |          | 2022-23  |          | 2023-24  |          | 2024-25 upto Sept. 2024 |          |
|---------------|-----------|----------|----------|----------|----------|----------|----------|-------------------------|----------|
|               |           | PLF in % | PAF in % | PLF in % | PAF in % | PLF in % | PAF in % | PLF in %                | PAF in % |
| 1             | ATPS PH-3 | 81.97    | 86.99    | 77.95    | 78.39    | 97.81    | 99.39    | 70.22                   | 71.93    |
| 2             | STPS PH-2 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00                    | 0.00     |

|   |            |       |       |       |       |       |       |       |       |
|---|------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 3 | STPS PH-3  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| 4 | STPS PH-4  | 78.76 | 92.26 | 90.59 | 94.34 | 88.81 | 92.59 | 80.94 | 86.32 |
| 5 | SGTPS PH-1 | 47.39 | 53.87 | 64.50 | 66.46 | 64.76 | 68.37 | 51.56 | 54.79 |
| 6 | SGTPS PH-2 | 61.12 | 66.52 | 66.81 | 70.03 | 73.39 | 77.10 | 62.44 | 66.15 |
| 7 | SGTPS PH-3 | 60.27 | 63.14 | 89.67 | 91.66 | 65.91 | 68.42 | 90.49 | 95.11 |
| 8 | SSTPP PH-1 | 44.86 | 65.63 | 64.27 | 69.63 | 67.11 | 74.56 | 63.88 | 77.64 |
| 9 | SSTPP PH-2 | 40.67 | 48.59 | 55.45 | 58.36 | 67.76 | 72.68 | 63.90 | 71.38 |

Table 86: Historical PLF and PAF of Hydro Power Stations of MPPGCL

| Sr No. | POWER STATION              | 2021-22  | 2022-23  | 2023-24  | 2024-25 upto Sept-2024 |
|--------|----------------------------|----------|----------|----------|------------------------|
|        |                            | PAF in % | PAF in % | PAF in % | PAF in %               |
| 1      | Gandhisagar HPS            | 47.22    | 46.58    | 42.18    | 43.59                  |
| 2      | Pench HPS                  | 59.80    | 72.77    | 88.23    | 89.07                  |
| 3      | Rajghat HPS                | 46.30    | 65.79    | 70.80    | 49.58                  |
| 4      | RABS Bargi HPS             | 82.51    | 88.71    | 97.54    | 85.34                  |
| 5      | Bansagar -1 ( Tons) HPS    | 58.90    | 37.08    | 80.25    | 89.25                  |
| 6      | Bansagar -2 ( Silpara) HPS | 89.46    | 95.21    | 95.08    | 90.98                  |
| 7      | Bansagar -3 (Deoland) HPS  | 94.40    | 102.81   | 104.60   | 98.63                  |
| 8      | Madhikheda HPS             | 93.34    | 99.25    | 99.71    | 91.95                  |
| 9      | Bansagar -4 (Jhinna) HPS   | 94.38    | 103.67   | 106.69   | 80.63                  |
| 10     | Birsinghpur HPS            | 45.21    | 48.66    | 81.86    | 90.74                  |
| 11     | Rana Pratap Sagar          | NA       | NA       | NA       | NA                     |
| 12     | Jawahar Sagar              | NA       | NA       | NA       | NA                     |

5.2.5 The energy availability from MPPGCL Thermal and Hydro Generating Stations as submitted by the MPPGCL and as considered by the Petitioners for FY 2025-26 is shown in the Table below:

Table 87: Thermal Ex-Bus Energy in MUs of MPPGCL - FY 2025-26 on Projected Basis

| Sr No.                 | Particulars | Apr -25     | May -25     | Jun-25      | Jul-25      | Aug -25     | Sep-25      | Oct-25      | Nov-25      | Dec-25      | Jan-26      | Feb-26      | Mar -26     | Total        |
|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| 1                      | ATPS PH-3   | 125         | 129         | 125         | 128         | 129         | 124         | 129         | 125         | 129         | 129         | 117         | 129         | 1519         |
| 2                      | STPS PH-4   | 302         | 312         | 152         | 280         | 305         | 295         | 319         | 309         | 319         | 319         | 288         | 319         | 3521         |
| 3                      | SGTPS PH-1  | 219         | 226         | 219         | 225         | 111         | 107         | 227         | 219         | 227         | 227         | 104         | 115         | 2226         |
| 4                      | SGTPS PH-2  | 216         | 224         | 216         | 216         | 216         | 209         | 112         | 109         | 115         | 115         | 205         | 227         | 2181         |
| 5                      | SGTPS PH-3  | 315         | 326         | 158         | 0           | 321         | 311         | 335         | 324         | 335         | 335         | 303         | 335         | 3398         |
| 6                      | SSTPS PH-1  | 712         | 736         | 712         | 722         | 603         | 353         | 635         | 741         | 766         | 766         | 692         | 766         | 8203         |
| 7                      | SSTPS PH-2  | 770         | 795         | 770         | 570         | 378         | 614         | 861         | 833         | 861         | 861         | 778         | 861         | 8953         |
| <b>Total (Thermal)</b> |             | <b>2659</b> | <b>2748</b> | <b>2351</b> | <b>2142</b> | <b>2063</b> | <b>2013</b> | <b>2618</b> | <b>2661</b> | <b>2752</b> | <b>2752</b> | <b>2486</b> | <b>2753</b> | <b>30000</b> |

**Table 88: Hydel Ex-Bus Energy in MUs of MPPGCL - FY 2025-26 on Projected Basis**

| Particulars                 | Apr-25     | May-25     | Jun-25     | Jul-25     | Aug-25     | Sep-25     | Oct-25     | Nov-25     | Dec-25     | Jan-26     | Feb-26     | Mar-26     | Total       |
|-----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| 1 Gandhisagar HPS           | 2          | 2          | 3          | 5          | 10         | 15         | 16         | 15         | 19         | 18         | 15         | 15         | 133         |
| 2 Pench HPS                 | 6          | 8          | 12         | 12         | 23         | 42         | 40         | 21         | 16         | 10         | 6          | 10         | 208         |
| 3 Rajghat HPS               | 0          | 0          | 0          | 6          | 6          | 9          | 9          | 7          | 6          | 3          | 3          | 3          | 51          |
| 4 RABS Bargi HPS            | 37         | 30         | 28         | 40         | 55         | 50         | 50         | 40         | 40         | 40         | 20         | 20         | 448         |
| 5 Bansagar -1 (Tons) HPS    | 60         | 60         | 50         | 100        | 110        | 110        | 100        | 100        | 70         | 70         | 60         | 60         | 948         |
| 6 Bansagar -2 (Silpara) HPS | 4          | 4          | 5          | 9          | 9          | 9          | 9          | 9          | 8          | 8          | 5          | 4          | 88          |
| 7 Bansagar -3 (Deoland) HPS | 0          | 0          | 0          | 10         | 25         | 25         | 20         | 20         | 0          | 10         | 0          | 0          | 109         |
| 8 Madhikheda HPS            | 0          | 0          | 2          | 10         | 18         | 12         | 12         | 10         | 8          | 8          | 5          | 5          | 88          |
| 9 Bansagar -4 (Jhinna) HPS  | 9          | 8          | 7          | 6          | 6          | 10         | 10         | 10         | 10         | 10         | 10         | 9          | 104         |
| 10 Birsinghpur HPS          | 0          | 0          | 2          | 10         | 10         | 8          | 8          | 5          | 5          | 4          | 0          | 0          | 51          |
| <b>Total (Hydel)</b>        | <b>118</b> | <b>112</b> | <b>109</b> | <b>207</b> | <b>271</b> | <b>289</b> | <b>273</b> | <b>236</b> | <b>182</b> | <b>180</b> | <b>124</b> | <b>125</b> | <b>2228</b> |

### Central Thermal Generating stations and Independent Power Producers (IPPs)

5.2.6 For Central generating Stations, the Petitioners have considered the actual Plant Availability Factor (PAF) of past years, i.e., from FY 2022-23 to FY 2023-24. The average PAF of past years of various Central Generating Stations have been calculated which is considered for the purpose of energy projections for FY 2025-26. The month wise PFA for CGS for FY 2025-26 is shown in the Table below:

**Table 89: PAF for Central Generating Stations for FY 2025-26**

| Sr No. | Particular                                 | Apr-25 | May-25 | Jun-25 | Jul-25 | Aug-25 | Sep-25 | Oct-25 | Nov-25 | Dec-25 | Jan-26 | Feb-26 | Mar-26 |
|--------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1      | <i>NTPC Korba</i>                          | 101%   | 98%    | 95%    | 87%    | 82%    | 100%   | 101%   | 100%   | 100%   | 95%    | 86%    | 96%    |
| 2      | <i>NTPC Korba III</i>                      | 103%   | 85%    | 52%    | 86%    | 102%   | 102%   | 102%   | 102%   | 98%    | 102%   | 102%   | 98%    |
| 3      | <i>NTPC Vindiyachal I</i>                  | 94%    | 90%    | 94%    | 90%    | 80%    | 82%    | 90%    | 88%    | 86%    | 91%    | 88%    | 93%    |
| 4      | <i>NTPC Vindiyachal II</i>                 | 102%   | 101%   | 77%    | 94%    | 95%    | 78%    | 101%   | 102%   | 97%    | 97%    | 102%   | 101%   |
| 5      | <i>NTPC Vindiyachal III</i>                | 103%   | 102%   | 80%    | 90%    | 103%   | 104%   | 102%   | 101%   | 99%    | 102%   | 86%    | 79%    |
| 6      | <i>NTPC Vindiyachal IV</i>                 | 104%   | 104%   | 104%   | 85%    | 92%    | 91%    | 84%    | 102%   | 100%   | 100%   | 94%    | 101%   |
| 7      | <i>NTPC Vindiyachal V Unit I</i>           | 75%    | 104%   | 104%   | 99%    | 101%   | 101%   | 102%   | 102%   | 102%   | 92%    | 56%    | 102%   |
| 8      | <i>NTPC Sipat I</i>                        | 58%    | 78%    | 74%    | 76%    | 88%    | 87%    | 94%    | 96%    | 96%    | 102%   | 102%   | 89%    |
| 9      | <i>NTPC Sipat II</i>                       | 102%   | 90%    | 83%    | 99%    | 101%   | 105%   | 101%   | 101%   | 102%   | 102%   | 76%    | 89%    |
| 10     | <i>NTPC Mouda I</i>                        | 91%    | 102%   | 101%   | 104%   | 101%   | 97%    | 96%    | 83%    | 77%    | 99%    | 98%    | 102%   |
| 11     | <i>NTPC Mouda II Unit I</i>                | 95%    | 99%    | 100%   | 101%   | 97%    | 96%    | 73%    | 72%    | 82%    | 97%    | 97%    | 95%    |
| 12     | <i>NTPC Solapur STPS</i>                   | 84%    | 98%    | 90%    | 98%    | 98%    | 102%   | 98%    | 101%   | 82%    | 82%    | 97%    | 98%    |
| 13     | <i>NTPC Gadgarwara STPS, Unit-1</i>        | 97%    | 101%   | 103%   | 98%    | 104%   | 101%   | 83%    | 91%    | 100%   | 98%    | 86%    | 98%    |
| 14     | <i>NTPC Lara STPS, Raigarh, Unit I</i>     | 89%    | 101%   | 95%    | 99%    | 87%    | 91%    | 99%    | 74%    | 69%    | 93%    | 96%    | 102%   |
| 15     | <i>NTPC Khargone STPS, Unit-I &amp; II</i> | 68%    | 92%    | 75%    | 77%    | 95%    | 97%    | 100%   | 100%   | 90%    | 96%    | 80%    | 95%    |

| Sr No. | Particular                        | Apr-25 | May-25 | Jun-25 | Jul-25 | Aug-25 | Sep-25 | Oct-25 | Nov-25 | Dec-25 | Jan-26 | Feb-26 | Mar-26 |
|--------|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 16     | <i>KAPP Kakrapar</i>              | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    |
| 17     | <i>TAPP Tarapur</i>               | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    | 85%    |
| 18     | <i>NTPC Gadawara STPS, Unit-2</i> | 97%    | 101%   | 103%   | 98%    | 104%   | 101%   | 83%    | 91%    | 100%   | 98%    | 86%    | 98%    |

5.2.7 For other CGSs and Independent Power Producers who's historical PAF was not available, the Petitioners have considered normative PAF of 85% for the assessment of energy availability.

#### **Energy Availability from existing and new HPPs including NVDA & NHDC Generating Stations**

5.2.8 As regard to estimation of availability from Hydro Power Plants (HPPs) for FY 2025-26, the Petitioners have worked out the month-wise average actual availability (in terms of Mus) over the past 3 years from existing HPPs and the same has been considered for the respective months of FY 2025-26. The Petitioners vide its letter dated 09 October, 2024 have also sought the information regarding energy availability from NHDC stations. NHDC limited has given the information vide its letter dated 22<sup>nd</sup> October, 2024. The Petitioners have compared the information towards expected energy availability as submitted by NHDC limited vis-à-vis as calculated by the Petitioners and found that the both the projections are in line. Further, with respect to new capacity addition towards HPPs, the availability is considered based on the design energy of respective plants. Further, the energy so anticipated for the FY 2025-26 from new HPPs from its COD is then apportioned over the respective months of FY 2025-26 based on the actual month-wise availability profiling of existing HPPs.

#### **Energy Availability from existing and new Renewable Energy Generating Stations**

5.2.9 Similarly, for the assessment of availability from existing solar and non-solar power plants, the Petitioners have considered the actual month-wise generation recorded over the past year, i.e., FY 2023-24 against the respective plants. For new/upcoming projects the CUF has been estimated as per PPA of the respective plant and the energy so anticipated for the FY 2025-26 from new solar and non-solar power plants from its COD is then apportioned over the respective months of FY 2025-26 based on the actual month-wise availability profiling of existing solar and non-solar power plants.

5.2.10 Based on the above, the summary of availability for FY 2025-26 from various existing and upcoming sources is shown in the Table below:

Table 90: Ex-Bus Availability (MUs) Source-wise for FY 2025-26

| Sr.no.   | Particulars                              | April        | May          | June         | July         | Aug          | Sep          | Oct          | Nov          | Dec          | Jan          | Feb          | Mar          | Total         |
|----------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| 1        | Amarkantak TPS Ph-III                    | 125          | 129          | 125          | 128          | 129          | 124          | 129          | 125          | 129          | 129          | 117          | 129          | 1,519         |
| 2        | Satpura TPS Ph-IV                        | 302          | 312          | 152          | 280          | 305          | 295          | 319          | 309          | 319          | 319          | 288          | 319          | 3,521         |
| 3        | SGTPS Ph-I & II                          | 435          | 450          | 435          | 441          | 327          | 317          | 339          | 328          | 342          | 342          | 309          | 342          | 4,407         |
| 4        | SGTPS Ph-III                             | 315          | 326          | 158          | -            | 321          | 311          | 335          | 324          | 335          | 335          | 303          | 335          | 3,398         |
| 5        | Shri Singaji STPS Phase-I                | 712          | 736          | 712          | 722          | 603          | 353          | 635          | 741          | 766          | 766          | 692          | 766          | 8,203         |
| 6        | Shri Singaji STPS Phase-II               | 770          | 795          | 770          | 570          | 378          | 614          | 861          | 833          | 861          | 861          | 778          | 861          | 8,953         |
| <b>A</b> | <b>Total (MP Genco Thermal-MP Share)</b> | <b>2,659</b> | <b>2,748</b> | <b>2,351</b> | <b>2,142</b> | <b>2,063</b> | <b>2,013</b> | <b>2,618</b> | <b>2,661</b> | <b>2,752</b> | <b>2,752</b> | <b>2,486</b> | <b>2,753</b> | <b>30,000</b> |
| 7        | Rani Awanti Bai Sagar, Bargi HPS         | 37           | 30           | 28           | 40           | 55           | 50           | 50           | 40           | 40           | 40           | 20           | 20           | 448           |
| 8        | Bansagar Ph I HPS (Tons)                 | 60           | 60           | 50           | 100          | 110          | 110          | 100          | 100          | 70           | 70           | 60           | 60           | 948           |
| 9        | Bansagar Ph-II HPS (Silpara)             | 4            | 4            | 5            | 9            | 9            | 9            | 9            | 9            | 8            | 8            | 5            | 4            | 88            |
| 10       | Bansagar Ph-III HPS (Deolond)            | -            | -            | -            | 10           | 25           | 25           | 20           | 20           | -            | 10           | -            | -            | 109           |
| 11       | Bansagar Ph-IV HPS (Jhinna)              | 9            | 8            | 7            | 6            | 6            | 10           | 10           | 10           | 10           | 10           | 10           | 9            | 104           |
| 12       | Birsinghpur HPS                          | -            | -            | 2            | 10           | 10           | 8            | 8            | 5            | 5            | 4            | -            | -            | 51            |
| 13       | Madikheda HPS                            | -            | -            | 2            | 10           | 18           | 12           | 12           | 10           | 8            | 8            | 5            | 5            | 88            |
| 14       | Rajghat HPS                              | -            | -            | -            | 6            | 6            | 9            | 9            | 7            | 6            | 3            | 3            | 3            | 51            |
| 15       | Gandhisagar HPS                          | 2            | 2            | 3            | 5            | 10           | 15           | 16           | 15           | 19           | 18           | 15           | 15           | 133           |
| 16       | Ranapratap Sagar HPS                     | 1            | 5            | 1            | 8            | 15           | 11           | 11           | 22           | 18           | 26           | 25           | 20           | 162           |
| 17       | Jawahar Sagar HPS                        | 1            | 3            | 1            | 8            | 14           | 10           | 9            | 19           | 18           | 19           | 20           | 16           | 138           |
| 18       | Pench HPS                                | 6            | 8            | 12           | 12           | 23           | 42           | 40           | 21           | 16           | 10           | 6            | 10           | 208           |
| <b>B</b> | <b>Total (MP Genco Hydel)</b>            | <b>120</b>   | <b>120</b>   | <b>111</b>   | <b>223</b>   | <b>300</b>   | <b>310</b>   | <b>292</b>   | <b>277</b>   | <b>219</b>   | <b>225</b>   | <b>169</b>   | <b>161</b>   | <b>2,528</b>  |
| 19       | NHDC Indira Sagar HPS                    | 123          | 119          | 152          | 273          | 513          | 421          | 322          | 153          | 158          | 186          | 221          | 97           | 2,737         |
| 20       | NHDC Omkareshwar HPS                     | 68           | 61           | 81           | 163          | 241          | 211          | 170          | 73           | 67           | 89           | 111          | 51           | 1,387         |
| 21       | NVDA Sardar Sarovar HPS                  | 65           | 76           | 138          | 156          | 371          | 313          | 270          | 110          | 101          | 111          | 121          | 78           | 1,910         |
| 22       | Rihand HPS                               | 3            | 3            | 7            | 5            | 7            | 6            | 7            | 2            | 5            | 9            | 6            | 4            | 65            |
| 23       | Matatila HPS                             | 0            | 2            | 0            | 1            | 4            | 4            | 5            | 2            | 4            | 3            | 4            | 3            | 33            |
| 24       | SJVN Rampur HPS                          | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 2             |
| 25       | SJVN Jhakri HPS                          | 1            | 1            | 1            | 1            | 2            | 1            | 1            | 0            | 0            | 0            | 0            | 1            | 10            |
| 26       | Tehri HPS                                | 0            | 0            | 1            | 1            | 1            | 1            | 1            | 0            | 0            | 0            | 0            | 0            | 6             |
| 27       | Koteshwar HPP                            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 3             |
| 28       | NHPC Parbati III                         | 0            | 0            | 0            | 1            | 1            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 3             |
| 29       | NHPC Chamera II                          | 0            | 0            | 0            | 1            | 1            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 4             |
| 30       | NHPC Chamera III                         | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 2             |
| 31       | NHPC Dulhasti                            | 0            | 0            | 1            | 1            | 1            | 1            | 0            | 0            | 0            | 0            | 0            | 0            | 4             |
| 32       | NHPC Dhauliganga                         | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 3             |
| 33       | NHPC Sewa II                             | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 1             |
| 34       | NHPC Uri II                              | -            | -            | -            | -            | -            | -            | -            | -            | -            | -            | -            | -            | -             |
| 35       | NHPC Kishanganga                         | 0            | 0            | 0            | 1            | 1            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 3             |

| Sr.no.   | Particulars                                  | April        | May          | June         | July         | Aug          | Sep          | Oct          | Nov          | Dec          | Jan          | Feb          | Mar          | Total         |
|----------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| 36       | NTPC Koldam HPP I                            | 0            | 0            | 0            | 1            | 1            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 4             |
| 37       | NTPC Singrauli Small HPP                     | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0             |
| 38       | NHPC Lower Subansiri HEP Units               | 3            | 4            | 7            | 17           | 31           | 21           | 17           | 10           | 8            | 11           | 9            | 6            | 146           |
| 39       | NHPC -Tiesta                                 | -            | -            | -            | -            | -            | -            | -            | -            | -            | -            | -            | -            | -             |
| 40       | NHPC - Rangit                                | -            | -            | 8            | 19           | 34           | 23           | 19           | 11           | 9            | 12           | 10           | 6            | 151           |
| 41       | SAS Hydel Project Pvt Ltd.                   | 0            | 0            | 0            | 3            | 4            | 4            | 1            | 0            | 0            | 0            | 0            | -            | 12            |
| 42       | Amhata Hydro Energy Pvt. Ltd.                | 0            | 0            | 0            | 0            | 1            | 0            | 0            | 0            | 0            | 1            | 0            | 1            | 4             |
| 43       | Amhata Hydro Energy Pvt. Ltd. - II           | 0            | 0            | 0            | 1            | 1            | 1            | 1            | 0            | 0            | 0            | 0            | 0            | 5             |
| 44       | Amhata Hydro Energy Pvt. Ltd. - IV           | -            | -            | -            | -            | 1            | 1            | 1            | 0            | 0            | 0            | 0            | 0            | 3             |
| 45       | Sirmour Small Hydel Pvt. Ltd.                | 16           | 18           | 16           | 9            | 11           | 14           | 14           | 13           | 16           | 17           | 15           | 17           | 177           |
| 46       | NVDA Indira sagar LBC HPS                    | (0)          | -            | 0            | 0            | 0            | 0            | 1            | 1            | 1            | 1            | 1            | 1            | 8             |
| 47       | NVDA Bargi LBC HPS                           | 0            | 1            | 0            | 0            | 2            | 3            | 1            | 1            | 0            | (0)          | 0            | (0)          | 8             |
| 48       | Mini & Micro Hydel Plants                    | 0            | 0            | -            | -            | 1            | 1            | 0            | 1            | 2            | 1            | 1            | 0            | 8             |
| <b>C</b> | <b>Total (JV Hydel &amp; Other Hydel-NR)</b> | <b>282</b>   | <b>288</b>   | <b>415</b>   | <b>653</b>   | <b>1,228</b> | <b>1,030</b> | <b>834</b>   | <b>380</b>   | <b>375</b>   | <b>445</b>   | <b>501</b>   | <b>267</b>   | <b>6,698</b>  |
| 49       | NTPC Korba                                   | 320          | 320          | 302          | 285          | 269          | 316          | 331          | 316          | 326          | 310          | 256          | 316          | 3,666         |
| 50       | NTPC Korba III                               | 50           | 43           | 25           | 43           | 51           | 49           | 51           | 49           | 49           | 51           | 46           | 49           | 556           |
| 51       | NTPC Vindychal I                             | 267          | 264          | 268          | 266          | 233          | 233          | 264          | 251          | 252          | 268          | 232          | 272          | 3,070         |
| 52       | NTPC Vindychal II                            | 214          | 221          | 163          | 205          | 206          | 164          | 220          | 215          | 213          | 212          | 201          | 221          | 2,457         |
| 53       | NTPC Vindychal III                           | 166          | 170          | 129          | 151          | 173          | 168          | 170          | 164          | 165          | 170          | 130          | 131          | 1,887         |
| 54       | NTPC Vindychal IV                            | 192          | 199          | 193          | 163          | 177          | 169          | 162          | 189          | 192          | 192          | 163          | 193          | 2,185         |
| 55       | NTPC Vindychal V Unit 1                      | 70           | 100          | 96           | 94           | 96           | 93           | 97           | 94           | 97           | 88           | 49           | 97           | 1,072         |
| 56       | NTPC Sipat I                                 | 126          | 174          | 160          | 170          | 197          | 188          | 209          | 206          | 214          | 227          | 206          | 197          | 2,273         |
| 57       | NTPC Sipat II                                | 126          | 113          | 101          | 125          | 127          | 128          | 128          | 123          | 129          | 130          | 87           | 113          | 1,431         |
| 58       | NTPC Mouda I                                 | 8            | 9            | 9            | 9            | 9            | 8            | 9            | 7            | 7            | 9            | 8            | 9            | 102           |
| 59       | NTPC Mouda II Unit 1                         | 15           | 16           | 15           | 16           | 15           | 15           | 12           | 11           | 13           | 15           | 14           | 15           | 172           |
| 60       | NTPC Solapur STPS                            | 182          | 219          | 194          | 220          | 220          | 220          | 219          | 219          | 183          | 183          | 196          | 219          | 2,474         |
| 61       | NTPC Gadawara STPS, Unit-1                   | 273          | 293          | 290          | 283          | 303          | 283          | 242          | 256          | 290          | 285          | 226          | 284          | 3,309         |
| 62       | NTPC Lara STPS, Raigarh, Unit I              | 105          | 124          | 112          | 122          | 107          | 108          | 121          | 88           | 85           | 114          | 107          | 125          | 1,317         |
| 63       | NTPC Khargone STPS, Unit-I & II              | 317          | 440          | 348          | 368          | 455          | 447          | 480          | 462          | 431          | 461          | 344          | 457          | 5,009         |
| 64       | NTPC Kawas GPP                               | -            | -            | -            | -            | -            | -            | -            | -            | -            | -            | -            | -            | -             |
| 65       | NTPC Gandhar GPP                             | -            | -            | -            | -            | -            | -            | -            | -            | -            | -            | -            | -            | -             |
| 66       | KAPP Kakrapar (including new capacity)       | 194          | 200          | 194          | 200          | 200          | 194          | 200          | 194          | 200          | 200          | 181          | 200          | 2,359         |
| 67       | TAPP Tarapur                                 | 122          | 126          | 122          | 126          | 126          | 122          | 126          | 122          | 126          | 126          | 114          | 126          | 1,482         |
| 68       | NTPC Gadawara STPS, Unit-2                   | 273          | 293          | 290          | 283          | 303          | 283          | 242          | 256          | 290          | 285          | 226          | 284          | 3,309         |
| <b>D</b> | <b>Total WR Region</b>                       | <b>3,018</b> | <b>3,324</b> | <b>3,012</b> | <b>3,130</b> | <b>3,268</b> | <b>3,189</b> | <b>3,281</b> | <b>3,223</b> | <b>3,262</b> | <b>3,328</b> | <b>2,785</b> | <b>3,310</b> | <b>38,130</b> |
| 69       | NTPC Kahalgaon II                            | 43           | 44           | 43           | 44           | 44           | 43           | 44           | 43           | 44           | 44           | 40           | 44           | 519           |
| 70       | LoI through DVC (Sep-2020 to Mar-2032)       | 61           | 63           | 61           | 63           | 63           | 61           | 63           | 61           | 63           | 63           | 57           | 63           | 745           |
| <b>E</b> | <b>Total ER Region</b>                       | <b>104</b>   | <b>107</b>   | <b>104</b>   | <b>107</b>   | <b>107</b>   | <b>104</b>   | <b>107</b>   | <b>104</b>   | <b>107</b>   | <b>107</b>   | <b>97</b>    | <b>107</b>   | <b>1,264</b>  |
| 71       | NTPC Auraiya GPP                             | 1            | 1            | 4            | 2            | 4            | 3            | 5            | 6            | 4            | 3            | 2            | 1            | 36            |

| Sr.no.   | Particulars                                | April        | May           | June         | July         | Aug           | Sep          | Oct           | Nov          | Dec          | Jan          | Feb          | Mar           | Total           |
|----------|--|--------------|---------------|--------------|--------------|---------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|-----------------|
| 72       | NTPC Dadri GPP                             | 1            | 2             | 5            | 3            | 5             | 4            | 6             | 7            | 5            | 4            | 3            | 1             | 45              |
| 73       | NTPC Anta GPP                              | 1            | 1             | 3            | 1            | 3             | 2            | 3             | 4            | 2            | 2            | 1            | 0             | 23              |
| 74       | NTPC Firoz Gandhi Unchahar I               | 0            | 0             | 1            | 0            | 1             | 1            | 1             | 1            | 1            | 1            | 0            | 0             | 7               |
| 75       | NTPC Firoz Gandhi Unchahar II              | 1            | 1             | 3            | 1            | 3             | 2            | 3             | 4            | 2            | 2            | 1            | 0             | 23              |
| 76       | NTPC Firoz Gandhi Unchahar III             | 0            | 0             | 1            | 1            | 1             | 1            | 1             | 2            | 1            | 1            | 1            | 0             | 11              |
| 77       | NTPC Firoz Gandhi Unchahar IV              | 1            | 1             | 3            | 2            | 3             | 2            | 4             | 4            | 3            | 2            | 2            | 1             | 27              |
| 78       | NTPC Rihand TPS-I                          | 1            | 2             | 5            | 3            | 5             | 4            | 6             | 7            | 4            | 4            | 3            | 1             | 43              |
| 79       | NTPC Rihand TPS-II                         | 1            | 2             | 5            | 3            | 5             | 4            | 6             | 8            | 5            | 4            | 3            | 1             | 48              |
| 80       | NTPC Rihand TPS-III                        | 1            | 2             | 6            | 3            | 6             | 5            | 7             | 9            | 6            | 4            | 3            | 1             | 54              |
| 81       | NTPC NCTP Dadri II                         | 1            | 2             | 5            | 3            | 6             | 4            | 7             | 8            | 5            | 4            | 3            | 1             | 49              |
| 82       | NTPC Singrauli                             | 2            | 4             | 10           | 6            | 10            | 8            | 12            | 15           | 9            | 7            | 5            | 2             | 91              |
| 83       | NTPC IGPS I Jhajjar                        | 1            | 2             | 5            | 3            | 5             | 4            | 6             | 7            | 4            | 3            | 3            | 1             | 42              |
| 84       | MEJA Urja Nigam                            | 0            | 1             | 2            | 1            | 2             | 2            | 2             | 3            | 2            | 1            | 1            | 0             | 17              |
| 85       | NTPC Tanda                                 | 1            | 1             | 3            | 1            | 3             | 2            | 3             | 4            | 2            | 2            | 1            | 0             | 23              |
| 86       | Rajasthan (NPCIL)                          | -            | -             | -            | -            | -             | -            | -             | 6            | 4            | 3            | 2            | -             | 16              |
| 87       | NARORA (NPCIL)                             | 1            | 1             | 3            | 1            | 3             | 2            | 3             | 4            | 2            | 2            | 1            | 0             | 23              |
| <b>F</b> | <b>Total NR (Thermal + Nuclear) Region</b> | <b>15</b>    | <b>22</b>     | <b>63</b>    | <b>34</b>    | <b>63</b>     | <b>51</b>    | <b>75</b>     | <b>97</b>    | <b>61</b>    | <b>49</b>    | <b>36</b>    | <b>11</b>     | <b>579</b>      |
| 88       | Torrent Power                              | 18           | 18            | 18           | 18           | 18            | 18           | 18            | 18           | 18           | 18           | 17           | 18            | 217             |
| 89       | BLA Power, Unit-I & II                     | 6            | 7             | 6            | 7            | 7             | 6            | 7             | 6            | 7            | 7            | 6            | 7             | 77              |
| 90       | Jaypee Bina Power                          | 179          | 185           | 179          | 185          | 185           | 179          | 185           | 179          | 185          | 185          | 167          | 185           | 2,176           |
| 91       | Lanco Amarkantak TPS Unit 1                | 131          | 135           | 131          | 135          | 135           | 131          | 135           | 131          | 135          | 135          | 122          | 135           | 1,589           |
| 92       | Reliance UMPP, Sasan                       | 881          | 910           | 881          | 910          | 910           | 881          | 910           | 881          | 910          | 910          | 822          | 910           | 10,716          |
| 93       | Essar Power STPS                           | 12           | 13            | 12           | 13           | 13            | 12           | 13            | 12           | 13           | 13           | 11           | 13            | 149             |
| 94       | Jaiprakash Power STPS, Nigri               | 286          | 295           | 286          | 295          | 295           | 286          | 295           | 286          | 295          | 295          | 266          | 295           | 3,474           |
| 95       | MB Power STPS, Unit-I                      | 129          | 133           | 129          | 133          | 133           | 129          | 133           | 129          | 133          | 133          | 120          | 133           | 1,564           |
| 96       | MB Power STPS, Unit-II                     | 129          | 133           | 129          | 133          | 133           | 129          | 133           | 129          | 133          | 133          | 120          | 133           | 1,564           |
| 97       | Jhabua Power STPS, Unit-1                  | 121          | 125           | 121          | 125          | 125           | 121          | 125           | 121          | 125          | 125          | 113          | 125           | 1,474           |
| 98       | New IPP                                    | -            | -             | -            | -            | -             | -            | -             | -            | -            | -            | -            | -             | -               |
| <b>G</b> | <b>Total (IPPs)</b>                        | <b>1,890</b> | <b>1,953</b>  | <b>1,890</b> | <b>1,953</b> | <b>1,953</b>  | <b>1,890</b> | <b>1,953</b>  | <b>1,890</b> | <b>1,953</b> | <b>1,953</b> | <b>1,764</b> | <b>1,953</b>  | <b>23,000</b>   |
| 99       | Renewable Energy (Solar)                   | 789          | 969           | 841          | 775          | 779           | 765          | 862           | 659          | 658          | 682          | 790          | 984           | 9,553           |
| 100      | Renewable Energy (other than Solar)        | 522          | 609           | 1,026        | 615          | 1,017         | 601          | 376           | 276          | 400          | 255          | 557          | 612           | 6,867           |
| 101      | Bio Mass/Bio gas/MSW                       | 16           | 16            | 16           | 12           | 8             | 11           | 13            | 13           | 13           | 13           | 13           | 16            | 162             |
| <b>H</b> | <b>Total Renewable Energy</b>              | <b>1,328</b> | <b>1,594</b>  | <b>1,882</b> | <b>1,402</b> | <b>1,805</b>  | <b>1,378</b> | <b>1,251</b>  | <b>949</b>   | <b>1,071</b> | <b>950</b>   | <b>1,360</b> | <b>1,612</b>  | <b>16,582</b>   |
| <b>I</b> | <b>Grand Total</b>                         | <b>9,415</b> | <b>10,158</b> | <b>9,829</b> | <b>9,645</b> | <b>10,789</b> | <b>9,965</b> | <b>10,413</b> | <b>9,581</b> | <b>9,801</b> | <b>9,810</b> | <b>9,200</b> | <b>10,174</b> | <b>1,18,781</b> |



### 5.3 Renewable Purchase Obligation (RPO)

5.3.1 The Commission had notified the MPERC (Co-generation and generation of electricity from Renewable sources of energy) (Revision-II) Regulations, 2021 on 12<sup>th</sup> November, 2021 and its first amendment on 16<sup>th</sup> January, 2023. In the said Regulations, the Commission has specified Renewable Purchase Obligation (RPO) for Wind, HPO and Other sources for the Period from FY 2022-23 to FY 2029-30.

5.3.2 Accordingly, the Petitioners have computed quantum of Wind, HPO and Other power purchase requirement for RPO compliance based on the total energy requirement estimated for the FY 2025-26, as shown in the Table below:

**Table 91: Renewable Purchase Obligation for FY 2025-26 (MUs)**

| Sr No | Particulars                     | Wind RPO     | HPO          | Others         | ESO          |
|-------|---------------------------------|--------------|--------------|----------------|--------------|
| 1     | Energy Requirements (MUs)       | 99,089       | 99,089       | 99,089         | 99,089       |
| 2     | RPO Targets %                   | 3.36%        | 1.48%        | 26.13%         | 1.00%        |
| 3     | Energy Required - MUs           | 3,329        | 1,467        | 25,892         | 991          |
| 4     | Energy Available - Assessed MUs | 3,229        | 508          | 22,071         | -            |
| 5     | Achievement %                   | 3.26%        | 0.51%        | 22.27%         | -            |
| 6     | Target Achieved %               | <b>97%</b>   | <b>35%</b>   | <b>85%</b>     | -            |
| 7     | <b>Surplus/Deficit - MUs</b>    | <b>(100)</b> | <b>(959)</b> | <b>(3,821)</b> | <b>(991)</b> |

5.3.3 Based on the above, it can be seen that there may be a shortfall of around 5,871 Mus in the total RPO Obligation. Accordingly, the Petitioners have considered the cost of additional power purchase for compliance of RPO shortfall in the Power Purchase Cost. The Petitioners have considered the rate of procurement for RPO fulfilment as the weighted average price of power from various plants under the respective RPO categories as estimated for FY 2025-26 as under:

**Table 92: Cost of Additional Power Purchase for RPO Compliance for FY 2025-26**

| Sr No | Particulars  | Wind RPO  | HPO        | Others       | ESO        | Total        |
|-------|--|-----------|------------|--------------|------------|--------------|
| 1     | Surplus/(Deficit) - MUs                            | (100)     | (959)      | (3,821)      | (991)      | (5,871)      |
| 2     | Per Unit Price for Additional Procurement in Rs.   | 4.37      | 7.19       | 4.49         | 7.00       | 5.35         |
| 3     | <b>Cost of additional Procurement in Rs. Crore</b> | <b>44</b> | <b>689</b> | <b>1,717</b> | <b>694</b> | <b>3,143</b> |

5.3.4 Further, this power procurement against the shortfall would be any additional procurement for MPPMCL (since they have already satisfied normative power procurement from the existing tied up capacity) or in other words would be the incremental addition to the projected availability of FY 2025-26. Further, in order to balance the energy requirement of the Petitioners, the equivalent portion of aforesaid additional procurement towards shortfall is considered to be sold as additional surplus power at a rate of Rs. 4.55/kWh (as explained in the following paras) during FY 2025-26. The net cost implication from aforesaid transaction is then considered in the total power purchase cost of FY 2025-26 as shown in the Table below:



Table 93: Net Cost implication towards Renewable Purchase Obligation for FY 2025-26 (MUs)

| S. No | Particulars  | 2025-26    |
|-------|--|------------|
| 1     | Total Shortfall in MUs                                     | 5,871      |
| 2     | Total Cost of Shortfall in Rs. Crore                       | 3,143      |
| 3     | Rate of Sale of Surplus Power in Rs./kWh                   | 4.55       |
| 4     | Revenue from Sale of additional Surplus Power in Rs. Crore | 2,674      |
| 5     | <b>Net Cost Implication in Rs. Crore</b>                   | <b>469</b> |

#### 5.4 Technical Minimum Scheduling & Backing down of Power

##### Technical Minimum Scheduling:

- 5.4.1 As regard to approach towards scheduling of stations to cater the normative power purchase requirement and hence working of energy charges, the Petitioners have observed that the Hon'ble Commission has approved "***Detailed Operating Procedure (DOP) for Backing Down of Coal unit(s) of the State Generating Stations having 100% installed capacity tied up with MP Power Management Company/DISCOMs of MP and for IPPs as per provision in PPA with MPPMCL for taking such units under Reserve Shut Down on scheduling below Technical Minimum Schedule and part load operation***" vide Order dated 29<sup>th</sup> January, 2020 in accordance with Clause 8.8 (6) of the aforesaid Madhya Pradesh Electricity Grid Code (Revision-II), 2019 issued on 21<sup>st</sup> June 2019.
- 5.4.2 It is to be noted that the approved DOP lay down (i) the methodology for identifying the generating stations or units thereof to be backed down in specific grid conditions such as low system demand, during regulation of power supply, incidence of high renewables etc.; (ii) the procedure for taking generating units under RSD; (iii) the role of different agencies; and (iv) the data requirements, etc. The DOP also provided "Technical Minimum" (TMM) for operation in respect of a unit(s) of a Thermal Generating Station as **55% of Maximum Continuous Rating or MCR loading**.
- 5.4.3 It is submitted that as per DOP, Day ahead scheduling is being undertaken by MPPMCL/Discoms wherein it has to ensure "Technical Minimum" scheduling for their tied-up stations. The relevant extract from the DOP stipulating the requirement of Technical Minimum is as reproduced below:

***"5. Methodology for taking generating station or unit(s) thereof under Reserve Shut Down (Day ahead scheduling)***

*The scheduling process is adopted as per clause 8.4 to 8.7 of MP Electricity Grid Code 2019. Salient points of the same are mentioned below;*

5.1. The State Sector Generating Station/IPPs shall submit the following information at the time of declaration of DC (time block-wise) and subsequent revisions, if any, in accordance with Grid Code.

.....

.....

5.4. Based on the ex-Power Plant (Ex-PP) requisition submitted by MPPMCL, SLDC prepares and issue Generation Schedule in 15-minute time-block for each of the SSGS/IPPs.

5.5. If the net Ex-PP injection schedule for a generating station is **less than technical minimum**, MPPMCL/Discoms shall be required to review its requisition(s) and submit a revised requisition(s), to the SLDC.

.....

5.7. If the grid conditions do not demand for providing **technical minimum** to a generating station, under such situation, the SSGS/IPPs shall have the option to go for RSD with intimation to SLDC.

.....” **{Emphasis Added}**

5.4.4 Further, in case of IPPs also, the DOP stipulates that **all the beneficiaries including pseudo beneficiary of IPP shall be responsible for maintaining technical minimum generation of the generating unit(s). All the beneficiaries are required to give technical minimum requisition of their share in the IPP’s unit(s), in case unit(s) is required to be kept on bar for smooth operation of the Grid.**

5.4.5 It is also submitted that as per clause 8.8(3) of the MP Electricity Grid Code, where Generating Station is directed by State Load Despatch Centre (SLDC) to operate below Normative plant Availability Factor but at or above Technical Minimum.

5.4.6 Hence, from the above it is clear that the MPPMCL/Discoms are required to ensure Technical Minimum scheduling for State Gencos and for IPPs as well. Further, the criterion for Technical Minimum Scheduling is squarely applicable for Central Generating Stations also as per relevant Regulations/Code of the Central Electricity Regulatory Commission (CERC) and DOP as approved by the Hon’ble CERC vide its Order No. L-1/219/2017-CERC dated 5<sup>th</sup> May 2017.

5.4.7 The Petitioners during the True-up and ARR proceedings of Previous years have observed that the Hon’ble Commission while calculating the normative power purchase requirement does not factor the Technical Minimum. Accordingly, the Petitioners in its previous True-up and ARR Petition have requested the Hon’ble Commission to consider the impact of Technical Minimum while applying merit order despatch on monthly basis. While the Hon’ble Commission has considered the Technical Minimum

impact under the True-up exercise for FY 2022-23, it has not considered the Technical Minimum impact under the ARR determination for FY 2024-25. The relevant extract from the Hon'ble Commission's ARR and Tariff Order for FY 2024-25 is as reproduced below:

*“2.62 The Commission has analysed the Petitioners' submission regarding consideration of technical minimum schedule while applying merit order despatch. The Commission is of the view that the technical minimum scheduling to some stations throughout the financial year while estimating the power purchase requirement is not correct as projections do not depict the actual operational scenario in respect to actual availability and scheduling of generating stations. **The Commission cannot arbitrarily assume technical minimum scheduling and burden the consumer with cost of such scheduling.** Actual availability based on technical minimum scheduling may be examined at the time of true-up after applying prudence checks. Therefore, the Commission has decided to continue with its approach towards scheduling of generating stations to cater to the normative monthly energy requirement against available energy from each generating stations by applying merit order despatch principle and accordingly determine variable cost and revenue from sale of surplus energy, backing down of energy quantum and variable cost of power purchase for FY 2024-25.”*

5.4.8 The Petitioners respect the above ruling of the Hon'ble Commission and understand that the intention of the Hon'ble Commission is not to burden the consumers with cost of such TMM scheduling. However, the Petitioners wish to submit that in actual scenario the scheduling of stations will take place honouring the TMM. Therefore, despite of non-consideration of cost of such scheduling under ARR, the same will be incurred by the Licensee and such cost will ultimately be passed on to the consumer via automatic FPPAS. Therefore, to avoid the difference between the approved and actual cost of power purchase it is necessary to build the impact of TMM under the determination of power purchase for the purpose of ARR for ensuing years.

5.4.9 It is to be noted that as per the Hon'ble Commission approach, i.e., non-consideration of Technical Minimum scheduling while estimating the power purchase requirement for ensuing year, will treat those stations falling below the MoD rank at which the normative energy requirement (and surplus sale if any) is fulfilled, to remain under backdown or RSD throughout the year. However, in actual scenario it is not possible even when the actual loss of the Licensee remains within the normative range. Due to this approach of the Hon'ble Commission, there exist a substantial variation in actual power purchase cost as compared to the approved which can be witnessed during the true-up exercise of past years. Such variation is mainly due to the reasons that as per the Hon'ble Commission's approach the Stations with higher energy charges never get schedule on MOD which rather in actual are required to be schedule for at least 55% of Maximum Continuous Rating or MCR loading, i.e., on TMM

5.4.10 It is submitted that the TMM run of thermal generating stations ensure the availability

of power during time period when Renewable power is not available, as once a station is back-down or given Reserve Shut Down it takes considerable time to get on bar. It is submitted that thermal stations cannot be subjected to start/stop on daily basis and during off peak hours, the scheduling of power is generally done on Technical Minimum basis which may also result in backing down of cheaper stations. If such costlier power stations are closed down considering the economic facts, power would not be delivered to the consumers due to various constraints. **The Petitioners therefore require the Hon'ble Commission to factor in the TMM scheduling while estimating the power purchase requirement and hence, cost for FY 2025-26.**

5.4.11 It is further submitted that the provisions of Section 32 of the Act, in no manner indicates that the procurement by State utilities should be promoted without considering the technical capabilities of the generating plant. If the intent of the legislature was to limit the scheduling without taking into account the technical constraints in other word giving NIL requisition or RSD to all Stations after satisfying the energy requirement on MoD principle, then the legislature would not have used the word 'optimum' in Section 32 of the Act. The sole purpose of incorporating the word 'optimum' in Section 32 is to entrust the responsibility upon SLDC to balance the interest of both the procurer as well as the generator. It is therefore submitted that the optimisation model for scheduling & dispatch; dispatches the cheapest available generator to its full declared capacity followed by the next higher variable cost generator (honouring the technical minimum and Declared Capability constraints besides ramp rates, network congestion etc.) and so on till the entire requisition is met. Hence, the concept of technical minimum cannot be ignored.

5.4.12 Although one may argue that providing technical minimum scheduling to some stations throughout the financial year also does not depicts the actual operational scenario as actual scheduling of TMM is based on 15-minute time block-wise demand vis-à-vis availability scenario. The Petitioners fully agree with such an argument. However, it is submitted that for the sake of financial burden on the Discoms it is required to adopt a balance approach to protect the interest of consumers as well as licensees. Accordingly, the Petitioners submit a methodology wherein it has proposed to ensure a minimum scheduling of say 40% for every thermal and gas station against the energy requirements and then apply the MoD principle for the remaining balance requirement. This will ensure continuity of the generation from the running stations during the need of hour and will also maintain grid stability.

**Backing Down of Stations:**

5.4.13 After fully meeting the requirement of the State and selling surplus power on the power exchange based on past trend, the Petitioners on normative basis are expected to partially back-down some costlier plants so as to save the variable costs being incurred on them.

5.4.14 The Petitioners have calculated partial backing down of units/stations at normative loss

levels on monthly basis during those periods when their scheduling is not required at normative loss level to meet the demand and also when there is no net savings in case of selling such power in open market/exchange. However, it is to be noted that such backing down as well as surplus sale so anticipated are on normative loss level only whereas in actual operations such quantum will differ.

5.4.15 The following Table shows the summary stations which are considered for partial back down for FY 2025-26:

**Table 94: Station wise Projected Backing Down of Power (MUs) on Normative basis for FY 2025-26**

| SI No    | Source                                   | FY 2025-26          |                  |              |                 |
|----------|--|---------------------|------------------|--------------|-----------------|
|          |  | Energy Availability | Energy Scheduled | Surplus Sale | Energy Backdown |
| 1        | Amarkantak TPS Ph-III                    | 1,519               | 1,296            | 146          | 77              |
| 2        | Satpura TPS Ph-IV                        | 3,521               | 2,901            | 133          | 487             |
| 3        | SGTPS Ph-I & II                          | 4,407               | 3,022            | 365          | 1,020           |
| 4        | SGTPS Ph-III                             | 3,398               | 2,924            | 95           | 379             |
| 5        | Shri Singaji STPS Phase-I                | 8,203               | 5,061            | 703          | 2,440           |
| 6        | Shri Singaji STPS Phase-II               | 8,953               | 5,809            | 1,054        | 2,089           |
| <b>A</b> | <b>Total (MP Genco Thermal-MP Share)</b> | <b>30,000</b>       | <b>21,013</b>    | <b>2,496</b> | <b>6,491</b>    |
| 7        | Rani Awanti Bai Sagar, Bargi HPS         | 448                 | 448              | 0            | 0               |
| 8        | Bansagar Ph I HPS (Tons)                 | 948                 | 948              | 0            | 0               |
| 9        | Bansagar Ph-II HPS (Silpara)             | 88                  | 88               | 0            | 0               |
| 10       | Bansagar Ph-III HPS (Deolond)            | 109                 | 109              | 0            | 0               |
| 11       | Bansagar Ph-IV HPS (Jhinna)              | 104                 | 104              | 0            | 0               |
| 12       | Birsinghpur HPS                          | 51                  | 51               | 0            | 0               |
| 13       | Madikheda HPS                            | 88                  | 88               | 0            | 0               |
| 14       | Rajghat HPS                              | 51                  | 51               | 0            | 0               |
| 15       | Gandhisagar HPS                          | 133                 | 133              | 0            | 0               |
| 16       | Ranapratap Sagar HPS                     | 162                 | 162              | 0            | 0               |
| 17       | Jawahar Sagar HPS                        | 138                 | 138              | 0            | 0               |
| 18       | Pench HPS                                | 208                 | 208              | 0            | 0               |
| <b>B</b> | <b>Total (MP Genco Hydel)</b>            | <b>2,528</b>        | <b>2,528</b>     | <b>0</b>     | <b>0</b>        |
| 19       | NHDC Indira Sagar HPS                    | 2,737               | 2,737            | 0            | 0               |
| 20       | NHDC Omkareshwar HPS                     | 1,387               | 1,387            | 0            | 0               |
| 21       | NVDA Sardar Sarovar HPS                  | 1,910               | 1,910            | 0            | 0               |
| 22       | Rihand HPS                               | 65                  | 65               | 0            | 0               |
| 23       | Matatila HPS                             | 33                  | 33               | 0            | 0               |
| 24       | SJVN Rampur HPS                          | 2                   | 2                | 0            | 0               |
| 25       | SJVN Jhakri HPS                          | 10                  | 10               | 0            | 0               |
| 26       | Tehri HPS                                | 6                   | 6                | 0            | 0               |
| 27       | Koteshwar HPP                            | 3                   | 3                | 0            | 0               |
| 28       | NHPC Parbati III                         | 3                   | 3                | 0            | 0               |

| SI No    | Source                                    | FY 2025-26          |                  |              |                 |
|----------|---|---------------------|------------------|--------------|-----------------|
|          |   | Energy Availability | Energy Scheduled | Surplus Sale | Energy Backdown |
| 29       | NHPC Chamera II                           | 4                   | 4                | 0            | 0               |
| 30       | NHPC Chamera III                          | 2                   | 2                | 0            | 0               |
| 31       | NHPC Dulhasti                             | 4                   | 4                | 0            | 0               |
| 32       | NHPC Dhauliganga                          | 3                   | 3                | 0            | 0               |
| 33       | NHPC Sewa II                              | 1                   | 1                | 0            | 0               |
| 34       | NHPC Uri II                               | 0                   | 0                | 0            | 0               |
| 35       | NHPC Kishanganga                          | 3                   | 3                | 0            | 0               |
| 36       | NTPC Koldam HPP I                         | 4                   | 4                | 0            | 0               |
| 37       | NTPC Singrauli Small HPP                  | 0                   | 0                | 0            | 0               |
| 38       | NHPC Lower Subansiri HEP Units            | 146                 | 146              | 0            | 0               |
| 39       | NHPC -Tiesta                              | 0                   | 0                | 0            | 0               |
| 40       | NHPC - Rangit                             | 151                 | 151              | 0            | 0               |
| 41       | SAS Hydel Project Pvt Ltd.                | 12                  | 12               | 0            | 0               |
| 42       | Amhata Hydro Energy Pvt. Ltd.             | 4                   | 4                | 0            | 0               |
| 43       | Amhata Hydro Energy Pvt. Ltd. - II        | 5                   | 5                | 0            | 0               |
| 44       | Amhata Hydro Energy Pvt. Ltd. - IV        | 3                   | 3                | 0            | 0               |
| 45       | Sirmour Small Hydel Pvt. Ltd.             | 177                 | 177              | 0            | 0               |
| 46       | NVDA Indira sagar LBC HPS                 | 8                   | 8                | 0            | 0               |
| 47       | NVDA Bargi LBC HPS                        | 8                   | 8                | 0            | 0               |
| 48       | Mini & Micro Hydel Plants                 | 8                   | 8                | 0            | 0               |
|          |   |                     |                  |              |                 |
| <b>C</b> | <b>Total (JV Hydel &amp; Other Hydel)</b> | <b>6,698</b>        | <b>6,698</b>     | <b>0</b>     | <b>0</b>        |
|          |   |                     |                  |              |                 |
| 49       | NTPC Korba                                | 3,666               | 3,505            | 161          | 0               |
| 50       | NTPC Korba III                            | 556                 | 525              | 30           | 0               |
| 51       | NTPC Vindychal I                          | 3,070               | 2,791            | 140          | 140             |
| 52       | NTPC Vindychal II                         | 2,457               | 2,234            | 99           | 124             |
| 53       | NTPC Vindychal III                        | 1,887               | 1,754            | 29           | 104             |
| 54       | NTPC Vindychal IV                         | 2,185               | 1,977            | 101          | 106             |
| 55       | NTPC Vindychal V Unit 1                   | 1,072               | 958              | 56           | 58              |
| 56       | NTPC Sipat I                              | 2,273               | 2,155            | 4            | 114             |
| 57       | NTPC Sipat II                             | 1,431               | 1,355            | 0            | 76              |
| 58       | NTPC Mouda I                              | 102                 | 46               | 15           | 42              |
| 59       | NTPC Mouda II Unit 1                      | 172                 | 101              | 9            | 62              |
| 60       | NTPC Solapur STPS                         | 2,474               | 1,107            | 351          | 1,016           |
| 61       | NTPC Gadarwara STPS, Unit-1               | 3,309               | 1,958            | 171          | 1,180           |
| 62       | NTPC Lara STPS, Raigarh, Unit I           | 1,317               | 1,252            | 64           | 0               |
| 63       | NTPC Khargone STPS, Unit-I & II           | 5,009               | 2,670            | 596          | 1,743           |
| 64       | KAPP Kakrapar                             | 2,359               | 2,359            | 0            | 0               |
| 65       | TAPP Tarapur                              | 1,482               | 1,482            | 0            | 0               |
| 66       | NTPC Gadarwara STPS, Unit-2               | 3,309               | 1,958            | 171          | 1,180           |
| <b>D</b> | <b>Total WR Region</b>                    | <b>38,130</b>       | <b>30,188</b>    | <b>1,997</b> | <b>5,945</b>    |
|          |   |                     |                  |              |                 |
| 67       | NTPC Kahalgaon II                         | 519                 | 415              | 52           | 52              |

| SI No    | Source                              | FY 2025-26          |                  |              |                 |
|----------|-------------------------------------|---------------------|------------------|--------------|-----------------|
|          |                                     | Energy Availability | Energy Scheduled | Surplus Sale | Energy Backdown |
| 68       | DVC (MTPS & CTPS)                   | 745                 | 445              | 38           | 262             |
| <b>E</b> | <b>Total ER Region</b>              | <b>1,264</b>        | <b>860</b>       | <b>90</b>    | <b>314</b>      |
| 69       | NTPC Auraiya GPP                    | 36                  | 16               | 4            | 16              |
| 70       | NTPC Dadri GPP                      | 45                  | 35               | 5            | 6               |
| 71       | NTPC Anta GPP                       | 23                  | 15               | 2            | 6               |
| 72       | NTPC Firoz Gandhi Unchahar I        | 7                   | 3                | 1            | 3               |
| 73       | NTPC Firoz Gandhi Unchahar II       | 23                  | 15               | 0            | 8               |
| 74       | NTPC Firoz Gandhi Unchahar III      | 11                  | 5                | 1            | 5               |
| 75       | NTPC Firoz Gandhi Unchahar IV       | 27                  | 12               | 3            | 12              |
| 76       | NTPC Rihand TPS-I                   | 43                  | 43               | 0            | 0               |
| 77       | NTPC Rihand TPS-II                  | 48                  | 45               | 3            | 0               |
| 78       | NTPC Rihand TPS-III                 | 54                  | 51               | 4            | -0              |
| 79       | NTPC NCTP Dadri II                  | 49                  | 21               | 6            | 22              |
| 80       | NTPC Singrauli                      | 91                  | 91               | 0            | 0               |
| 81       | NTPC IGPS I Jhajjar                 | 42                  | 18               | 5            | 19              |
| 82       | MEJA Urja Nigam                     | 17                  | 13               | 2            | 2               |
| 83       | NTPC Tanda                          | 23                  | 18               | 2            | 3               |
| 84       | Rajasthan (NPCIL)                   | 16                  | 16               | 0            | 0               |
| 85       | NARORA (NPCIL)                      | 23                  | 23               | 0            | 0               |
| <b>F</b> | <b>Total NR Region</b>              | <b>579</b>          | <b>440</b>       | <b>39</b>    | <b>100</b>      |
| 86       | Torrent Power                       | 217                 | 97               | 33           | 87              |
| 87       | BLA Power, Unit-I & II              | 77                  | 34               | 12           | 31              |
| 88       | Jaypee Bina Power                   | 2,176               | 1,300            | 111          | 766             |
| 89       | Lanco Amarkantak TPS Unit 1         | 1,589               | 1,295            | 191          | 103             |
| 90       | Reliance UMPP, Sasan                | 10,716              | 10,696           | 21           | 0               |
| 91       | Essar Power STPS                    | 149                 | 119              | 7            | 22              |
| 92       | Jaiprakash Power STPS, Nigri        | 3,474               | 3,474            | 0            | 0               |
| 93       | MB Power STPS, Unit-I               | 1,564               | 1,177            | 96           | 290             |
| 94       | MB Power STPS, Unit-II              | 1,564               | 1,091            | 159          | 314             |
| 95       | Jhabua Power STPS, Unit-1           | 1,474               | 1,399            | 75           | 0               |
| <b>G</b> | <b>Total (IPPs)</b>                 | <b>23,000</b>       | <b>20,681</b>    | <b>706</b>   | <b>1,613</b>    |
| 96       | Renewable Energy (Solar)            | 9,553               | 9,553            | 0            | 0               |
| 97       | Renewable Energy (other than Solar) | 6,867               | 6,867            | 0            | 0               |
| 98       | Bio Mass/Bio gas/MSW                | 162                 | 162              | 0            | 0               |
| <b>H</b> | <b>Total Renewable Energy</b>       | <b>16,582</b>       | <b>16,582</b>    | <b>0</b>     | <b>0</b>        |
| <b>I</b> | <b>IEX/Short Term Purchase</b>      | <b>0</b>            | <b>99</b>        | <b>0</b>     | <b>0</b>        |
| <b>J</b> | <b>Total</b>                        | <b>1,18,781</b>     | <b>99,089</b>    | <b>5,327</b> | <b>14,464</b>   |

5.4.16 Further, the summary of partial back down during the past three years along with the

projected backdown considering TMM as elaborated at paras above is shown in the Table below:

**Table 95: Historical Station wise Backing Down of Power (MUs)**

| Sl No    | Source                                    | 2020-21<br>(Actual) | 2021-22<br>(Actual) | 2022-23<br>(Actual) | 2023-24<br>(Actual) | 2025-26<br>(Projection) |
|----------|---|---------------------|---------------------|---------------------|---------------------|-------------------------|
| 1        | Amarkantak TPS Ph-III                     | 20                  | 56                  | 3                   | 22                  | 77                      |
| 2        | Satpura TPS Ph-II & III                   | 1549                | 46                  | 0                   |                     | 0                       |
| 3        | Satpura TPS Ph-IV                         | 336                 | 412                 | 140                 | 145                 | 487                     |
| 4        | SGTPS Ph-I & II                           | 629                 | 193                 | 123                 | 247                 | 1020                    |
| 5        | SGTPS Ph-III                              | 225                 | 200                 | 72                  | 103                 | 379                     |
| 6        | Shri Singaji STPS, Ph-I                   | 3975                | 1688                | 498                 | 752                 | 2440                    |
| 7        | Shri Singaji STPS, Ph-II                  | 3406                | 1080                | 266                 | 488                 | 2089                    |
| <b>A</b> | <b>Total (MP Genco Thermal-MP Share)</b>  | <b>10,140</b>       | <b>3,674</b>        | <b>1,102</b>        | <b>1756</b>         | <b>6,491</b>            |
| 8        | Rani Awanti Bai Sagar, Bargi HPS          | -                   | -                   | -                   | -                   | -                       |
| 9        | Bansagar Ph I HPS (Tons)                  | -                   | -                   | -                   | -                   | -                       |
| 10       | Bansagar Ph-II HPS (Silpara)              | -                   | -                   | -                   | -                   | -                       |
| 11       | Bansagar Ph-III HPS (Deolond)             | -                   | -                   | -                   | -                   | -                       |
| 12       | Bansagar Ph-IV HPS (Jhinna)               | -                   | -                   | -                   | -                   | -                       |
| 13       | Birsinghpur HPS                           | -                   | -                   | -                   | -                   | -                       |
| 14       | Madikheda HPS                             | -                   | -                   | -                   | -                   | -                       |
| 15       | Rajghat HPS                               | -                   | -                   | -                   | -                   | -                       |
| 16       | Gandhisagar HPS                           | -                   | -                   | -                   | -                   | -                       |
| 17       | Ranapratap Sagar HPS                      | -                   | -                   | -                   | -                   | -                       |
| 18       | Jawahar Sagar HPS                         | -                   | -                   | -                   | -                   | -                       |
| 19       | Pench HPS                                 | -                   | -                   | -                   | -                   | -                       |
| <b>B</b> | <b>Total (MP Genco Hydel)</b>             | <b>0</b>            | <b>0</b>            | <b>0</b>            | <b>0</b>            | <b>0</b>                |
| 20       | NHDC Indira Sagar HPS                     | -                   | -                   | -                   | -                   | -                       |
| 21       | NHDC Omkareshwar HPS                      | -                   | -                   | -                   | -                   | -                       |
| 22       | Sardar Sarovar HPS                        | -                   | -                   | -                   | -                   | -                       |
| 23       | NVDA Indira sagar LBC HPS                 | -                   | -                   | -                   | -                   | -                       |
| 24       | NVDA Bargi LBC HPS                        | -                   | -                   | -                   | -                   | -                       |
| 25       | Rihand HPS                                | -                   | -                   | -                   | -                   | -                       |
| 26       | Matatila HPS                              | -                   | -                   | -                   | -                   | -                       |
| 27       | Allocation from Northern region (Hydel)   | -                   | -                   | -                   | -                   | -                       |
| 28       | SAS Hydel, Hata                           | -                   | -                   | -                   | -                   | -                       |
| 29       | Amhata Hydel                              | -                   | -                   | -                   | -                   | -                       |
| 30       | Sirmour small Hydro                       | -                   | -                   | -                   | -                   | -                       |
| 31       | Mini & Micro Hydel Plants                 | -                   | -                   | -                   | -                   | -                       |
| <b>C</b> | <b>Total (JV Hydel &amp; Other Hydel)</b> | <b>0</b>            | <b>0</b>            | <b>0</b>            | <b>0</b>            | <b>0</b>                |
| 32       | Korba STPS                                | 17                  | 15                  | 60                  | 37                  | 0                       |
| 33       | Korba STPS Unit 7                         | 0                   | 1                   | 3                   | 3                   | 0                       |
| 34       | Vindhyanchal STPS-I                       | 313                 | 203                 | 94                  | 87                  | 140                     |
| 35       | Vindhyanchal STPS-II                      | 105                 | 74                  | 33                  | 31                  | 124                     |
| 36       | Vindhyanchal STPS-III                     | 54                  | 40                  | 29                  | 31                  | 104                     |
| 37       | Vindhyanchal STPS-IV                      | 62                  | 27                  | 30                  | 26                  | 106                     |
| 38       | Vindhyanchal STPS-V, Unit-1               | 61                  | 40                  | 25                  | 24                  | 58                      |
| 39       | Sipat STPS Stage-I                        | 9                   | 14                  | 196                 | 14                  | 114                     |
| 40       | Sipat STPS Stage-II                       | 10                  | 141                 | 175                 | 7                   | 76                      |
| 41       | Mouda STPS Stage-1                        | 877                 | 256                 | 63                  | 16                  | 42                      |



| Sl No    | Source                                 | 2020-21 (Actual) | 2021-22 (Actual) | 2022-23 (Actual) | 2023-24 (Actual) | 2025-26 (Projection) |
|----------|--|------------------|------------------|------------------|------------------|----------------------|
| 42       | Mouda STPS Stage-2                     | 1,444            | 117              | 92               | 24               | 62                   |
| 43       | NTPC Solapur STPS Unit-1 & 2           | 1,856            | 1,205            | 1,009            | 1105             | 1,016                |
| 44       | NTPC Gadawara STPS, Unit-1&2           | 1,463            | 2,027            | 2,099            | 1476             | 2,360                |
| 45       | NTPC Lara STPS Unit 1&2                | 208              | 188              | 230              | 5                | 0                    |
| 46       | NTPC Kharagone STPS, Unit-1&2          | 3,248            | 1,857            | 2,154            | 1483             | 1,743                |
| 47       | Kawas GPP                              | 1,006            | 1,149            | 305              | 0                | 0                    |
| 48       | Gandhar GPP                            | 839              | 755              | 235              | 0                | 0                    |
| 49       | Kakrapar APS                           | 0                | 0                | 0                | 0                | 0                    |
| 50       | Tarapore APS                           | 0                | 0                | 0                | 0                | 0                    |
| <b>D</b> | <b>Total WR Region</b>                 | <b>11,573</b>    | <b>8,110</b>     | <b>6,833</b>     | <b>4369</b>      | <b>5,945</b>         |
| 50       | NTPC Kahalgaon II                      | 66               | 91               | 186              | 133              | 52                   |
| 51       | LoI through DVC (Sep-2020 to Mar-2032) | 0                | 0                | 0                | 0                | 262                  |
| <b>E</b> | <b>Total ER Region</b>                 | <b>66</b>        | <b>91</b>        | <b>186</b>       | <b>133</b>       | <b>314</b>           |
| <b>F</b> | <b>Total NR Region</b>                 | <b>84</b>        | <b>288</b>       | <b>54</b>        | <b>11</b>        | <b>100</b>           |
| 52       | Torrent Power                          | 569              | 385              | 419              | 446              | 87                   |
| 53       | BLA Power                              | 197              | 173              | 42               | 123              | 31                   |
| 54       | Jaypee Bina Power                      | 2,215            | 808              | 618              | 535              | 766                  |
| 55       | Lanco Amarkantak TPS Unit 1            | 81               | 91               | 6                | 27               | 103                  |
| 56       | Reliance UMPP, Sasan                   | 29               | 71               | 24               | 25               | 0                    |
| 57       | Essar Power STPS                       | 0                | 0                | 0                |                  | 22                   |
| 58       | Jaiprakash Power STPS, Nigri           | 0                | 1                | 0                | 67               | 0                    |
| 59       | MB Power STPS                          | 930              | 466              | 499              | 356              | 604                  |
| 60       | Jhabua Power STPS, Unit-1              | 489              | 358              | 190              | 167              | 0                    |
| <b>G</b> | <b>Total (IPPs)</b>                    | <b>4,510</b>     | <b>2,352</b>     | <b>1,798</b>     | <b>1745</b>      | <b>1,613</b>         |
| 61       | Renewable Energy (Solar)               | 0                | 0                | 0                | 0                | 0                    |
| 62       | Renewable Energy (other than Solar)    | 0                | 0                | 0                | 0                | 0                    |
| 63       | BioMass/Biogas/MSW                     | -                | -                | -                | 0                | -                    |
| <b>H</b> | <b>Total Renewable Energy</b>          | <b>0</b>         | <b>0</b>         | <b>0</b>         | <b>0</b>         | <b>0</b>             |
| <b>I</b> | <b>Grand Total</b>                     | <b>26,373</b>    | <b>14,515</b>    | <b>9,972</b>     | <b>8014</b>      | <b>14,464</b>        |

## 5.5 Management of Surplus Energy

5.5.1 As regard to management of surplus energy, it has been observed that the quantum of sale of surplus power have always being approved on higher side in respective Tariff Orders as against the realistic sale of surplus energy sold by the Licensees. The consideration of higher quantum of surplus results in artificially reducing the power purchase cost and thereby ARR of Discoms.

5.5.2 It is submitted that the Petitioners have been projecting the realistic sale of surplus energy based on its past experience considering the actual energy traded at power exchange during the past years. It is submitted that the sale of power at power exchange depends on the factors such as Demand situation of MP-State in MW, availability of surplus energy with MPPMCL in MW in time blocks, Demand-Supply position in the

power sector and Marginal Clearing Price (MCP) at the market. It is noteworthy to mention that Petitioners do not have control over the availability of power stations and MCP of Power exchange.

- 5.5.3 The comparative analysis of the quantum of surplus sale of power admitted by the Hon'ble Commission as against actual sale of surplus power sold by the Petitioners over the past years is shown in Table below:

**Table 96: Surplus energy considered by the Commission against actual sale of surplus energy (MU)**

| Sr. No. | FY         | As per MYT Tariff Order | Actual sold through Exchange |
|---------|------------|-------------------------|------------------------------|
| 1       | FY 2019-20 | 25,657                  | 2897                         |
| 2       | FY 2020-21 | 15,252                  | 1558                         |
| 3       | FY 2021-22 | 24,887                  | 2,923                        |
| 4       | FY 2022-23 | 19,456                  | 4,371                        |
| 5       | FY 2023-24 | 14,608/8000*            | 5,317                        |
| 6       | FY 2024-25 | 5,619.37 <sup>#</sup>   | 2,285 (till Sept.)           |
| 7       | FY 2025-26 | 5,908.28                | -                            |

\*Revised in Retail Supply Tariff Order of FY 2023-24

<sup>#</sup> As per Retail Supply Tariff Order for FY 2024-25

- 5.5.4 It is submitted that the availability of surplus energy is reflected to be higher which is mainly because the Hon'ble Commission approves the power purchase requirement at normative losses and the difference of normative energy requirement and total availability is being considered as surplus power available for sale. However, on actual scenario considering the Demand-Supply position with actual losses the results are different.

- 5.5.5 For FY 2025-26 also, as per the current power supply position, and after meeting the energy requirement at actual loss situation, the Petitioners envisage to have surplus energy in few of the time blocks and months in the ensuing year. Accordingly, based on the past trend, the Petitioners have estimated sale of surplus power as summarized in the Table below:

**Table 97: Surplus energy sale for FY 2025-26 (MU)**

| Particulars                        | UNIT | FY21    | FY 22   | FY23    | FY 24   | FY 26       |
|------------------------------------|------|---------|---------|---------|---------|-------------|
|                                    |      | Actuals | Actuals | Actuals | Actuals | Projections |
| Ex-Bus Availability                | MU   | 109,117 | 99,848  | 106,677 | 109,871 | 1,18,781    |
| Ex-Bus Energy Required by Discom's | MU   | 80,992  | 83,092  | 90,205  | 96,523  | 99,089      |
| Surplus Energy Available           | MU   | 28,126  | 16,756  | 16,471  | 13,348  | 19,692      |
| Surplus Units Sold                 | MU   | 1,555   | 2,924   | 4,371   | 5,317   | 5,327       |
| Sold as % of Surplus Energy        | %    | 6%      | 17%     | 27%     | 40%     | 27%         |
| Energy Backdown                    | MU   | 26,571  | 13,833  | 9,972   | 8,032   | 14,365      |

- 5.5.6 Further, as far as rate for sale of surplus energy is concerned, the Petitioner has observed the IEX rate on the basis of weighted average of the past 24 months (From October-

2022 to September-2024) which is Paisa 455.49 per unit. Hence for the purpose of computation of revenue from surplus energy, the IEX rate is taken at Paisa 455.49 per unit for FY 2025-26.

- 5.5.7 The energy surplus of the Discom's vis-à-vis overall energy availability and energy requirement as well as the details of revenue from sale of energy are shown in the Table below:

**Table 98: Total saving in variable cost from sale of surplus energy for FY 2025-26 (MUs)**

| Particulars  | UNIT          | FY 26      |
|--|---------------|------------|
| Ex-Bus Availability  | MU            | 1,18,781   |
| Ex-Bus Energy Required by Discom's                               | MU            | 99,089     |
| Surplus Power available for sale/back down                       | MU            | 19,692     |
| Backdown   | MU            | 14,365     |
| Surplus Units available for Sale                                 | MU            | 5,327      |
| IEX Rate (Paisa/kWh)   | P/KWh         | 455.49     |
| Revenue from Sale of Surplus Power                               | Rs. Cr        | 2,426      |
| Purchase Cost of Surplus Power- Variable (Rs Crores)             | Rs. Cr        | 1,688      |
| <b>Total saving in variable cost from sale of surplus energy</b> | <b>Rs. Cr</b> | <b>739</b> |

- 5.5.8 The above net revenue has been subtracted from the variable power purchase costs of MPPMCL allocated stations, while computing the total power purchase costs of the Discoms.
- 5.5.9 **The Petitioner hereby prays to the Hon'ble Commission to approve Assessment of Availability including consideration of technical minimum & treatment of surplus energy as elaborated in the para above.**

**A6: POWER PURCHASE COST****6.1 Details of Cost for Power Stations**

The basis of considering the Fixed cost (Rs. Crores) and the variable charge (Paise/kWh) of different power stations has been indicated in the below table:

**Table 99: Basis for consideration of Fixed & Variable Charges for FY 2025-26**

| Sl No    | Source                                   | FY 2025-26            |   |                            | Basis of Energy Charges  |
|----------|--|-----------------------|---|----------------------------|--|
|          |  | Fixed Charge (Rs. Cr) | Basis for Fixed Charges   | Variable Charge (Rs. /kWh) |  |
| 1        | Amarkantak TPS Ph-III                    | 164                   | MPERC MYT Order dated 19.05.2021 in respect of MP Genco Plants for FY 2019-20 to FY 2023-24 in P.no. 53 of 2020 | 2.10                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 2        | Satpura TPS Ph-IV                        | 604                   |   | 2.89                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 3        | SGTPS Ph-I & II                          | 457                   |   | 3.04                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 4        | SGTPS Ph-III                             | 309                   |   | 2.72                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 5        | Shri Singaji STPS Phase-I                | 1,247                 |   | 3.37                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 6        | Shri Singaji STPS Phase-II               | 1,315                 |   | 3.15                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| <b>A</b> | <b>Total (MP Genco Thermal-MP Share)</b> | <b>4,095</b>          |   |                            |  |
| 7        | Rani Awanti Bai Sagar, Bargi HPS         | 9                     | MPERC MYT Order dated 19.05.2021 in respect of MP Genco Plants for FY 2019-20 to FY 2023-24 in P.no. 53 of 2020 | 0.59                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 8        | Bansagar Ph I HPS (Tons)                 | 60                    |   | 0.88                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 9        | Bansagar Ph-II HPS (Silpara)             | 6                     |   | 0.66                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 10       | Bansagar Ph-III HPS (Deolond)            | 13                    |   | 1.07                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 11       | Bansagar Ph-IV HPS (Jhinna)              | 5                     |   | 0.73                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |

| SI No    | Source                        | FY 2025-26            |   |                            | Basis of Energy Charges  |
|----------|-------------------------------|-----------------------|---|----------------------------|--|
|          |                               | Fixed Charge (Rs. Cr) | Basis for Fixed Charges   | Variable Charge (Rs. /kWh) |  |
| 12       | Birsinghpur HPS               | 3                     |   | 0.99                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 13       | Madikheda HPS                 | 10                    |   | 2.28                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 14       | Rajghat HPS                   | 7                     |   | 1.28                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 15       | Gandhisagar HPS               | 2                     |   | 1.01                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 16       | Ranapratap Sagar HPS          | 0                     |   | 1.51                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 17       | Jawahar Sagar HPS             | 0                     |   | 1.51                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 18       | Pench HPS                     | 11                    |   | 0.53                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| <b>B</b> | <b>Total (MP Genco Hydel)</b> | <b>125</b>            |   |                            |  |
| 19       | NHDC Indira Sagar HPS         | 270                   | Based on bills for period Aug-23 to July-24   | 1.85                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 20       | NHDC Omkareshwar HPS          | 170                   | Based on bills for period Aug-23 to July-24   | 2.24                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 21       | NVDA Sardar Sarovar HPS       | 163                   | Based on bills for period Aug-23 to July-24   | 0.82                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 22       | Rihand HPS                    | 0                     | -   | 0.40                       | As Approved by the Hon'ble Commission in Tariff Order of FY 2024-25            |
| 23       | Matatila HPS                  | 0                     | -   | 0.40                       | As Approved by the Hon'ble Commission in Tariff Order of FY 2024-25            |
| 24       | SJVN Rampur HPS               | 1                     | CERC Ord dtd. 24-01-2022 in P.no. 28/GT/2020 for 01.04.2019 to 31.03.2024                               | 2.17                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 25       | SJVN Jhakri HPS               | 3                     | CERC Order dtd. 04.04.2023 in P.no. 27/RP/2021 for 01.04.2019 to 31.03.2024 review of ord in 30/GT/2020 | 1.22                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 26       | Tehri HPS                     | 2                     | CERC Order dtd. 13-05-2022 in P.no. 97/GT/2020 for 01.04.2019 to 31.03.2024                             | 2.14                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |

| Sl No | Source                             | FY 2025-26            |   |                            | Basis of Energy Charges  |
|-------|------------------------------------|-----------------------|---|----------------------------|--|
|       |                                    | Fixed Charge (Rs. Cr) | Basis for Fixed Charges   | Variable Charge (Rs. /kWh) |  |
| 27    | Koteshwar HPP                      | 1                     | CERC Ord dtd. 03.10.2022 in P.no. 244/GT/2020 for 01.04.2019 to 31.03.2024                                | 3.04                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 28    | NHPC Parbati III                   | 2                     | CERC Ord dtd. 31.03.2024 in P.no. 96/GT/2020 for 01.04.2019 to 31.03.2024                                 | 1.41                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 29    | NHPC Chamera II                    | 1                     | CERC Ord dtd. 06.01.2024 in P.no. 291/GT/2020 for 01.04.2019 to 31.03.2024                                | 1.15                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 30    | NHPC Chamera III                   | 1                     | CERC ROrd dtd. 12.07.2024 in P.no. 26/RP/2023 for 01.04.2019 to 31.03.2024 revision of ord in 642/GT/2020 | 2.09                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 31    | NHPC Dulhasti                      | 3                     | CERC Ord dtd. 09.05.2022 in P.no. 146/RP/2020 for 01.04.2019 to 31.03.2024                                | 2.83                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 32    | NHPC Dhauliganga                   | 1                     | CERC Ord dtd. 18-08-2022 in P.no. 284/GT/2020 for 01.04.2019 to 31.03.2024                                | 1.42                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 33    | NHPC Sewa II                       | 1                     | CERC TuPOrd dtd. 17.08.2023 in P.no. 643/GT/2020 for 01.04.2019 to 31.03.2024                             | 2.34                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 34    | NHPC Kishanganga                   | 3                     | CERC TuPOrd dtd. 12.01.2024 in P.no. 453/GT/2020 for 01.04.2024 to 31.03.2024                             | 2.47                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 35    | NTPC Koldam HPP I                  | 2                     | CERC Ord dtd. 14.01.2024 in P.no. 412/GT/2020 for 01.04.2019 to 31.03.2024                                | 1.97                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 36    | NTPC Singrauli Small HPP           | 0                     |   | 5.04                       | As per Generic Tariff Order  |
| 37    | NHPC Lower Subansiri HEP Units     | 0                     |   | 5.09                       | As per Generic Tariff Order  |
| 38    | NHPC - Rangit                      | 0                     |   | 4.37                       | As per Agreement with Geneator   |
| 39    | SAS Hydel Project Pvt Ltd.         | 0                     |   | 5.36                       | As per Agreement with Geneator   |
| 40    | Amhata Hydro Energy Pvt. Ltd.      | 0                     |   | 5.97                       | As per Generic Tariff Order  |
| 41    | Amhata Hydro Energy Pvt. Ltd. - II | 0                     |   | 5.97                       | As per Generic Tariff Order  |
| 42    | Amhata Hydro Energy Pvt. Ltd. - IV | 0                     |   | 5.97                       | As per Generic Tariff Order  |
| 43    | Sirmour Small Hydel Pvt. Ltd.      | 0                     |   | 5.97                       | As per Generic Tariff Order  |
| 44    | NVDA Indira Sagar LBC HPS          | 0                     |   | 2.40                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |

| Sl No    | Source                                    | FY 2025-26            |   |                            | Basis of Energy Charges  |
|----------|---|-----------------------|---|----------------------------|--|
|          |   | Fixed Charge (Rs. Cr) | Basis for Fixed Charges   | Variable Charge (Rs. /kWh) |  |
| 45       | NVDA Bargi LBC HPS                        | 0                     |   | 2.60                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 46       | Mini & Micro Hydel Plants                 | 0                     |   | 2.53                       | As per MPERC Tariff Order  |
| <b>C</b> | <b>Total (JV Hydel &amp; Other Hydel)</b> | <b>626</b>            |   |                            |  |
| 47       | NTPC Korba                                | 248                   | CERC ROrd dtd. 07.12.2022 in P.no. 22/RP/2022 for 01.04.2019 to 31.03.2024 review of order in 486/GT/2020   | 1.60                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 48       | NTPC Korba III                            | 56                    | CERC Ord dtd. 23.03.2022 in P.no. 419/GT/2020 for 01.04.2019 to 31.03.2024                                  | 1.59                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 49       | NTPC Vindiyachal I                        | 270                   | CERC ROrd dtd. 17.03.2023 in P.no. 11/RP/2022 for 01.04.2019 to 31.03.2024 review of order in P-401/GT/2020 | 1.89                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 50       | NTPC Vindiyachal II                       | 170                   | CERC Ord dtd. 10.06.2022 in P.no. 485/GT/2014 for 01.04.2019 to 31.03.2024                                  | 1.81                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 51       | NTPC Vindiyachal III                      | 178                   | CERC TuPOrd 17.03.2023 in P.no. 285/GT/2020 for 01.04.2014 to 31.03.2019                                    | 1.79                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 52       | NTPC Vindiyachal IV                       | 322                   | CERC Order dtd. 05.01.2024 in P.no. 422/GT/2020 for 01.04.2019 to 31.03.2024                                | 1.90                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 53       | NTPC Vindiyachal V Unit 1                 | 163                   | CERC Ord 15.06.2023 in P.no. 415/GT/2020 for 01.04.2019 to 31.03.2024                                       | 1.84                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 54       | NTPC Sipat I                              | 280                   | CERC Ord dtd. 06.06.2022 in P.no. 425/GT/2020 for 01.04.2019 to 31.03.2024                                  | 1.72                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 55       | NTPC Sipat II                             | 125                   | CERC Ord dtd. 06.06.2022 in P.no. 435/GT/2020 for 01.04.2019 to 31.03.2024                                  | 1.76                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 56       | NTPC Mouda I                              | 17                    | CERC ROrd dtd.01.05.2024 in P.no.10/RP/2023 for 01.04.2014 to 31.03.2019 review order in 393/GT/2020        | 4.97                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 57       | NTPC Mouda II Unit 1                      | 25                    | CERC Ord dtd. 04.03.2023 in P.no. 423/GT/2020 for 01.04.2029 to 31.03.2024                                  | 3.52                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 58       | NTPC Solapur STPS                         | 458                   | CERC Ord dtd. 02.08.2024 in P.no. 246/GT/2021 for 01.04.2019 to 31.03.2024                                  | 4.90                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |

| SI No    | Source  | FY 2025-26            |  |                            | Basis of Energy Charges  |
|----------|---|-----------------------|--|----------------------------|--|
|          |   | Fixed Charge (Rs. Cr) | Basis for Fixed Charges  | Variable Charge (Rs. /kWh) |  |
| 59       | NTPC Gadarwara STPS, Unit-1                     | 538                   | As per bills for period Aug-23 to Jul-24                                   | 3.73                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 60       | NTPC Lara STPS, Raigarh, Unit I                 | 283                   | CERC Ord dtd. 02.08.2024 in P.no. 145/GT/2019 for 01.10.2019 to 31.03.2024 | 1.56                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 61       | NTPC Khargone STPS, Unit-I & II                 | 994                   | CERC Ord dtd. 26.07.2023 in P.no. 402/GT/2019 for 01.02.2020 to 31.03.2024 | 3.92                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 62       | KAPP Kakrapar (including new capacity addition) | 0                     | -  | 4.08                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 63       | TAPP Tarapur                                    | 0                     | -  | 3.52                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 64       | NTPC Gadarwara STPS, Unit-2                     | 538                   | As per bills for period Aug-23 to Jul-24                                   | 3.73                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| <b>D</b> | <b>Total WR Region</b>                          | <b>4,662</b>          |  |                            |  |
| 65       | NTPC Kahalgaon II                               | 48                    | CERC Ord 29.03.2023 in P.no. 442/GT/2020 for 01-04-2019 to 31-03-2024      | 2.80                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 66       | DVC (MTPS & CTPS)                               | 96                    | As per LOI   | 3.87                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| <b>E</b> | <b>Total ER Region</b>                          | <b>144</b>            |  |                            |  |
| 67       | NTPC Auraiya GPP                                | 1                     | CERC Ord dtd. 31.05.2023 in P.no. 428/GT/2020 for 01-04-2019 to 31-03-2024 | 8.76                       | As per Tariff Order of FY 2024-25  |
| 68       | NTPC Dadri GPP                                  | 1                     | CERC Ord dtd. 13-11-2021 in P.no. 400/GT/2020 for 01-04-2019 to 31-03-2024 | 2.65                       | As per Tariff Order of FY 2024-25  |
| 69       | NTPC Anta GPP                                   | 1                     | CERC Ord dtd. 05.09.2023 in P.no. 432/GT/2020 for 01.04.2019 to 31.03.2024 | 3.09                       | As per Tariff Order of FY 2024-25  |
| 70       | NTPC Firoz Gandhi Unchahar I                    | 0                     | CERC Ord dtd. 07.10.2022 in P.no. 431/GT/2020 for 01.04.2019 to 31.03.2024 | 4.51                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 71       | NTPC Firoz Gandhi Unchahar II                   | 0                     | CERC Ord dtd. 12-12-2021 in P.no. 438/GT/2020 for 01.04.2019 to 31.03.2024 | 3.86                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 72       | NTPC Firoz Gandhi Unchahar III                  | 0                     | CERC Ord dtd. 07.10.2022 in P.no. 427/GT/2020 for 01.04.2019 to 31.03.2024 | 4.25                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 73       | NTPC Firoz Gandhi Unchahar IV                   | 1                     | CERC Ord dtd. 29.03.2023 in P.no. 3/GT/2021 for 01-04-2019 to 31.03.2024   | 4.23                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |



| SI No    | Source                      | FY 2025-26            |   |                            | Basis of Energy Charges  |
|----------|-----------------------------|-----------------------|---|----------------------------|--|
|          |                             | Fixed Charge (Rs. Cr) | Basis for Fixed Charges   | Variable Charge (Rs. /kWh) |  |
| 74       | NTPC Rihand TPS-I           | 0                     | CERC Ord dtd. 15.09.2023 in P.no. 433/GT/2020 for 01.04.2019 to 31.03.2024                              | 1.16                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 75       | NTPC Rihand TPS-II          | 0                     | CERC ROrd dtd. 26.09.2023 in P.no. 34/RP/2022 for 01-04-2019 to 31-03-2024 review of ord in 426/GT/2020 | 1.44                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 76       | NTPC Rihand TPS-III         | 1                     | CERC Ord dtd. 27.12.2023 in P.no. 430/GT/2020 for 01-04-2019 to 31-03-2024                              | 1.33                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 77       | NTPC NCTP Dadri II          | 1                     | CERC Ord 01-06-2022 in P.no. 2/GT/2021 for 01-04-2019 to 31-03-2024                                     | 4.20                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 78       | NTPC Singrauli              | 1                     | CERC Ord dtd. 05.09.2023 in P.no. 424/GT/2020 for 01-04-2019 to 31-03-2024                              | 1.08                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 79       | NTPC IGPS I Jhajjar         | 3                     | CERC Order dtd. 22.09.2022 in P.no. 489/GT/2020 for 01-04-2019 to 31-03-2024                            | 4.34                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 80       | MEJA Urja Nigam             | 1                     | CERC Ord dtd. 19.05.2024 in P.no. 183/GT/2022 for 30.04.2019 to 31.03.2024                              | 2.40                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 81       | NTPC Tanda                  | 0                     | CERC Ord dtd. 17.04.2024 in P.no. 445/GT/2020 for 01.10.2019 to 31.03.2024                              | 2.82                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 82       | Rajasthan (NPCIL)           | 0                     | Tariff @ Rs 2.9914 as DAE Notification dtd 22.03.2018 for 01.04.2017 to 31.03.2022                      | 3.92                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 83       | NARORA (NPCIL)              | 0                     | Tariff @ Rs 3.3439 as DAE Notification dtd 22.03.2018 for 01.04.2017 to 31.03.2022                      | 2.98                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| <b>F</b> | <b>Total NR Region</b>      | <b>12</b>             |   |                            |  |
| 84       | Torrent Power               | 17                    | CERC Ord dtd 20.08.2020 in P.no. 268/GT/2019 for 01.04.2019 to 31.03.2024                               | 8.01                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 85       | BLA Power, Unit-I & II      | 42                    | MPERC Ord dtd 13-06-2023 in P.no. 14/2023 for FY 2019-20 to FY 2023-24                                  | 4.03                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 86       | Jaypee Bina Power           | 445                   | MPERC Ord dtd 30-04-2021 in P.no. 44/2020 for FY 2019-20 to FY 2023-24                                  | 3.63                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 87       | Lanco Amarkantak TPS Unit 1 | 264                   | MPERC Ord dtd 24-08-2021 in P.no. 60/2020 for FY 2014-15 to FY 2018-19                                  | 2.13                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |
| 88       | Reliance UMPP, Sasan        | 149                   | MPERC Ord dtd 08-05-2021 in P.no. 47/2020 for FY 2019 to FY 2024  | 1.29                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) |

| Sl No    | Source                              | FY 2025-26            |  |                            | Basis of Energy Charges  |
|----------|-------------------------------------|-----------------------|--|----------------------------|--|
|          |                                     | Fixed Charge (Rs. Cr) | Basis for Fixed Charges  | Variable Charge (Rs. /kWh) |  |
| 89       | Essar Power STPS                    | 0                     |  | 2.90                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24)   |
| 90       | Jaiprakash Power STPS, Nigri        | 602                   | MPERC Ord dtd 03-05-2021 in P.no. 43/2020 for FY 2019 to FY 2024 | 0.78                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24)   |
| 91       | MB Power STPS, Unit-I               | 257                   | MPERC Ord dtd 01-05-2021 in P.no. 46/2020 for FY 2019 to FY 2024 | 2.96                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24)   |
| 92       | MB Power STPS, Unit-II              | 257                   | MPERC Ord dtd 01-05-2021 in P.no. 46/2020 for FY 2019 to FY 2024 | 2.96                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24)   |
| 93       | Jhabua Power STPS, Unit-1           | 263                   | MPERC Ord dtd 08-05-2021 in P.no. 47/2020 for FY 2019 to FY 2024 | 1.68                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24)   |
| <b>G</b> | <b>Total (IPPs)</b>                 | <b>2,297</b>          |  |                            |  |
| 94       | Renewable Energy (Solar)            |                       |  |                            |  |
| 95       | Renewable Energy (other than Solar) | 0                     |  | 3.33                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) and expected rates for future capacity addition |
| 96       | Bio-Mass/Bio gas/MSW                | 0                     |  | 4.36                       | Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24) and expected rates for future capacity addition |
| <b>H</b> | <b>Total Renewable Energy</b>       | <b>0</b>              |  | <b>7.65</b>                | <b>Energy Charge as per Weighted Avg of past 12 months Bills ( Aug-23 to July-24)</b>  |
| <b>J</b> | <b>Total</b>                        | <b>11,961</b>         |  |                            |  |

## 6.2 Merit Order Dispatch

6.2.1 For determination of power purchase expenses, the Petitioners have applied the principles of Merit Order Dispatch (MOD) duly honouring the Technical Minimum Run on the basis of energy charges as submitted in this Petition.

6.2.2 The MoD applied for FY 2025-26 is given in the following Table:

**Table 100: Merit Order Dispatch for FY 2025-26**

| Sr. No | Must Run Sources                 | Variable Charge (Paisa/kWh) | Rank | MOD Stations                    | Variable Charge (Paisa/kWh) |
|--------|----------------------------------|-----------------------------|------|---------------------------------|-----------------------------|
| 1      | Matatila HPS                     | 0.40                        | 1    | Jaiprakash Power STPS, Nigri    | 0.78                        |
| 2      | Rihand HPS                       | 0.40                        | 2    | NTPC Singrauli                  | 1.08                        |
| 3      | Pench HPS                        | 0.53                        | 3    | NTPC Rihand TPS-I               | 1.16                        |
| 4      | Rani Awanti Bai Sagar, Bargi HPS | 0.59                        | 4    | Reliance UMPP, Sasan            | 1.29                        |
| 5      | Bansagar Ph-II HPS (Silpara)     | 0.66                        | 5    | NTPC Rihand TPS-III             | 1.33                        |
| 6      | Bansagar Ph-IV HPS (Jhinna)      | 0.73                        | 6    | NTPC Rihand TPS-II              | 1.44                        |
| 7      | NVDA Sardar Sarovar HPS          | 0.82                        | 7    | NTPC Lara STPS, Raigarh, Unit I | 1.56                        |
| 8      | Bansagar Ph I HPS (Tons)         | 0.88                        | 8    | NTPC Korba III                  | 1.59                        |
| 9      | Birsinghpur HPS                  | 0.99                        | 9    | NTPC Korba                      | 1.60                        |
| 10     | Gandhisagar HPS                  | 1.01                        | 10   | Jhabua Power STPS, Unit-1       | 1.68                        |
| 11     | Bansagar Ph-III HPS (Deolond)    | 1.07                        | 11   | NTPC Sipat I                    | 1.72                        |
| 12     | NHPC Chamera II                  | 1.15                        | 12   | NTPC Sipat II                   | 1.76                        |
| 13     | SJVN Jhakri HPS                  | 1.22                        | 13   | NTPC Vindychal III              | 1.79                        |
| 14     | Rajghat HPS                      | 1.28                        | 14   | NTPC Vindychal II               | 1.81                        |
| 15     | NHPC Parbati III                 | 1.41                        | 15   | NTPC Vindychal V Unit 1         | 1.84                        |
| 16     | NHPC Dhauliganga                 | 1.42                        | 16   | NTPC Vindychal I                | 1.89                        |
| 17     | Jawahar Sagar HPS                | 1.51                        | 17   | NTPC Vindychal IV               | 1.90                        |
| 18     | Ranapratap Sagar HPS             | 1.51                        | 18   | Amarkantak TPS Ph-III           | 2.10                        |
| 19     | NHDC Indira Sagar HPS            | 1.85                        | 19   | Lanco Amarkantak TPS Unit 1     | 2.13                        |
| 20     | NTPC Koldam HPP I                | 1.97                        | 20   | MEJA Urja Nigam                 | 2.40                        |
| 21     | NHPC Chamera III                 | 2.09                        | 21   | NTPC Dadri GPP                  | 2.65                        |
| 22     | Tehri HPS                        | 2.14                        | 22   | SGTPS Ph-III                    | 2.72                        |
| 23     | SJVN Rampur HPS                  | 2.17                        | 23   | NTPC Kahalgaon II               | 2.80                        |
| 24     | NHDC Omkareshwar HPS             | 2.24                        | 24   | NTPC Tanda                      | 2.82                        |
| 25     | Madikheda HPS                    | 2.28                        | 25   | Satpura TPS Ph-IV               | 2.89                        |
| 26     | NHPC Sewa II                     | 2.34                        | 26   | Essar Power STPS                | 2.90                        |
| 27     | NVDA Indira Sagar LBC HPS        | 2.40                        | 27   | MB Power STPS, Unit-I           | 2.96                        |
| 28     | NHPC Kishanganga                 | 2.47                        | 28   | MB Power STPS, Unit-II          | 2.96                        |
| 29     | Mini & Micro Hydel Plants        | 2.53                        | 29   | SGTPS Ph-I & II                 | 3.04                        |
| 30     | NVDA Bargi LBC HPS               | 2.60                        | 30   | NTPC Anta GPP                   | 3.09                        |
| 31     | NHPC Dulhasti                    | 2.83                        | 31   | Shri Singaji STPS Phase-II      | 3.15                        |
| 32     | NARORA (NPCIL)                   | 2.98                        | 32   | Shri Singaji STPS Phase-I       | 3.37                        |
| 33     | Koteshwar HPP                    | 3.04                        | 33   | NTPC Mouda II Unit 1            | 3.52                        |
| 34     | Renewable Energy (Solar)         | 3.33                        | 34   | Jaypee Bina Power               | 3.63                        |
| 35     | TAPP Tarapur                     | 3.52                        | 35   | NTPC Gadawara STPS, Unit-2      | 3.73                        |
| 36     | Rajasthan (NPCIL)                | 3.92                        | 36   | NTPC Gadawara STPS, Unit-1      | 3.73                        |
| 37     | KAPP Kakrapar                    | 4.08                        | 37   | NTPC Firoz Gandhi Unchahar II   | 3.86                        |

| Sr. No | Must Run Sources                    | Variable Charge (Paisa/kWh) | Rank | MOD Stations                    | Variable Charge (Paisa/kWh) |
|--------|-------------------------------------|-----------------------------|------|---------------------------------|-----------------------------|
| 38     | Renewable Energy (other than Solar) | 4.36                        | 38   | DVC (MTPS & CTPS)               | 3.87                        |
| 39     | NHPC - Rangit                       | 4.37                        | 39   | NTPC Khargone STPS, Unit-I & II | 3.92                        |
| 40     | NTPC Singrauli Small HPP            | 5.04                        | 40   | BLA Power, Unit-I & II          | 4.03                        |
| 41     | NHPC Lower Subansiri HEP Units      | 5.09                        | 41   | NTPC NCTP Dadri II              | 4.20                        |
| 42     | SAS Hydel Project Pvt Ltd.          | 5.36                        | 42   | NTPC Firoz Gandhi Unchahar IV   | 4.23                        |
| 43     | Amhata Hydro Energy Pvt. Ltd.       | 5.97                        | 43   | NTPC Firoz Gandhi Unchahar III  | 4.25                        |
| 44     | Sirmour Small Hydel Pvt. Ltd.       | 5.97                        | 44   | NTPC IGPS I Jhajjar             | 4.34                        |
| 45     | Amhata Hydro Energy Pvt. Ltd. - II  | 5.97                        | 45   | NTPC Firoz Gandhi Unchahar I    | 4.51                        |
| 46     | Amhata Hydro Energy Pvt. Ltd. - IV  | 5.97                        | 46   | NTPC Solapur STPS               | 4.90                        |
| 47     | Bio Mass/Bio gas/MSW                | 7.65                        | 47   | NTPC Mouda I                    | 4.97                        |
|        |                                     |                             | 48   | Torrent Power                   | 8.01                        |
|        |                                     |                             | 49   | NTPC Auraiya GPP                | 8.76                        |

### 6.3 Power Purchase Cost for MP

**6.3.1** The following Table indicates the Total costs (fixed costs and variable costs) of Stations allocated to MP State and the three Discoms before consideration of MPPMCL Cost and treatment of surplus energy:

Table 101: Revised claim of Station-wise Power Purchase Cost for FY 2025-26 against approved in MYT Order

| Sr. No   | Particulars                              | Approved for FY 2025-26 in MYT Order |                 |                 | Revised claim for FY 2025-26 |                 |                  | Variation    |                 |                 |
|----------|--|--------------------------------------|-----------------|-----------------|------------------------------|-----------------|------------------|--------------|-----------------|-----------------|
|          |  | Fixed Charge                         | Variable Charge | Total           | Fixed Charge                 | Variable Charge | Total            | Fixed Charge | Variable Charge | Total           |
| 1        | Amarkantak TPS Ph-III                    | 163.59                               | 201.97          | 365.56          | 163.59                       | 272.50          | 436.09           | 0.00         | 70.53           | 70.53           |
| 2        | Satpura TPS Ph-IV                        | 603.99                               | 835.83          | 1,439.82        | 603.99                       | 837.92          | 1,441.91         | 0.00         | 2.09            | 2.09            |
| 3        | SGTPS Ph-I & II                          | 430.16                               | 1239.96         | 1,670.12        | 457.03                       | 917.47          | 1,374.50         | 26.87        | -322.49         | -295.62         |
| 4        | SGTPS Ph-III                             | 309.32                               | 721.54          | 1,030.86        | 309.32                       | 794.96          | 1,104.28         | 0.00         | 73.42           | 73.42           |
| 5        | Shri Singaji STPS Phase-I                | 1246.84                              | 1495.34         | 2,742.18        | 1,246.84                     | 1,707.21        | 2,954.05         | 0.00         | 211.87          | 211.87          |
| 6        | Shri Singaji STPS Phase-II               | 1314.19                              | 413.01          | 1,727.20        | 1,314.60                     | 1,828.26        | 3,142.86         | 0.41         | 1,415.25        | 1,415.66        |
| <b>A</b> | <b>Total (MP Genco Thermal-MP Share)</b> | <b>4,068.09</b>                      | <b>4,907.65</b> | <b>8,975.74</b> | <b>4,095.37</b>              | <b>6,358.33</b> | <b>10,453.70</b> | <b>27.28</b> | <b>1,450.68</b> | <b>1,477.96</b> |
| 7        | Rani Awanti Bai Sagar, Bargi HPS         | 8.12                                 | 7.71            | 15.83           | 9.26                         | 26.55           | 35.82            | 1.14         | 18.84           | 19.99           |
| 8        | Bansagar Ph I HPS (Tons)                 | 21.34                                | 87.05           | 108.39          | 60.13                        | 83.00           | 143.13           | 38.79        | -4.05           | 34.74           |
| 9        | Bansagar Ph-II HPS (Silpara)             | 25.92                                | 7.9             | 33.82           | 5.89                         | 5.86            | 11.75            | -20.03       | -2.04           | -22.07          |
| 10       | Bansagar Ph-III HPS (Deolond)            | 25.92                                | 7.78            | 33.70           | 12.60                        | 11.65           | 24.25            | -13.32       | 3.87            | -9.45           |
| 11       | Bansagar Ph-IV HPS (Jhinna)              | 4.82                                 | 5.61            | 10.43           | 4.94                         | 7.54            | 12.48            | 0.12         | 1.93            | 2.05            |
| 12       | Birsinghpur HPS                          | 2.19                                 | 3.72            | 5.91            | 3.14                         | 5.05            | 8.20             | 0.95         | 1.33            | 2.29            |
| 13       | Madikheda HPS                            | 9.47                                 | 19.31           | 28.78           | 9.54                         | 19.94           | 29.48            | 0.07         | 0.63            | 0.70            |
| 14       | Rajghat HPS                              | 2.7                                  | 4.41            | 7.11            | 6.60                         | 6.53            | 13.13            | 3.90         | 2.12            | 6.02            |
| 15       | Gandhisagar HPS                          | 2.15                                 | 2.94            | 5.09            | 2.17                         | 13.50           | 15.67            | 0.02         | 10.56           | 10.58           |
| 16       | Ranapratap Sagar HPS                     | 0                                    | 44.23           | 44.23           | 0.00                         | 24.48           | 24.48            | 0.00         | -19.75          | -19.75          |
| 17       | Jawahar Sagar HPS                        |                                      |                 | 0.00            | 20.86                        | 20.86           | 0.00             | 20.86        | 20.86           |                 |
| 18       | Pench HPS                                | 9.5                                  | 9.01            | 18.51           | 10.93                        | 11.00           | 21.93            | 1.43         | 1.99            | 3.42            |
| <b>B</b> | <b>Total (MP Genco Hydel)</b>            | <b>112.13</b>                        | <b>199.67</b>   | <b>311.80</b>   | <b>125.22</b>                | <b>235.94</b>   | <b>361.17</b>    | <b>13.09</b> | <b>36.27</b>    | <b>49.37</b>    |
| 19       | NHDC Indira Sagar HPS                    | 279.46                               | 280.37          | 559.83          | 270.17                       | 506.85          | 777.01           | -9.29        | 226.48          | 217.18          |
| 20       | NHDC Omkareshwar HPS                     | 199.22                               | 209.79          | 409.01          | 170.12                       | 311.33          | 481.46           | -29.10       | 101.54          | 72.45           |

| Sr. No | Particulars                        | Approved for FY 2025-26 in MYT Order |                 |        | Revised claim for FY 2025-26 |                 |        | Variation    |                 |        |
|--------|------------------------------------|--------------------------------------|-----------------|--------|------------------------------|-----------------|--------|--------------|-----------------|--------|
|        |                                    | Fixed Charge                         | Variable Charge | Total  | Fixed Charge                 | Variable Charge | Total  | Fixed Charge | Variable Charge | Total  |
| 21     | NVDA Sardar Sarovar HPS            | 101.45                               | 178.85          | 280.30 | 163.24                       | 156.58          | 319.82 | 61.79        | -22.27          | 39.52  |
| 22     | Rihand HPS                         | 0                                    | 4.44            | 4.44   | 0.00                         | 2.58            | 2.58   | 0.00         | -1.86           | -1.86  |
| 23     | Matatila HPS                       | 0                                    | 1.61            | 1.61   | 0.00                         | 1.33            | 1.33   | 0.00         | -0.28           | -0.28  |
| 24     | SJVN Rampur HPS                    | 0.5                                  | 0.6             | 1.10   | 1.50                         | 0.53            | 2.03   | 1.00         | -0.07           | 0.93   |
| 25     | SJVN Jhakri HPS                    | 1.08                                 | 1.31            | 2.39   | 3.35                         | 1.17            | 4.52   | 2.27         | -0.14           | 2.13   |
| 26     | Tehri HPS                          | 1.03                                 | 1.12            | 2.15   | 2.48                         | 1.36            | 3.84   | 1.45         | 0.24            | 1.69   |
| 27     | Koteshwar HPP                      | 0.37                                 | 0.4             | 0.77   | 1.33                         | 0.77            | 2.11   | 0.96         | 0.37            | 1.34   |
| 28     | NHPC Parbati III                   | 0.62                                 | 0.49            | 1.11   | 1.68                         | 0.47            | 2.15   | 1.06         | -0.02           | 1.04   |
| 29     | NHPC Chamera II                    | 0.38                                 | 0.44            | 0.82   | 1.38                         | 0.41            | 1.79   | 1.00         | -0.03           | 0.97   |
| 30     | NHPC Chamera III                   | 0.45                                 | 0.48            | 0.93   | 1.36                         | 0.48            | 1.84   | 0.91         | 0.00            | 0.91   |
| 31     | NHPC Dulhasti                      | 1.09                                 | 1.06            | 2.15   | 2.82                         | 1.10            | 3.92   | 1.73         | 0.04            | 1.77   |
| 32     | NHPC Dhauliganga                   | 0.29                                 | 0.3             | 0.59   | 0.92                         | 0.40            | 1.32   | 0.63         | 0.10            | 0.73   |
| 33     | NHPC Sewa II                       | 0.3                                  | 0.34            | 0.64   | 0.74                         | 0.28            | 1.02   | 0.44         | -0.06           | 0.38   |
| 34     | NHPC Uri II                        | 0                                    | 0               | 0.00   | 0.00                         | 0.00            | 0.00   | 0.00         | 0.00            | 0.00   |
| 35     | NHPC Kishanganga                   | 0.49                                 | 0.47            | 0.96   | 2.57                         | 0.81            | 3.38   | 2.08         | 0.34            | 2.42   |
| 36     | NTPC Koldam HPP I                  | 0.79                                 | 0.92            | 1.71   | 1.98                         | 0.69            | 2.67   | 1.19         | -0.23           | 0.96   |
| 37     | NTPC Singrauli Small HPP           | 0                                    | 0.11            | 0.11   | 0.00                         | 0.04            | 0.04   | 0.00         | -0.07           | -0.07  |
| 38     | NHPC Lower Subansiri HEP Units     | 0                                    | 25.14           | 25.14  | 0.00                         | 74.37           | 74.37  | 0.00         | 49.23           | 49.23  |
| 39     | NHPC -Tiesta                       |                                      |                 | 0.00   | 0.00                         | 0.00            | 0.00   | 0.00         | 0.00            | 0.00   |
| 40     | NHPC - Rangit                      |                                      |                 | 0.00   | 0.00                         | 65.84           | 65.84  | 0.00         | 65.84           | 65.84  |
| 41     | SAS Hydel Project Pvt Ltd.         |                                      |                 | 0.00   | 0.00                         | 6.16            | 6.16   | 0.00         | 6.16            | 6.16   |
| 42     | Amhata Hydro Energy Pvt. Ltd.      |                                      |                 | 0.00   | 0.00                         | 2.55            | 2.55   | 0.00         | 2.55            | 2.55   |
| 43     | Amhata Hydro Energy Pvt. Ltd. - II |                                      |                 | 0.00   | 0.00                         | 2.99            | 2.99   | 0.00         | 2.99            | 2.99   |
| 44     | Amhata Hydro Energy Pvt. Ltd. - IV |                                      |                 | 0.00   | 0.00                         | 1.99            | 1.99   | 0.00         | 1.99            | 1.99   |
| 45     | Sirmour Small Hydel Pvt. Ltd.      |                                      |                 | 0.00   | 0.00                         | 105.77          | 105.77 | 0.00         | 105.77          | 105.77 |

| Sr. No   | Particulars                               | Approved for FY 2025-26 in MYT Order |                 |                 | Revised claim for FY 2025-26 |                 |                 | Variation    |                 |               |
|----------|---|--------------------------------------|-----------------|-----------------|------------------------------|-----------------|-----------------|--------------|-----------------|---------------|
|          |   | Fixed Charge                         | Variable Charge | Total           | Fixed Charge                 | Variable Charge | Total           | Fixed Charge | Variable Charge | Total         |
| 46       | NVDA Indira sagar LBC HPS                 |                                      |                 | 0.00            | 0.00                         | 1.84            | 1.84            | 0.00         | 1.84            | 1.84          |
| 47       | NVDA Bargi LBC HPS                        |                                      |                 | 0.00            | 0.00                         | 2.19            | 2.19            | 0.00         | 2.19            | 2.19          |
| 48       | Mini & Micro Hydel Plants                 |                                      |                 | 0.00            | 0.00                         | 1.91            | 1.91            | 0.00         | 1.91            | 1.91          |
|          |   |                                      |                 |                 |                              |                 |                 |              |                 |               |
| <b>C</b> | <b>Total (JV Hydel &amp; Other Hydel)</b> | <b>587.52</b>                        | <b>708.24</b>   | <b>1,295.76</b> | <b>625.62</b>                | <b>1,252.81</b> | <b>1,878.44</b> | <b>38.10</b> | <b>544.57</b>   | <b>582.68</b> |
|          |   |                                      |                 |                 |                              |                 |                 |              |                 |               |
| 49       | NTPC Korba                                | 225.38                               | 632.81          | 858.19          | 247.63                       | 561.57          | 809.20          | 22.25        | -71.24          | -48.99        |
| 50       | NTPC Korba III                            | 70.08                                | 96.92           | 167.00          | 56.23                        | 83.59           | 139.82          | -13.85       | -13.33          | -27.18        |
| 51       | NTPC Vindychal I                          | 269.99                               | 665.78          | 935.77          | 269.59                       | 527.06          | 796.65          | -0.40        | -138.72         | -139.12       |
| 52       | NTPC Vindychal II                         | 152.14                               | 473.72          | 625.86          | 170.01                       | 404.79          | 574.81          | 17.87        | -68.93          | -51.05        |
| 53       | NTPC Vindychal III                        | 175.71                               | 375.95          | 551.66          | 178.12                       | 314.68          | 492.80          | 2.41         | -61.27          | -58.86        |
| 54       | NTPC Vindychal IV                         | 303.52                               | 381.85          | 685.37          | 321.54                       | 375.16          | 696.70          | 18.02        | -6.69           | 11.33         |
| 55       | NTPC Vindychal V Unit 1                   | 159.85                               | 216.38          | 376.23          | 163.17                       | 175.85          | 339.02          | 3.32         | -40.53          | -37.21        |
| 56       | NTPC Sipat I                              | 294.02                               | 419.9           | 713.92          | 279.66                       | 371.11          | 650.76          | -14.36       | -48.79          | -63.16        |
| 57       | NTPC Sipat II                             | 158.27                               | 235.23          | 393.50          | 124.76                       | 237.95          | 362.71          | -33.51       | 2.72            | -30.79        |
| 58       | NTPC Mouda I                              | 24.39                                | 62.58           | 86.97           | 17.04                        | 22.77           | 39.81           | -7.35        | -39.81          | -47.16        |
| 59       | NTPC Mouda II Unit 1                      | 24.73                                | 38.23           | 62.96           | 25.17                        | 35.59           | 60.76           | 0.44         | -2.64           | -2.20         |
| 60       | NTPC Solapur STPS                         | 487.44                               | 161.83          | 649.27          | 457.59                       | 542.46          | 1,000.05        | -29.85       | 380.63          | 350.78        |
| 61       | NTPC Gadawara STPS, Unit-1                | 570.18                               | 906.52          | 1,476.70        | 537.76                       | 729.36          | 1,267.12        | -32.42       | -177.16         | -209.58       |
| 62       | NTPC Lara STPS, Raigarh, Unit I & II      | 276.34                               | 357.1           | 633.44          | 282.75                       | 195.25          | 478.00          | 6.41         | -161.85         | -155.44       |
| 63       | NTPC Khargone STPS, Unit-I & II           | 851.54                               | 1082.38         | 1,933.92        | 993.52                       | 1,045.86        | 2,039.39        | 141.98       | -36.52          | 105.47        |
| 64       | NTPC Kawas GPP                            | 86.91                                | 46.82           | 133.73          | 0.00                         | 0.00            | 0.00            | -86.91       | -46.82          | -133.73       |
| 65       | NTPC Gandhar GPP                          | 92.06                                | 262.79          | 354.85          | 0.00                         | 0.00            | 0.00            | -92.06       | -262.79         | -354.85       |
| 66       | KAPP Kakrapar                             | 0                                    | 177.63          | 177.63          | 0.00                         | 961.45          | 961.45          | 0.00         | 783.82          | 783.82        |
| 67       | TAPP Tarapur                              | 0                                    | 540.33          | 540.33          | 0.00                         | 521.13          | 521.13          | 0.00         | -19.20          | -19.20        |

| Sr. No   | Particulars                    | Approved for FY 2025-26 in MYT Order |                 |                  | Revised claim for FY 2025-26 |                 |                  | Variation      |                 |               |
|----------|--------------------------------|--------------------------------------|-----------------|------------------|------------------------------|-----------------|------------------|----------------|-----------------|---------------|
|          |                                | Fixed Charge                         | Variable Charge | Total            | Fixed Charge                 | Variable Charge | Total            | Fixed Charge   | Variable Charge | Total         |
| 68       | NTPC Gadarwara STPS, Unit-2    | 570.18                               | 609.41          | 1,179.59         | 537.76                       | 729.36          | 1,267.12         | -32.42         | 119.95          | 87.53         |
| <b>D</b> | <b>Total WR Region</b>         | <b>4,792.73</b>                      | <b>7,744.16</b> | <b>12,536.89</b> | <b>4,662.49</b>              | <b>7,834.99</b> | <b>12,497.47</b> | <b>-130.24</b> | <b>90.83</b>    | <b>-39.42</b> |
| 69       | NTPC Kahalgaon II              | 56.71                                | 107.57          | 164.28           | 47.80                        | 116.14          | 163.95           | -8.91          | 8.57            | -0.33         |
| 70       | DVC (MTPS & CTPS)              |                                      |                 | 0.00             | 96.10                        | 172.09          | 268.19           | 96.10          | 172.09          | 268.19        |
| <b>E</b> | <b>Total ER Region</b>         | <b>56.71</b>                         | <b>107.57</b>   | <b>164.28</b>    | <b>143.90</b>                | <b>288.23</b>   | <b>432.13</b>    | <b>87.19</b>   | <b>180.66</b>   | <b>267.85</b> |
| 71       | NTPC Auraiya GPP               | 0.74                                 | 3.03            | 3.77             | 1.36                         | 13.77           | 15.13            | 0.62           | 10.74           | 11.36         |
| 72       | NTPC Dadri GPP                 | 0.76                                 | 3.65            | 4.41             | 1.20                         | 9.26            | 10.46            | 0.44           | 5.61            | 6.05          |
| 73       | NTPC Anta GPP                  | 0.52                                 | 0.3             | 0.82             | 0.70                         | 4.72            | 5.42             | 0.18           | 4.42            | 4.60          |
| 74       | NTPC Firoz Gandhi Unchahar I   | 0.25                                 | 0.21            | 0.46             | 0.09                         | 1.44            | 1.53             | -0.16          | 1.23            | 1.07          |
| 75       | NTPC Firoz Gandhi Unchahar II  | 0.7                                  | 0.32            | 1.02             | 0.30                         | 5.66            | 5.97             | -0.40          | 5.34            | 4.95          |
| 76       | NTPC Firoz Gandhi Unchahar III | 0.43                                 | 0.21            | 0.64             | 0.16                         | 2.03            | 2.19             | -0.27          | 1.82            | 1.55          |
| 77       | NTPC Firoz Gandhi Unchahar IV  | 1.32                                 | 0.44            | 1.76             | 0.56                         | 5.02            | 5.58             | -0.76          | 4.58            | 3.82          |
| 78       | NTPC Rihand TPS-I              | 1.16                                 | 2.32            | 3.48             | 0.45                         | 5.03            | 5.48             | -0.71          | 2.71            | 2.00          |
| 79       | NTPC Rihand TPS-II             | 1.09                                 | 2.96            | 4.05             | 0.47                         | 6.44            | 6.91             | -0.62          | 3.48            | 2.86          |
| 80       | NTPC Rihand TPS-III            | 2.45                                 | 3.25            | 5.70             | 0.99                         | 6.76            | 7.75             | -1.46          | 3.51            | 2.05          |
| 81       | NTPC NCTP Dadri II             | 2.13                                 | 0.85            | 2.98             | 0.74                         | 8.98            | 9.72             | -1.39          | 8.13            | 6.74          |
| 82       | NTPC Singrauli                 | 1.9                                  | 5.14            | 7.04             | 0.85                         | 9.87            | 10.72            | -1.05          | 4.73            | 3.68          |
| 83       | NTPC IGPS I Jhajjar            | 2.05                                 | 0.14            | 2.19             | 3.05                         | 8.02            | 11.07            | 1.00           | 7.88            | 8.88          |
| 84       | MEJA Urja Nigam                | 2.04                                 | 0.3             | 2.34             | 0.60                         | 3.20            | 3.80             | -1.44          | 2.90            | 1.46          |
| 85       | NTPC Tanda                     | 1.71                                 | 3.58            | 5.29             | 0.23                         | 5.02            | 5.25             | -1.48          | 1.44            | -0.04         |
| 86       | Rajasthan (NPCIL)              | 0                                    | 4.13            | 4.13             | 0.00                         | 6.08            | 6.08             | 0.00           | 1.95            | 1.95          |
| 87       | NARORA (NPCIL)                 | 0                                    | 2.36            | 2.36             | 0.00                         | 6.85            | 6.85             | 0.00           | 4.49            | 4.49          |
| <b>F</b> | <b>Total NR Region</b>         | <b>19.25</b>                         | <b>33.19</b>    | <b>52.44</b>     | <b>11.75</b>                 | <b>108.15</b>   | <b>119.91</b>    | <b>-7.50</b>   | <b>74.96</b>    | <b>67.47</b>  |



| Sr. No   | Particulars                         | Approved for FY 2025-26 in MYT Order |                  |                  | Revised claim for FY 2025-26 |                  |                  | Variation     |                  |                  |
|----------|-------------------------------------|--------------------------------------|------------------|------------------|------------------------------|------------------|------------------|---------------|------------------|------------------|
|          |                                     | Fixed Charge                         | Variable Charge  | Total            | Fixed Charge                 | Variable Charge  | Total            | Fixed Charge  | Variable Charge  | Total            |
| 88       | Torrent Power                       | 0                                    | 0                | 0.00             | 17.49                        | 77.52            | 95.01            | 17.49         | 77.52            | 95.01            |
| 89       | BLA Power, Unit-I & II              | 16.09                                | 24.82            | 40.91            | 41.95                        | 13.84            | 55.79            | 25.86         | -10.98           | 14.88            |
| 90       | Jaypee Bina Power                   | 413.65                               | 373.13           | 786.78           | 445.47                       | 471.48           | 916.95           | 31.82         | 98.35            | 130.17           |
| 91       | Lanco Amarkantak TPS Unit 1         | 264.22                               | 392.84           | 657.06           | 264.22                       | 275.80           | 540.02           | 0.00          | -117.04          | -117.04          |
| 92       | Reliance UMPP, Sasan                | 166.58                               | 1586.87          | 1,753.45         | 149.31                       | 1,376.59         | 1,525.90         | -17.27        | -210.28          | -227.55          |
| 93       | Essar Power STPS                    | 0                                    | 0                | 0.00             | 0.00                         | 34.47            | 34.47            | 0.00          | 34.47            | 34.47            |
| 94       | Jaiprakash Power STPS, Nigri        | 521.57                               | 246.9            | 768.47           | 601.82                       | 271.94           | 873.76           | 80.24         | 25.04            | 105.29           |
| 95       | MB Power STPS, Unit-I               | 440.06                               | 748.52           | 1,188.58         | 256.70                       | 349.01           | 605.71           | -183.36       | -399.51          | -582.87          |
| 96       | MB Power STPS, Unit-II              | 0                                    | 0                | 0.00             | 256.70                       | 323.36           | 580.06           | 256.70        | 323.36           | 580.06           |
| 97       | Jhabua Power STPS, Unit-1           | 225.45                               | 365.96           | 591.41           | 263.03                       | 235.56           | 498.58           | 37.58         | -130.40          | -92.83           |
| 98       | PFCCL                               | 0.00                                 | 0.00             | 0.00             | 0.00                         | 0.00             | 0.00             | 0.00          | 0.00             | 0.00             |
| <b>G</b> | <b>Total (IPPs)</b>                 | <b>2,047.62</b>                      | <b>3,739.04</b>  | <b>5,786.66</b>  | <b>2,296.69</b>              | <b>3,429.56</b>  | <b>5,726.25</b>  | <b>249.07</b> | <b>-309.48</b>   | <b>-60.41</b>    |
| 99       | Renewable Energy (Solar)            | 0                                    | 3610.94          | 3,610.94         | 0.00                         | 3,178.91         | 3,178.91         | 0.00          | -432.03          | -432.03          |
| 100      | Renewable Energy (other than Solar) | 0                                    | 4991.4700        | 4,991.47         | 0.00                         | 2,996.08         | 2,996.08         | 0.00          | -1,995.39        | -1,995.39        |
| 101      | Bio-Mass/Bio gas/MSW                | 0                                    | 0                |                  | 0.00                         | 123.99           | 123.99           | 0.00          | 123.99           | 123.99           |
| <b>H</b> | <b>Total Renewable Energy</b>       | <b>0.00</b>                          | <b>8,602.41</b>  | <b>8,602.41</b>  | <b>0.00</b>                  | <b>6,298.98</b>  | <b>6,298.98</b>  | <b>0.00</b>   | <b>-2,303.43</b> | <b>-2,303.43</b> |
| <b>I</b> | <b>IEX/Short Term Purchase</b>      |                                      |                  |                  |                              | <b>38.58</b>     | <b>38.58</b>     | <b>0.00</b>   | <b>38.58</b>     | <b>38.58</b>     |
| <b>J</b> | <b>Total</b>                        | <b>11,684.02</b>                     | <b>26,041.89</b> | <b>37,725.98</b> | <b>11,961.05</b>             | <b>25,845.59</b> | <b>37,806.64</b> | <b>277.03</b> | <b>-196.30</b>   | <b>80.66</b>     |

**6.3.2** The Table below shows the Total costs (fixed costs and variable costs) of Stations allocated to MP State and the three Discoms after consideration of MPPMCL Cost, net savings from surplus energy and considering the transmission charges (Inter State & Intra State) for FY 2025-26:

Table 102: Total Power Purchase Cost for MP State for FY 2025-26

| Sr<br>·<br>N<br>o | Particulars   | Approved for FY 26 in MYT Order |                 |               | Revised claim for FY 2025-26 |                 |               | Variation    |                 |              |
|-------------------|---|---------------------------------|-----------------|---------------|------------------------------|-----------------|---------------|--------------|-----------------|--------------|
|                   |   | Fixed Charge                    | Variable Charge | Total         | Fixed Charge                 | Variable Charge | Total         | Fixed Charge | Variable Charge | Total        |
| 1                 | Gross Power Purchase Cost   | 11,684                          | 26,042          | 37,726        | 11,961                       | 25,846          | 37,807        | 277          | (196)           | 81           |
| 2                 | Less: Saving in variable cost of surplus energy from sale of surplus energy |                                 | 114             | 114           |                              | 739             | 739           | -            | 625             | 625          |
| 3                 | Gross Power Purchase Cost after Saving in Variable Cost                     | 11,684                          | 25,928          | 37,612        | 11,961                       | 25,107          | 37,068        | 277          | (821)           | (544)        |
| 4                 | Add: MPPMCL Cost  |                                 | (442)           | (442)         |                              | 209             | 209           | -            | 650             | 650          |
| 5                 | Add: Cost due to RPO  |                                 |                 | -             |                              | 469             | 469           | -            | 469             | 469          |
| <b>6</b>          | <b>Net Power Purchase Cost</b>  | <b>11,684</b>                   | <b>25,486</b>   | <b>37,170</b> | <b>11,961</b>                | <b>25,785</b>   | <b>37,746</b> | <b>277</b>   | <b>299</b>      | <b>576</b>   |
| 7                 | Inter-state Transmission Charges  | 2,955                           |                 | 2,955         | 3,241                        |                 | 3,241         | 286          | -               | 286          |
| 8                 | MPPTCL Charges including SLDC Charges                                       | 4,500                           |                 | 4,500         | 5,316                        |                 | 5,316         | 816          | -               | 816          |
| <b>9</b>          | <b>Total Power Purchase Cost</b>  | <b>19,140</b>                   | <b>25,486</b>   | <b>44,626</b> | <b>20,518</b>                | <b>25,785</b>   | <b>46,303</b> | <b>1,378</b> | <b>299</b>      | <b>1,677</b> |

**The Total Power Purchase cost excluding MPPTCL Charges is again distributed among the three Discoms according to the DBST Methodology for individual Discoms as summarized below:**

**6.4 Distribution Bulk Supply Tariff methodology for Allocation of Power Purchase Cost to Discoms**

- 6.4.1** The Government of MP vide gazette notification dated 21<sup>st</sup> March 2016 had allocated all the stations to MPPMCL and in order to maintain equitable allocation of the power purchased cost among all the three Discoms, MPPMCL have allocated the costs to the three Discoms as per Distribution Bulk Supply Tariff (DBST) methodology.
- 6.4.2** With the Implementation of Distribution Bulk Supply Tariff (DBST) with effect from January 2020, the overall Power Purchase Cost of all the three Discoms is being distributed on the basis of Revenue available with Discoms for power purchase and in-proportion of their energy requirement.
- 6.4.3** The Power Purchase cost allocated to Discoms based on DBST methodology for FY 2025-26 as provided in the Table below:

Table 103: Allocation of total Power Purchase Cost for MP State as per DBST for FY 2025-26

| S. No    | Particulars  | Unit           | FY 2025-26    |               |               |               |
|----------|--|----------------|---------------|---------------|---------------|---------------|
|          |  |                | MP            | EZ            | CZ            | WZ            |
| <b>A</b> | <b>Revenue from Existing Tariff</b>  | <b>Rs. Cr</b>  | <b>54,637</b> | <b>14,860</b> | <b>18,262</b> | <b>21,514</b> |
| <b>B</b> | <b>Other costs of Discoms<br/>(Expenditure other than power purchase cost)</b> | <b>Rs. Cr</b>  | <b>12,441</b> | <b>4,449</b>  | <b>5,188</b>  | <b>2,804</b>  |
| <b>1</b> | R&M Expense  | Rs. Cr         | 1,203         | 488           | 388           | 328           |
| <b>2</b> | Employee Expenses  | Rs. Cr         | 4,164         | 1,387         | 1,350         | 1,427         |
| <b>3</b> | A&G Expense  | Rs. Cr         | 476           | 148           | 162           | 166           |
| <b>4</b> | Depreciation and Related debits  | Rs. Cr         | 1,127         | 434           | 342           | 352           |
| <b>5</b> | Interest & Finance Charges   | Rs. Cr         | 1,349         | 490           | 602           | 256           |
| <b>6</b> | Other Debits, Write-offs (Prior period and bad debts)                          | Rs. Cr         | 557           | 158           | 222           | 176           |
| <b>7</b> | RoE  | Rs. Cr         | 695           | 243           | 276           | 176           |
| <b>8</b> | Less: Other income   | Rs. Cr         | 617           | 185           | 166           | 265           |
| <b>9</b> | Impact of True ups   | Rs. Cr         | 3,487         | 1,286         | 2,013         | 189           |
| <b>C</b> | <b>Intra- state transmission Charges including SLDC<br/>Charges</b>            | <b>Rs. Cr</b>  | <b>5,316</b>  | <b>1,759</b>  | <b>1,778</b>  | <b>1,779</b>  |
| <b>D</b> | <b>Aggregated Amount available with Discoms for Power<br/>purchase (A-B-C)</b> | <b>Rs. Cr</b>  | <b>36,880</b> | <b>8,652</b>  | <b>11,297</b> | <b>16,931</b> |
| <b>E</b> | <b>Total Power Purchase Cost</b>   | <b>Rs. Cr</b>  | <b>40,987</b> |               |               |               |
| <b>F</b> | <b>Surplus/Gap (E-D)</b>   | <b>Rs. Cr</b>  | <b>4,107</b>  |               |               |               |
| <b>G</b> | Ex-Bus Energy Requirement  | MU             | 99,089        | 28,117        | 33,620        | 37,351        |
| <b>H</b> | Ex-Bus Energy Requirement  | %              | 100%          | 28%           | 34%           | 38%           |
| <b>I</b> | <b>Allocation of surplus/Gap as per the Energy<br/>Requirement</b>             | <b>Rs. Cr</b>  | <b>4,107</b>  | <b>1,165</b>  | <b>1,394</b>  | <b>1,548</b>  |
| <b>J</b> | <b>Power Purchase Cost for Discom (D+I)</b>                                    | <b>Rs. Cr</b>  | <b>40,987</b> | <b>9,770</b>  | <b>12,668</b> | <b>18,550</b> |
| <b>K</b> | <b>Bulk Supply Tariff</b>  | <b>Rs./kWh</b> | <b>4.14</b>   | <b>3.47</b>   | <b>3.77</b>   | <b>4.97</b>   |

## 6.5 Estimation of Other Costs associated to Power Purchase

### 6.5.1 Inter State Transmission Charges

6.5.1.1 The Inter-State transmission charges to be paid by MP consist of charges to be paid for Western, Eastern & Northern Regions transmission systems. For the purpose of estimation of Inter State Transmission Charges, the Petitioners have considered the escalation of 4% over the actual Inter State Transmission Charges being paid during FY 2023-24 as summarised in the Table below:

**Table 104: Inter State Transmission Charges (Rs Crores)**

| Sr. no | Particulars     | FY 23           | FY 24           | FY 25           | FY 26           |
|--------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1      | East Discom     | 805.75          | 841.06          | 874.70          | 909.69          |
| 2      | Central Discom  | 968.65          | 1,022.93        | 1,063.85        | 1,106.41        |
| 3      | West Discom     | 1,276.58        | 1,132.47        | 1,177.77        | 1,224.88        |
| 4      | <b>MP State</b> | <b>3,050.98</b> | <b>2,996.47</b> | <b>3,116.32</b> | <b>3,240.98</b> |

6.5.1.2 These Inter-state transmission charges have been allocated to Discoms based on energy allocation from Central Generating Stations and as per Ex-bus Energy requirement.

### 6.5.2 Intra-State Transmission Charges including SLDC Charges and Cash Outflow for Terminal Benefits

6.5.2.1 The Petitioners have considered SLDC Charges for FY 2025-26 based on 4% increment for each year over the approved charges for FY 2024-25.

6.5.2.2 Similarly, the Petitioners have considered Intra-Transmission Charges for FY 2025-26 with 4% escalation over the approved charges for FY 2024-25 as summarized in the Table below:

**Table 105: Intra State Transmission Charges including SLDC charges for FY 2025-26 (Rs Crores)**

| S.No  | Transmission Charges                        | FY 23<br>(Actuals) | FY 24<br>(Actuals) | FY 25<br>(Approved) | FY 26<br>(Proj.) |
|-------|---|--------------------|--------------------|---------------------|------------------|
| 1     | East Discom                                 | 1,558.97           | 1,364.50           | 1,686.18            | 1,753.63         |
| 2     | Central Discom                              | 1,575.62           | 1,807.41           | 1,702.90            | 1,771.02         |
| 3     | West Discom                                 | 1,574.43           | 1,956.38           | 1,704.19            | 1,772.36         |
| 4     | <b>MP State</b>                             | <b>4,709.01</b>    | <b>5,128.29</b>    | <b>5,093.27</b>     | <b>5,297.00</b>  |
| S.No  | SLDC Charges                                | FY 23<br>(Actuals) | FY 24<br>(Actuals) | FY 25<br>(Approved) | FY 26<br>(Proj.) |
| 1     | East Discom                                 | 1.36               | 6.15               | 5.40                | 5.62             |
| 2     | Central Discom                              | 4.43               | 5.35               | 6.47                | 6.73             |
| 3     | West Discom                                 | 2.99               | 5.49               | 6.30                | 6.55             |
| 4     | <b>MP State</b>                             | <b>8.78</b>        | <b>16.99</b>       | <b>18.17</b>        | <b>18.90</b>     |
| Sr.no | Transmission Charges including SLDC Charges | FY 23<br>(Actuals) | FY 24<br>(Actuals) | FY 25<br>(Approved) | FY 26<br>(Proj.) |
| 1     | East Discom                                 | 1,560.33           | 1,370.65           | 1,691.58            | 1,759.24         |
| 2     | Central Discom                              | 1,580.04           | 1,812.76           | 1,709.37            | 1,777.74         |

|   |                 |                 |                 |                 |                 |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| 3 | West Discom     | 1,577.42        | 1,961.87        | 1,710.49        | 1,778.91        |
| 4 | <b>MP State</b> | <b>4,717.79</b> | <b>5,145.28</b> | <b>5,111.44</b> | <b>5,315.90</b> |

6.5.2.3 The Intra-State Transmission charges have been allocated to Discoms based on Ex-bus energy requirement.

## 6.6 MPPMCL Cost

6.6.1 The MPPMCL Cost for the FY 2025-26 is as follows:

**Table 106: MPPMCL Cost Details for FY 2025-26**

| S. No.      | Particulars  | FY 26<br>(Projected) |
|-------------|--|----------------------|
| I.          | Revenue from operations (including Revenue Subsidy)              |                      |
| II.         | Other income   | 406.41               |
| III.        | Income from other business allocated to Licensed business        |                      |
| <b>IV</b>   | <b>Total Revenue (I + II+III)</b>                                | <b>406.41</b>        |
| V           | <b>Expenses:</b>   |                      |
|             | Purchase of Power from MP Genco                                  |                      |
|             | Purchase of Power from Other Sources                             | 460.47               |
|             | Open Access Charges  | 14.02                |
|             | Banking Charges  |                      |
|             | Bank Charges   | 3.91                 |
|             | Depreciation and amortization expenses                           | 10.41                |
|             | Interest & Finance Charges                                       | 0.13                 |
|             | Repairs and Maintenance  | 15.13                |
|             | Employee costs   | 64.80                |
|             | Administration and General expenses                              | 46.51                |
|             | Net prior period credit charges                                  | -                    |
|             | Other Debits, Write-offs   | -                    |
|             | Other Charges  | -                    |
|             | <b>Total Expenses</b>  | <b>615.38</b>        |
| VI          | Profit before exceptional and extraordinary items and tax (IV-V) |                      |
| VII         | Exceptional items  |                      |
| <b>VIII</b> | <b>Profit before extraordinary items and tax (VI – VII)</b>      | <b>(208.97)</b>      |

## 6.7 Total Power Purchase Cost

6.7.1 Based on the various cost components discussed above, the total power purchase cost for MP state and for each of the Discoms is indicated in the below Table:

Table 107: Summary of total Power Purchase Cost for FY 2025-26

| Power Purchase Cost FY 2025-26 |  |                  |             |             |                |             |
|--------------------------------|--|------------------|-------------|-------------|----------------|-------------|
| S. No.                         | Particulars  | UoM              | MP State    | East Discom | Central Discom | West Discom |
| <b>A</b>                       | <b>Ex- Bus Net Power Purchase Cost excluding Transmission Charges (Inter, Intra &amp; SLDC) etc.</b> |                  |             |             |                |             |
| i                              | Quantum  | MUs              | 99,089      | 28,117      | 33,620         | 37,351      |
| ii                             | Fixed Cost   | Rs Crores        | 11,961      | 3,394       | 4,058          | 4,509       |
| iii                            | Variable Cost  | Rs Crores        | 25,576      | 7,258       | 8,678          | 9,641       |
| iv                             | MPPMCL Cost  | Rs Crores        | 209         | 59          | 71             | 79          |
| v                              | Total Cost   | Rs Crores        | 37,746      | 10,711      | 12,807         | 14,228      |
| vi                             | <b>Average Cost</b>  | <b>Paisa/kWh</b> | <b>3.81</b> | <b>3.81</b> | <b>3.81</b>    | <b>3.81</b> |
| <b>B</b>                       | <b>Inter State Transmission</b>  |                  |             |             |                |             |
| i                              | Losses   | MUs              | 1,902       | 530         | 634            | 738         |
| ii                             | Charges- Fixed   | Rs Crores        | 3,241       | 920         | 1,100          | 1,222       |
| <b>C</b>                       | <b>Power Purchase Cost at State Boundary</b>   |                  |             |             |                |             |
| i                              | Quantum  | MUs              | 97,187      | 27,587      | 32,986         | 36,614      |
| ii                             | Fixed Cost   | Rs Crores        | 15,202      | 4,314       | 5,158          | 5,730       |
| iii                            | Variable Cost  | Rs Crores        | 25,576      | 7,258       | 8,678          | 9,641       |
| iv                             | MPPMCL Cost  | Rs Crores        | 209         | 59          | 71             | 79          |
| v                              | Total Cost   | Rs Crores        | 40,987      | 11,631      | 13,907         | 15,450      |
| vi                             | Average Cost   | Paisa/kWh        | 4.22        | 4.22        | 4.22           | 4.22        |
| <b>D</b>                       | <b>Intra State Transmission including SLDC</b>   |                  |             |             |                |             |
| i                              | Losses   | MUs              | 2,537       | 720         | 861            | 956         |
| ii                             | Charges- Fixed   | Rs Crores        | 5,316       | 1,759       | 1,778          | 1,779       |
| <b>E</b>                       | <b>Power Purchase Cost at Discom Boundary</b>  |                  |             |             |                |             |
| i                              | Quantum  | MUs              | 94,650      | 26,867      | 32,125         | 35,658      |
| ii                             | Fixed Cost including Transmission Charges  | Rs Crores        | 20,518      | 6,073       | 6,936          | 7,509       |
| iii                            | Variable Cost  | Rs Crores        | 25,576      | 7,258       | 8,678          | 9,641       |
| iv                             | MPPMCL Cost  | Rs Crores        | 209         | 59          | 71             | 79          |
| v                              | Total Cost   | Rs Crores        | 46,303      | 13,390      | 15,684         | 17,229      |
| vi                             | <b>Average Cost</b>  | <b>Paisa/kWh</b> | <b>4.89</b> | <b>4.98</b> | <b>4.88</b>    | <b>4.83</b> |

6.7.2 The Petitioners hereby prays to the Hon'ble Commission to approve power purchase cost as shown above.

## 6.8 Reason for Increase in Power Purchase Cost

**6.8.1** Power Purchase Costs contribute more than 80% of total ARR of the MP State. Any increase in power purchase cost directly gets reflected in the consumer tariff.

**6.8.2** Some of the uncontrollable reasons which have been restricting MPPMCL from reduction of power purchase costs are as listed below:

- **Payment of Fixed Cost:** It needs to be highlighted that the payment of fixed charges is required to be made for generators in accordance with the PPAs even if the capacity is backed down. MPPMCL is also paying the Technical Minimum Charges for Central Generating Stations.
- On account of revision in fixed and energy charges of Central Generating Stations due to True up Orders issued by the CERC.
- Use of Biomass pellets by thermal power stations is also a cause of increase in power purchase cost. CERC vide its Tariff Regulations, 2019 has allowed generators to recover Capital expenditure on account of biomass handling equipment and facilities, for co-firing as well as blending of biomass for calculation of Energy Charge Rate.
- Variation in **Intra and Inter State Transmission Charges** due to various factors beyond the control of Licensees.
- The scheduling of generators considered in the MOD is on ideal condition whereas during actual operating conditions the demand incident is an uncontrollable parameter and varies abruptly during the peak/Rabi seasons. The higher demand calls for scheduling of costlier stations which results in increase in actual power purchase cost.



**A7: INCOME/EXPENSES OF MPPMCL**

7.1 As per item No.8 (ii) of State Govt. Notification No.2260-F-3-24-2009-XIII dated 19/03/2013, to meet its own expenses, M.P. Power Management Company Limited has been supplying power to the Discoms at the tariff determined/approved by MPERC and its own expenses on actual basis in proportion to the energy drawl by respective Discoms.

7.2 MPPMCL has been operating on “No Profit and No Loss” basis. Therefore, till now at the end of each financial year, all the credits received by MPPMCL which formed the part of income of MPPMCL (shown as “other income” in Form S-1) were being passed on to the Discoms in proportion to the energy drawl by respective Discoms as a part of their Power Purchase Costs. The major components of Annual Revenue Requirement of MPPMCL are detailed in this section.

7.3 The details of these expenses are given in the Table below:

**Table 108: Projections of MPPMCL Cost from FY 2025-26 (Rs Crores)**

| S. No.      | Particulars  | FY 26<br>(Projected) |
|-------------|--|----------------------|
| I.          | Revenue from operations (including Revenue Subsidy)              |                      |
| II.         | Other income   | 406.41               |
| III.        | Income from other business allocated to Licensed business        |                      |
| <b>IV</b>   | <b>Total Revenue (I + II+III)</b>                                | <b>406.41</b>        |
| V           | <b>Expenses:</b>   |                      |
|             | Purchase of Power from MP Genco                                  |                      |
|             | Purchase of Power from Other Sources                             | 460.47               |
|             | Open Access Charges  | 14.02                |
|             | Banking Charges  |                      |
|             | Bank Charges   | 3.91                 |
|             | Depreciation and amortization expenses                           | 10.41                |
|             | Interest & Finance Charges                                       | 0.13                 |
|             | Repairs and Maintenance  | 15.13                |
|             | Employee costs   | 64.80                |
|             | Administration and General expenses                              | 46.51                |
|             | Net prior period credit charges                                  | -                    |
|             | Other Debits, Write-offs   | -                    |
|             | Other Charges  | -                    |
|             | <b>Total Expenses</b>  | <b>615.38</b>        |
| VI          | Profit before exceptional and extraordinary items and tax (IV-V) |                      |
| VII         | Exceptional items  |                      |
| <b>VIII</b> | <b>Profit before extraordinary items and tax (VI – VII)</b>      | <b>(208.97)</b>      |

## 7.4 Income of MPPMCL

### Revenue from operations (including Revenue Subsidy)

7.4.1 The revenue from operation for M.P. Power Management Company Ltd. consists of sale bills credit, which could not be passed on to the Discoms in their monthly bills. However, from FY 2024-25 it is assumed that the same would be passed to the Discoms in the regular monthly bills and thus revenue from operations has been considered as NIL for FY 2025-26.

### Other Income

7.4.2 The other income of MPPMCL includes income from:

- (a) rebate received on a/c of timely/prompt payments
- (b) Generation based incentive
- (c) Interest on Fixed deposits and commitment advances
- (d) Rent receivable, sale of tender fees etc
- (e) Income from Security Constrained Economic Dispatch

7.4.3 The Petitioner submits that during FY 2023-24, other income of MPPMCL which was passed on to Discoms was Rs 335.88 Crore. The details of which is as shown in the Table below:

**Table 109: Other Income during FY 2023-24 (Rs Crores)**

| Particulars                                 | Amount<br>(in Crores) |
|---|-----------------------|
| Credit on Account of STOA                   | 162.95                |
| Compensation Receivable                     | 0.00                  |
| Security Constrained Economic Dispatch      | 40.71                 |
| Profit on sale of Scraps/fixed assets       | 0.01                  |
| Tender Form                                 | 0.02                  |
| Generation Based Incentive                  | 8.02                  |
| RRAS Income                                 | 2.56                  |
| Miscellaneous Income                        | 0.41                  |
| R.T.I Fees                                  | 0.01                  |
| Recoveries for Transport Facilities         | 0.01                  |
| O&M Receivable (Inter State JVs)            | 12.50                 |
| Ground Rent Recovery                        | 0.03                  |
| Rental of Staff Quarters                    | 0.54                  |
| Cleaning From Contractors                   | 0.01                  |
| Rental From Contractors                     | 0.45                  |
| Rent From Guest Houses                      | 0.08                  |
| RECOVERY FROM TRANSPORT AND VEHICLE EXPENSE | 0.00                  |
| Recovery of Vehicle Charges                 | 0.01                  |
| Misc. Income                                | 2.50                  |
| Rebate Received                             | 88.36                 |

| Particulars                             | Amount<br>(in Crores) |
|---|-----------------------|
| Water Charges                           | 0.09                  |
| House Building & Plot Loan              | 0.00                  |
| I.T. Investment in Form of FD with Bank | 0.01                  |
| Interest Receivable                     | 4.34                  |
| Interest Income                         | 0.01                  |
| Penalty                                 | 12.25                 |
| <b>TOTAL</b>                            | <b>335.88</b>         |

7.4.4 For the purpose of projections of other income for FY 2025-26, the Petitioner has taken an escalation rate of 10%. The said escalation rate is applied twice on the other income of FY 2023-24 to arrive the projected income for FY 2025-26.

## 7.5 Expenses of MPPMCL

7.5.1 In the ARR of DISCOMs, the station-wise power purchase cost and DISCOM's own O&M Expenses, Depreciation, Interest Charges etc. have been considered as per the provisions of MPERC Regulations. However, there are certain costs pertaining to power purchase (as detailed below) which could not be considered by the Discoms being not in their control/action. Such costs are therefore included additionally under power purchase costs of Discoms as MPPMCL specific costs and are taken into consideration in the ARR of MPPMCL, the details of which are given hereunder:-

## 7.6 Power Purchase from other sources

7.6.1 Beginning from the year 2007-08, MPPMCL has started the practice of exchange/banking of energy with third party outside the State of Madhya Pradesh whereby during availability of surplus power in the state, energy is supplied to the parties facing shortage of power and in case of power deficit in the state the banked energy is taken by the Company. The Banking and Exchange transactions do not involve any payment or receipts in terms of money for the power transacted except the charges related to open access and trading margin payable to the party through which such transaction is facilitated. Energy banking is a barter system, wherein units of energy are exchanged without any financial transaction between the partners in banking arrangement, although some operational expenses like trading margin, open access charges, RLDC/SLDC permission charges etc. are incurred. The charges towards "banking of energy" reflect the notional cost of the net liability of energy to be returned in the subsequent year and it is based on average power purchase cost of the financial year concerned.

7.6.2 The Company has to receive 220.63 MU of banked energy, imported during FY 2023-24, which translates into a financial liability of about Rs. 96.87 Crore considering cost per unit of Rs. 4.39/kWh, i.e., the average power purchase rate for 2023-24. The average purchase cost has been used for the sole purpose of passing the reasonable cost of units exported through banking and credit/debit for the equivalent amount will be provided to the DISCOMs in the following year when banked units would be received back.

7.6.3 For FY 25-26, the liability for banking of energy is calculated as follows:

**Table 110: Details of Liability for Banking of Energy for FY 2025-26**

| Particular  | Values |
|---|--------|
| Mus to be returned at the end of FY 2023-24 =   | 220.63 |
| Mus to be returned at the end of FY 2024-25 (increasing the units of FY 2023-24 by 10%) = | 242.69 |
| Average purchase cost for F.Y. 23-24 =  | 4.39   |
| Average purchase cost for F.Y. 24-25 (Increasing the rate of FY 2023-24 by 10%) =         | 4.83   |
| Total amount of Banking liability for FY 24-25  | 117.20 |
| Debit for 220.63 Mus billed to Discoms in 2023-24 @ 4.391 Rs/unit                         | 96.87  |
| Net liability to be passed to Discoms for FY 24-25  | 214.07 |
| For FY 25-26 (Increasing cost for FY 24-25 by 10%)  | 235.47 |

7.6.4 From above, the net liability to be passed on to Discoms for FY 2025-26 works out to be Rs. 235.47 Crore. However, it is observed that the Hon'ble Commission in the past tariff Orders has not considered the cost towards banking. The rationale given by the Hon'ble Commission from the Tariff Order of FY 2024-25 is as reproduced below:

*“2.99 The Commission has observed that MPPMCL has been doing exchange/banking of energy with third parties outside Madhya Pradesh whereby during the availability of surplus power in the State, electricity is supplied to the parties having requirement of power and during the period of power deficit in the State, the banked electricity is taken back by the Company. It is also observed that MPPMCL has not been able to return the full quantum of power drawn from banked energy in the same financial year and therefore, has been owing liability in financial terms against the banking. The Commission is of the opinion that such transactions do not involve any expense except for Open Access charges. As per the directions in previous Tariff Orders, these expenses are required to be booked under the head of power purchase of respective DISCOMs. Therefore, the Commission has not admitted such power purchase expense under MPPMCL cost.”*

7.6.5 In view of the above, the Petitioners have not included any cost towards banking of energy for FY 2025-26.

7.6.6 MPPMCL is responsible for purchasing the power to satisfy the energy need of the three Discoms. The power purchase expense so incurred by MPPMCL are passed on to the Discoms on monthly basis. However, sometimes due to delay in receiving of bills from generators, some of the power purchase expenses remains unpassed to the Discoms through monthly bills. During FY 2023-24, the net power purchase cost which was not passed on the Discoms through monthly bills were Rs. 381.44 Crore. The Petitioner has escalated the aforesaid expenses of FY 2023-24 two times with an escalation rate of 10% to arrive at the power purchase expenses for FY 2025-26.

## 7.7 Inter State Transmission Charges:

7.7.1 Apart from the direct bill of power purchase as per REA/SEA and other heads under energy purchase, some other expenses like open access charges etc. on banking and short-term power purchase & sale are being incurred by MPPMCL. During FY 2023-24, the Open Access charges incurred for banking of Power was Rs.11.58 Crore. Further, the transmission charges for FY 2025-26 are estimated by escalating the actual expenses of FY 2023-24 by 10% pa.

## 7.8 Depreciation:

7.8.1 Depreciation for FY 2025-26 is calculated as under:

**Table 111: Details of Depreciation for MPPMCL**

| Fixed assets  | FY22         | FY23        | FY24        | FY25         | FY 26        |
|---|--------------|-------------|-------------|--------------|--------------|
| (i) Tangible assets   |              |             |             |              |              |
| Gross Block   | 104.98       | 114.86      | 126.78      | 128.78       | 130.78       |
| Depreciation*   | 2.59         | 1.87        | 2.06        | 2.26         | 2.46         |
| (ii) Intangible assets  |              |             |             |              |              |
| Gross Block   | 40.55        | 46.73       | 53.03       | 53.03        | 53.03        |
| Depreciation**  | 8.35         | 6.14        | 7.43        | 7.95         | 7.95         |
| <b>Total Depreciation (i + ii)</b>  | <b>10.21</b> | <b>8.09</b> | <b>9.48</b> | <b>10.21</b> | <b>10.41</b> |
| *In case of tangible assets, there is assumed to be an addition of Rs. 2 Crores. Depreciable @ 10% approx. from FY 2024-25 and onwards. Further, CWIP of CY is capitalised in FY 2024-25.     |              |             |             |              |              |
| **In case of intangible assets, no addition is assumed from FY 2025-26 and onwards. Intangible Assets under development as on 31 <sup>st</sup> March 2025 shall be capitalised in FY 2025-26. |              |             |             |              |              |

## 7.9 Interest and Finance charges for power procurement:

7.9.1 The Interest & Finance charges include interest paid to suppliers on account of instalments facility, interest due to tariff revision, Bank charges, Guarantee Charges, commitment charges., Stamp duty, processing charges etc.

7.9.2 Further, as per the existing power purchase agreements, facility of Letter of Credit is to be provided to power suppliers. The cost towards extending this facility of LC and other bank charges is also covered under item "Interest & finance charges".

7.9.3 The interest and finance charges for FY 2023-24 was Rs. 224.00 Crore. However, it was observed from the past tariff Orders that the Hon'ble Commission does not consider finance cost, i.e., interest towards loan availed by MPPMCL. Therefore, the Petitioners have not considered interest on loan and working capital, however, the Petitioners have only considered the interest paid to suppliers on account of instalment facility, interest due to tariff revision, Bank charges, Guarantee Charges, commitment charges., Stamp duty, processing charges etc. The said expenses incurred during FY 2023-24 was Rs. 3.34 Crore which is escalated twice by 10% to arrive at the interest and finance charges for FY 2025-26.

**7.10 Repairs and Maintenance:**

7.10.1 The R&M expenses for FY 2023-24 are Rs. 12.50 Crores. These expenses for FY 2024-25 are taken by increasing the expenses of FY 2023-24 by 10% p.a. Further, for the purpose of projections of R&M expenses for FY 2025-26, the expenses so arrived for FY 2024-25 are further increased by 10% p.a.

**7.11 Employee expenses:**

7.11.1 The employee costs for FY 2023-24 are Rs. 61.08 Crores. For FY 2024-25 the employee expense is estimated by increasing the expense of FY 2023-24 by 10% p.a. For projections for FY 2025-26 the expenses are further increased by 10% p.a.

**7.12 Administration and General Expenses:**

7.12.1 FY 2023-24, Admin & general expenses consist of consultancy fees, legal charges, bank charges, Rates and Taxes, printing & stationary, etc.

7.12.2 The total Administration and General expenses for FY 2023-24 amounts to Rs 259.65 Crore which also includes surcharge on delayed payment amounting to Rs. 221.21 Crore. The Petitioners have excluded the aforesaid amount incurred towards surcharge on delayed payment and the remaining amount towards A&G expenses, i.e., Rs. 38.44 Crore is considered towards projection of A&G expenses. Further, the administration and general expenses for FY 2025-26 is projected by escalating the aforesaid expenses twice by 10% p.a.

7.12.3 **The Petitioner hereby prays to the Hon'ble Commission to approve MPPMCL cost as shown above.**

## **A8: O&M EXPENSES - DISCOMS**

8.1 The O&M expenses comprise of Employee expenses, Administrative and General Expenses (A&G), and Repairs and Maintenance (R&M) expenses. Regulation 36 of the MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 provides stipulation for calculation of O&M expenses for the Control Period. The relevant extract of the said Regulations is as reproduced below:

*36.2. The Employee expenses and Administrative and General expenses shall be derived on the basis of the average of the actual expenses for the period from FY 2018-19 to FY 2020-21, excluding abnormal expenses, if any, subject to prudence check by the Commission:*

*Provided that the average of such expenses shall be considered as expenses for the Year ended 31 March, 2020, and shall be escalated at the respective escalation rate for FY 2020-21 and FY 2021-22, to arrive at the expenses for the base year ending 31 March, 2022:*

*Provided further that the escalation rate for FY 2020-21 and FY 2021-22 shall be computed by considering 30% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past five financial years as per the Office of Economic Advisor of Government of India and 70% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the respective past five financial years as per the Labour Bureau, Government of India.*

*36.3. The Employee expenses and Administrative and General expenses for each subsequent year shall be determined by escalating these Base Year expenses of FY 2021-22 by an inflation factor with 30% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past five financial years as per the Office of Economic Advisor of Government of India and 70% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the past five financial years as per the Labour Bureau, Government of India, to arrive at the permissible expenses for each year of the Control Period.*

*36.4. The R&M Expenses shall be allowed on the opening GFA of the financial year @ 2.3% for East Discom, @ 2.3% for West Discom, @ 2.3% for Central Discom, and @ 5% for SEZ Pithampur.*

8.2 Based on the above provision, the Hon'ble Commission has approved O&M expenses for the entire Control Period, i.e., from FY 2022-23 to FY 2026-27 in its MYT Order dated 31<sup>st</sup> March 2022. The summary of O&M expenses approved for FY 2025-26 is as provided in the Table below:

Table 112: O&amp;M Expenses approved for FY 2025-26 in MYT Order

| <i>Particulars</i>                                    | <i>East Discom</i>     | <i>Central Discom</i>  | <i>West Discom</i>     |
|---|------------------------|------------------------|------------------------|
| <i>Opening GFA</i>                                    | <i>19,677.22</i>       | <i>19,884.57</i>       | <i>15,000.50</i>       |
| <b><i>Repair and Maintenance Expenses @ 2.30%</i></b> | <b><i>452.58</i></b>   | <b><i>457.35</i></b>   | <b><i>292.12</i></b>   |
| <i>Basic Salary</i>                                   | <i>974.20</i>          | <i>857.37</i>          | <i>941.73</i>          |
| <i>Dearness Allowance</i>                             | <i>506.59</i>          | <i>445.83</i>          | <i>489.70</i>          |
| <i>Terminal Benefits</i>                              | <i>61.55</i>           | <i>74.18</i>           | <i>65.61</i>           |
| <b><i>Employee Expenses</i></b>                       | <b><i>1,542.34</i></b> | <b><i>1,377.38</i></b> | <b><i>1,497.04</i></b> |
| <b><i>Administrative and General Expenses</i></b>     | <b><i>224.13</i></b>   | <b><i>308.79</i></b>   | <b><i>155.69</i></b>   |
| <i>Other Expenses (Rates &amp; Taxes...etc.)</i>      | <i>2.25</i>            | <i>1.46</i>            | <i>11.08</i>           |
| <i>MPERC fees</i>                                     | <i>0.59</i>            | <i>0.68</i>            | <i>0.81</i>            |
| <i>Provision for Terminal Benefit Trust Fund</i>      | <i>70.00</i>           | <i>70.00</i>           | <i>70.00</i>           |
| <i>O&amp;M Expenses Capitalized</i>                   | <i>(56.52)</i>         | <i>(44.67)</i>         | <i>(47.23)</i>         |
| <i>Additional Operational Expenditure (RRDS)</i>      | <i>253.78</i>          | <i>198.49</i>          | <i>198.49</i>          |
| <b><i>Total O&amp;M Expenses</i></b>                  | <b><i>2,489.15</i></b> | <b><i>2,369.48</i></b> | <b><i>2,178.00</i></b> |

- 8.3 The Petitioners submit that the MYT approved expenses for FY 2025-26 were based on the Audited expenses of past financial years, i.e., from FY 2018-19 to FY 2020-21. Further, as per Regulation 36.2 the base year considered was FY 2021-22 and the expenses of FY 2025-26 were approved by escalating the base year expenses with an escalation rate of 4.24%. Further, such an escalation rate of 4.24% was based on the average yearly inflation of past five financial years, i.e., from FY 2016-17 to FY 2020-21.
- 8.4 The Petitioners hereby wish to submit that now the Audited expenses of till FY 2023-24 are available with the Licensee. Further, the escalation rate, i.e., WPI & CPI index are also available as on date. Hence, in order to have realistic projection capturing the true inflation, it is necessary that the actual expenses being incurred by the Licensees till FY 2023-24 are taken into account. Otherwise, the actual expenses of FY 2025-26 at the time of True-up of FY 2025-26 would substantially differ than the approved norms. Therefore, there is need to revise the base year and rework the expenditure for FY 2025-26.
- 8.5 Further, Regulation 7.2 of the Tariff Regulations, 2021 mandate the Discoms to file a revised ARR for FY 2024-25. However, Regulation 36 of the Tariff Regulations, 2021 do not stipulate any provision regarding revision in O&M expenses. Therefore, in absence of clarity the Petitioners have reworked the O&M expenses for FY 2025-26 by shifting the base year and other concerned years as specified in Regulation 36 of the Tariff Regulations, 2021. The other methodology as specified in aforesaid Regulations were kept the same. Accordingly, it is requested before the Hon'ble Commission to approve the revised O&M expenses as projected by the Licensees.



## 8.6 Revision in Base Year and other Concerned Years

8.6.1 As mentioned in paras above, the revised base year has been considered as the year ending 31<sup>st</sup> March 2024 instead of the year ending 31<sup>st</sup> March 2022 as specified in Regulation 36.2 of Tariff Regulations, 2021. The normative Employee expenses and A&G expenses for the base year has been arrived based on the Audited Expenses of past three financial years, i.e., from FY 2021-22 to FY 2023-24 excluding abnormal expenses, if any. The average of past three years' audited expenses has been calculated which is considered as normative Employee expenses and A&G expenses for the year ended on 31<sup>st</sup> March 2023, which in turn is escalated with revised escalation rate to arrive at the normative expenses for the base year ending 31<sup>st</sup> March 2024. The base year expenses so calculated are then escalated to arrive at normative Employee expenses and A&G expenses for FY 2025-26.

## 8.7 Revision in Escalation Rate

8.7.1 Petitioners wish to submit that the escalation rate for projections has been considered in line with the methodology specified by the Hon'ble Commission in the Regulations. Petitioners have considered WPI series (Base Year: 2011-12) for the relevant period as released by the Office of the Economic Adviser of Government of India. The CPI for Industrial Workers (all-India) for the relevant period has been considered as per the Labour Bureau, Government of India. Petitioners further wishes to submit that Labour Bureau, Government of India has revised the CPI-IW series from base year 2001=100 to 2016=100. In the new CPI-IW series base 2016=100, the number of centres covered has been increased from 78 to 88. The number of markets has also been enhanced from 289 to 317. The coverage of workers has also been increased from 41040 to 48384. The new CPI-IW series data is available from September 2020 onwards and the old series has been discontinued, hence, no data is available for old series from September 2020 onwards. Due to aforesaid changes, the new CPI-IW index numbers are not comparable with previous CPI-IW series base 2001=100. Therefore, considering the new series data for part of the year, particularly for FY 2020-21 and for the complete from FY 2021-22 onwards shall not reflect the actual inflation during the respective year as compared to previous year.

8.7.2 Since, the Regulations stipulate to consider average yearly inflation of past 5 years, it is necessary to derive the old series CPI-IW data for the remaining period of FY 2020-21, i.e., from September 2020 to March 2021 and also for FY 2021-22 & FY 2022-23. For doing so, the Petitioners have considered a multiplication factor of 2.88, which has been provided by the Labour Bureau, Government of India in its report on "*New Series of Consumer Price Index for Industrial Workers (CPI-IW) (Base 2016=100)*" dated 21 October 2020. Hence, based on above, in order to calculate the yearly inflation of FY 2020-21, the Petitioners have considered CPI-IW series base 2001=100 data up to August 2020, thereafter, Petitioners have derived the CPI-IW index data by multiplying the respective months' new series CPI-IW index numbers by 2.88. Similar,

methodology was adopted for calculating the yearly inflation during the previous ARR proceedings.

- 8.7.3 Further, the escalation rate to be considered for calculating the normative expenses of FY 2023-24 has been derived as 5.86% which is based on the average yearly inflation of past five years, i.e, from FY 2018-19 to FY 2022-23 with 30% and 70% weightage to WPI and CPI, respectively. The revised escalation rate for FY 2024-25 has been calculated as 5.95%, based on the average yearly WPI of the past four years, due to a negative year-on-year WPI of -0.73% for FY 2023-24, and the average yearly CPI of the past five years, as shown in the following Table:

**Table 113: Escalation Rate for FY 2023-24 & FY 2024-25 (%)**

| Year  | Yearly WPI | WPI Inflation | Yearly CPI | CPI Inflation |
|---|------------|---------------|------------|---------------|
| FY 2018-19  | 119.79     | 4.28%         | 299.92     | 5.45%         |
| FY 2019-20  | 121.80     | 1.68%         | 322.50     | 7.53%         |
| FY 2020-21  | 123.38     | 1.29%         | 338.69     | 5.02%         |
| FY 2021-22  | 139.41     | 13.00%        | 356.06     | 5.13%         |
| FY 2022-23  | 152.53     | 9.41%         | 377.62     | 6.05%         |
| FY 2023-24  | 151.42     | -0.73%        | 397.20     | 5.19%         |
| Average from FY19 to FY23                                   |            | 5.93%         |            | 5.84%         |
| Average from FY20 to FY24                                   |            | 6.34%         |            | 5.78%         |
| Weightage   |            | 30%           |            | 70%           |
| <b>Escalation rate for FY 2023-24 (4.93%*30%+5.84%*70%)</b> |            |               |            | <b>5.86%</b>  |
| <b>Escalation rate for FY 2024-25 (4.93%*30%+5.78%*70%)</b> |            |               |            | <b>5.95%</b>  |

## 8.8 Employee Cost

- 8.8.1 Petitioners' wishes to submit that various head under Employee cost have been escalated based on the aforementioned escalation rate except for Dearness Allowances (D.A.). Further, it is to be noted that Petitioners have not considered any provisions made towards Terminal Benefit during the past three Audited years in their normative Employee expenses calculations for ensuing years. However, they have considered Rs. 70 Crore each as a provision towards Terminal Benefit Trust fund in line with the Hon'ble Commission's past Orders. As regard to D.A., which is linked to basic salary of Employees, Petitioners have considered latest available actual rate for FY 2024-25 in line with the order and circular issued by the Finance Department, Government of Madhya Pradesh. From FY 2024-25 onwards, Petitioners have considered marginal quarterly addition of 4% over previous quarters' D.A. rate as shown in the Table below:

**Table 114: Dearness Allowance Considered (%)**

| Particulars (As per 7th Pay)                                    | FY 26 |
|---|-------|
| DA as percentage of Basic for first quarter - Apr to June       | 57%   |
| DA as percentage of Basic for 2nd and 3rd quarter - July to Dec | 61%   |
| DA as percentage of Basic for 4th quarter - Jan to March        | 65%   |

8.8.2 Based on the above, the Employee and A&G expense for the ensuing year as shown in the Table below:

**Table 115: Discom-wise Revised Employee Expenses claimed for FY 2025-26 (Rs. Crores)**

| Sr. No   | Particular  | East Discom           |                 | Central Discom        |                 | West Discom           |                 |
|----------|---|-----------------------|-----------------|-----------------------|-----------------|-----------------------|-----------------|
|          |   | Approved in MYT Order | Revised Claim   | Approved in MYT Order | Revised Claim   | Approved in MYT Order | Revised Claim   |
| <b>1</b> | <b>Employee Expenses</b>  |                       |                 |                       |                 |                       |                 |
| 1        | Basic Salaries  | 974.20                | 982.77          | 857.37                | 870.73          | 941.73                | 885.45          |
| 2        | DA  | 506.59                | 305.19          | 445.83                | 324.14          | 489.70                | 307.75          |
| 3        | Terminal Benefit  | 61.55                 | 32.89           | 74.18                 | 18.19           | 65.61                 | 83.79           |
| 4        | Other Allowance (Earned leave Encashment, Staff welfare Expenses etc) | 0.00                  | 25.31           | 0.00                  | 87.01           | 0.00                  | 102.25          |
| 5        | Less: Expenses Capitalized  | 56.52                 | 28.82           | 44.67                 | 20.23           | 47.23                 | 22.57           |
| 6        | Provision for Terminal Benefit Trust Fund                             | 70.00                 | 70.00           | 70.00                 | 70.00           | 70.00                 | 70.00           |
|          | <b>Total Employee Expenses</b>  | <b>1,555.82</b>       | <b>1,387.35</b> | <b>1,402.71</b>       | <b>1,349.84</b> | <b>1,519.81</b>       | <b>1,426.66</b> |

**Table 116: Revised Employee Expenses claimed for MP-State for FY 2025-26 (Rs. Crores)**

| Sr. No   | Particular  | Approved in MYT Order | Revised Claim   | Variation      |
|----------|---|-----------------------|-----------------|----------------|
| <b>1</b> | <b>Employee Expenses</b>  |                       |                 |                |
| 1        | Basic Salaries  | 2,773.30              | 2,738.95        | -34.35         |
| 2        | DA  | 1,442.12              | 937.07          | -505.05        |
| 3        | Terminal Benefits   | 201.34                | 134.87          | -66.47         |
| 4        | Other Allowance (Earned leave Encashment, Staff welfare Expenses etc) | 0.00                  | 214.57          | 214.57         |
| 5        | Expenses Capitalized  | 148.42                | 71.62           | -76.80         |
| 6        | Provision for Terminal Benefit Trust Fund                             | 210.00                | 210.00          | 0.00           |
|          | <b>Total Employee Expenses</b>  | <b>4,478.34</b>       | <b>4,163.85</b> | <b>-314.49</b> |

8.8.3 Petitioners hereby submit that any variation against the normative Employee expenses as worked out above and actual expenses for the respective period shall be claimed at the time of final True-up.

## 8.9 Administrative & General Expenses

8.9.1 Petitioners submit that they have projected A&G expenses in line with the MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021. However, as mentioned in Para 8.5 the base year and concerned year has been shifted by two year for the purpose of calculations. Further, for MPERC fees under A&G

expenses, the Petitioners have projected the same considering Rs. 500 for each one Million Units of energy input into the distribution system in line with the “Madhya Pradesh Electricity Regulatory Commission (Fees, fines and charges (revision-ii) regulations, 2024 [RG-21 (II) of 2024] dated 27 June 2024. The Discom-wise summary of A&G expenses for next control period is as shown in the Table below:

**Table 117: Discom-wise Revised A&G Expenses claimed for FY 2025-26 (Rs. Crores)**

| Sr. No | Particulars                   | East Discom           |               | Central Discom        |               | West Discom           |               |
|--------|-------------------------------|-----------------------|---------------|-----------------------|---------------|-----------------------|---------------|
|        |                               | Approved in MYT Order | Revised Claim | Approved in MYT Order | Revised Claim | Approved in MYT Order | Revised Claim |
|        | <b>A&amp;G Expenses</b>       |                       |               |                       |               |                       |               |
| 1      | A&G Expenses                  | 224.13                | 143.01        | 308.79                | 155.40        | 155.69                | 161.79        |
| 2      | Rates & Taxes                 | 2.25                  | 3.77          | 1.46                  | 4.61          | 11.08                 | 2.83          |
| 3      | MPERC Fee                     | 0.59                  | 1.34          | 0.68                  | 1.61          | 0.81                  | 1.78          |
| 4      | <b>Total A&amp;G Expenses</b> | <b>226.97</b>         | <b>148.12</b> | <b>310.93</b>         | <b>161.61</b> | <b>167.58</b>         | <b>166.40</b> |

**Table 118: Revised A&G Expenses claimed for MP-State for FY 2025-26 (Rs. Crores)**

| Sr. No | Particular                    | Approved in MYT Order | Revised Claim |
|--------|-------------------------------|-----------------------|---------------|
|        | <b>A&amp;G Expenses</b>       |                       |               |
| 1      | A&G Expenses                  | 688.61                | 460.20        |
| 2      | Rates & Taxes                 | 14.79                 | 11.20         |
| 3      | MPERC Fee                     | 2.08                  | 4.73          |
| 4      | <b>Total A&amp;G Expenses</b> | <b>705.48</b>         | <b>476.13</b> |

## 8.10 Repair and Maintenance Expenses

8.10.1 As regards to estimation of R&M expenses, Petitioners submits that the same is linked to opening Gross Block Assets (GFA) of the year as per Regulation 36.4 of Tariff Regulations, 2021. Since there is a revision in capitalization and hence opening GFA for the concerned year, therefore, the Petitioner have projected the revised R&M expenses for FY 2025-26.

8.10.2 The revised claim of the Petitioners towards R&M expenses as shown in the Table below:

**Table 119: Discom-wise Revised R&M Expenses for FY 2025-26 (Rs. Crores)**

| Sr. no   | Particular              | East Discom           |               | Central Discom        |               | West Discom           |               |
|----------|-------------------------|-----------------------|---------------|-----------------------|---------------|-----------------------|---------------|
|          |                         | Approved in MYT Order | Revised Claim | Approved in MYT Order | Revised Claim | Approved in MYT Order | Revised Claim |
| <b>1</b> | <b>R&amp;M Expenses</b> |                       |               |                       |               |                       |               |
| 1        | Opening Gross Block     | 19,677.22             | 16,547.14     | 19,884.57             | 14,902.19     | 15,000.50             | 9,658.19      |
| 2        | Applicable Rate         | 2.30%                 | 2.30%         | 2.30%                 | 2.30%         | 2.30%                 | 2.80%         |

|   |           |        |        |        |        |        |        |
|---|-----------|--------|--------|--------|--------|--------|--------|
| 3 | Total R&M | 452.58 | 380.58 | 457.35 | 342.75 | 345.01 | 270.43 |
|---|-----------|--------|--------|--------|--------|--------|--------|

Table 120: Revised R&amp;M Expenses claimed for MP-State for FY 2025-26 (Rs. Crores)

| Sr. No | Particular              | Approved in MYT Order | Revised Claim |
|--------|-------------------------|-----------------------|---------------|
|        | <b>R&amp;M Expenses</b> |                       |               |
| 1      | Opening Gross Block     | 54,562.29             | 41,107.52     |
| 2      | Applicable Rate         | 2.30%                 | 2.42%         |
| 3      | <b>Total R&amp;M</b>    | <b>1,254.93</b>       | <b>993.76</b> |

### 8.11 Additional Operational Expenditure (OPEX) Cost:

- 8.11.1 As already mentioned at paras above that the Petitioners have taken part in Central Government's Revamped Distribution Sector Scheme: A Reforms-Based and Results-Linked Scheme. Under part A of this scheme, Prepaid Smart metering for consumers, and System metering at Feeder and Distribution Transformer level with communicating feature along with associated Advanced Metering Infrastructure (AMI) will be done in TOTEX mode (CAPEX + OPEX) through PPP, to facilitate reduction of Distribution losses and enable automatic measurement of energy flows and energy accounting as well as auditing. For prepaid smart metering under the scheme, 15% of the total cost will be provided by the Government of India and an additional incentive of 7.5% will be provided for prepaid smart metering within the target time frame of the first phase, i.e., December 2023. The expenditure on billing module, data management, data analysis and other works will be funded 100% by the Government of India.
- 8.11.2 As per the guidelines issued by Ministry of Power, Government of India for Revamped Schemes, the funding shall be available to Discoms if the scheme is being implemented in TOTEX mode. Accordingly, Discoms have planned to implement the smart meterization through PPP in TOTEX mode. Under this, only partial capex will be paid upfront by Discoms, and balance shall be paid through annuity during next 10 years period of operations under OPEX.
- 8.11.3 Discoms have estimated the TOTEX requirement for meterization part of the scheme. Out of the total outlay as estimated by the Petitioners for the said scheme, the CAPEX portion was considered as lease charges and the remaining portion, i.e., OPEX portion of the total outlay for meterization was claimed under O&M expenses on equated yearly instalment over the operation period of 10 years.
- 8.11.4 It is submitted that the Hon'ble Commission in its MYT Order has approved Additional OPEX for the Petitioners for each year of the Control Period which is over and above the normative O&M expenses. However, due to uncontrollable situation, the smart metering plan has been deferred. Since, the Petitioners have projected revision in CAPEX particularly for Smart Metering during FY 2025-26, there is a revision in OPEX part too. Accordingly, the Petitioners have re-estimated the OPEX portion for FY 2025-26 as provided in the Table below:

**Table 121: Addl. OPEX cost for Discoms for FY 2025-26 (Rs. Crores)**

| S. No. | Particular               | East Discom | Central Discom | West Discom | MP-State      |
|--------|--------------------------|-------------|----------------|-------------|---------------|
| 1      | Additional OPEX Expenses | 106.98      | 45.32          | 57.36       | <b>209.66</b> |

8.11.5 The Petitioners further submit that the estimation of the TOTEX and hence, OPEX cost claimed by Petitioner is based on the estimation and selection of vendor, award of contract and other factors. Such expense being specific in nature shall be subjected to True-up for respective years. Further, the aforesaid expenses shall be over and above normative O&M expense of respective year.

## 8.12 Gist of Total Revised O&M Expenses

8.12.1 Based on the above, Discom-wise and MP State level total O&M expenses for FY 2025-26 is as shown in the Table below:

**Table 122: Discom-wise Revised O&M Expenses for FY 2025-26 (Rs. Crores)**

| Sr. No   | Particular                    | East Discom           |                 | Central Discom        |                 | West Discom           |                 |
|----------|-------------------------------|-----------------------|-----------------|-----------------------|-----------------|-----------------------|-----------------|
|          |                               | Approved in MYT Order | Revised Claim   | Approved in MYT Order | Revised Claim   | Approved in MYT Order | Revised Claim   |
| <b>1</b> | <b>O&amp;M Expenses</b>       |                       |                 |                       |                 |                       |                 |
| 1        | Employee Expenses             | 1,555.82              | 1,387.35        | 1,402.71              | 1,349.84        | 1,519.81              | 1,426.66        |
| 2        | A&G Expenses                  | 226.97                | 148.12          | 310.93                | 161.61          | 167.58                | 166.40          |
| 3        | R&M Expenses                  | 452.58                | 380.58          | 457.35                | 342.75          | 345.01                | 270.43          |
| 4        | Additional OPEX Expenses      | 253.78                | 106.98          | 198.49                | 45.32           | 198.49                | 57.36           |
| <b>5</b> | <b>Total O&amp;M Expenses</b> | <b>2,489.15</b>       | <b>2,023.03</b> | <b>2,369.48</b>       | <b>1,899.52</b> | <b>2,230.89</b>       | <b>1,920.85</b> |

**Table 123: Revised O&M Expenses at State Level for FY 2025-26 (Rs. Crores)**

| Sr. No   | Particular                    | MP State              |                 |
|----------|-------------------------------|-----------------------|-----------------|
|          |                               | Approved in MYT Order | Revised Claim   |
| <b>1</b> | <b>O&amp;M Expenses</b>       |                       |                 |
| 1        | Employee Expenses             | 4,478.34              | 4,163.85        |
| 2        | A&G Expenses                  | 705.48                | 476.13          |
| 3        | R&M Expenses                  | 1,254.93              | 993.76          |
| 4        | Additional OPEX Expenses      | 650.76                | 209.66          |
| <b>5</b> | <b>Total O&amp;M Expenses</b> | <b>7,089.51</b>       | <b>5,843.40</b> |

8.12.2 The Petitioner hereby requests the Hon'ble Commission to approve the revised O&M expenses as shown above. Any variation shall be claimed at the time of final True-up of respective years.

## **A9: INVESTMENT PLAN – DISCOMS**

### **9.1 Capital Investment Plan**

- 9.1.1 For strengthening of the system and reduction of Distribution losses, all the three Discom's of the State are undertaking various projects in the forthcoming years. The focus is on creation of new 33/11 kV S/s, bifurcation of overloaded 33 kV feeders, feeder bifurcation of agricultural feeder at 11 kV level, Addl. / Aug of PTRs, Installation of DTRs, conversion of bare LT line into AB Cables and replacement of service lines etc.
- 9.1.2 The overall distribution loss of the system is a mix of Technical and Commercial losses. Technical losses are mainly due comparatively inadequate infrastructure as per the system demand which needs strengthening, renovation and up-gradation of the capacity of lines, Sub-stations and associated infrastructures. Whereas the commercial losses are mainly due to commercial parameters like theft & pilferage of energy, presence of prominent nos. of stop & defective meters in the system, inadequate meter reading system etc. which can also be reduced to a large extent by re-engineering of the system which requires capital investment and directed efforts. Discoms are working on both the issues regularly, which have resulted in reduction in Distribution losses considerably over the past years, but these reductions are not up to the normative loss levels which are more stringent at this level.
- 9.1.3 Further, with the aim to provide 24x7 uninterrupted, quality, reliable and affordable power supply, Government of India has launched Revamped Distribution Sector Scheme (RDSS), on 20<sup>th</sup> July 2021 for supporting DISCOMs to undertake reforms and improve performance in a time bound manner. MP Discoms have participated in the RDSS Scheme. The Revamped Distribution Sector Scheme has the following parts:

#### **Part A – Metering & Distribution Infrastructure Works:**

- Facilitating in installing prepaid smart meters for all consumers along with associated AMI, communicable meters for DTs & Feeders, ICT including Artificial Intelligence (AI), Machine Learning (ML), etc. based solutions for power Sector and a unified billing and collection system;
- Distribution infrastructure works as required for strengthening and modernizing the system as well as measures for loss reduction. The infrastructure strengthening works will include separation of Agriculture feeders to enable implementation of the KUSUM scheme, Aerial Bunch cables and HVDS for loss reduction, replacement of HT/LT lines as required, construction of new/ upgradation of substations, SCADA and DMS system etc. Each DISCOM/ State will draw up the scheme according to its requirement with the end objective of reducing losses and ensuring 24 x 7 supply.

#### **Part B - Training & Capacity Building and other Enabling & Supporting Activities:**

- Supporting and enabling components, such as Nodal Agency fee, enabling

components of MoP (communication plan, publicity, consumer awareness, consumer survey and other associated measures such as third-party evaluation etc.), up-gradation of Smart Grid Knowledge Centre, training and capacity building, awards and recognitions etc.

9.1.4 The scheme wise summary of capital expenditure of the three Discoms are as detailed below:

**Table 124: Capital expenditure Plan for FY 2025-26 (Rs. Crores)**

| Name of Scheme                        | East Discom  | Central Discom | West Discom |
|---------------------------------------|--------------|----------------|-------------|
| Government schemes (ST(N), TSP, SCSP) | 102          | 193            | 250         |
| Supervision                           | -            | 131            | -           |
| Capital store and spares              | -            | -              | 6           |
| Mukhymantri Krishak Mitra Yona (MKMY) | 0            | 10             | 0           |
| Loss Reduction (RDSS)                 | 1207         | 1,981          | 731         |
| SSTD & Modernisation (RDSS)           |              |                |             |
| <b>Total</b>                          | <b>1,309</b> | <b>2,314</b>   | <b>987</b>  |

9.1.5 The Petitioners request the Hon'ble Commission to approve the above CAPEX plan for MP Discoms. Further, any variation against the aforesaid proposal may be adjusted at the time of final True-up of FY 2025-26.

## 9.2 Scheme Wise Capitalization

9.2.1 Discoms have projected CAPEX during FY 2025-26 as outlined in the paras above. The capitalization against the ongoing schemes has been estimated by each Discoms as per its best judgement, summary of which has been shown in the Table below:

**Table 125: Scheme Wise Capitalization for FY 2025-26 (Rs. Crores)**

| Name of Scheme                           | East Discom     | Central Discom  | West Discom     |
|--|-----------------|-----------------|-----------------|
| Government schemes (ST(N), TSP, SCSP)    | 51.02           | 96.33           | 163.50          |
| Supervision/Deposit Works/Capital Spares | -               | 130.83          | 5.71            |
| From Opening CWIP                        | 583.30          | 227.11          | 483.54          |
| Mukhymantri Krishak Mitra Yona (MKMY)    | -               | 8.18            | -               |
| Loss Reduction (RDSS)                    | 784.26          | 788.25          | 365.45          |
| SSTD & Modernisation (RDSS)              |                 |                 |                 |
| <b>Total</b>                             | <b>1,418.57</b> | <b>1,250.70</b> | <b>1,018.19</b> |

## 9.3 Capital Work in Progress

9.3.1 Based on the proposed capital expenditure and capitalization, Petitioners have projected the opening and closing balance of CWIP as shown in the Table below:

**Table 126: Discom Wise Capital Work in Progress (Rs. Crores)**



| S. No. | Particulars                                 | East Discom  | Central Discom | West Discom  | Total         |
|--------|---|--------------|----------------|--------------|---------------|
| 1      | Opening Balance of CWIP                     | 3,288        | 2,868          | 4,851        | 11,006        |
| 2      | Fresh Investment during the year            | 1,309        | 2,314          | 987          | 4,610         |
| 3      | <b>Total Capitalization during the year</b> | 1,418        | 1,251          | 1,018        | 3,687         |
| 4      | <b>Closing Balance of CWIP</b>              | <b>3,178</b> | <b>3,931</b>   | <b>4,818</b> | <b>11,928</b> |

#### 9.4 Fixed Assets Addition

9.4.1 Based on the capitalization as proposed in the section above, Petitioners have projected the Gross Fixed Assets addition for the FY 26 as shown in the Table below:

**Table 127: Fixed Assets Addition for FY 2025-26 (Rs. Crores)**

| Particulars             | East Discom                          | Central Discom | West Discom  |
|-------------------------|--------------------------------------|----------------|--------------|
| Land & land rights      | 1                                    | 0              | 0            |
| Buildings               | 3                                    | 32             | 38           |
| Hydraulic works         | 0                                    | 0              | 0            |
| Other civil works       | 2                                    | 0              | 0            |
| Plant & machinery       | 342                                  | 126            | 118          |
| Lines, cables, networks | 1,068                                | 91             | 350          |
| Vehicles                | 0                                    | 0              | 0            |
| Furniture & fixtures    | 0                                    | 1              | 0            |
| Office equipment's      | 1                                    | 47             | 86           |
| RGGVY                   | 0                                    | 0              | 0            |
| Intangible Assets       | 0                                    | 35             | 1            |
| Supervision assets      | 0                                    | 131            | 0            |
| Capital Stores & Spares | 0                                    | 0              | 58           |
| RRRDS                   | (Included in lines and cables above) | 788            | 365          |
| <b>Total</b>            | <b>1,419</b>                         | <b>1,251</b>   | <b>1,018</b> |

#### 9.5 Lease Charges towards Smart Meters

9.5.1 It is submitted that the smart meters are being installed in the State under the TOTEX model, which incorporates three cost components:

- an upfront cost,
- an Opex EMI, and
- Capex EMI

9.5.2 In accordance with the Accounting Standards issued by the Institute of Chartered Accountants of India (ICAI), these smart meters must be accounted for under Indian Accounting Standard (Ind AS) 116 – Leases. Consequently, all expenses incurred in connection with the installation of the smart meters are to be claimed pursuant to the terms of the lease agreement.

9.5.3 As discussed in paras above that the Petitioners have claimed expense towards OPEX EMI separately under O&M expenses, the remaining expense, i.e., upfront payment and Capex EMI is being claimed under lease charges in this section.

9.5.4 The Petitioners wish to submit that Regulation 35 of the MYT Regulations, 2021 provides stipulation for Lease/Hire Purchase Charges as reproduced below:

**“35. Lease/Hire Purchase Charge.-**

*Lease charges for asset taken on lease by Distribution Licensee shall be considered as per lease agreement provided the charges are considered reasonable by the Commission.”*

9.5.5 In view of the above, based on the projected smart meter installation for the FY 2025-26 and considering the EMI & Upfront rate as quoted by the bidders, the Discoms have worked out the lease charges towards installation of smart meters as shown in the Table below:

**Table 128: Discom-wise lease charges towards Smart Meters for FY 2025-26 (Rs. Crores)**

| Sr. | Particulars                        | East Discom | Central Discom | West Discom | MP-State   |
|-----|------------------------------------|-------------|----------------|-------------|------------|
| 1   | Lease Charges towards Smart Meters | 154         | 218            | 172         | <b>545</b> |

9.5.6 The Petitioners have not considered capitalization of Smart Meters as GFA addition, and hence, not claimed any depreciation, interest on loan and return on equity corresponding to such capitalization. Instead, they have claimed the lease charges in line with the Regulation 35 of the Tariff Regulations, 2021. **The Petitioners request the Hon’ble Commission to approve the lease charges as shown in the Table above.**

**Central Discom Submission:**

9.5.7 The detailed working of CAPEX EMI, upfront Cost and OPEX EMI expected to be incurred during FY 2025-26 is summarized in the Table below:

**Table 129: Summary of TOTEX Cost towards Smart Meters for FY 2025-26 – Central Discom**

| Type of Meter                             | Qty    | EMI Rate<br>(50%<br>CAPEX+<br>50%<br>OPEX) | FY 2025-26                |   |                     |                           |                          | Total<br>TOTEX<br>(Capex+<br>Opex)<br>(Rs. Cr) |
|---|--------|--|---------------------------|---|---------------------|---------------------------|--------------------------|--|
|   |        |  | Projected<br>Installation | Upfront<br>payment<br>(Rs. 1770/-<br>per meter) | Total No.<br>of EMI | CAPEX<br>EMI<br>(Rs. Cr.) | OPEX<br>EMI<br>(Rs. Cr.) |  |
| <b>(AMISP- M/s Alfanar Power Pvt Ltd)</b> |        |  |                           |   |                     |                           |                          |  |
| LT 1 phase                                | 882983 | 71.2                                       | 511056                    | 90.46   | 5786209             | 20.6                      | 20.6                     | 131.66   |
| LT 3 Phase                                | 78885  | 97.03                                      | 45657                     | 8.08  | 516935              | 2.51                      | 2.51                     | 13.1   |
| LT CT Meter                               | 12215  | 164.85                                     | 7070                      | 1.25  | 80045               | 0.66                      | 0.66                     | 2.57   |
| DT Meter                                  | 155515 | 172.99                                     | 80584                     | 14.26   | 1664725             | 14.4                      | 14.4                     | 43.06  |
| Feeder Meter                              | 9477   | 320.33                                     | 5484                      | 0.97  | 62099               | 0.99                      | 0.99                     | 2.95   |
| HT Meter                                  | 2965   | 299.25                                     | 1716                      | 0.3   | 19429               | 0.29                      | 0.29                     | 0.88   |

| Type of Meter  | Qty            | EMI Rate<br>(50%<br>CAPEX+<br>50%<br>OPEX) | FY 2025-26                |   |                     |                           |                          | Total<br>TOTEX<br>(Capex+<br>Opex)<br>(Rs. Cr) |
|--|----------------|--|---------------------------|---|---------------------|---------------------------|--------------------------|--|
|  |                |  | Projected<br>Installation | Upfront<br>payment<br>(Rs. 1770/-<br>per meter) | Total No.<br>of EMI | CAPEX<br>EMI<br>(Rs. Cr.) | OPEX<br>EMI<br>(Rs. Cr.) |  |
| <b>Total<br/>(Alfanar)</b>   | <b>1142040</b> |  | <b>651567</b>             | <b>115.32</b>                                   | <b>8129442</b>      | <b>39.45</b>              | <b>39.45</b>             | <b>194.22</b>                                  |
| <b>(AMISP- M/s Apraava Energy Pvt. Ltd.)</b>   |                |  |                           |   |                     |                           |                          |  |
| LT 1 phase   | 790498         | 75.17                                      | 274760                    | 48.63   | 1148497             | 4.32                      | 4.32                     | 57.27  |
| LT 3 Phase   | 147323         | 109.15                                     | 39708                     | 7.03  | 165979              | 0.91                      | 0.91                     | 8.85   |
| LT CT Meter  | 1706           | 262.6                                      | 4109                      | 0.73  | 17176               | 0.23                      | 0.23                     | 1.19   |
| DT Meter   | 18231          | 262.6                                      | 7470                      | 1.32  | 31225               | 0.41                      | 0.41                     | 2.14   |
| <b>Total<br/>(Apraava)</b>   | <b>957758</b>  |  | <b>326047</b>             | <b>57.71</b>                                    | <b>1362877</b>      | <b>5.87</b>               | <b>5.87</b>              | <b>69.45</b>                                   |
| <b>Total</b>   | <b>2099798</b> |  | <b>977614</b>             | <b>173.03</b>                                   | <b>9492319</b>      | <b>45.32</b>              | <b>45.32</b>             | <b>263.67</b>                                  |
| <b>Total Lease Charges (Upfront Payment + CAPEX EMI) = (Rs. 173.03 Cr.+ Rs. 45.32 Cr.)</b> |                |  |                           |   |                     |                           |                          | <b>218.35</b>                                  |

**East Discom Submission:**

9.5.8 The detailed working of CAPEX EMI, upfront Cost and OPEX EMI expected to be incurred during FY 2025-26 is summarized in the Table below:

**Table 130: Summary of TOTEX Cost towards Smart Meters for FY 2025-26 – East Discom**

| Particulars  | Projected     |
|--|---------------|
|  | FY 25-26      |
| No. of Smart Metered installed                                       | 658833        |
| <b>Capex EMI amount Component (Rs. Crore)</b>                        |               |
| (i) Upfront payment amount   | 116.61        |
| (ii) EMI Paid  | 37.42         |
| <b>Opex Component (Rs. Crore)</b>                                    |               |
| Opex EMI   | 106.98        |
| <b>Total TOTEX (Capex+Opex)</b>                                      | <b>261.02</b> |
| <b>Total Lease Charges (Upfront Charges + Capex EMI) (Rs. Crore)</b> | <b>154.03</b> |

**West Discom Submission:**

9.5.9 The detailed working of CAPEX EMI, upfront Cost and OPEX EMI expected to be incurred during FY 2025-26 is summarized in the Table below:

**Table 131: Summary of TOTEX Cost towards Smart Meters for FY 2025-26 – West Discom**

| Particulars                                   | Projected |
|---|-----------|
|   | FY 25-26  |
| No. of Smart Metered installed                | 587146    |
| <b>Capex EMI amount Component (Rs. Crore)</b> |           |
| (i) Upfront payment amount                    | 103.92    |

| Particulars  | Projected     |
|--|---------------|
|  | FY 25-26      |
| (ii) EMI Paid  | 68.36         |
| <b>Opex Component (Rs. Crore)</b>                                    |               |
| Opex EMI   | 57.36         |
| <b>Total TOTEX (Capex + Opex) (Rs. Crore)</b>                        | 229.64        |
| <b>Total Lease Charges (Upfront Charges + Capex EMI) (Rs. Crore)</b> | <b>172.28</b> |

**9.6 The Petitioners hereby request the Hon'ble Commission to approve Capital Expenditure and Fixed Assets Addition and Lease charges towards Smart Meters as shown in the Tables above.**

**A10: OTHER COSTS / INCOME - DISCOMS****10.1 Depreciation**

10.1.1 Regulation 33 of the MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021, provides stipulation for calculation of depreciation. As per the said Regulations, Depreciation needs to be calculated on value base of the capital cost as admitted by the Commission. The salvage value of the assets needs to be considered as 10% of Capital Cost and Depreciation shall be allowed up to maximum of 90% of the Capital Cost of the Asset.

10.1.2 The rate of depreciation has been considered in accordance with the rate specified by the Hon'ble Commission in its Regulations. In case of existing projects/schemes Petitioners have verified if the accumulated depreciation has reached 70%. For the existing projects/schemes where the accumulated depreciation has reached 70% of asset value, the remaining depreciable value has been spread over the remaining life of the asset such that the maximum depreciation does not exceed 90%.

10.1.3 Petitioners have claimed depreciation on the Net Block of Assets excluding consumer contribution and grants, since the Petitioners have not considered deferred income booked towards the amortization of assets created through consumer contribution and grants under their Non-Tariff Income.

10.1.4 Accordingly, the Discom-wise depreciation for the ensuing years of the Control Period is as shown in the Table below:

**Table 132: Discom-wise Depreciation for FY 2025-26 (Rs. Crores)**

| Particulars                           | East Discom   | Central Discom | West Discom   | MP-State       |
|---------------------------------------|---------------|----------------|---------------|----------------|
| Building                              | 1.36          | 4.97           | 6.29          | 12.62          |
| Hydraulic Works                       | 0.00          | 0.28           | 0.00          | 0.28           |
| Other Civil Works                     | 1.55          | 0.12           | 0.79          | 2.46           |
| Plant & Machinery                     | 159.37        | 82.08          | 104.13        | 345.58         |
| Line Cable Networks etc.              | 253.11        | 151.06         | 230.65        | 634.82         |
| Vehicles                              | 0.18          | 0.00           | 0.41          | 0.59           |
| Furniture & fixtures                  | 0.00          | 0.10           | 0.33          | 0.43           |
| Office Equipment                      | 11.54         | 13.27          | 6.96          | 31.77          |
| RGGVY, IPDS, Soubhagya, DDUGJY, RRRDS | 0.00          | 73.70          | 0.00          | 73.70          |
| Amortization of Intangible Assets     | 6.38          | 3.10           | 1.97          | 11.45          |
| Supervision assets                    | 0.00          | 0.00           | 0.00          | 0.00           |
| Capital Stores & Spares               | 0.00          | 13.21          | 0.00          | 13.21          |
| <b>Total</b>                          | <b>433.50</b> | <b>341.89</b>  | <b>351.59</b> | <b>1126.92</b> |

## 10.2 Interest and Finance Charges

### 10.2.1 Interest on Project Loans

Regulation 32 of the MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 provides stipulation for calculation of interest and finance charges on loan capital.

Petitioners have calculated interest and finance charges on loan capital in line with the methodology adopted by the Hon'ble Commission in its previous Tariff/True-up Orders. The opening debt of FY 2023-24 has been considered in line with the closing debt as approved by the Hon'ble Commission in its True-up Order of FY 2022-23. However, in case of Central Discom, due to prior period capitalization of Rs. 77.51 Crore, the opening debt balance for FY 2023-24 has been revised corresponding to debt balance associated with prior period capitalization of Rs. 77.51 Crore. The detailed working of the same is provided in the separate Petition submitted for True up of ARR for FY 2023-24.

The assets addition to GFA, consumer deposit & grant and actual equity contribution has been considered as proposed in the True-up Petition of FY 2023-24. The repayment of loan has been considered equal to depreciation. Accordingly, the closing debt of FY 2023-24 has been arrived by adding the net GFA considered as funded through debt and subtracting debt repayment of the respective year. The Closing debt of FY 2023-24 is then considered as opening debt of FY 2024-25.

In a similar fashion, opening and closing debt of FY 2024-25 & FY 2025-26 has been arrived. However, while doing so the GFA addition, consumer deposit & grant and equity has been considered as projected in this Petition. Further, 30% of the net asset addition to GFA during the year or actual equity infusion as admitted, whichever being less has been considered as funded through equity. Balance of net asset addition to GFA is considered as having been funded through debt and added to the total debt in GFA.

The interest on loan for FY 2025-26 has been calculated on the normative average loan of the year by applying the weighted average rate of interest. Further, the weighted average rate of interest for each Discom has been calculated based on the actual loan portfolio of Discoms in line with the Regulations.

Petitioners have also considered other finance charges such as Bank Charges, Commitment Charges, Guarantee/LC Charges etc. based on the actual expenditure incurred over the previous financial years as per audited accounts. The Discom-wise summary of interest and finance charges is as detailed in the Table below:

**Table 133: Discom-Wise Interest on Project Loan for FY 2025-26 (Rs. Crores)**

| S. No. | Particulars (In Rs Crores)                              | East Discom | Central Discom | West Discom | MP-State |
|--------|---|-------------|----------------|-------------|----------|
| 1      | Opening Debt associated with GFA (as per True-up Order) | 3409.91     | 4301.47        | 735.47      | 8446.85  |
| 2      | GFA Addition during the year                            | 1418.57     | 1250.70        | 1018.19     | 3687.47  |

| S. No. | Particulars (In Rs Crores)                           | East Discom   | Central Discom | West Discom   | MP-State      |
|--------|--|---------------|----------------|---------------|---------------|
| 3      | Consumer Deposit and Grants utilized during the year | 941.70        | 724.70         | 307.79        | 1974.20       |
| 4      | Net GFA Addition during the year                     | 476.87        | 526.00         | 710.40        | 1713.27       |
| 5      | Addition of Equity                                   | 30.24         | 52.43          | 62.61         | 145.28        |
| 6      | Net GFA considered as funded through debt            | 446.63        | 473.57         | 647.79        | 1567.99       |
| 7      | Debt repayment during the year                       | 433.50        | 341.89         | 351.59        | 1126.98       |
| 8      | Closing debt associated with GFA                     | 3423.04       | 4433.15        | 1031.67       | 8887.86       |
| 9      | Average debt associated with Loan                    | 3416.48       | 4367.31        | 883.57        | 8667.35       |
| 10     | Weighted average rate of interest (%) on all loans   | 9.36%         | 10.21%         | 9.87%         | 9.84%         |
| 11     | Interest on Project Loans                            | <b>319.82</b> | <b>445.72</b>  | <b>87.22</b>  | <b>852.76</b> |
| 12     | Other Finance cost                                   | 5.95          | 9.02           | 17.50         | 32.47         |
| 13     | Bank Charges   | 0.12          | 0.97           | 0.26          | 1.35          |
| 14     | Commitment Charges                                   | 4.59          | 0.00           | 17.24         | 21.83         |
| 15     | Guarantee/Lc Charges                                 | 1.24          | 8.05           | 0.00          | 9.29          |
| 16     | <b>Interest Cost Claimed in Petition</b>             | <b>325.77</b> | <b>454.74</b>  | <b>104.72</b> | <b>885.23</b> |

**Petitioners request the Hon'ble Commission to approve the interest and finance charges on Project loan as summarized in the Table above. Any variation shall be claimed at the time of final True-up of respective year.**

### 10.2.2 Interest on Working Capital

Regulation 23 of the MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 provides the method of calculation of interest on working capital, wherein the total Working Capital shall consist of expenses towards working capital for the supply activity and wheeling activity. The said Regulation also stipulates the parameters to be considered for computation of working capital for wheeling and supply activity.

As per the Regulation 38, the Rate of interest on working capital shall be equal to the Base Rate as on 01<sup>st</sup> April of the relevant year plus 350 basis points. Further, the base rate shall be one-year Marginal Cost of Funds-based Lending Rate (MCLR) as declared by State Bank of India from time to time. The SBI MCLR as on 1st April 2024 is 8.5%. Accordingly, the Petitioners have considered the interest rate on working capital as 12% (SBI-MCLR 8.5% plus 350 bps).

The summary of Discom wise Interest on Working Capital is as detailed in the Table below:

**Table 134: Discom-wise Interest on Working Capital for FY 2025-26 (Rs. Crores)**

| S. No.    | Particulars  | East Discom | Central Discom | West Discom | MP-State |
|-----------|--|-------------|----------------|-------------|----------|
| <b>I</b>  | <b>Wheeling</b>  |             |                |             |          |
| <b>A)</b> | 1/6th of annual requirement of inventory for 1% GFA of previous year | 22.06       | 19.87          | 12.88       | 54.81    |

| S. No.        | Particulars  | East Discom  | Central Discom | West Discom  | MP-State      |
|---------------|--|--------------|----------------|--------------|---------------|
| <b>B)</b>     | O&M expenses   |              |                |              |               |
|               | R&M expenses   | 487.56       | 388.07         | 270.43       | 1,146.06      |
|               | A&G expense  | 148.12       | 142.67         | 166.40       | 457.18        |
|               | Employee expenses  | 1,566.91     | 1,280.60       | 1,356.66     | 4,204.17      |
| <b>B) i)</b>  | Total of O&M expenses  | 2,202.59     | 1,811.34       | 1,793.49     | 5,807.41      |
| <b>B) ii)</b> | 1/12th of total  | 183.55       | 150.94         | 149.46       | 483.95        |
| <b>C)</b>     | Receivables  |              |                | -            | -             |
| <b>C) i)</b>  | Annual Revenue from wheeling charges**                                 |              |                | 3.75         | 3.75          |
| <b>C) ii)</b> | Receivables equivalent to 2 months average billing of wheeling charges |              |                | 0.63         | 0.63          |
| <b>D)</b>     | Total Working capital [ A) + B) ii) - C) ii)]                          | 205.61       | 170.81         | 162.96       | 539.39        |
| <b>E)</b>     | Rate of Interest *   | 12.00%       | 12.00%         | 12.00%       | 12.00%        |
| <b>F)</b>     | <b>Interest on Working capital (Wheeling)</b>                          | <b>24.67</b> | <b>20.50</b>   | <b>19.56</b> | <b>64.73</b>  |
| <b>II</b>     | <b>Retail Supply</b>   |              |                |              |               |
| <b>A)</b>     | 1/6th of annual requirement of inventory for previous year             | 5.52         | 4.97           | 3.22         | 13.70         |
| <b>B)</b>     | Receivables  |              |                |              |               |
| <b>B) i)</b>  | Annual Revenue from Tariff and charges**                               | 14,860       | 18,262         | 21,514       | 54,637        |
| <b>B) ii)</b> | Receivables equivalent to 2 months average billing                     | 2,477        | 3,044          | 3,586        | 9,106         |
| <b>C)</b>     | Power Purchase expenses  | 9,770        | 12,668         | 18,550       | 40,987        |
| <b>C) i)</b>  | 1/12th of power purchase expenses                                      | 814          | 1,056          | 1,546        | 3,416         |
| <b>D)</b>     | Consumer Security Deposit  | 1,321        | 1,972          | 2,341        | 5,634         |
| <b>E)</b>     | Total Working capital (A+B ii) - C i) - D)                             | <b>347</b>   | <b>21</b>      | <b>(298)</b> | <b>70</b>     |
| <b>F)</b>     | Rate of Interest *   | 12.00%       | 12.00%         | 12.00%       | 12.00%        |
| <b>G)</b>     | Interest on Working capital (Retail Supply)                            | <b>41.62</b> | <b>2.56</b>    | <b>0.00</b>  | <b>44.17</b>  |
|               | <b>Total Interest on Working Capital (Wheeling + Retail Supply)</b>    | <b>66.29</b> | <b>23.05</b>   | <b>19.56</b> | <b>108.90</b> |

Petitioners request the Hon'ble Commission to approve the interest on working capital as projected in the Table above. Any variation shall be claimed at the time of final True-up of the respective years.

### 10.2.3 Interest on Consumer Security Deposit

Interest on Consumer Security Deposit has to be paid to the consumers in accordance with MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 and MPERC Security Deposit Regulations, 2009 and its amendment thereof. The Petitioner have provisionally considered rate on Consumer Security Deposit rate in line with the actual rate arrived based on the audited accounts. The Discom-wise summary of interest on Consumer Security Deposit is as provided in the Table below:

**Table 135: Discom-wise Interest on Consumer Security Deposit for FY 2025-26 (Rs. Crores)**

| S. No. | Particulars                           | East Discom | Central Discom | West Discom | MP-State      |
|--------|---------------------------------------|-------------|----------------|-------------|---------------|
| 1      | Interest on Consumer Security Deposit | 98.05       | 124.57         | 132.17      | <b>354.79</b> |



### 10.2.4 Gist of Interest & Finance Charge

Gist of the Interest & Finance Charges for FY 2025-26 is summarized as below:

**Table 136: Discom-wise Total Interest & Finance Charges for FY 2025-26 (Rs. Crores)**

| S. No. | Particular                                  | East Discom           |               | Central Discom        |               | West Discom           |               |
|--------|---|-----------------------|---------------|-----------------------|---------------|-----------------------|---------------|
|        |   | Approved in MYT Order | Revised Claim | Approved in MYT Order | Revised Claim | Approved in MYT Order | Revised Claim |
| 1      | Interest on Project Loans                   | 592.98                | 325.77        | 586.17                | 454.74        | 422.22                | 104.72        |
| 2      | Total Interest on working Capital           | 86.53                 | 66.29         | 72.22                 | 23.05         | 0                     | 19.56         |
| 3      | Interest on Consumer Security Deposit       | 50.56                 | 98.05         | 61.19                 | 124.57        | 102.57                | 132.17        |
| 4      | <b>Total Interest &amp; Finance Charges</b> | <b>730.07</b>         | <b>490.11</b> | <b>719.58</b>         | <b>602.36</b> | <b>524.79</b>         | <b>256.44</b> |

**Table 137: Revised Interest & Finance Charges claimed for MP-State for FY 2025-26 (Rs. Crores)**

| S. No. | Particular                                  | MP -State             |                 |
|--------|---|-----------------------|-----------------|
|        |   | Approved in MYT Order | Revised Claim   |
| 1      | Interest on Project Loans                   | 1601.36               | 885.23          |
| 2      | Total Interest on working Capital           | 158.75                | 108.90          |
| 3      | Interest on Consumer Security Deposit       | 214.32                | 354.79          |
| 4      | <b>Total Interest &amp; Finance Charges</b> | <b>1,974.43</b>       | <b>1,348.92</b> |

### 10.3 Return on Equity

10.3.1 The Commission in its Tariff Regulations, 2021 has proposed to allow Return on Equity in two parts, i.e., Base Return on Equity and Additional Return on Equity linked to actual performance. The rate for base Return on Equity has been kept at 14% and an Additional Return on Equity of 2% which is linked to performance has been proposed to be allowed at the time of True-up.

10.3.2 Regulation 22 of the MYT Regulations, 2021 provides that the debt-equity ratio of the capital employed for determination of tariff shall be 70:30. However, in case the actual equity is less than 30%, actual equity infused is to be considered and wherever the actual equity infused exceeds 30%, equity in excess of 30% shall be treated as normative loan. Accordingly, based on the above, the Petitioners have worked out Return of Equity for the FY 2025-26 as follows:

- (a) Opening Equity for FY 2023-24 has been taken equivalent to the closing equity admitted in true-up of FY 2022-23. However, mainly in case of Central Discom, during the FY 2023-24, assets amounting to Rs. 77.51 Crores have been capitalized retrospectively from FY 2017-18. This capitalization pertains to periods prior to FY 2023-24, based on completion reports received in the current fiscal year.

Considering this prior period capitalization, the Petitioner has revised the normative opening equity balance for FY 2023-24, as submitted in the True- Up petition for FY 2023-24.

- (b) Thereafter addition in equity for FY 2023-24 has been considered as proposed in True-up Petition for FY 2023-24. The closing equity thus arrived for FY 2023-24 has been considered as opening equity for FY 2024-25.
- (c) Net asset addition to GFA during FY 2024-25 and FY 2025-26 of the Control Period has arrived by subtracting the consumer contribution/Grants from total asset addition to GFA as projected in this Petition.
- (d) 30% of the net asset addition to GFA during the year or actual equity infusion as proposed, whichever being less has been considered as funded through equity.

10.3.3 Accordingly, the Return on Equity has been calculated on the average equity balance of the respective year with the Rate of 14% as summarised in the Table below:

**Table 138: Discom-wise return on Equity for FY 2025-26 (Rs. Crores)**

| Particulars  | East Discom     | Central Discom  | West Discom     |
|--|-----------------|-----------------|-----------------|
| <b>Gross Fixed Assets at the beginning of year (net of consumer contributions)</b>                           | <b>8,693.84</b> | <b>9,915.06</b> | <b>8,417.16</b> |
| Opening balance of GFA identified as funded through equity   | 1,723.70        | 1,943.52        | 1,222.92        |
| <b>Proposed capitalization of assets as per the investment plan (net of consumer contribution and grant)</b> | <b>1,418.57</b> | <b>526.00</b>   | <b>208.71</b>   |
| Proportion of capitalized assets funded out of equity, internal reserves                                     | 30.24           | 52.43           | 82.53           |
| Balance Proportion of capitalized assets funded out of project loans (B - B1)                                | 1,388.33        | 473.57          | 126.19          |
| Normative additional equity (30% of B)   | 425.57          | 157.80          | 62.61           |
| Normative additional debt (70% of B)   | 993.00          | 368.20          | 146.10          |
| Excess / shortfall of additional equity over normative (B1-C1)   | -395.33         | -105.37         | 19.91           |
| Excess / shortfall of additional debt over normative (B2-C2)   | 395.33          | 105.37          | -19.91          |
| <b>Equity eligible for Return (A1+(C1/2)) OR (A1+(B1/2)), whichever is lower</b>                             | <b>1,738.82</b> | <b>1,969.74</b> | <b>1,254.23</b> |
| <b>Rate of Return in Equity</b>  | <b>14.00%</b>   | <b>14.00%</b>   | <b>14.00%</b>   |
| <b>Return on Equity (14% on E)</b>   | <b>243.44</b>   | <b>275.76</b>   | <b>175.59</b>   |

**Table 139: Summary of Return on Equity claimed for MP-State for FY 2025-26 (Rs. Crores)**

| S. No. | Particular      | MP -State             |               |
|--------|-----------------|-----------------------|---------------|
|        |                 | Approved in MYT Order | Revised Claim |
| 1      | East Discom     | 357.01                | 243.44        |
| 2      | Central Discom  | 381.48                | 275.76        |
| 3      | West Discom     | 218.76                | 175.59        |
| 4      | <b>MP-state</b> | <b>957.25</b>         | <b>694.79</b> |

**10.3.4 Petitioners request the Hon'ble Commission to approve the RoE as proposed in the Table above. Any variation shall be claimed at the time of final True-up of the respective years.**

#### 10.4 Provision for Bad & Doubtful Debts

10.4.1 Regulation 37 of Tariff Regulations, 2021 provides the methodology for computation of Provision for Bad & Doubtful Debts, wherein it is stated that Bad & Doubtful Debts shall be allowed to the maximum of 1% of the yearly revenue. Accordingly, the Petitioners have claimed the expenses against bad and doubtful debts as shown in the Table below:

**Table 140: Discom-wise Provision for Bad & Doubtful Debts for FY 2025-26 (Rs. Crores)**

| S. No. | Particulars            | East Discom | Central Discom | West Discom | MP-State |
|--------|------------------------|-------------|----------------|-------------|----------|
| 1      | Bad and Doubtful debts | 2           | 2              | 2           | 6        |

#### 10.5 Research & Development Fund

10.5.1 The Hon'ble Commission in its previous ARR proceedings has allowed R&D Fund of Rs. 2 Crore for each DISCOM. This fund is to be utilised in conducting studies and running pilots, whenever required in areas aimed at enhancing the efficiency of distribution licensees. The emphasis is on utilising the fund strategically to support studies, research and support initiatives that contribute to improvements in technological interventions, operational capabilities and cost savings, etc.

10.5.2 The Petitioners express its gratitude before the Hon'ble Commission for allowing the R&D fund. Research and Development (R&D) funding is essential for distribution licensees as it drives innovation and efficiency, leading to improved reliability and quality of electricity supply, reduced operational costs, and enhanced customer satisfaction. It enables the integration of sustainable practices and renewable energy sources, ensures regulatory compliance, and provides a competitive edge in the evolving energy market. Moreover, R&D fosters safety improvements and future preparedness, contributing to economic growth and the overall sustainability of the electricity distribution network.

10.5.3 However, it is submitted that for any fund to operationalize it is necessary that the recovery of the same is built in tariff. The Petitioner being a regulated entity, can recover only approved expenses from the consumer. Further, considering the current financial condition of the Petitioners where the Licensees are facing cash crunch in managing day-to-day business activity, it has become difficult for them to arrange the required R&D fund on its own.

10.5.4 The Hon'ble Commission would appreciate the fact that as mandated under Section 62 (6) of the Electricity Act, 2003, Distribution Licensee cannot recover any charges / tariff more than that approved by the Commission. Accordingly, it is prayed before the Hon'ble Commission kindly include the expenses towards R&D fund while determining the ARR for the FY 2025-26 and allow its recovery through tariff.

10.5.5 The summary of expenses towards R&D fund as considered by the Petitioners are shown in the Table below:

**Table 141: Summary of Expenditure for R&D Fund claimed for MP-State FY 2025-26 (Rs. Crores)**

| Sr. No   | Particular      | MP -State             |               |
|----------|-----------------|-----------------------|---------------|
|          |                 | Approved in MYT Order | Revised Claim |
| 1        | East Discom     | 0                     | 2             |
| 2        | Central Discom  | 0                     | 2             |
| 3        | West Discom     | 0                     | 2             |
| <b>4</b> | <b>MP-state</b> | <b>0</b>              | <b>6</b>      |

## 10.6 Other Income & Non-Tariff Income

10.6.1 The main components of Non-Tariff Income are Wheeling Charges, Supervision Charges, Sale of Scrap, income from Trading and Miscellaneous Charges from consumers as per Tariff Regulations, 2021 and as per the "Schedule of Miscellaneous and General Charges" under MPERC (Details to be furnished and fee payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004 and amendments issued thereof. The Petitioners have projected their Other Income & Non-Tariff Income for FY 2025-26 based on averaging method over various components of other income. Further the Petitioners have also considered the escalation rate as arrived for escalation of O&M Expenses for the projection of appropriate components of Other Income.

10.6.2 Petitioners further wish to submit that they have not considered deferred income i.e. income booked towards the amortization of assets created through consumer contribution and grants under their claim of Other Income since, the Petitioners have claimed depreciation on net block of assets. Further, in line with the methodology adopted by the Hon'ble Commission in its previous True-up Order of FY 2022-23, Petitioners have not considered the waived off amount by MPPTCL towards liability of wheeling charges on DISCOMs in other income.

10.6.3 Accordingly, the Other Income & Non-Tariff Income is shown below:

**Table 142: Discom-wise Other Income & Non-Tariff Income for FY 2025-26 (Rs. Crores)**

| Particulars  | East Discom   | Central Discom | West Discom   | MP-State      |
|--|---------------|----------------|---------------|---------------|
| Income from Investment, Fixed & Call Deposits            | 53.58         | 59.23          | 75.78         | 188.59        |
| Interest on loans and Advances to staff                  | -             |                | 0.03          | 0.03          |
| Other Income from Trading/Sale of scrap                  | 30.70         | 26.45          | 8.22          | 65.37         |
| Interest on Advances to Suppliers / Contractors          | -             |                | 0.08          | 0.08          |
| Income/Fee/Collection against staff welfare activities   | -             |                | 0.03          | 0.03          |
| Miscellaneous receipts                                   | 45.39         | 40.49          |               | 85.87         |
| Wheeling charges   | -             | -              | 3.75          | 3.75          |
| Liability of wheeling charges towards MPPTCL written off | -             |                |               | -             |
| Supervision charges                                      | 36.27         | 40.32          | 51.53         | 128.12        |
| Recovery from theft                                      | 18.90         |                |               | 18.90         |
| Income from renting                                      | -             |                | 4.89          | 4.89          |
| Other miscellaneous income                               | -             | -              | 121.09        | 121.09        |
| <b>Total</b>   | <b>184.84</b> | <b>166.49</b>  | <b>265.46</b> | <b>616.79</b> |

**Table 143: Summary of Other Income claimed for MP-State for FY 2025-26 (Rs. Crores)**

| Sr. No   | Particular      | MP -State             |               |
|----------|-----------------|-----------------------|---------------|
|          |                 | Approved in MYT Order | Revised Claim |
| 1        | East Discom     | 199.85                | 184.84        |
| 2        | Central Discom  | 234.73                | 166.49        |
| 3        | West Discom     | 151.12                | 265.46        |
| <b>4</b> | <b>MP-state</b> | <b>585.70</b>         | <b>616.79</b> |

**A11: AGGREGATE REVENUE REQUIREMENT****11.1 Aggregate Revenue Requirement of MPPMCL**

The Table below details the Aggregate Revenue Requirement of MPPMCL. The net expenses are included as a part of Power Purchase Costs of Discom's.

**Table 144: Summary of ARR for MPPMCL for FY 2025-26 (Rs. Crore)**

| S. No.    | Particulars  | FY 26<br>(Projected) |
|-----------|--|----------------------|
| I.        | Revenue from operations (including Revenue Subsidy)              |                      |
| II.       | Other income   | 406.41               |
| III.      | Income from other business allocated to Licensed business        |                      |
| <b>IV</b> | <b>Total Revenue (I + II+III)</b>                                | <b>406.41</b>        |
| V         | <b>Expenses:</b>   |                      |
|           | Purchase of Power from MP Genco                                  |                      |
|           | Purchase of Power from Other Sources                             | 460.47               |
|           | Open Access Charges  | 14.02                |
|           | Banking Charges  |                      |
|           | Bank Charges   | 3.91                 |
|           | Depreciation and amortization expenses                           | 10.41                |
|           | Interest & Finance Charges                                       | 0.13                 |
|           | Repairs and Maintenance  | 15.13                |
|           | Employee costs   | 64.80                |
|           | Administration and General expenses                              | 46.51                |
|           | Net prior period credit charges                                  | -                    |
|           | Other Debits, Write-offs   | -                    |
|           | Other Charges  | -                    |
|           | <b>Total Expenses</b>  | <b>615.38</b>        |
| VI        | Profit before exceptional and extraordinary items and tax (IV-V) |                      |
| VII       | Exceptional items  |                      |
| VIII      | <b>Profit before extraordinary items and tax (VI – VII)</b>      | <b>(208.97)</b>      |

**11.2 Impact of MPGENCO True-up and DISCOM's True-up**

- (a) **Impact of MPGENCO's True-up for FY 2023-24:** Based on information gathered from MPGENCO, it is expected that the True up claim for MPGENCO stations the FY 2023-24, would be around Rs. 857 Crores and the same has been considered for determination of revised ARR for MP Discoms for FY 2025-26.
- (b) **Impact of DISCOM's True-up for FY 2023-24:** The Petitioners in line with Regulation 7.2 of Tariff Regulations, 2021 have filed a separate Petition for True-up of ARR for FY 2023-24. The Petitioners have claimed Rs. 4,344.02 Crore towards

True-up of ARR for FY 2023-24. The same has been considered in the revised ARR for FY 2025-26.

### **11.3 Aggregate Revenue Requirement of Discoms**

The summary of the Aggregate Revenue Requirement, Revenue from Sale of Power & Revenue (Gap)/Surplus of the DISCOM's calculated on the basis of provisions of the regulation is detailed in the Table below:

Table 145: Summary of ARR of Discoms for FY 2025-26 (Rs. Crore)

| Sr. no.  | Particular  | Unit           | Revised ARR for FY 2025-26 |               |               |               |
|----------|---|----------------|----------------------------|---------------|---------------|---------------|
|          |   |                | MP State                   | East          | Central       | West          |
| <b>A</b> | <b>Revenue</b>  |                |                            |               |               |               |
| 1        | Revenue from sale of power at current Tariffs                   | Rs Cr          | 54,637                     | 14,860        | 18,262        | 21,514        |
| <b>B</b> | <b>Expenditure</b>  |                |                            |               |               |               |
| 1        | Purchase of Power   | Rs Cr          |                            |               |               |               |
| 2        | MPPMCL Cost   | Rs Cr          | 40,987                     | 9,770         | 12,668        | 18,550        |
| 3        | Inter-State Transmission charges                                | Rs Cr          |                            |               |               |               |
| 4        | Intra-State Transmission (MP Transco) Charges and SLDC Charges  | Rs Cr          | 5,316                      | 1,759         | 1,778         | 1,779         |
| 5        | R&M Expense   | Rs Cr          | 1,203                      | 488           | 388           | 328           |
| 6        | Employee Expenses   | Rs Cr          | 4,164                      | 1,387         | 1,350         | 1,427         |
| 7        | A&G Expense   | Rs Cr          | 476.13                     | 148           | 162           | 166           |
| 8        | Depreciation and Related debits                                 | Rs Cr          | 1,127                      | 434           | 342           | 352           |
| 9        | Interest & Finance Charges                                      | Rs Cr          | 1,349                      | 490           | 602           | 256           |
| 10       | Other Debits, Write-offs (Prior period and bad debts), R&D Fund | Rs Cr          | 12                         | 4             | 4             | 4             |
| 11       | Lease charges for Smart Meters                                  | Rs Cr          | 545                        | 154           | 218           | 172           |
| 12       | <b>Total Expenses</b>   | <b>Rs Cr</b>   | <b>55,179</b>              | <b>14,634</b> | <b>17,512</b> | <b>23,034</b> |
| 13       | RoE   | Rs Cr          | 695                        | 243           | 276           | 176           |
| 14       | <b>Total Expenses Including RoE</b>                             | <b>Rs Cr</b>   | <b>55,874</b>              | <b>14,877</b> | <b>17,788</b> | <b>23,209</b> |
| 15       | Other income  | Rs Cr          | 617                        | 185           | 166           | 265           |
| <b>C</b> | <b>Total ARR</b>  | <b>Rs Cr</b>   | <b>55,257</b>              | <b>14,692</b> | <b>17,621</b> | <b>22,944</b> |
| <b>D</b> | <b>Revenue Gap</b>  | <b>Rs Cr</b>   | <b>620</b>                 | <b>(168)</b>  | <b>(641)</b>  | <b>1,430</b>  |
| 1        | Impact of True Up GENCO for FY 2023-24                          | Rs Cr          | (857)                      | (243)         | (291)         | (323)         |
| 2        | Impact of True Up Transco                                       | Rs Cr          | -                          |               |               |               |
| 3        | Impact of True Up Discoms for FY 2023-24                        | Rs Cr          | 4,344                      | 1,529         | 2,303         | 512           |
| <b>E</b> | <b>Total Revenue Gap (including true up if any)</b>             | <b>Rs Cr</b>   | <b>4,107</b>               | <b>1,117</b>  | <b>1,372</b>  | <b>1,618</b>  |
| <b>F</b> | <b>Total ARR including True Up</b>                              | <b>Rs Cr</b>   | <b>58,744</b>              | <b>15,978</b> | <b>19,634</b> | <b>23,132</b> |
| <b>G</b> | <b>Sales</b>  | <b>MUs</b>     | <b>79,983</b>              | <b>22,299</b> | <b>26,663</b> | <b>31,021</b> |
| <b>H</b> | <b>Average Cost of Supply Including True Up</b>                 | <b>Rs./kWh</b> | <b>7.34</b>                | <b>7.17</b>   | <b>7.36</b>   | <b>7.46</b>   |



## A12: WHEELING CHARGES, CROSS SUBSIDY SURCHARGE AND ADDITIONAL SURCHARGE

### 12.1 Determination of Wheeling Charges

12.1.1 It is submitted that the Regulation 8.11 of the MYT Regulations, 2021 specify allocation matrix for apportioning expenses of DISCOMs into wheeling and supply businesses as follows:

| Particulars   | Wheeling Business | Supply Business |
|---|-------------------|-----------------|
| Operation and Maintenance Expenses                          | 70%               | 30%             |
| Depreciation  | 95%               | 5%              |
| Interest on loan  | 95%               | 5%              |
| Interest on working capital                                 | 10%               | 90%             |
| Return on Equity  | 90%               | 10%             |
| Power purchase cost including transmission and SLDC charges | 0%                | 100%            |

12.1.2 On the basis of the above allocation matrix and ARR projection for FY 2025-26, the expenditure towards wheeling business for all the DISCOMs works out to be Rs. 7,496.92 Crore.

**Table 146: Wheeling ARR for FY 2025-26**

| Particulars                  | FY 2025-26            |                 |
|------------------------------|-----------------------|-----------------|
|                              | ARR excluding PP Cost | Wheeling ARR    |
| O&M Expenses                 | 5,843.40              | 4,090.38        |
| Interest and Finance Charges | 1,789.69              | 1,700.21        |
| Depreciation                 | 1,126.98              | 1,070.63        |
| Interest on Working Capital  | 103.83                | 10.38           |
| Return on Equity             | 694.79                | 625.31          |
| <b>Total</b>                 | <b>9,558.70</b>       | <b>7,496.92</b> |

12.1.3 It is further submitted that the Madhya Pradesh Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewable Sources of Energy) Regulations, 2021 (First Amendment), stipulates that the consumers with a contracted demand or sanctioned load of 100kW or more, excluding captive consumers, are entitled to request green energy from the Distribution Licensee.

12.1.4 Further, the Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Intra-State Open Access in Madhya Pradesh) Regulations, (Revision-I) 2021, as amended, and the Madhya Pradesh Electricity Regulatory Commission (Methodology for determination of Open Access charges and Banking charges for Green Energy Open Access consumers) Regulations, 2023, outline various charges applicable to Green Energy Open Access Consumers, including wheeling charges. In view of the above, the Petitioners have determined wheeling charges for the consumers at 33 kV, 11 kV and LT separately in this Petition.

12.1.5 It is submitted that the Hon'ble Commission in its previous Tariff Order of FY 2024-25 has approved separate wheeling charges for consumers at 33kV, 11kV, and LT levels. In line with the same methodology, the Petitioners have worked out the wheeling cost individually for each relevant category, namely 33kV, 11kV, and LT Lines for the approval of before the Hon'ble Commission.

#### Segregation of costs among voltage levels

12.1.6 It is submitted that the costs of wheeling activity have been distributed among three voltage levels of distribution, i.e., 33 kV, 11kV and LT. Though, the EHT consumers (i.e., at voltages above 33 kV) are consumers of the DISCOMs, they are not directly connected to the distribution system. Certain costs related with metering, billing and collection are associated with EHT consumers.

12.1.7 In order to ascertain the wheeling charges at different voltage levels, it is necessary to have voltage wise allocation of various expenditure of the Discoms. However, at present the Discom do not maintain accounts of their costs, voltage-wise. Similar is the case with other Government-owned distribution licensees operating in most of the Other States.

12.1.8 The Petitioners find that the Hon'ble Commission in its previous Order has adopted the approach of using transformation capacity in MVA at interfaces of 33/11 kV and 11/0.4 kV to segregate the cost of licensees voltage wise. The Petitioners have updated the same methodology as summarised in the Table below:

**Table 147: Voltage level-wise Cost Break-up of Sub transmission & Distribution Lines**

| Voltage level of Lines | East DISCOM (ckt-kms) | Central DISCOM (ckt-kms) | West DISCOM (ckt-kms) | Length of lines at State Level (ckt-kms) | Total Cost of lines (Rs. Crore.) | Per unit cost (Rs. Lakh /ckt-km) |
|------------------------|-----------------------|--------------------------|-----------------------|--|----------------------------------|----------------------------------|
| 33 kV                  | 20,805                | 20,368                   | 20,615                | 61,788                                   | 11,171.27                        | 18.08                            |
| <b>Below 33 kV</b>     |                       |                          |                       |  |                                  |                                  |
| (a) 11 kV              | 1,66,189              | 1,68,782                 | 1,42,993              | 4,77,964                                 | 84,360.65                        | 17.65                            |
| (b) LT                 | 1,46,050              | 1,28,469                 | 1,79,006              | 4,53,525                                 | 46,758.43                        | 10.31                            |
| <b>Sub-total</b>       | <b>3,12,239</b>       | <b>2,97,251</b>          | <b>3,21,999</b>       | <b>9,31,489</b>                          | <b>1,31,119.07</b>               |                                  |
| <b>Total</b>           | <b>3,33,044</b>       | <b>3,17,619</b>          | <b>3,42,614</b>       | <b>9,93,277</b>                          | <b>1,42,290.34</b>               |                                  |

**Table 148: Voltage level-wise cost of Transformer**

| Transformer Voltage Level | East DISCOM (MVA) | Central DISCOM (MVA) | West DISCOM (MVA) | State (MVA)      | Total Cost (Rs. Crore.) | Per unit cost (Rs. Lakh /MVA) |
|---------------------------|-------------------|----------------------|-------------------|------------------|-------------------------|-------------------------------|
| 33/11 kV Transformer      | 11,436.00         | 13,590.00            | 14,552.00         | 39,578.00        | 20,414.33               | 51.58                         |
| 11/0.4 kV Transformer     | 11,400.00         | 19,831.00            | 21,256.00         | 52,487.00        | 21,099.77               | 40.2                          |
| <b>Total</b>              | <b>22,836.00</b>  | <b>33,421.00</b>     | <b>35,808.00</b>  | <b>92,065.00</b> | <b>41,514.11</b>        |                               |

12.1.9 For the purpose of above calculations, the Petitioners have considered data for length of lines and transformation capacity based on the actual addition during FY 2023-24. The per unit cost of Sub transmission & Distribution Lines and transformers are taken as approved by the Hon'ble Commission in previous Tariff Order. Accordingly, the Voltage level-wise Cost Break-up of Sub transmission & Distribution Lines and Transformers are determined by the Petitioners as shown in the Table above.

12.1.10 In order to identify the asset values at different voltage levels, it is necessary to "assign" the interface transformers to the voltage levels. For this exercise, the Petitioners in line with the Hon'ble Commission's methodology have included the distribution transformers (11/0.4 kV) to be a part of the 11 kV network and the power transformers of 33/11 kV to be a part of the 33 kV network. Based on this method, the asset values at different voltage levels works out to be as follows:

**Table 149: Identification of value of network at different voltage level (Rs. Crore)**

| Voltage level of Lines | Cost of Lines (Rs. Crore) | Cost of Transformation (Rs. Crore) | Total Cost (Rs. Crore) |
|------------------------|---------------------------|------------------------------------|------------------------|
| 33 kV                  | 11,171.27                 | 20,414.33                          | 31,585.60              |
| <b>Below 33 kV</b>     |                           |                                    |                        |
| (a) 11 kV              | 84,360.65                 | 21,099.77                          | 1,05,460.42            |
| (b) LT                 | 46,758.43                 |                                    | 46,758.43              |
| <b>Total</b>           | <b>1,42,290.34</b>        | <b>41,514.11</b>                   | <b>1,83,804.45</b>     |

12.1.11 Expenses of wheeling activity are worked out using the asset value ratios as obtained from above, given in the Table below:

**Table 150: Identification of network expenses (wheeling cost) at different voltage levels**

| Voltage level of Lines | Asset Values (Rs. Crore) | Asset Ratios (%) | Total Wheeling Cost (Rs. Crore) | Wheeling Cost (Rs. Crore) |
|------------------------|--------------------------|------------------|---------------------------------|---------------------------|
| 33 kV                  | 31,585.60                | 17.18%           | <b>7,496.92</b>                 | 1,288.30                  |
| Below 33 kV            |                          |                  |                                 |                           |
| (a) 11 kV              | 1,05,460.42              | 57.38%           |                                 | 4,301.46                  |
| (b) LT                 | 46,758.43                | 25.44%           |                                 | 1,907.16                  |
| <b>Total</b>           | <b>1,83,804.45</b>       | <b>100.00%</b>   |                                 | <b>7,496.92</b>           |

#### Sharing of Wheeling costs

12.1.12 The cost of wheeling is again required to be allocated to the users appropriately based on the usage of network at different voltage levels by consumers. Consumers at 33 kV Voltage level uses 33 kV network only while consumers at 11 kV Voltage level use network of 33 kV and 11 kV and LT Consumers use network of 33 kV, 11 kV and LT.

12.1.13 The energy wheeled during the year at different voltage levels are as follows:-

**Table 151: Energy Wheeled at different voltage levels (MU)**

| EHT (400 kV, 220 kV, 132 kV & 66 kV) | 33 kV System | 11 kV    | LT        | State     |
|--------------------------------------|--------------|----------|-----------|-----------|
| 7,767.52                             | 11,172.83    | 1,141.84 | 59,900.33 | 79,982.51 |

12.1.14 The Petitioners have chosen “Energy Wheeled” at different voltage levels as the measure of network usage to allocate the costs as detailed below:

**Table 152: Allocation of wheeling cost over Distribution System Users at 33 kV**

| Particulars   | Reference                 | Unit for item under reference | Quantum/ Amount |
|---|---------------------------|-------------------------------|-----------------|
| Wheeling Cost at 33 kV                                      | A                         | Rs. Crore                     | 1288.30         |
| Sales at 33 kV  | B                         | MU                            | 11,172.76       |
| Total Sales {excluding sales at 132 kV}                     | C                         | MU                            | 72,214.93       |
| Proportion of 33 kV sales to total sales                    | $D=B/C*100$               | %                             | 15.5%           |
| <b>Cost allocation</b>                                      |                           |                               |                 |
| <b>Wheeling cost of 33 kV allocated to 33 kV users only</b> | <b><math>E=A*D</math></b> | <b>Rs. Crore</b>              | <b>199.32</b>   |

**Table 153: Allocation of wheeling cost over Distribution System Users at 11 kV**

| Particulars   | Reference                 | Unit for item under reference | Quantum/ Amount |
|---|---------------------------|-------------------------------|-----------------|
| Wheeling Cost at 33 kV  | A                         | Rs. Crore                     | 1,288.30        |
| Wheeling cost of 33 kV allocated to 33 kV users only              | B                         | Rs. Crore                     | 199.32          |
| Remaining Wheeling Cost of 33kV                                   | $C=A-B$                   | Rs. Crore                     | 1,088.98        |
| Wheeling Cost at 11 kV  | D                         | Rs. Crore                     | 4,301.46        |
| Wheeling Cost at 11 kV along with remaining Wheeling Cost of 33kV | $E=C+D$                   | Rs. Crore                     | 5,390.44        |
| Sales at 11 kV  | F                         | MU                            | 1,141.84        |
| Total Sales {excluding sales at 132 kV}                           | G                         | MU                            | 72,214.93       |
| Proportion of 11 kV sales to total sales                          | H                         | MU                            | 1.58%           |
| <b>Wheeling cost of 11 kV allocated to 11 kV users only</b>       | <b><math>I=E*H</math></b> | <b>Rs. Crore</b>              | <b>85.23</b>    |

12.1.15 The remaining wheeling cost has been allocated to LT consumers. Based on these allocations and considering the consumption at 33 kV, 11 kV and LT the wheeling charges in Rupees per unit has been determined as follows:

**Table 154: Wheeling Charges at different Voltage Levels**

| Voltage     | Wheeling Cost Allocated (Rs. Crore) | Sales (MUs) | Wheeling Charges (Rs. / kWh) |
|-------------|-------------------------------------|-------------|------------------------------|
| 33 kV       | 199.32                              | 11,172.76   | 0.18                         |
| Below 33 kV |                                     |             |                              |
| (a) 11 kV   | 85.23                               | 1,141.84    | 0.75                         |
| (b) LT      | 7,212.36                            | 59,900.33   | 1.20                         |

12.1.16 Applicability of wheeling charges for the Open Access consumers depending on their connectivity shall be governed by MPERC (Terms and Conditions for Intra-State Open Access in Madhya Pradesh) Regulations, 2021 and MPERC (Methodology for determination of Open Access charges and Banking charges for Green Energy Open

Access consumers) Regulations, 2023 and amendments thereof.

## 12.2 Cross Subsidy Surcharge

- 12.2.1 The Licensee submits that the Tariff Policy provides for the determination of cross-subsidy surcharge for various categories of consumers. The Tariff Policy notified by GOI on dated 28th January 2016 prescribes the following formula for determination of cross- subsidy surcharge for various categories of consumers.

*“8.5 Cross-subsidy surcharge and additional surcharge for open access*

*8.5.1 ...*

*....*

***Surcharge formula:***

$$S = T - [C / (1 - L / 100) + D + R]$$

*Where*

*S is the surcharge*

*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.*

*Above formula may not work for all distribution licensees, particularly for those having power deficit, the State Regulatory Commissions, while keeping the overall objectives of the Electricity Act in view, may review and vary the same taking into consideration the different circumstances prevailing in the area of distribution licensee.*

*Provided that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access.*

*Provided further that the Appropriate Commission, in consultation with the Appropriate Government, shall exempt levy of cross subsidy charge on the Railways, as defined in Indian Railways Act, 1989 being a deemed licensee, on electricity purchased for its own consumption.*

*8.5.4 The additional surcharge for obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges.*

8.5.5 Wheeling charges should be determined on the basis of same principles as laid down for intra-state transmission charges and in addition would include average loss compensation of the relevant voltage level.”

- 12.2.2 Accordingly, the cost of supply to the consumer may be computed on the basis of the weighted average cost of power purchase by the Licensee including cost of meeting the Renewable Purchase Obligation (C), applicable transmission and distribution losses (L), Cost of transmission and distribution of electricity (D).
- 12.2.3 The Licensees in subsequent section has determined aforementioned components of Cost of Supply. Depending on the applicability of various charges for each consumer, as specified in MPERC (Terms and Conditions for Intra-State Open Access in Madhya Pradesh) Regulations, 2021 and MPERC (Methodology for determination of Open Access charges and Banking charges for Green Energy Open Access consumers) Regulations, 2023 and amendments thereof, it is required to compute the Cross Subsidy surcharge.
- 12.2.4 The weighted average cost of power purchase by the Licensee including cost of meeting the Renewable Purchase Obligation (C) works out as shown in Table below:

**Table 155: Weighted average cost of power purchase by the Licensee including cost of meeting the Renewable Purchase Obligation**

| Generating Stations | Requirement (MU) | Total cost (Rs. Crore) | Wt. Average rate of power purchase (Rs. /unit) |
|---------------------|------------------|------------------------|--|
| Dispatched          | 99,088.58        | 37,746.27              | <b>3.81</b>                                    |

- 12.2.5 The Tariff Policy prescribes that the Loss level (term ‘L’) should be worked out for each voltage level separately. The Hon’ble Commission in its previous Tariff Order has determined the losses at each level. Considering the revised normative distribution losses as per RDSS trajectory for FY 2025-26, the Petitioners have reworked the losses at different voltages by apportioning the total normative losses of FY 2025-26 in the same loss ratio as approved by the Hon’ble Commission for FY 2024-25.
- 12.2.6 Losses at each voltage level for FY 2025-26 are shown in the Table below:

**Table 156: Voltage-wise losses for FY 2025-26**

| Voltage Level  | FY 2024-25 (Approved Loss Levels) | FY 2025-26 Loss level (L) |
|--|-----------------------------------|---------------------------|
| EHT (transmission system) including External losses* | 3.56%                             | 3.55%                     |
| 33 kV  | 4.65%                             | 4.18%                     |
| 11 kV  | 5.82%                             | 5.24%                     |
| LT   | 6.75%                             | 6.07%                     |

\* EHT Voltage level losses have been considered 3.55% for FY 2025-26

- 12.2.7 The Licensees has uniformly spread cost of transmission over all consumers at each voltage level, as the transmission network is utilized by all the consumers. Therefore, similar to wheeling costs transmission charges for FY 2025-26 are worked out as under:

**Table 157: Transmission Charges in Rs./kWh for FY 2025-26**

| Particulars                           | Unit             | Quantity        |
|---------------------------------------|------------------|-----------------|
| PGCIL Charges                         | Rs. Crore        | 3,240.98        |
| MPPTCL Charges including SLDC Charges | Rs. Crore        | 5,315.90        |
| <b>Total Charges</b>                  | <b>Rs. Crore</b> | <b>8,556.88</b> |
| Units to be handled                   | MU               | 99,088.58       |
| <b>Transmission Charges per unit</b>  | <b>Rs/kWh</b>    | <b>0.86</b>     |

- 12.2.8 The Licensees have considered the Wheeling charges as determined for consumers connected at 33 kV, 11kV and LT, in the above section.
- 12.2.9 Thereafter the licensees have determined the Average Tariff for different categories, from expected revenue for FY 2025-26 as shown in the following table:

**Table 158: Average Billing Rate (ABR) for FY 2025-26 at proposed tariff (Rs. /kWh)**

| Category of consumers  | Average Tariff 'T'<br>(Rs Per Unit) |
|--|-------------------------------------|
| LV-1: Domestic   | 7.04                                |
| LV-2: Non Domestic   | 9.73                                |
| LV-3: Public Water works and Street Light                        | 7.31                                |
| LV-4: LT Industries  | 9.42                                |
| LV-5: Agriculture & allied activities                            | 6.47                                |
| LV-6: E-Vehicle/ E-Rickshaws Charging Stations                   | 7.34                                |
| HV-1: Railway Traction   | 6.50                                |
| HV-2: Coal Mines   | 9.11                                |
| HV-3: HT Industrial, Non-Industrial and Shopping Malls           |                                     |
| <i>HV-3.1: Industrial</i>  | 8.41                                |
| <i>HV-3.2: Non-Industrial</i>                                    | 10.11                               |
| <i>HV-3.3: Shopping Malls</i>                                    | 9.23                                |
| <i>HV-3.4: Power Intensive Industries</i>                        | 6.30                                |
| HV-4: Seasonal & Non Seasonal                                    | 10.78                               |
| HV-5: Irrigation, Public Water Works and Other than Agricultural | 8.84                                |
| HV-6: Bulk Residential Users                                     | 8.31                                |
| HV-7: Synchronization and Start-Up Power                         | 12.48                               |
| HV 8: E-Vehicle/ E-Rickshaws Charging Stations                   | 7.01                                |
| HV 9: Metro Rail   | 8.42                                |

- 12.2.10 As per the MPERC (Terms and Conditions for Intra-State Open Access in Madhya Pradesh) Regulations, 2021 and amendments thereof, the consumers other than Renewable Energy users with contract demand of 1 MW and above are allowed Open Access. These consumers are to be connected at 33 kV or above as per Madhya Pradesh Electricity Supply Code, 2021 as amended from time to time.

- 12.2.11 Further, Renewable Energy Generators and users having capacity of 100 kW or above are also eligible for Open Access, subject to no operational constraints in the Licensee's system as per MPERC (Terms and Conditions for Intra-State Open Access in Madhya Pradesh) Regulations, 2021 and MPERC (Methodology for determination of Open Access charges and Banking charges for Green Energy Open Access consumers) Regulations, 2023 and amendments thereof {hereinafter referred to as MPERC (Intra-State or Green Energy Open Access) Regulations}.
- 12.2.12 In accordance with the above provisions, the total charges (Rs/unit) i.e.  $[C / (1-L/100) + D + R]$  for various LT & HT categories are to be computed as per applicable cost and eligibility as per the MPERC (Intra-State or Green Energy Open Access) Regulations
- 12.2.13 The Cross- Subsidy Surcharge shall be the difference of average tariff (T) and the total charges (Rs/unit) for that particular category at particular voltage level to be computed based on cost component determined above depending upon its applicability as per MPERC (Intra-State or Green Energy Open Access) Regulations. However, Cross-Subsidy surcharge is not to exceed 20% of the average cost of supply for the consumers seeking Open Access as per MYT Regulations, 2021 and amendments thereof. In case where Cross-Subsidy Surcharge, based on above methodology, works out to be negative, the same shall be considered as zero for billing purposes.

#### Illustrations for computation of Cross Subsidy Surcharge

- 12.2.14 Illustration-1: Both Generator and consumer are connected to transmission network (132 kV or above)
- 12.2.15 Illustration-2: Generator is connected to Transmission network (EHT voltages), while the consumer is connected to the distribution network at 33 kV of Distribution Licensee.
- 12.2.16 Illustration-3: Generator is connected to Transmission network, while the consumer is connected to the distribution network at LT of Distribution Licensee.

**Table 159: Illustrations of Computation of Cost for Cross Subsidy Surcharge (Rs. per unit)**

| Illustration | Wt. Average rate of power purchase (Rs. /unit) | Cost of Power grossed up for transmission losses (3.55%) | Cost of Power grossed up for distribution losses (33kV-4.18%) (LT- 15.50%) | Transmission charges (Rs. per unit) | Wheeling charges at 33 kV (Rs. per unit) | Total Cost            |
|--------------|--|--|--|-------------------------------------|--|-----------------------|
|              |  |  |  |                                     |  | $[C/(1-L/100) + D+R]$ |
| 1            | 3.81   | 3.95   | -  | 0.86                                | -  | 4.81                  |
| 2            | 3.81   | 3.95   | 4.12   | 0.86                                | 0.18                                     | 5.16                  |
| 3            | 3.81   | 3.95   | 4.67   | 0.86                                | 1.20                                     | 6.74                  |



**Table 160: Category wise Cross Subsidy Surcharge as per above Illustrations (Rs. Per unit)**

| Category of HT/EHT consumers                                     | Average Tariff 'T' (Rs Per Unit) | Ceiling 20% of AcoS (Rs/Unit) | CSS (Rs/Unit) | Applicable CSS (Rs/Unit) |
|--|----------------------------------|-------------------------------|---------------|--------------------------|
| <b>Illustration 3</b>  |                                  |                               |               |                          |
| LV-1: Domestic   | 7.04                             | 1.47                          | 0.30          | 0.30                     |
| LV-2: Non Domestic   | 9.73                             | 1.47                          | 2.99          | 1.47                     |
| LV-3: Public Water Works & Street Light                          | 7.31                             | 1.47                          | 0.57          | 0.57                     |
| LV-4: LT Industrial  | 9.42                             | 1.47                          | 2.68          | 1.47                     |
| LV 6: E-Vehicle/ E-Rickshaws Charging Stations                   | 7.34                             | 1.47                          | 0.60          | 0.60                     |
| <b>Illustration 1</b>  |                                  |                               |               |                          |
| HV-1: Railway Traction   | 6.50                             | 1.47                          | 1.69          | 1.47                     |
| <b>Illustration 2</b>  |                                  |                               |               |                          |
| HV-2: Coal Mines   | 9.11                             | 1.47                          | 3.95          | 1.47                     |
| HV-3.1: Industrial   | 8.41                             | 1.47                          | 3.25          | 1.47                     |
| HV-3.2: Non Industrial   | 10.11                            | 1.47                          | 4.94          | 1.47                     |
| HV-3.3: Shopping Malls   | 9.23                             | 1.47                          | 4.06          | 1.47                     |
| HV-3.4: Power Intensive Industries                               | 6.30                             | 1.47                          | 1.13          | 1.13                     |
| HV-4: Seasonal & Non Seasonal                                    | 10.78                            | 1.47                          | 5.61          | 1.47                     |
| HV-5: Irrigation, Public Water Works and Other than Agricultural | 8.84                             | 1.47                          | 3.68          | 1.47                     |
| HV-6: Bulk Residential Users                                     | 8.31                             | 1.47                          | 3.14          | 1.47                     |
| HV-7: Synchronization and Start-Up Power                         | 12.48                            | 1.47                          | 7.31          | 1.47                     |
| HV 8: E-Vehicle/ E-Rickshaws Charging Stations                   | 7.01                             | 1.47                          | 1.85          | 1.47                     |
| HV 9: Metro Rail   | 8.42                             | 1.47                          | 3.25          | 1.47                     |

### 12.3 Additional Surcharge

12.3.1 The Petitioners have computed the additional surcharge by considering the weighted average monthly fixed rate of surrendered power, which is based on daily weighted fixed rate of the generating station in the surrendered power. The Petitioner worked-out additional surcharge is shown in the Table below:

**Table 161: Additional Surcharge for FY 2025-26**

| S. No. | Months | Energy entitlement (MU) | Energy Scheduled (MU) | Energy Surrendered (MU) | Effective Fixed Cost Applied (Rs/Unit) | OA Units (MU) | Cost of Backdown Energy Surrendered due to Open Access (Rs. Cr.) |
|--------|--------|-------------------------|-----------------------|-------------------------|--|---------------|--|
| 1      | 2      | 3                       | 4                     | 5=3-4                   | 6                                      | 7             | 8= (7*6/10)  |
| 1      | Sep-23 | 6,548.14                | 5,966.21              | 581.93                  | 1.75                                   | 4.95          | 0.87   |
| 2      | Oct-23 | 7,006.19                | 6,736.11              | 270.09                  | 1.71                                   | 8.96          | 1.53   |
| 3      | Nov-23 | 7,561.40                | 6,943.56              | 617.84                  | 1.55                                   | 10.18         | 1.57   |
| 4      | Dec-23 | 7,668.86                | 6,855.16              | 813.70                  | 1.43                                   | 6.35          | 0.91   |
| 5      | Jan-24 | 7,854.53                | 7,292.65              | 561.88                  | 1.51                                   | 19.71         | 2.98   |
| 6      | Feb-24 | 6,702.70                | 6,260.35              | 442.35                  | 1.40                                   | 16.49         | 2.31   |

| S. No.  | Months | Energy entitlement (MU) | Energy Scheduled (MU) | Energy Surrendered (MU) | Effective Fixed Cost Applied (Rs/Unit) | OA Units (MU) | Cost of Backdown Energy Surrendered due to Open Access (Rs. Cr.) |
|---|--------|-------------------------|-----------------------|-------------------------|--|---------------|--|
| 1   | 2      | 3                       | 4                     | 5=3-4                   | 6                                      | 7             | 8= (7*6/10)  |
| 7   | Mar-24 | 7,879.83                | 6,886.40              | 993.42                  | 1.21                                   | 14.18         | 1.71   |
| 8   | Apr-24 | 7,856.24                | 7,115.04              | 741.20                  | 1.25                                   | 14.78         | 1.84   |
| 9   | May-24 | 8,036.15                | 7,271.33              | 764.82                  | 1.30                                   | 6.89          | 0.90   |
| 10  | Jun-24 | 7,949.51                | 6,978.22              | 971.29                  | 11.57                                  | 0.07          | 0.08   |
| 11  | Jul-24 | 6,623.23                | 6,056.72              | 566.50                  | -                                      | -             | -  |
| 12  | Aug-24 | 5,998.04                | 4,888.99              | 1,109.05                | 1.63                                   | 2.40          | 0.39   |
|   |        | <b>87,684.82</b>        | <b>79,250.74</b>      | <b>8,434.08</b>         |  | <b>104.96</b> | <b>15.10</b>   |
| <b>Additional Surcharge on OA Consumers (Rs./Unit) = (8/7*10)</b> |        |                         |                       |                         |  |               | <b>1.44</b>  |

12.3.2 In view of above, the Petitioners have determined the additional surcharge of **Rs 1.44 per unit** based on the power drawn by the Open Access consumers detailed calculation of which is being submitted in softcopy along with this Petition by the Petitioners.

### **A13: VOLTAGE WISE COST OF SUPPLY**

- 13.1 The Petitioners have worked out indicative category-wise cross subsidy based on voltage-wise cost of supply in spite of constraints in terms of segregation of voltage-wise losses and capital expenditure related costs. The Hon'ble APTEL in its judgement passed in Appeal No. 103 of 2010 and IA Nos. 137 & 138 of 2010 in previous Tariff Orders had concluded that the mandate of the Tariff Policy to limit cross subsidies within (+/-) 20% of the overall average cost of supply can be applied to determine the category wise retail tariff. However, determination of voltage-wise cost of supply is required to evaluate cross subsidies prevalent at various voltages. The voltage-wise cost of supply serves as a guiding tool to gradually reduce cross subsidies at various voltage levels.
- 13.2 Since the requisite data for determination of voltage wise cost of supply is generally not maintained by distribution licensees, the Hon'ble APTEL had further advised that the power purchase cost, which is the major component of the DISCOMs' costs, can be apportioned to different voltage levels in proportion to the sales and losses at the respective voltage levels. As regards the other costs such as Return on Equity, Interest on Loan, depreciation, Interest on Working Capital and O&M costs, etc., these costs can be pooled and apportioned equitably, on pro-rata basis to all voltage levels.
- 13.3 The Petitioners submit that determination of voltage-wise losses requires detailed technical studies of the distribution network which will be conducted within definite time frame. In order to work out category-wise cross subsidy based on voltage-wise cost of supply the Petitioners have attempted to determine the same based on the methodology adopted by the Hon'ble Commission. The voltage-wise cross subsidy so computed is indicative in nature and not accurate, as the base data for the same needs to be worked out based on actuals.
- 13.4 The methodology for determination of voltage-wise cost of supply adopted by the Petitioners is as follows:
1. Voltage-wise cost of supply has been computed for above 33 kV and 33 kV and 11 kV (inclusive of LT) categories only.
  2. Sales as projected for above 33 kV and 33 kV, and 11 kV (inclusive of LT) categories have been considered.
  3. Losses as specified in the MYT Regulations, 2021 and amendments thereof for FY 2025-26 have been considered.
  4. Total losses have been segregated voltage-wise for above 33 kV, 33 kV and 11 kV (inclusive of LT).
  5. The breakup of technical and commercial losses at 11 kV + LT System is not available, 50% of the loss at this voltage level has been assumed as purely technical loss and remaining 50% loss has been assumed as commercial loss which has been loaded to various voltage levels in the proportion of their sales.
  6. Power purchase costs at the DISCOMs periphery for above 33 kV, 33 kV and 11 kV (inclusive of LT) based on the voltage-wise input energy have been considered. All other costs of the DISCOMs are allocated based on the sales to each voltage-level.

7. Voltage-wise cost so derived has been divided by voltage-wise sales for working out the voltage-wise cost of supply.

13.5 Based on the above methodology, the Petitioner has computed the indicative voltage-wise cost of supply and commensurate cross-subsidy as shown in the table below:

**Table 162: Voltage Wise Cost of Supply Calculation for MP State for FY 2025-26**

| Sr. No    | Particulars  | UoM            | EHT System (400 kV, 220 kV & 132 kV) | 33 KV System  | 11 KV + LT System | Total         |
|-----------|--|----------------|--------------------------------------|---------------|-------------------|---------------|
| <b>A</b>  | <b>MP State</b>  |                |                                      |               |                   |               |
| <b>1</b>  | <b>Sales</b>   | <b>MUs</b>     | <b>7,768</b>                         | <b>11,173</b> | <b>61,042</b>     | <b>79,983</b> |
| 2         | Loss %   | %              | 3.55%                                | 4.18%         | 11.31%            | 19.28%        |
| <b>3</b>  | <b>Energy Input</b>  | <b>MUs</b>     | <b>8,054</b>                         | <b>12,090</b> | <b>78,944</b>     | <b>99,089</b> |
| 4         | Energy Lost (Technical up to 33 kV voltage & 11 kV +LT technical and Commercial) | MUs            | 286                                  | 918           | 17,902            |               |
| 5         | Commercial Loss assumed as 50% of 11 kV and LT overall losses                    | MUs            |                                      |               | 8,951             |               |
| 6         | Balance 50% Commercial loss for all voltage in proportion to Sales               | MUs            | 869                                  | 1,250         | 6,831             |               |
| <b>7</b>  | <b>Net Energy Input</b>  | <b>MUs</b>     | <b>8,923</b>                         | <b>13,341</b> | <b>76,825</b>     | <b>99,089</b> |
| 8         | Power Purchase Costs - allocated based on voltage-wise losses                    | Rs Cr          | 4,170                                | 6,234         | 35,899            | 46,303        |
| 9         | Other costs - allocated based on voltage-wise sales                              | Rs Cr          | 1,268                                | 1,824         | 9,966             | 13,058        |
| 10        | Less: Other income - allocated based on voltage-wise sales                       | Rs Cr          | 60                                   | 86            | 471               | 617           |
| <b>11</b> | <b>Total Costs (ARR requirement)</b>   | <b>Rs Cr</b>   | <b>5,378</b>                         | <b>7,972</b>  | <b>45,394</b>     | <b>58,744</b> |
| <b>12</b> | <b>VCoS</b>  | <b>Rs/k Wh</b> | <b>6.92</b>                          | <b>7.14</b>   | <b>7.44</b>       | <b>7.34</b>   |

13.6 Consumer category-wise approximate cross-subsidy, computed based on voltage-wise cost of supply for FY 2025-26 is shown in the Table below:

**Table 163: Cross-subsidy based on voltage-wise cost of supply for FY 2025-26 for MP State**

| Tariff Categories                       | VCoS (Rs./Unit) | Average Billing Rate (Rs./unit) | Ratio of Average Billing Rate to Voltage-Wise Cost of Supply (%) |
|---|-----------------|---------------------------------|--|
| LV-1: Domestic                          | 7.44            | 7.04                            | 95%  |
| LV-2: Non Domestic                      | 7.44            | 9.73                            | 131%   |
| LV-3: Public Water Works & Street Light | 7.44            | 7.31                            | 98%  |

| Tariff Categories  | VCoS (Rs. /Unit) | Average Billing Rate (Rs. /unit) | Ratio of Average Billing Rate to Voltage-Wise Cost of Supply (%) |
|--|------------------|----------------------------------|--|
| LV-4: LT Industrial  | 7.44             | 9.42                             | 127%   |
| LV-5: Agriculture  | 7.44             | 6.47                             | 87%  |
| LV 6: E-Vehicle/ E-Rickshaws Charging Stations                   | 7.44             | 7.34                             | 99%  |
| HV-1: Railway Traction   | 6.92             | 6.50                             | 94%  |
| HV-2: Coal Mines   | 7.02             | 9.11                             | 130%   |
| HV-3.1: Industrial   | 7.07             | 8.41                             | 119%   |
| HV-3.2: Non Industrial   | 7.15             | 10.11                            | 141%   |
| HV-3.3: Shopping Malls   | 7.15             | 9.23                             | 129%   |
| HV-3.4: Power Intensive Industries                               | 7.01             | 6.30                             | 90%  |
| HV-4: Seasonal & Non Seasonal                                    | 7.14             | 10.78                            | 151%   |
| HV-5: Irrigation, Public Water Works and Other than Agricultural | 7.05             | 8.84                             | 125%   |
| HV-6: Bulk Residential Users                                     | 7.18             | 8.31                             | 116%   |
| HV-7: Synchronization and Start-Up Power                         | 7.21             | 12.48                            | 173%   |
| HV 8: E-Vehicle/ E-Rickshaws Charging Stations                   | 7.14             | 7.01                             | 98%  |
| HV 9: Metro Rail   | 6.92             | 8.42                             | 122%   |
| <b>Total</b>   | <b>7.34</b>      | <b>7.34</b>                      | <b>100%</b>  |

13.7 The average cost of supply for FY 2025-26 works out to **Rs. 7.34 per unit**.

13.8 While determining the tariffs for FY 2025-26, the Petitioners have given due consideration to the provision of the Electricity Act, 2003 that consumer tariff should reflect the cost of supply. The average cost of supply for FY 2025-26 works out to Rs. 7.34 per unit as against Rs. 6.90 per unit for FY 2024-25. The Table below shows the cost coverage (Average realization as percentage of Average cost of supply) on account of tariff proposed for FY 2025-26, as compared to the cost coverage approved in the Tariff Order for FY 2024-25:

**Table 164: Comparison of tariff v/s overall average cost of supply**

| Tariff Categories                              | Average Realization as % of Average CoS |                                | Average Billing Rate (ABR) (Rs. /Unit) | Average Cost of Supply (ACoS) (Rs. /Unit) |
|--|---|--------------------------------|--|---|
|  | FY 2024-25                              | FY 2025-26                     |  |   |
|  | (as per Tariff Order)                   | (as proposed in this Petition) |  |   |
| <b>LV- Categories</b>                          |   |                                |  | <b>7.34</b>                               |
| LV-1: Domestic                                 | 97%                                     | 96%                            | 7.04                                   |   |
| LV-2: Non-Domestic                             | 135%                                    | 132%                           | 9.73                                   |   |
| LV-3: Public Water Works & Street Light        | 99%                                     | 100%                           | 7.31                                   |   |
| LV-4: LT Industrial                            | 130%                                    | 128%                           | 9.42                                   |   |
| LV-5: Agriculture                              | 89%                                     | 88%                            | 6.47                                   |   |
| LV-6: E-Vehicle/ E-Rickshaws Charging Stations | 100%                                    | 100%                           | 7.34                                   |   |
| <b>Total LT</b>                                | <b>97%</b>                              | <b>96%</b>                     | <b>7.06</b>                            |   |

| Tariff Categories  | Average Realization as % of Average CoS |                                | Average Billing Rate (ABR) (Rs. /Unit) | Average Cost of Supply (ACoS) (Rs. /Unit) |
|--|---|--------------------------------|--|---|
|  | FY 2024-25                              | FY 2025-26                     |  |   |
|  | (as per Tariff Order)                   | (as proposed in this Petition) |  |   |
| <b>HV- Categories</b>  |   |                                |  |   |
| HV-1: Railway Traction   | 75%                                     | 89%                            | 6.50                                   |   |
| HV-2: Coal Mines   | 124%                                    | 124%                           | 9.11                                   |   |
| HV-3.1: Industrial and Industrial and HV-3.4: Power Intensive Industries | 106%                                    | 107%                           | 7.87                                   |   |
| HV-3.2: Non Industrial and HV-3.3: Shopping Malls                        | 131%                                    | 137%                           | 10.04                                  |   |
| HV-4: Seasonal & Non Seasonal  | 122%                                    | 147%                           | 10.78                                  |   |
| HV-5: Irrigation, Public Water Works and Other than Agricultural         | 114%                                    | 120%                           | 8.84                                   |   |
| HV-6: Bulk Residential Users   | 111%                                    | 113%                           | 8.31                                   |   |
| HV 8: E-Vehicle/ E-Rickshaws Charging Stations                           | 100%                                    | 95%                            | 7.01                                   |   |
| HV 9: Metro Rail   | 122%                                    | 115%                           | 8.42                                   |   |
| <b>HT Total</b>  | <b>109%</b>                             | <b>112%</b>                    | <b>8.20</b>                            |   |
| <b>Total (LT+HT)</b>   | <b>100%</b>                             | <b>100%</b>                    | <b>7.34</b>                            |   |

**A14: TARIFF PROPOSAL FOR FY 2025-26****14.1 Revenue at Current & Proposed Tariffs**

14.1.1 It is submitted that there has not been any substantial tariff hike for the years the past years in the State of Madhya Pradesh which has severely affected the financial health of the Discom's. In FY 2021-22 there was a marginal tariff hike of 0.63% only, whereas in FY 2022-23, FY 2023-24 and FY 2024-25 there was a tariff hike of 2.64%, 1.65% and 0.07% respectively. The Discom's are finding it extremely difficult to sustain its operations at the present tariff levels because of intrinsic rise in expenditure due to inflationary pressures, and consistent rise in power and energy demands, an ambitious normative loss reduction trajectory and benchmarks set by the Hon'ble Commission, and obligations to be met under the policy objectives of the State and Central governments.

14.1.2 As elaborated at different section of this Petitions that due to various reasons beyond the control of the Petitioners the ARR mainly power purchase expenses has increased over the years. Further, considering the impact of past True-up of Discoms and Gencos as available with the Licensee, they have worked out the net ARR for FY 2025-26 as Rs. 58,744 Crore. Considering the sales as estimated for FY 2025-26 and the tariff for different categories as approved for FY 2023-24, the Petitioners have worked out the revenue from existing tariff as Rs. 54,637 Crore for FY 2025-26. Accordingly, there will be a revenue gap of Rs. 4,107 Crore for FY 2025-26.

14.1.3 In order to bridge the revenue gap, it is necessary for the licensee to seek an appropriate hike in the tariff, up to the level as proposed and detailed in this petition.

14.1.4 In view of the above submission, the Petitioners are proposing a hike of around 7.52% for FY 2025-26. The category wise tariff hike has been considered by the Petitioners keeping the mandate to bring the cross subsidy within  $\pm 20\%$  of the average cost of supply for the year. It is submitted that it would just not be possible for the Discom's to maintain its operational viability at the least, without an appropriate hike in the retail tariff sought through this Petition.

14.1.5 A summary of the revenue at current tariff and proposed tariff is given in the Table below:

**Table 165: Summary of proposed tariff for FY 2025-26 (Rs. Crores)**

| Particulars                                       | Unit    | MP State | East   | Central | West   |
|---|---------|----------|--------|---------|--------|
| ARR   | Rs Crs. | 58,744   | 15,978 | 19,634  | 23,132 |
| Revenue at Current Tariffs                        | Rs Crs. | 54,637   | 14,860 | 18,262  | 21,514 |
| Revenue Gap at Current Tariff (Including True-Up) | Rs Crs. | 4,107    | 1,117  | 1,372   | 1,618  |
| Revenue at Proposed Tariffs                       | Rs Crs. | 58,744   | 15,978 | 19,634  | 23,132 |
| Revenue Gap at Proposed Tariff                    | Rs Crs. | 0.00     | 0.00   | 0.00    | 0.00   |

14.1.6 The Table below shows the summary of category-wise revenue at current tariff vis-a-vis proposed tariff along with category-wise average tariff hike as proposed for FY 2025-26:

**Table 166: Category-wise proposed revenue for FY 2025-26 (Rs. Crores)**

| Tariff Category |   | Sale          | Revenue at Current Tariff | Revenue at Proposed Tariff | Additional Revenue at proposed Tariff | Proposed Average increase in Tariff category |
|-----------------|---|---------------|---------------------------|----------------------------|---------------------------------------|--|
|                 |   | MU            | Rs. Cr                    | Rs. Cr                     | Rs. Cr                                | %  |
| LV 1            | Domestic  | 20,527        | 13,458                    | 14,446                     | 988                                   | 7.34%  |
| LV 2            | Non-Domestic  | 5,123         | 4,766                     | 4,985                      | 218                                   | 4.58%  |
| LV 3            | Public Water Works & Street Light                             | 2,103         | 1,434                     | 1,538                      | 104                                   | 7.27%  |
| LV 4            | LT Industrial   | 1,718         | 1,556                     | 1,619                      | 62                                    | 4.00%  |
| LV 5            | Agriculture and Allied Activities                             | 30,425        | 18,174                    | 19,684                     | 1,509                                 | 8.30%  |
| LV 6            | E Vehicle/E-Rickshaws Charging Stations                       | 4.48          | 3.09                      | 3.29                       | 0.2                                   | 6.44%  |
|                 | <b>(LT)</b>   | <b>59,900</b> | <b>39,392</b>             | <b>42,275</b>              | <b>2,883</b>                          | <b>7.32%</b>                                 |
| HV 1            | Railway Traction  | 55            | 33                        | 36                         | 3                                     | 7.52%  |
| HV 2            | Coal Mines  | 587           | 508                       | 535                        | 27                                    | 5.24%  |
| HV 3.1          | Industrial  | 11,245        | 8,712                     | 9,461                      | 749                                   | 8.60%  |
| HV 3.2          | Non-Industrial  | 1,524         | 1,462                     | 1,540                      | 79                                    | 5.38%  |
| HV 3.3          | Shopping Mall   | 132           | 116                       | 122                        | 6                                     | 5.35%  |
| HV 3.4          | Power Intensive Industries                                    | 3,901         | 2,252                     | 2,456                      | 204                                   | 9.06%  |
| HV 4            | Seasonal  | 28            | 30                        | 30                         | 0                                     | 0.00%  |
| HV 5            | Irrigations, Public Water Works and other than Agricultural   | 2,065         | 1,698                     | 1,826                      | 128                                   | 7.53%  |
| HV 6            | Bulk Residential Users  | 443           | 344                       | 368                        | 24                                    | 7.07%  |
| HV 7            | Synchronization of Power for Generators connected to the Grid | 39            | 45                        | 49                         | 4                                     | 7.87%  |
| HV 8            | E Vehicle /E-Rickshaws Charging Stations                      | 41            | 27                        | 28                         | 2                                     | 6.77%  |
| HV 9            | HV-9: Metro Rail  | 21            | 18                        | 18                         | 0                                     | 0.00%  |
|                 | <b>(HT)</b>   | <b>20,082</b> | <b>15,245</b>             | <b>16,469</b>              | <b>1,224</b>                          | <b>8.03%</b>                                 |
|                 | <b>LT+HT</b>  | <b>79,983</b> | <b>54,637</b>             | <b>58,744</b>              | <b>4,107</b>                          | <b>7.52%</b>                                 |

14.1.7 The Discom wise details of revenue at current vis-à-vis revenue at proposed tariff is given below:

**Table 167: Discom-wise proposed revenue for FY 2025-26 (Rs. Crores)**

| Tariff Category/<br>Sub-category |              | MP State                |                          | East Discom             |                          | Central Discom          |                          | West Discom             |                          |
|----------------------------------|--------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|
|                                  |              | Rev. at Current Tariffs | Rev. at Proposed tariffs | Rev. at Current Tariffs | Rev. at Proposed tariffs | Rev. at Current Tariffs | Rev. at Proposed tariffs | Rev. at Current Tariffs | Rev. at Proposed tariffs |
| LV-1                             | Domestic     | 13458                   | 14446                    | 4511                    | 4848                     | 4535                    | 4861                     | 4412                    | 4737                     |
| LV-2                             | Non-Domestic | 4766                    | 4985                     | 1525                    | 1595                     | 1532                    | 1602                     | 1710                    | 1788                     |



| Tariff Category/<br>Sub-category |   | MP State                      |                                | East Discom                   |                                | Central Discom                |                                | West Discom                   |                                 |
|----------------------------------|---|-------------------------------|--------------------------------|-------------------------------|--------------------------------|-------------------------------|--------------------------------|-------------------------------|---------------------------------|
|                                  |   | Rev. at<br>Current<br>Tariffs | Rev. at<br>Proposed<br>tariffs | Rev. at<br>Current<br>Tariffs | Rev. at<br>Proposed<br>tariffs | Rev. at<br>Current<br>Tariffs | Rev. at<br>Proposed<br>tariffs | Rev. at<br>Current<br>Tariffs | Rev. at<br>Propose<br>d tariffs |
| LV-3                             | Public Waterworks & Street Light                      | 1434                          | 1538                           | 382                           | 410                            | 472                           | 507                            | 579                           | 621                             |
| LV-4                             | LT Industry   | 1556                          | 1619                           | 459                           | 477                            | 366                           | 381                            | 731                           | 760                             |
| LV-5                             | Agriculture   | 18174                         | 19684                          | 3877                          | 4199                           | 6839                          | 7408                           | 7458                          | 8077                            |
| LV-6                             | EV Charging   | 3                             | 3                              | 1                             | 1                              | 0                             | 1                              | 2                             | 2                               |
|                                  | <b>LT</b>   | <b>39,392</b>                 | <b>42,275</b>                  | <b>10,755</b>                 | <b>11,529</b>                  | <b>13,746</b>                 | <b>14,759</b>                  | <b>14,892</b>                 | <b>15,986</b>                   |
| HV-1                             | Railway Traction                                      | 33                            | 36                             | 0                             | 0                              | 33                            | 36                             | 0                             | 0                               |
| HV-2                             | HV 2: Coal Mines                                      | 508                           | 535                            | 482                           | 508                            | 26                            | 27                             | 0                             | 0                               |
| HV-3.1                           | Industrial Use  | 8712                          | 9460                           | 1913                          | 2108                           | 2905                          | 3143                           | 3894                          | 4210                            |
| HV-3.2                           | Non-Industrial  | 1462                          | 1540                           | 313                           | 330                            | 551                           | 581                            | 597                           | 630                             |
| HV-3.3                           | Shopping mall   | 116                           | 122                            | 40                            | 42                             | 33                            | 35                             | 43                            | 46                              |
| HV-3.4                           | Power Intensive Industries                            | 2252                          | 2456                           | 880                           | 951                            | 438                           | 484                            | 934                           | 1021                            |
| HV-4                             | Seasonal & Non-Seasonal                               | 30                            | 30                             | 15                            | 15                             | 2                             | 2                              | 14                            | 14                              |
| HV-5                             | PWW Works & Other Agri.                               | 1698                          | 1826                           | 253                           | 272                            | 384                           | 413                            | 1061                          | 1140                            |
| HV-6                             | Bulk Residential Users                                | 344                           | 368                            | 199                           | 212                            | 114                           | 123                            | 31                            | 33                              |
| HV-7                             | RECs/Synchro of power for Generator connected to Grid | 45                            | 49                             | 5                             | 5                              | 5                             | 6                              | 35                            | 37                              |
| HV-8                             | EV Charging   | 27                            | 29                             | 5                             | 5                              | 13                            | 15                             | 8                             | 9                               |
| HV-9                             | Metro Rail  | 18                            | 18                             | 0                             | 0                              | 12                            | 12                             | 6                             | 6                               |
|                                  | <b>HT</b>   | <b>15,245</b>                 | <b>16,469</b>                  | <b>4,105</b>                  | <b>4,448</b>                   | <b>4,517</b>                  | <b>4,875</b>                   | <b>6,623</b>                  | <b>7,146</b>                    |
|                                  | <b>(LT+HT)</b>  | <b>54,637</b>                 | <b>58,744</b>                  | <b>14,860</b>                 | <b>15,978</b>                  | <b>18,262</b>                 | <b>19,634</b>                  | <b>21,514</b>                 | <b>23,132</b>                   |

## 14.2 Salient Features of the Tariff Proposal

14.2.1 In order to meet out the Revenue gap, the licensees have proposed nominal hike in tariff rates along with certain changes in other terms and conditions of LT and HT tariff. The various proposals are being made taking cognizance of the consumer's demand to reduce complexity in Tariff. Further, MoP has issued "Consumer Service Rating Report" for Discoms wherein weightage has been given to number of tariff categories in such a fashion that the Discoms with least number of tariff categories including sub-categories and slab will get highest mark and vice-a-versa. Further, MoP has also issued Electricity (Rights of Consumers) Amendment Rules, 2023 which stipulates provision for Time-of-Day Tariff. Further, the Electricity Rules, 2022 and subsequently the Standard Operating Procedure (SOP) as issued by MoP for subsidy accounting and disbursement requires certain necessary changes in the Tariff Structure of unmetered agricultural consumers. Further, based on energy surplus scenario in the State of MP, some rebates to HV industries were introduced to promote industrialization. As the State

is still expected to be surplus in terms of energy, the rebates are proposed to be continued for FY 2025-26 also. In view of the above, and submissions in the previous chapters of this Petition the required changes have been proposed.

14.2.2 The salient features of the proposed changes are elaborated below:

**1. Simplification of Tariff slabs in LV-1.2 Domestic Tariff:**

**Reasons for proposed changes:** For the purpose of Simplification of Domestic Tariff sub-categories, it is proposed to modify the tariff slab “151 - 300 unit” as “Above 151 units” and removal of “Above 300 units slab”.

**2. Merging of slabs under Tariff Sub-Categories of LV-5**

**Reasons for proposed changes:** For the ease of implementation of provision of the Electricity Rules, 2022 and subsequently the Standard Operating Procedure (SOP) as issued by MoP for subsidy accounting and disbursement, it is proposed to merge the slab under Tariff Sub-Categories of LV-5. The proposed tariff has been worked out by following the revenue neutral approach for revenue from all the slabs in the proposed tariff. The tariff for temporary connections under these categories are proposed @ 1.25 times of the normal tariff under these categories.

**3. Measured Common Billing Norms for unmetered permanent and temporary connections under Agriculture Category**

**Reasons for proposed changes:** In line with the provision of Standard Operating Procedure (SOP) issued by MOP for subsidy accounting and disbursement, billing of unmetered agriculture connections is to be done by measuring the energy at Distribution Transformers (DT) and feeder level through proper metering of DTs/feeders. Therefore, the existing norms will no longer be valid for the purpose of billing. As per the provisions of the SOP it is proposed to calculate common measured norms at circle level which shall be used for the purpose of billing of unmetered permanent and temporary connections under Agriculture Category.

**4. Introducing kVAh billing for HT category:**

**Reasons for proposed changes:** In view of the advantages of kVAh billing for Consumers as well as the Licensee, it is proposed to implement the kVAh billing in HT category. The kVAh billing will also simplify the complex structure of the billing and encompass the automatic penalties and incentives on account of Power Factor of the consumers. kVAh Tariff is being designed for HT consumers considering suitable conversion factor after careful study of tariff neutrality at kVAh & kWh factoring in the existing applicable pf incentives/surcharges.

**5. Continuation of Tariff for supply through DTR meters for cluster of Jhuggi/Jhopadi:**

**Reasons for proposed changes:** The cluster of Jhuggi/Jhopadi consumers meters are installed at DTR locations. Till the time proper electrification of these declared/undeclared illegal colony and meterisation of consumers thereon is achieved it is proposed to continue the tariff category for supply through DTR meters for cluster of Jhuggi/Jhopadi. The tariff for consumers of Cluster of Jhuggi/Jhopadi being supplied through DTR meters is proposed to be kept at a rate lower than the ABR for domestic category i.e. at the landed cost of power at Discom boundary.

**6. Clarification on consideration of Fuel and Power Purchase Adjustment Surcharges (FPPAS) for unmetered temporary agriculture connection:**

**Reasons for proposed changes:** As per existing mechanism, agricultural consumers opting for temporary supply have to pay the charges in advance for three months including the prevailing FPPAS charges. However, in case where the FPPAS charges are revised for the next months, such charges are difficult to recover from the consumers. Hence, to address such practical constraints in recovery of charges on account of revision of FPPAS for unmetered temporary agriculture connections it is proposed to bill Fuel and Power Purchase Cost Adjustment Surcharge (FPPAS) at the rate prevailing as on the date of release of the connection.

**7. Introduction of ToD Tariff for other LT consumers (except agriculture) having sanctioned load/contracted demand more than ten Kilowatt and also for consumers installed with Smart Meters:**

**Reasons for proposed changes:** The Electricity (Rights of Consumers) Amendment Rules, 2023 mandated introduction of the Time-of-Day tariff for Commercial and Industrial consumers having maximum demand more than ten Kilowatt from a date not later than 1<sup>st</sup> April, 2024 and for other consumers except agricultural consumers, the Time of Day tariff shall be made effective not later than 1st April, 2025 and a Time of Day tariff shall be made effective immediately after installation of smart meters, for the consumers with smart meters. Accordingly, it is proposed that the Time-of-Day Rebate and Surcharge as prevailing for LV-2: Non-Domestic and LV-4: LT Industrial Consumers having contract demand exceeding 10 kW shall also be applicable for other LT consumers (except agriculture) having sanctioned load/contracted demand more than ten Kilowatt. For consumers with Smart meters, ToD rebate of 20% on normal rate of energy charge is proposed for energy consumed during the Solar Hours i.e., during 9 AM to 5 PM (Off-peak period).

**8. It is proposed that no ToD rebate be given during 10:00 PM to 6:00 AM as the average cost of power during these hours is comparatively higher and any ToD rebate during these hours will burden the other consumers of Discoms.**

- 9. Green Energy Charges:** In line with the previous submission, the Petitioners for FY 2025-26 have also wish to propose two types of Green Energy Charges/Tariff, i.e., one for the purpose of reducing their carbon footprint and seeking Certification to this effect and other as per MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 for RPO compliance of the consumers.
- 10. Rebate to existing HV 3 category consumers (all sub-categories):** The rebate for incremental consumption for HV -3 category consumers (Industrial, Non-industrial, Shopping Malls and Power Intensive) has been extended at Rs. 1 per unit for the incremental consumption.
- 11. Other rebates for HV-3 category consumers:** The duration of rebate for captive power plant consumers, open access consumers and rebate for conversion of existing LT Industrial/Non-domestic connection to corresponding HT connection has been extended to FY 2025-26. However, as kVAh billing is proposed for HT consumers, the existing provision of PF incentives/rebates and penalties is proposed to be omitted.

**A15: INTRODUCTION TO KVAH BASED BILLING TO HT CONSUMERS**

- 15.1 The Petitioners wish to submit that electrical energy has two components, i.e., Active Energy (kWh) and Reactive Energy (kVARh). The active power also called as real power is consumed and converted into useful work for creating heat, light and motion. The Active power is measured in kilo Watt (kW) and is totalized by the energy meter in kilo watt hour (kWh). Whereas Reactive power is used to provide the electromagnetic / electrostatic field in inductive and capacitive equipment like motors, air conditioners, fans and is measured in kVAR (lag/ lead). Further, the Reactive Power is totalized by the energy meter as kVARh. Vector sum of these two components is called as Apparent Energy & is measured in terms of kVAh.
- 15.2 Both Active (kWh) and Reactive (kVARh) energies are consumed simultaneously. Reactive Energy (kVARh) occupies the capacity of electricity network and reduces the useful capacity of system for generation and distribution & hence its consumption also needs to be billed. The source of most reactive currents is the poor power factor loads (equipment) connected at consumer premises. As these loads are not compensated by appropriate capacitor installation by consumers, utilities are burdened for installation of capacitors.
- 15.3 In the State of Madhya Pradesh, as per existing mechanism the billing of all consumers is done on the basis of active power which is measured in kWh. As far as Reactive power is concerned, the same is governed through Power Factor Incentive and Penalty mainly applicable for LT consumer (other than LV:1 Domestic consumers) and HT consumers.
- 15.4 The Hon'ble Commission vide its Order dated 29<sup>th</sup> June 2005 in Petition No. 03/2005 had introduced the mechanism to incentivize HT and LT consumers if they maintain average monthly power factor above specified percentage and penalize if the average monthly power factor fall below specified percentage. Subsequently, the Hon'ble Commission stringent the norms for power factor incentives and penalties in its subsequent Tariff Orders. Presently, the HT consumers are eligible for incentives if they maintain average monthly power factor above 95 percent and shall be penalize if their average monthly power factor fall below 90 percent. The relevant provision of power factor incentives and penalty from the Tariff Order of FY 2024-25 is as reproduced below:

*“1.9 Power Factor Incentives:**Power factor incentives shall be payable as follows:*

| <i>Average Monthly Power Factor</i> | <i>Percentage incentive payable on billed energy charges on the basis of energy actually consumed</i> |
|-------------------------------------|---|
| <i>96%</i>                          | <i>1.0 (one percent)</i>  |
| <i>97%</i>                          | <i>2.0 (two percent)</i>  |
| <i>98%</i>                          | <i>3.0 (three percent)</i>  |
| <i>99%</i>                          | <i>5.0 (five percent)</i>   |
| <i>100 %</i>                        | <i>7.0 (seven percent)</i>  |

1.15 Power Factor Penalty (For HT consumers other than Railway Traction HV-1)

- (i) *If the average monthly power factor of the consumer falls to 89% or below, the consumer shall be levied a penalty @ 1% (one percent), for each one percent fall in his average monthly power factor below 90 percent, on amount of bill under the head of “Energy Charges”:*
- (ii) *If the average monthly power factor of the consumer falls to 84% or below, the consumer shall be levied a penalty of 5% (five percent) plus @ 2% (two percent) for each one percent fall in his average monthly power factor below 85 percent on the amount of bill under the head of “Energy Charges”. This penalty shall be subject to the condition that overall penalty on account of low power factor does not exceed 35%.*
- (iii) *Should the average monthly power factor fall to below 69% or below, the Distribution Licensee reserves the right to disconnect the consumer’s installation till steps are taken to improve the same to the satisfaction of the Distribution Licensee. This is, however, without prejudice to the levy of penalty charges for low power factor in the event of supply not being disconnected.*
- (iv) *.....”*

15.5 The Petitioners have earlier proposed to implement kVAh billing initially for HT consumers in the previous tariff proceedings. Based on the Portioner’s proposal, the Hon’ble Commission have received mixed response from the stakeholders during the previous Tariff proceedings. Accordingly, the Hon’ble Commission in its previous Order has directed the Petitioners to carry out impact assessment study on transition from kWh billing to kVAh billing and also to conduct consumer awareness programs across the State to explain the concept of kVAh billing and its implications to consumers of relevant categories. The Petitioners have carried consumer awareness program for HT consumers in which Central Discom has conveyed the benefits of kVAh billing via mobile SMS and West Discom has conducted awareness program in various industrial area.

15.6 The Petitioners hereby wish to submit that considering long pending demand of the stakeholders and complying to the directives of the Hon’ble Commission, the kVAh billing may be introduced in the State for HT consumers for FY 2025-26.

**15.7 As the incentives and penalties are inbuilt in the kVAh billing it will reduce the complexities in billing and will encourage the consumers to maintain near unity Power factor to achieve loss reduction, improve system stability, power quality and improve voltage profile.**

15.8 The Petitioners wish to submit that at various levels and platforms, the MP-Discoms shown their readiness for implementation of kVAh billing to HT Consumers, where meters can ready extract data suitable for kVAh billing is available.

15.9 Further, many States have already adopted kVAh billing in India, the details of while are as below:

| Name of State     | Date of Order for kVAh billing |
|-------------------|--------------------------------|
| Himanchal Pradesh | 18.09.2001                     |
| Delhi             | 2001                           |
| Jammu & Kashmir   | 28.03.2007                     |
| Andhra Pradesh    | 30.03.2011                     |
| Haryana           | 25.07.2012                     |
| Uttar Pradesh     | 31.05.2013                     |
| Punjab            | 22.08.2014                     |
| Chhattisgarh      | 23.05.2015                     |
| Bihar             | 21.03.2016                     |
| Maharashtra       | 30.03.2020                     |

15.10 Further, the category wise status of applicability of kVAh billing for various States is tabulated as below:

| Category                    | MH | AP | CG | Delhi | Gujarat | Haryana | UP | Bihar | J&K |
|-----------------------------|----|----|----|-------|---------|---------|----|-------|-----|
| <b>HT Category</b>          |    |    |    |       |         |         |    |       |     |
| Industrial                  | Y  | Y  | Y  | Y     | X       | Y       | Y  | Y     | Y   |
| Commercial                  | Y  | Y  | Y  | Y     | X       | Y       | Y  | Y     | Y   |
| Railways                    | Y  | Y  | Y  | Y     | X       | Y       | Y  | Y     | Y   |
| Agriculture                 | Y  | Y  | Y  | X     | X       | X       | X  | Y     | Y   |
| PWW/LIS                     | Y  | Y  | Y  | Y     | X       | X       | Y  | Y     | Y   |
| Temporary                   | Y  | Y  | Y  | Y     | X       | X       | -  | Y     | Y   |
| Bulk Supply                 | Y  | Y  | Y  | X     | X       | Y       | Y  | Y     | Y   |
| Start Up                    | -  | X  | Y  | X     | X       | X       | Y  | Y     | X   |
| <b>LT Category</b>          |    |    |    |       |         |         |    |       |     |
| Domestic                    | X  | X  | X  | X     | X       | X       | X  | X     | X   |
| Non-Domestic/<br>Commercial | Y  | X  | X  | Y     | X       | Y       | X  | Y     | X   |
| PWW                         | Y  | X  | X  | Y     | X       | X       | X  | X     | X   |
| Agriculture                 | X  | X  | X  | X     | X       | X       | X  | X     | X   |
| Industrial                  | Y  | X  | X  | Y     | X       | Y       | X  | Y     | X   |
| Street Light                | X  | X  | X  | X     | X       | X       | X  | X     | X   |

15.11 Further, the Forum of Regulators (FoR) in its report on “Metering Issues” August,2009, has stated that kVAh billing is the new trend in electricity billing, which is adopted worldwide. In the report they have strongly advocated to adopt kVAh billing in India.

15.12 Based on the above, the Petitioners have proposed to implement kVAh billing, like other States, initially for HT consumers considering higher awareness about advantages of maintaining PF among HT consumer groups.

15.13 While proposing the kVAh billing, i.e., in designing kVAh Tariff, the Petitioners have **adopted the principle of revenue neutrality** so that both the licensee as well as consumers are not burdened unnecessarily. **Tariff determined in kVAh is less than kWh tariff by the average power factor.** The methodology as adopted by the Petitioners are explained in subsequent paras:

**Methodology for kVAh tariff determination:**

- I. A conversion factor has been derived for converting energy charge in Rs./kWh to energy charge in Rs./kVAh for the corresponding power factor.

*Following illustration is given for the purpose of understanding:*

*Let assume,*

*a = energy charge in Rs./kWh*

*b = no. of units billed in kWh*

*pf = average monthly power factor*

*i = percentage power factor incentive or penalty for the given month*

*{“ i ” is positive of penalty and negative for incentive}*

*The Energy Charge for kWh units is therefore = a \* b .....(1)*

*After considering power factor incentive or penalty*

*kWh energy charge payable Rs. = a \* b \* (1+i) ..... (2)*

*Now, the units equivalent to kVAh consumption will be = b/pf ..... (3)*

*The revenue neutralized energy charge in Rs./kVAh corresponding to given power factor shall be: c = (2) / (3)*

*Where c = a \* pf \* (1+i) .....(4)*

*Therefore,*

*Revenue neutralized conversion factor for energy charges in Rs./kWh to energy charges in Rs./ kVAh is say k as under:*

$$k = \frac{c}{a}$$

$$k = pf * (1 + i) \dots\dots\dots(5)$$

**Sample Calculation:**

*Energy charge (Rs./ kWh) = 6.5*

*Average monthly power factor = 98%*



As per the MYT Tariff Order 2022-23, for 98% monthly average power factor an incentive of 3% is given on energy charge.

After substituting above values in eq. (5)

The revenue neutralized conversion factor for converting energy charges in Rs./kWh to energy charges in Rs./kVAh corresponding to 98% power factor is

$$\begin{aligned} &= 0.98*(1-0.03) \\ &= 0.9506 \end{aligned}$$

Accordingly, Energy charges in Rs./kVAh =  $0.9506*6.5$   
= 6.1789

- II. By using the above methodology, revenue neutral conversion factor for each power factor ranging from (1 , 0.99, 0.98.....0.70) is calculated and then energy charges in Rs./kVAh is determined corresponding to each power factor for each sub-category.
- III. Finally, for determining the category wise energy charge in Rs./kVAh, a weighted average of kWh units and energy charge in Rs./kVAh for the full range of power factor is determined.
- IV. After determining the sub-category wise energy charged in Rs./kVAh, sub-category wise conversion factor is determined by taking the ratio of energy charges in Rs./kVAh and energy charges in Rs./kWh of that sub-category.

Following Table summarizes the sample calculation for weighted average energy charges sample categories based on actual data of East, Central and West Discom.

Table 168: Calculation of sub-category wise energy charges in Rs./kVAh as per weighted average cum revenue neutralize method : East Discom

| Power Factor   | % Incentive or Penalty | Revenue neutralize Conversion factor | HV 5.1. A                          |   |                   | HV 5.1. B                          |   |                   |
|--|------------------------|--------------------------------------|------------------------------------|---|-------------------|------------------------------------|---|-------------------|
|  |                        |                                      | Existing Energy Charges in Rs./KWh | Revenue neutralize Energy Charges in Rs./kVAh | Units Sales (kWh) | Existing Energy Charges in Rs./KWh | Revenue neutralize Energy Charges in Rs./kVAh | Units Sales (kWh) |
| pf   | i                      | $k = pf^* (1+i)$                     | a                                  | $c = a*k$                                     | d                 | e                                  | $f = e*k$                                     | g                 |
| 1  | -7%                    | 0.929                                | 6.10                               | 5.67  |                   | 5.96                               | 5.54  | 319070            |
| 0.99   | -5%                    | 0.940                                | 6.10                               | 5.73  |                   | 5.96                               | 5.60  | 3608257           |
| 0.98   | -3%                    | 0.950                                | 6.10                               | 5.80  |                   | 5.96                               | 5.66  | 10773431          |
| 0.97   | -2%                    | 0.950                                | 6.10                               | 5.80  |                   | 5.96                               | 5.66  | 8253108           |
| 0.96   | -1%                    | 0.950                                | 6.10                               | 5.80  | 130656            | 5.96                               | 5.66  | 15872085          |
| 0.95   | 0                      | 0.950                                | 6.10                               | 5.80  | 621261            | 5.96                               | 5.66  | 22980109          |
| 0.94   | 0                      | 0.940                                | 6.10                               | 5.73  | 547485            | 5.96                               | 5.60  | 4997640           |
| 0.93   | 0                      | 0.929                                | 6.10                               | 5.67  |                   | 5.96                               | 5.54  | 38278334          |
| 0.92   | 0                      | 0.920                                | 6.10                               | 5.61  |                   | 5.96                               | 5.48  | 1567866           |
| 0.91   | 0                      | 0.910                                | 6.10                               | 5.55  | 761861            | 5.96                               | 5.42  | 2827279           |
| 0.9  | 0                      | 0.901                                | 6.10                               | 5.49  | 1070190           | 5.96                               | 5.37  | 33692442          |
| 0.89   | 1%                     | 0.899                                | 6.10                               | 5.49  | 958691            | 5.96                               | 5.36  | 9534722           |
| 0.88   | 2%                     | 0.898                                | 6.10                               | 5.48  |                   | 5.96                               | 5.35  | 4841035           |
| 0.87   | 3%                     | 0.896                                | 6.10                               | 5.47  | 469390            | 5.96                               | 5.34  | 2528024           |
| 0.86   | 4%                     | 0.895                                | 6.10                               | 5.46  | 765261            | 5.96                               | 5.33  | 7618340           |
| 0.85   | 5%                     | 0.893                                | 6.10                               | 5.45  |                   | 5.96                               | 5.32  | 6076171           |
| 0.84   | 7%                     | 0.899                                | 6.10                               | 5.49  |                   | 5.96                               | 5.36  | 4067016           |
| 0.83   | 9%                     | 0.905                                | 6.10                               | 5.52  | 808311            | 5.96                               | 5.40  | 789474            |
| 0.82   | 11%                    | 0.910                                | 6.10                               | 5.55  |                   | 5.96                               | 5.42  | 4700527           |
| 0.81   | 13%                    | 0.916                                | 6.10                               | 5.59  | 107547            | 5.96                               | 5.46  | 321193            |
| 0.8  | 15%                    | 0.920                                | 6.10                               | 5.61  | 304111            | 5.96                               | 5.48  | 4793795           |
| 0.79   | 17%                    | 0.925                                | 6.10                               | 5.64  | 547537            | 5.96                               | 5.51  | 1206468           |
| 0.78   | 19%                    | 0.928                                | 6.10                               | 5.66  | 295910            | 5.96                               | 5.53  | 1662935           |
| 0.77   | 21%                    | 0.932                                | 6.10                               | 5.69  | 214755            | 5.96                               | 5.56  | 1334603           |
| 0.76   | 23%                    | 0.935                                | 6.10                               | 5.71  | 78804             | 5.96                               | 5.57  | 825376            |
| 0.75   | 25%                    | 0.937                                | 6.10                               | 5.71  |                   | 5.96                               | 5.58  | 1763815           |
| 0.74   | 27%                    | 0.940                                | 6.10                               | 5.73  | 120407            | 5.96                               | 5.60  |                   |
| 0.73   | 29%                    | 0.941                                | 6.10                               | 5.74  | 829087            | 5.96                               | 5.61  | 178784            |
| 0.72   | 31%                    | 0.943                                | 6.10                               | 5.75  | 27144             | 5.96                               | 5.62  | 965781            |
| 0.71   | 33%                    | 0.944                                | 6.10                               | 5.76  |                   | 5.96                               | 5.63  | 463373            |
| 0.7  | 35%                    | 0.944                                | 6.10                               | 5.76  | 1380907           | 5.96                               | 5.63  | 13402198          |
| <b>Sub category wise energy charges in Rs./ kVAh</b> |                        |                                      |                                    | <b>5.62</b>                                   |                   |                                    | <b>5.52</b>                                   |                   |

Table 169: Calculation of sub-category wise energy charges in Rs./kVAh as per weighted average cum revenue neutralize method : CENTRAL DISCOM

| Power Factor   | % Incentive or Penalty | Revenue neutralize Conversion factor | HV 3.2.A                           |   |                   | HV 3.2.B                           |   |                   |
|--|------------------------|--------------------------------------|------------------------------------|---|-------------------|------------------------------------|---|-------------------|
|  |                        |                                      | Existing Energy Charges in Rs./KWh | Revenue neutralize Energy Charges in Rs./kVAh | Units Sales (kWh) | Existing Energy Charges in Rs./KWh | Revenue neutralize Energy Charges in Rs./kVAh | Units Sales (kWh) |
| pf   | i                      | $k = pf^* (1+i)$                     | a                                  | $c = a*k$                                     | d                 | e                                  | $f = e*k$                                     | g                 |
| 1  | -7%                    | 0.929                                | 6.80                               | 6.32  | 5905649           | 6.55                               | 6.09  | 47460875          |
| 0.99   | -5%                    | 0.940                                | 6.80                               | 6.39  | 23849717          | 6.55                               | 6.16  | 100980422         |
| 0.98   | -3%                    | 0.950                                | 6.80                               | 6.46  | 17728971          | 6.55                               | 6.22  | 78251514          |
| 0.97   | -2%                    | 0.950                                | 6.80                               | 6.46  | 9786704           | 6.55                               | 6.22  | 21331953          |
| 0.96   | -1%                    | 0.950                                | 6.80                               | 6.46  | 7229537           | 6.55                               | 6.22  | 18038212          |
| 0.95   | 0                      | 0.950                                | 6.80                               | 6.46  | 6872319           | 6.55                               | 6.22  | 27875007          |
| 0.94   | 0                      | 0.940                                | 6.80                               | 6.39  | 7124405           | 6.55                               | 6.16  | 33358418          |
| 0.93   | 0                      | 0.929                                | 6.80                               | 6.32  | 6943180           | 6.55                               | 6.09  | 11133281          |
| 0.92   | 0                      | 0.920                                | 6.80                               | 6.26  | 4977733           | 6.55                               | 6.03  | 4431081           |
| 0.91   | 0                      | 0.910                                | 6.80                               | 6.19  | 2978893           | 6.55                               | 5.96  | 4898013           |
| 0.9  | 0                      | 0.901                                | 6.80                               | 6.13  | 1605937           | 6.55                               | 5.90  | 8246079           |
| 0.89   | 1%                     | 0.899                                | 6.80                               | 6.11  | 2326644           | 6.55                               | 5.89  | 6894437           |
| 0.88   | 2%                     | 0.898                                | 6.80                               | 6.10  | 2918298           | 6.55                               | 5.88  | 3193106           |
| 0.87   | 3%                     | 0.896                                | 6.80                               | 6.09  | 1233119           | 6.55                               | 5.87  | 1606372           |
| 0.86   | 4%                     | 0.895                                | 6.80                               | 6.08  | 1139689           | 6.55                               | 5.86  | 2630929           |
| 0.85   | 5%                     | 0.893                                | 6.80                               | 6.07  | 689256            | 6.55                               | 5.85  | 7231191           |
| 0.84   | 7%                     | 0.899                                | 6.80                               | 6.11  | 996839            | 6.55                               | 5.89  | 2834908           |
| 0.83   | 9%                     | 0.905                                | 6.80                               | 6.16  | 343843            | 6.55                               | 5.93  | 1283458           |
| 0.82   | 11%                    | 0.910                                | 6.80                               | 6.19  | 976976            | 6.55                               | 5.96  | 1045528           |
| 0.81   | 13%                    | 0.916                                | 6.80                               | 6.23  | 452778            | 6.55                               | 6.00  | 175171            |
| 0.8  | 15%                    | 0.920                                | 6.80                               | 6.26  | 23323             | 6.55                               | 6.03  | 2048464           |
| 0.79   | 17%                    | 0.925                                | 6.80                               | 6.29  |                   | 6.55                               | 6.06  | 75849             |
| 0.78   | 19%                    | 0.928                                | 6.80                               | 6.31  | 593393            | 6.55                               | 6.08  | 1239604           |
| 0.77   | 21%                    | 0.932                                | 6.80                               | 6.34  | 1213406           | 6.55                               | 6.11  | 2087680           |
| 0.76   | 23%                    | 0.935                                | 6.80                               | 6.36  | 422278            | 6.55                               | 6.13  | 46611             |
| 0.75   | 25%                    | 0.937                                | 6.80                               | 6.37  | 276606            | 6.55                               | 6.14  | 127580            |
| 0.74   | 27%                    | 0.940                                | 6.80                               | 6.39  | 134777            | 6.55                               | 6.16  |                   |
| 0.73   | 29%                    | 0.941                                | 6.80                               | 6.40  | 168289            | 6.55                               | 6.17  | 158662            |
| 0.72   | 31%                    | 0.943                                | 6.80                               | 6.41  | 335854            | 6.55                               | 6.18  | 106872            |
| 0.71   | 33%                    | 0.944                                | 6.80                               | 6.42  | 333419            | 6.55                               | 6.19  | 169740            |
| 0.7  | 35%                    | 0.944                                | 6.80                               | 6.42  | 2055467           | 6.55                               | 6.19  | 3946272           |
| <b>Sub category wise energy charges in Rs./ kVAh</b> |                        |                                      |                                    | <b>6.37</b>                                   |                   |                                    | <b>6.14</b>                                   |                   |

Table 170 : Calculation of sub-category wise energy charges in Rs./kVAh as per weighted average cum revenue neutralize method : WEST DISCOM

| Power Factor   | % Incentive or Penalty | Revenue neutralize Conversion factor | HV 3.1.A                           |   |                   | HV 3.1.B                           |   |                   |
|--|------------------------|--------------------------------------|------------------------------------|---|-------------------|------------------------------------|---|-------------------|
|  |                        |                                      | Existing Energy Charges in Rs./KWh | Revenue neutralize Energy Charges in Rs./kVAh | Units Sales (kWh) | Existing Energy Charges in Rs./KWh | Revenue neutralize Energy Charges in Rs./kVAh | Units Sales (kWh) |
| pf   | i                      | $k = pf * (1+i)$                     | a                                  | $c = a * k$                                   | d                 | e                                  | $f = e * k$                                   | g                 |
| 1  | -7%                    | 0.929                                | 6.30                               | 5.85  | 26208095          | 6.21                               | 5.77  | 1629148039        |
| 0.99   | -5%                    | 0.940                                | 6.30                               | 5.92  | 57075678          | 6.21                               | 5.84  | 651664425         |
| 0.98   | -3%                    | 0.950                                | 6.30                               | 5.99  | 36427167          | 6.21                               | 5.90  | 255993833         |
| 0.97   | -2%                    | 0.950                                | 6.30                               | 5.99  | 25233574          | 6.21                               | 5.90  | 154374361         |
| 0.96   | -1%                    | 0.950                                | 6.30                               | 5.99  | 19031229          | 6.21                               | 5.90  | 104875586         |
| 0.95   | 0                      | 0.950                                | 6.30                               | 5.99  | 15460276          | 6.21                               | 5.90  | 53028726          |
| 0.94   | 0                      | 0.940                                | 6.30                               | 5.92  | 12222536          | 6.21                               | 5.84  | 62859880          |
| 0.93   | 0                      | 0.929                                | 6.30                               | 5.85  | 9953698           | 6.21                               | 5.77  | 37026518          |
| 0.92   | 0                      | 0.920                                | 6.30                               | 5.80  | 10308933          | 6.21                               | 5.72  | 38865085          |
| 0.91   | 0                      | 0.910                                | 6.30                               | 5.73  | 6194351           | 6.21                               | 5.65  | 33956750          |
| 0.9  | 0                      | 0.901                                | 6.30                               | 5.67  | 3773031           | 6.21                               | 5.59  | 17746006          |
| 0.89   | 1%                     | 0.899                                | 6.30                               | 5.67  | 4572468           | 6.21                               | 5.58  | 16774557          |
| 0.88   | 2%                     | 0.898                                | 6.30                               | 5.66  | 3464190           | 6.21                               | 5.57  | 10297420          |
| 0.87   | 3%                     | 0.896                                | 6.30                               | 5.65  | 2141446           | 6.21                               | 5.57  | 8704295           |
| 0.86   | 4%                     | 0.895                                | 6.30                               | 5.64  | 2093409           | 6.21                               | 5.56  | 3040879           |
| 0.85   | 5%                     | 0.893                                | 6.30                               | 5.63  | 2129304           | 6.21                               | 5.55  | 7359151           |
| 0.84   | 7%                     | 0.899                                | 6.30                               | 5.67  | 1654425           | 6.21                               | 5.58  | 8757682           |
| 0.83   | 9%                     | 0.905                                | 6.30                               | 5.70  | 899855            | 6.21                               | 5.62  | 17325302          |
| 0.82   | 11%                    | 0.910                                | 6.30                               | 5.73  | 1426143           | 6.21                               | 5.65  | 3181024           |
| 0.81   | 13%                    | 0.916                                | 6.30                               | 5.77  | 1425057           | 6.21                               | 5.69  | 3170463           |
| 0.8  | 15%                    | 0.920                                | 6.30                               | 5.80  | 959465            | 6.21                               | 5.72  | 2852097           |
| 0.79   | 17%                    | 0.925                                | 6.30                               | 5.83  | 573020            | 6.21                               | 5.74  | 2646388           |
| 0.78   | 19%                    | 0.928                                | 6.30                               | 5.85  | 806666            | 6.21                               | 5.76  | 2572557           |
| 0.77   | 21%                    | 0.932                                | 6.30                               | 5.87  | 654972            | 6.21                               | 5.79  | 1756143           |
| 0.76   | 23%                    | 0.935                                | 6.30                               | 5.89  | 1041394           | 6.21                               | 5.81  | 1248128           |
| 0.75   | 25%                    | 0.937                                | 6.30                               | 5.90  | 402852            | 6.21                               | 5.82  | 1836432           |
| 0.74   | 27%                    | 0.940                                | 6.30                               | 5.92  | 629995            | 6.21                               | 5.84  | 2724960           |
| 0.73   | 29%                    | 0.941                                | 6.30                               | 5.93  | 323436            | 6.21                               | 5.85  | 402173            |
| 0.72   | 31%                    | 0.943                                | 6.30                               | 5.94  | 1221667           | 6.21                               | 5.86  | 1337048           |
| 0.71   | 33%                    | 0.944                                | 6.30                               | 5.95  | 99641             | 6.21                               | 5.86  | 794584            |
| 0.7  | 35%                    | 0.944                                | 6.30                               | 5.95  | 4731213           | 6.21                               | 5.86  | 10035042          |
| <b>Sub category wise energy charges in Rs./ kVAh</b> |                        |                                      |                                    | <b>5.90</b>                                   |                   |                                    | <b>5.80</b>                                   |                   |

- For East Discom, from the above Table 168 the weighted average energy charges for HV 5.1: A is calculated to be Rs. 5.62/kVAh. Accordingly, the conversion factor works out to be 0.921 (i.e., Rs. 5.62 per kVAh/ Rs. 6.10 per kWh). Similarly, the conversion factor for HV 5.1:B works out as 0.926
- Similarly, for Central Discom, from the above Table 169 the weighted average energy charges for HV 3.2:A is calculated to be Rs. 6.37/kVAh. Accordingly, the conversion factor works out to be 0.936 (i.e., Rs. 6.37 per kVAh/ Rs. 6.80 per kWh). Similarly, the conversion factor for HV 3.2:B works out as 0.938
- And for West Discom, from the above Table 170 the weighted average energy charges for HV 3.1:A is calculated to be Rs. 5.90/kVAh. Accordingly, the conversion factor works out to be 0.937 (i.e., Rs. 5.90 per kVAh/ Rs. 6.30 per kWh). Similarly, the conversion factor for HV 3.1:B works out as 0.934

V. Similarly, Energy Charge in Rs./kVAh and conversion factor for each sub-categories for each Discom is determined.

Following Table summarizes the Discom wise conversion factor calculation:

**Table 171 : Discom wise conversion factor for determination of energy charge in Rs./kVAh**

| Tariff sub-category | Existing energy charge in Rs./kWh | East Discom               |                   | West Discom               |                   | Central Discom            |                   |
|---------------------|-----------------------------------|---------------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|
|                     |                                   | Energy Charge in Rs./kVAh | Conversion Factor | Energy Charge in Rs./kVAh | Conversion Factor | Energy Charge in Rs./kVAh | Conversion Factor |
| HV-2.1.A            | 6.65                              | 6.04                      | 0.909             |                           |                   |                           |                   |
| HV-2.1.B            | 6.44                              | 6.03                      | 0.937             |                           |                   | 6.12                      | 0.950             |
| HV-2.1.C            | 6.23                              | 5.92                      | 0.950             |                           |                   |                           |                   |
| HV-3.1.A            | 6.30                              | 5.90                      | 0.936             | 5.90                      | 0.937             | 5.89                      | 0.935             |
| HV-3.1.B            | 6.21                              | 5.81                      | 0.935             | 5.80                      | 0.934             | 5.81                      | 0.935             |
| HV-3.1.C            | 5.86                              | 5.46                      | 0.932             | 5.45                      | 0.931             | 5.46                      | 0.931             |
| HV-3.1.D            | 5.40                              | 5.04                      | 0.934             | 5.02                      | 0.929             |                           |                   |
| HV-3.2.A            | 6.80                              | 6.35                      | 0.934             | 6.37                      | 0.937             | 6.37                      | 0.936             |
| HV-3.2.B            | 6.55                              | 6.12                      | 0.934             | 6.13                      | 0.936             | 6.14                      | 0.938             |
| HV-3.2.C            | 5.95                              |                           |                   | 5.53                      | 0.929             | 5.36                      | 0.901             |
| HV-3.3.A            | 6.75                              | 6.39                      | 0.947             | 6.35                      | 0.940             | 6.33                      | 0.938             |
| HV-3.3.B            | 6.35                              | 5.94                      | 0.935             | 5.96                      | 0.939             | 5.95                      | 0.937             |
| HV-3.4.B            | 5.41                              | 5.07                      | 0.936             | 5.07                      | 0.937             | 5.07                      | 0.936             |
| HV-3.4.C            | 5.41                              | 5.03                      | 0.929             |                           |                   | 5.03                      | 0.929             |
| HV-4.1.A            | 6.02                              | 5.67                      | 0.941             | 5.57                      | 0.926             |                           |                   |
| HV-4.1.B            | 5.83                              | 5.45                      | 0.935             | 5.44                      | 0.933             | 5.34                      | 0.915             |
| HV-5.1.A            | 6.10                              | 5.62                      | 0.921             | 5.60                      | 0.918             | 5.59                      | 0.917             |
| HV-5.1.B            | 5.96                              | 5.52                      | 0.926             | 5.55                      | 0.931             | 5.53                      | 0.928             |
| HV-5.1.C            | 5.56                              |                           |                   | 5.10                      | 0.917             | 5.15                      | 0.926             |
| HV-5.1.D            | 5.56                              |                           |                   | 4.97                      | 0.895             |                           |                   |
| HV-5.2.A            | 6.10                              | 5.60                      | 0.918             | 5.60                      | 0.918             | 5.54                      | 0.907             |
| HV-5.2.B            | 5.96                              | 5.56                      | 0.932             | 5.61                      | 0.941             | 5.62                      | 0.943             |
| HV-6.1.A            | 5.72                              | 5.34                      | 0.934             | 5.40                      | 0.944             | 5.43                      | 0.949             |

| Tariff sub-category                  | Existing energy charge in Rs./kWh | East Discom               |                   | West Discom               |                   | Central Discom            |                   |
|--------------------------------------|-----------------------------------|---------------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|
|                                      |                                   | Energy Charge in Rs./kVAh | Conversion Factor | Energy Charge in Rs./kVAh | Conversion Factor | Energy Charge in Rs./kVAh | Conversion Factor |
| HV-6.1.B                             | 5.52                              | 5.20                      | 0.941             | 5.16                      | 0.935             | 5.20                      | 0.942             |
| HV-6.2.A                             | 5.72                              | 5.26                      | 0.920             | 5.34                      | 0.934             | 5.34                      | 0.933             |
| HV-6.2.B                             | 5.52                              |                           |                   | 5.09                      | 0.923             | 5.17                      | 0.936             |
| HV-7.1.A                             | 10.09                             | 9.53                      | 0.944             | 9.53                      | 0.944             | 9.53                      | 0.944             |
| HV-7.1.B                             | 10.09                             | 9.41                      | 0.933             | 9.48                      | 0.939             | 9.47                      | 0.938             |
| HV-7.1.C                             | 10.09                             | 9.19                      | 0.911             | 9.49                      | 0.941             | 9.44                      | 0.936             |
| HV-7.1.D                             | 10.09                             |                           |                   | 9.45                      | 0.936             |                           |                   |
| HV-8.1.A                             | 6.96                              |                           |                   | 6.51                      | 0.936             |                           |                   |
| HV-8.1.B                             | 6.96                              |                           |                   | 6.53                      | 0.938             |                           |                   |
| HV-9.1.C                             | 5.70                              |                           |                   |                           |                   | 5.38                      | 0.944             |
| Average of conversion factor         |                                   |                           | 0.932             |                           | 0.932             |                           | 0.933             |
| Overall Average of Conversion factor |                                   |                           | 0.932             |                           |                   |                           |                   |

VI. The conversion factor so arrived as per Table above, i.e., 0.932 is then applied to proposed tariff for HT consumers in order to have a proposed kVAh tariff for FY 2025-26.

*Note: For analysis of kVAh billing Petitioners have considered base data of FY 2023-24 billing file of HT consumers of all Discoms. Billing file of HT consumers have sold unit, category of consumers, PF, LF, PF incentive/penalty, Energy charges and other required data.*

15.14 The Petitioners submit that the prime objective of the kVAh billing is to encourage the consumers to maintain near unity Power factor to achieve loss reduction, improve system stability, power quality and improve voltage profile. If in case, the Power Factor is less than unity, the consumption recorded in respect of kVAh would be high compared to kWh consumption. Thus, the kVAh based billing will drive the consumers to reach unity power factor.

15.15 As regard to existing PF incentive and penalty, Petitioners submit that the Hon'ble APTEL in its Appeal No.130 of 2005 has already ruled that ***"kVAh billing which provides inbuilt incentive for the Appellant's category, which will automatically take care of power factor incentive and disincentive for the high and low power factor respectively"***. Hence, it is proposed to withdraw the existing provision of PF incentives and penalties for HT consumers as ultimately, kVAh billing will provide inbuilt incentive which will automatically take care of power factor incentive and disincentive. Petitioners further submit that the consumers who have already spent money to maintain power factor will have an added advantage as they already have the resources to maintain higher power factor which will benefit them in terms of reduced consumption.

**15.16 In view of the submissions in the foregoing paras, it is requested the Hon'ble Commission to approve kVAh based billing for the HT consumers from billing cycle of April FY 2025-26. In view of the proposed kVAh billing, the provision for Power Factor incentive and penalty shall not be applicable for HT consumers. However, the existing provisions for Power Factor incentive and penalty shall continue to be applicable for LT category consumers as per the relevant Orders of the Hon'ble Commission.**

## **A16: GREEN ENERGY TARIFF**

16.1 Similar to its previous proposal for Green Energy Tariff during the ARR proceedings of FY 2024-25, the Petitioners for the ensuing FY 2025-26 have also wish to propose two types of Green Energy Charges/Tariff as summarized below:

- (a) Green Energy Charges and Modalities for consumers availing Green Energy from Distribution Licensee only for the purpose of reducing their carbon footprint and seeking Certification to this effect.
- (b) Tariff for Green Energy and Modalities for consumers availing Green Energy from Distribution Licensee as per MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof.

**(a) Green Energy Charges and Modalities for consumers availing Green Energy from Distribution Licensee only for the purpose of reducing their carbon footprint and seeking Certification to this effect:**

16.2 The modalities under this type of Green Energy Transaction are as under:

**Applicability:**

- 16.3 All consumers shall be eligible for opting RE power for certification purpose on payment of Green Power Tariff.
- 16.4 The Consumer will have option to select the any integer quantum of green power to be purchased in steps of any integer value and going up to 100% of the consumption.
- 16.5 The Consumer will have option to select any integer quantum of green power to be purchased against their consumption and will be permitted to increase their requisition for RE Power in the steps of any integer value against their monthly consumption going upto 100% of their consumption during any billing month.
- 16.6 Such an option will also be available for Open Access consumer for its balance consumption from the Distribution Licensee.
- 16.7 The Distribution Licensee will levy Green Power Tariff only for percentage of consumption opted by the Consumer.
- 16.8 In addition to above, such consumers shall also be permitted to avail green power for any number of days in a billing month subject to meeting consumption criteria as mentioned above.
- 16.9 The consumers shall have to place a requisition for availing power from RE sources with their respective Distribution Licensee.

**Treatment of RPO:**



- 16.10 It is to clarify that the RE power to be supplied by the Petitioners to consumers availing Green Energy for the purpose of reducing their carbon footprint and seeking Certification **shall be considered towards RPO compliance of the Petitioners only** and shall not be considered for fulfilment of RPO for obligated entities/consumers.
- 16.11 If the consumer is also an obligated entity, then he may make its own arrangement or submit requisition to Distribution Licensee for procuring RE power from Distribution Licensee for the purpose of meeting his RPO compliance as per MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof, for which the tariff has been proposed separately as discussed in the subsequent paras of this Petition.

### Green Energy Charges:

- 16.12 The Petitioners have calculated Green Energy Charges for the consumers who wishes to procure RE Power for the purpose of reducing their carbon footprint and seeking Certification to this effect as the difference in weighted average rate of RE power and weighted average rate of Energy charge (Variable Charges) of Non-RE sources as shown in the following Table below:

Table 172: Green Energy Charges for certification purpose for FY 2025-26

| RE Power Procurement for the Period FY 2025-26 |        |         | Non-RE Power Procurement (Only Variable) for the Period FY 2025-26 |        |         | Difference between RE & Non-RE Power | Claimed Green Energy Tariff |
|--|--------|---------|--|--------|---------|--------------------------------------|-----------------------------|
| MU   | Rs. Cr | Rs/Unit | MU   | Rs. Cr | Rs/Unit | Rs/Unit                              | Rs/Unit                     |
| A  | B      | C       | D  | E      | F       | G = (C – F)                          | H                           |
| 25,808   | 7,788  | 3.02    | 73,281   | 18,527 | 2.53    | 0.49                                 | 0.49                        |

- 16.13 **The above Green Energy Tariff shall be over and above the existing energy charges applicable for different categories of consumers. Also, in addition to above Green Energy Tariff, the Demand Charges/Fixed Charges or any other charges as being approved by the Hon’ble Commission for FY 2025-26 shall also be applicable to the respective categories of consumer.**

**(b) Tariff for Green Energy and Modalities for consumers availing Green Energy from Distribution Licensee as per MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof:**

- 16.14 It is submitted that in line with the Electricity (Promoting Renewable Energy through Green Energy Open Access) Rules, 2022 dated 06th June 2022 and as per the Regulation 3.8A of the First Amendment to Madhya Pradesh Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewable Sources of Energy), (Revision-II), Regulations, 2021 (First Amendment), {ARG-33(II)(i) of 2023} dated 20th January 2023, any entity, whether obligated or not, may elect to generate, purchase and consume renewable energy as per their requirements by one or more of the following

methods:

- (a) Own Generation from renewable energy sources
- (b) By procuring Renewable Energy through Open Access from any Developer either directly or through a trading licensee or through power markets.
- (c) By requisition from Distribution Licensee

16.15 The relevant clause from the said MPERC first amendment read with second amendment to (Cogeneration and Generation of Electricity from Renewable Sources of Energy), (Revision-II), Regulations, 2021 is as reproduced below:

***“3.8(A). Any entity, whether obligated or not may elect to generate, purchase and consume renewable energy as per their requirements by one or more of the following methods: -***

.....

.....

***(c) By requisition from distribution licensee –***

- i. Any consumer may elect to purchase green energy either upto a certain percentage of the consumption or its entire consumption and they may place a requisition for this with their distribution licensee, which shall procure such quantity of green energy and supply it and the consumer shall have the flexibility to give separate requisition for solar and non-solar;*
- ii. The consumer may purchase on a voluntary basis, more renewable energy, than he is obligated to do and for ease of implementation, this may be in steps of Twenty five per cent and going up to Hundred per cent;*
- iii. The tariff for the green energy shall be determined separately by the Appropriate Commission, which shall comprise of the average pooled power purchase cost of the renewable energy, cross-subsidy charges if any, and service charges covering the prudent cost of the distribution licensee for providing the green energy;*
- iv. Any requisition for green energy from a distribution licensee shall be for a minimum period of one year;*
- v. The quantum of green energy shall be pre-specified for at least one year;*
- vi. The green energy purchased from distribution licensee or from Renewable Energy sources other than distribution licensee in excess of Renewable Purchase Obligation of obligated entity shall be counted towards Renewable Purchase Obligation compliance of the distribution licensee;*
- vii. The Accounting of renewable energy supplied at distribution licensee level shall be on a monthly basis;" {Emphasis Added}*

16.16 In view of the above, the Petitioners have proposed the Green Energy Tariff for an entity towards fulfilment of their RPO obligations in this section. The modalities for such Green Energy Transaction are specified in the subsequent paras of this Petition.

**Applicability:**

16.17 All consumer having contracted demand or sanctioned load of 100 kW and above shall be eligible for opting RE power for RPO compliance in accordance with the provisions of Regulation 3.8A(c) of the MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and its amendment thereof; on payment of Green Power Tariff as proposed in this section.

16.18 Such Consumers will have option to select the quantum of green power to be purchased from Distribution Licensee in steps of 25% and going up to 100% of the consumption. Further, the consumers on a voluntary basis may place requisition for more RE power beyond the renewable purchase obligation of the consumers.

16.19 As per Regulation 3.8 (A)(C) (iv) and (v) of MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof any requisition for green energy from a Distribution Licensee shall be for a minimum period of one year and the quantum of green energy shall be pre-specified for at least one year.

16.20 Such an option will also be available for Open Access consumer for its balance consumption from the Distribution Licensee.

16.21 The Distribution Licensee will levy Green Power Tariff only for percentage of consumption opted by the Consumer.

16.22 This tariff will be applicable to the consumers subject to completion of the process of procurement of power and execution of relevant PPAs/Agreements.

**Treatment of RPO:**

16.23 In case of an obligated Entity, the Green Energy purchased from Distribution Licensees shall be first considered to meet the Renewable Power Obligation of the obligated entity.

16.24 Further, as per Regulation 3.8 (A)(c) (vi) and (vii) of MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof, the green energy purchased from Distribution Licensee or from Renewable Energy sources other than Distribution Licensee in excess of Renewable Purchase Obligation of obligated entity shall be counted towards Renewable Purchase Obligation compliance of the Distribution Licensee.

16.25 In case the consumer is not an obligated entity and places requisition under Regulation 3.8 (A)(c) (vi) and (vii) of MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof; the green energy purchased from Distribution Licensee shall be counted towards Renewable Purchase Obligation compliance of the Distribution Licensee.

### Green Energy Charges:

16.26 As per Regulation 3.8(A)(c)(iii) of the first amendment to MPERC Cogen Regulations, 2021 and Clause 4 (C) (c) of Rules, 2022, the component for Green Energy Tariff for RPO obligation of an entity shall include:

- (A) Average Pooled Power Purchase Cost of RE
- (B) Cross Subsidy Charges, if any and
- (C) Service Charge covering prudent cost of distribution licensee for providing Green Energy

16.27 In line with the existing approach, instead of determining separate category wise Tariff for Green Energy for consumers purchasing Green Energy from DISCOMs, the Petitioners have determined the Green Energy Charges for such consumers based on the incremental cost basis for availing RE power from Wind, HPO and Others which shall be applicable to consumers over and above the normal tariff of the respective category as per the provisions of Regulations.

16.28 It is to be submitted that the Petitioners have adopted the same approach as adopted by the Hon'ble Commission in its previous Tariff Order as under:

- (a) The Average Pooled Power purchase cost of RE sources (Wind, HPO and Others,) and its contribution in Average Cost of Supply has been worked out separately considering the normative losses, Intra-State Transmission losses and Inter and Intra State Transmission Charges as shown in the Table below:

**Table 173: Effective Cost of Pooled Power Purchase of RE sources for FY 2025-26**

| Particulars  | Units          | Wind        | HPO         | Others      |
|--|----------------|-------------|-------------|-------------|
| Power Purchase Cost of RE Sources                                  | Rs. Crore      | 931         | 264         | 6592        |
| Quantum of RE Source   | MUs            | 3229        | 508         | 22071       |
| <b>Weighted Average Rate of RE Sources</b>                         | <b>Rs./kWh</b> | <b>2.88</b> | <b>5.21</b> | <b>2.99</b> |
| Distribution loss  | %              | 15.50%      | 15.50%      | 15.50%      |
| RE Source Rate after considering Distribution loss                 | Rs./kWh        | 3.41        | 6.16        | 3.53        |
| Intra-State Transmission loss                                      | %              | 2.61%       | 2.61%       | 2.61%       |
| RE Source Rate after Considering Intra-State Transmission loss     | Rs./kWh        | 3.51        | 6.33        | 3.63        |
| Inter and Intra – State Transmission Charges                       | Rs./kWh        | 0.86        | 0.86        | 0.86        |
| <b>Contribution of Pooled Power Purchase of RE sources in ACOS</b> | <b>Rs./kWh</b> | <b>4.37</b> | <b>7.19</b> | <b>4.49</b> |

- (b) In order to determine the Cross Subsidy Charges, the difference between ACoS and ABR of respective tariff categories have been considered.
- (c) Services Charges pertains to the cost of distribution licensee other than the cost associated for purchase of power (i.e Other ARR components) and the fixed cost of power purchase including transmission charges as the power purchase from Renewable Energy is at single part tariff only. Hence, it is important to consider the fixed cost of power purchase also while determining the Service Charges of Distribution Licensee.
- (d) In the Average Cost of Supply determined by the Petitioners, the contribution of other components of ARR excluding power purchase cost works out to be Rs 1.50/kWh (i.e Rs. 12,033 Crore of Other ARR Components / Sales of 79,983 MU\*10) and the same is considered as Service Charges covering prudent cost of distribution licensee for supplying power to the consumers. In case Distribution Licensees procure more power from Renewable Energy sources to meet the requisitions of consumers opting for procuring RE power, the thermal capacity contracted by the Distribution Licensees will become stranded and hence the fixed cost due to stranded power also needs to be considered as part of Service Charges of Distribution Licensee for providing Green Energy, which works out to Rs.1.50/kWh (i.e Rs. 11,961 Crore as Fixed Cost of Power Purchase /Sales of 79,983 MU\*10).
- (e) Based on the above, incremental Green Energy Charges has been determined (i.e Green Energy Tariff applicable minus ABR applicable)

16.29 Accordingly, incremental Green Energy Charges for different RE sources and tariff categories computed is given below:

**Table 174 : Category wise Incremental Green Energy Charges for FY 2025-26**

| Category of consumers  | Effective Cost of Pooled Power Purchase Cost of RE (Rs/kWh) |      |       | ABR (Rs/kWh) | Cross Subsidy (Rs/kWh) | Services Charges (Rs/kWh)                                   |                      | Green Energy Tariff Applicable (Rs/kWh) |           |           | Incremental Green Energy Charges (Rs/kWh) |       |       |
|--|---|------|-------|--------------|------------------------|---|----------------------|---|-----------|-----------|---|-------|-------|
|  | Others  | Wind | Hydro |              |                        | Fixed Cost of Power Purchase including Transmission Charges | Other ARR Components | Other                                   | Wind      | Hydro     | Other                                     | Wind  | Hydro |
| A  | B   | C    | D     | E            | F                      | G   | H                    | I=B+F+G+H                               | J=C+F+G+H | K=D+F+G+H | L=I-E                                     | M=J-E | N=K-E |
| LV-2: Non Domestic   | 4.49  | 4.37 | 7.19  | 9.73         | 2.39                   | 1.50  | 1.56                 | 9.93                                    | 9.81      | 12.63     | 0.20                                      | 0.07  | 2.90  |
| LV-3: Public Water Works   |   |      |       | 7.31         | (0.03)                 |   |                      | 7.51                                    | 7.39      | 10.21     |   |       |       |
| LV-4: LT Industries  |   |      |       | 9.42         | 2.08                   |   |                      | 9.62                                    | 9.50      | 12.32     |   |       |       |
| LV-5: Agriculture & allied activities                            |   |      |       | 6.47         | (0.88)                 |   |                      | 6.67                                    | 6.54      | 9.37      |   |       |       |
| LV-6: E-Vehicle/ E-Rickshaws Charging Stations                   |   |      |       | 7.34         | 0.00                   |   |                      | 7.54                                    | 7.42      | 10.24     |   |       |       |
| HV-1: Railway Traction   |   |      |       | 6.50         | (0.84)                 |   |                      | 6.70                                    | 6.58      | 9.40      |   |       |       |
| HV-2: Coal Mines   |   |      |       | 9.11         | 1.77                   |   |                      | 9.31                                    | 9.19      | 12.01     |   |       |       |
| HV-3: HT Industrial, Non-Industrial and Shopping Malls           |   |      |       | 7.46         | 0.12                   |   |                      | 7.66                                    | 7.54      | 10.36     |   |       |       |
| HV-4: Seasonal & Non Seasonal                                    |   |      |       | 10.78        | 3.43                   |   |                      | 10.98                                   | 10.85     | 13.68     |   |       |       |
| HV-5: Irrigation, Public Water Works and Other than Agricultural |   |      |       | 8.22         | 0.88                   |   |                      | 8.42                                    | 8.30      | 11.12     |   |       |       |
| HV-6: Bulk Residential Users                                     |   |      |       | 8.31         | 0.96                   |   |                      | 8.51                                    | 8.38      | 11.21     |   |       |       |
| HV-7: Synchronization and Start- Up Power                        |   |      |       | 12.48        | 5.13                   |   |                      | 12.68                                   | 12.55     | 15.37     |   |       |       |
| HV 8: E-Vehicle/ E-Rickshaws Charging Stations                   |   |      |       | 7.01         | (0.33)                 |   |                      | 7.21                                    | 7.08      | 9.91      |   |       |       |
| HV 9: Metro Rail   |   |      |       | 8.42         | 1.07                   |   |                      | 8.62                                    | 8.49      | 11.32     |   |       |       |

### Summary of Green Energy Charges

16.30 In view of the above, the summary of Green Energy Charges determined for consumers availing Green Energy from Distribution Licensee only for the purpose of reducing their carbon footprint and seeking Certification to this effect and for consumers availing Green Energy from Distribution Licensee as per MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof for FY 2025-26 are as follows:

**Table 175: Effective Cost of Pooled Power Purchase of RE sources for FY 2025-26**

| Particulars   | Incremental Rate (Rs./kWh) | Incremental Rate (Rs./kWh) |      |        |
|---|----------------------------|----------------------------|------|--------|
|   |                            | Wind                       | HPO  | Others |
| Green Energy Charges only for Certification Purpose | 0.49                       | -                          | -    | -      |
| Green Energy Charges for RPO Obligation             | -                          | 0.07                       | 2.90 | 0.20   |

16.31 Further, the Green Energy Charges shall be over and above the existing fixed and energy charges applicable for different categories of consumers. Also, in addition to above Green Energy Charges, Demand Charges/Fixed Charges or any other charges as being approved by the Commission for FY 2025-26 shall also be applicable to the respective categories of consumer.

## **A17: INTRODUCTION OF TIME-OF-DAY TARIFF (TOD) FOR OTHER LT CATEGORIES AND REVISION OF TOD REBATE FOR HT CONSUMERS**

17.1 The MoP vide its notification dated 14 June 2023 has issued the Electricity (Rights of Consumers) Amendment Rules, 2023 wherein; it has stipulated various provision for Time of Day Tariff as extracted below:

*"3. In the principal rules, after rule 8, the following rules shall be inserted, namely:-*

*(8A) Time of Day Tariff.-The Time of Day tariff for Commercial and Industrial consumers having maximum demand more than ten Kilowatt shall be made effective from a date not later than 1st April, 2024 and for other consumers except agricultural consumers, the Time of Day tariff shall be made effective not later than 1st April, 2025 and a Time of Day tariff shall be made effective immediately after installation of smart meters, for the consumers with smart meters.*

*Provided that, the Time of Day Tariff specified by the State Commission for Commercial and Industrial consumers during peak period of the day shall not be less than 1.20 times the normal tariff and for other consumers, it shall not be less than 1.10 times the normal tariff:*

*Provided further that, tariff for solar hours of the day, specified by the State Commission shall be atleast twenty percent less than the normal tariff for that category of consumers:*

*Provided also that the Time of Day Tariff shall be applicable on energy charge component of the normal tariff:*

*Provided also that the duration of peak hours shall not be more than solar hours as notified by the State Commission or State Load Despatch Centre.*

***Explanation:-** For the purposes of this rule, the expression "solar hours" means the duration of eight hours in a day as specified by the State Commission."  
{Emphasis Added}*

17.2 Taking cognizance of the above, the Petitioners in their previous Tariff Petition for FY 2024-25 have proposed to introduce the Time-of-Day Tariff for consumer categories LV-2: Non-Domestic and LV-4: LT Industrial Consumers having contract demand exceeding 10 kW, which was accepted and approved by the Hon'ble Commission in its Tariff Order for FY 2024-25.

17.3 The said Rules further mandates that for other consumers except agricultural consumers, the Time-of-Day tariff shall be made effective not later than **1<sup>st</sup> April, 2025** and a Time of Day tariff shall be made effective immediately after installation of smart meters, for the consumers with smart meters.



17.4 In view of the above, **the Petitioners wish to introduce Time of Day tariff for consumers having contract demand exceeding 10 kW and covered under other LV categories (except agriculture)**. The TOD tariff for above categories is proposed to be applicable from the billing month of April, 2025 wherein the Rebate/Surcharge proposed are as given below:-

- a) Rebate of 20% on normal rate of energy charge shall be applicable for energy consumed during the Solar Hours i.e., during 9 AM to 5 PM (Off-peak period) and;
- b) Surcharge of 20% on normal rate of energy charge shall be applicable for energy consumed during the Peak period i.e., during 6 AM to 9 AM and 5 PM to 10 PM.

17.5 In case of consumers with Smart Meters, the Petitioners propose to not levy any TOD surcharge during peak period. The intention of the Petitioners here is incentivize the adoption of smart meters, encouraging the transition of more and more consumers from traditional metering systems. With smart meters, consumers can better manage their energy usage during peak and solar periods, ultimately leading to more balanced load management and reduced strain on the grid.

17.6 **Accordingly, for consumers with Smart Meters following TOD Rebate is proposed:**

- a) Rebate of 20% on normal rate of energy charge shall be applicable for energy consumed during the Solar Hours i.e., during 9 AM to 5 PM (Off-peak period)

17.7 **The Petitioners, accordingly, request the Hon'ble Commission to approve the proposal regarding introduction of ToD tariff for consumers under other LT categories (except agriculture) having contract demand exceeding 10 kW and consumers with Smart Meters in line with the provisions of Electricity (Rights of Consumers) Amendment Rules, 2023 as proposed in this Petition.**

**Revision in ToD Rebate for HT Consumers:**

17.8 Further, it is submitted the Petitioners as per the existing ToD Rebate framework for HT Consumers, the ToD Rebate @10% on normal rate of energy charges is being allowed from 10 PM to 6 AM next day. To analyse the impact of aforesaid rebate on power purchaser the Petitioners have undertaken the detailed analysis of block wise power purchase profile during the previous financial year, i.e., FY 2022-23. As per the analysis it was observed that:

- (a) The per unit actual power procurement cost during the Non-Solar Hours is higher i.e., mainly during which the ToD Rebate is being provided as per existing approved structure;
- (b) The per unit actual power procurement cost during the Solar Hours is lower wherein normal energy charges are applicable;
- (c) The per unit power procurement cost as per IEX data also shows that cost is lower

during Solar Hours and it is higher during Non-Solar hours;

17.9 In view of above, it was observed the impact of higher power purchase price on account of ToD Rebate being offered during above mentioned hours is getting socialize on other consumers of Discoms (impact is falling on all LT consumer and other HT consumers for which ToD rebate is not applicable during night hours). Therefore, following revision is proposed for ToD Rebate/Surcharge structure applicable for HT Categories:

**Table 176: Revised ToD Rebate Structure as proposed for HT Categories for FY 2025-26**

| Sr. No | Peak / Off-peak Hrs                          | Surcharge / Rebate on energy charges on energy consumed during the corresponding period                      |  |
|--------|--|--|--|
|        |  | Existing   | Proposed   |
| 1      | Peak hours (6 AM to 9 AM and 5 PM to 10 PM ) | Surcharge of 20% on normal rate of energy charge shall be applicable for energy consumed during this period. | Surcharge of 20% on normal rate of energy charge shall be applicable for energy consumed during this period. |
| 2      | Off peak /Solar hours (9 AM to 5 PM)         | Rebate of 20% on normal rate of energy charge shall be applicable for energy consumed during this period.    | Rebate of 20% on normal rate of energy charge shall be applicable for energy consumed during this period.    |
| 3      | Normal hours (10 PM to 6 AM next day)        | Rebate of 10% on normal rate of energy charge shall be applicable for energy consumed during this period.    | Normal rate of energy charge shall be applicable for energy consumed during this period.                     |

## **A18: RECOVERY OF BACKLOG RPO COST**

- 18.1 The Petitioners submit that despite of various sincere efforts undertaken to achieve the year-wise RPO Target as specified by the Hon'ble Commission under its (Cogeneration and Generation of Electricity from Renewable Sources of Energy) Regulations, the Petitioners were not able fulfill their RPO obligation for FY 2020-21, FY 2021-22, FY 2022-23 as well as for FY 2023-24.
- 18.2 The Hon'ble Commission would appreciate that the shortfalls in achieving the RPO Targets for the respective years have generally been due to the reasons beyond the control of the Petitioners as such abandonment / delay in scheduled commissioning of the projects by the developers, variation from existing sources of generation due to variable nature of RE power and also that generation of hydel power depends on rainfall and extreme weather conditions.
- 18.3 The status of RPO achieved and the deficit against the RPO target for the respective years along with reasons for shortfalls, as a matter of regulatory requirement, was already communicated by the Petitioners to the Hon'ble Commission. The Hon'ble Commission vide its past Orders against RPO compliance of respective years has directed the Petitioners to deposit the amount equivalent to the deficit in fulfillment of RPO targets in a separate fund, however, no source of recovery has been provided by the Hon'ble Commission.
- 18.4 The Petitioners vide its previous responses and also in previous ARR proceedings submitted before the Hon'ble Commission that Petitioners being regulated entity, can recover only approved expenses from the consumers. Further, considering the current financial condition of the Petitioners, there is no way the Petitioners could arrange such a substantial amount against RPO shortfall by its own.
- 18.5 Further, the Hon'ble Commission would appreciate the fact that as mandated under Section 62 (6) of the Electricity Act, 2003, Distribution Licensee cannot recover any charges / tariff more than that approved by the Commission. Had the Hon'ble Commission allowed the recovery of such amount equivalent to RPO shortfall through tariff of respective ensuing years, the Petitioner would have been in a position to arrange the same and would have deposited it in a separate fund.
- 18.6 It is to be noted that the underlying principle to deposit an amount in any fund is that it should have been built up in tariff before. This can be related with existing Terminal Benefit Trust Fund wherein the Hon'ble Commission has been allowing recovery of Rs. 210 Crore for each Distribution Licensees which in turn is recovered through tariff and subsequently is deposited to TBT fund. The Petitioner submits that modalities of Terminal Benefit Trust Fund is governed by provision 3(6) of the MPERC (Terms and Conditions for allowing pension and terminal benefits liabilities of personnel of Board and successor entities) Regulations, 2012 (G-38 of 2012), which has clearly demarcated the stipulation for recovery of amount to be deposited in TBT fund. The relevant extract of the same is

shown below:

- 18.7 “3(6) The liabilities in regard to the contribution to be made under sub-clause 2(iii) above shall be allowed in the tariff of respective Successor Entities in the relevant year limited to the extent to be decided by the Commission in the relevant tariff order...” {Emphasis Added}
- 18.8 However, no such modality is being provided by the Hon’ble Commission in its aforementioned Order towards RPO compliance.
- 18.9 The Petitioner submits that in absence of any recovery mechanism, the only option available with the Distribution Licensees is to invoke Fuel & Power Purchase Adjustment Surcharge (FPPAS) mechanism which has been provided under the Act for regular pass through of actual variation in power purchase expenses. However, the Petitioner opines that recovery of such amount equivalent to RPO shortfall through FPPAA may led to regulatory challenges as the same is not approved in Tariff Order. FPPAS allows Distribution Licensee to recover only prudent expenses and that too actually incurred by it. Such FPPAS provision may not be allowed to be used for levying provisional charges by Distribution Licensee for accumulating corpus / fund for future use.
- 18.10 It is submitted that the Petitioners in previous ARR proceedings of FY 2024-25 had requested before the Hon’ble Commission to consider the amounts to be deposited against RPO shortfall while determining the ARR and Tariff for FY 2024-25. However, the Hon’ble Commission directed the respondents to file a separate petition under point 6.19 of ARR Order for FY 2024-25. Meanwhile the respondents were in process to file the Petition in compliance to the above, the Hon’ble Commission issued a notice to respondent dated 18th July 2024 numbered 1742 under SMP 38 of 2024 and issued a show cause noticed under Section 142 of Electricity Act 2003.
- 18.11 As the aforesaid matter is sub judice, the Petitioners have not considered any impact of backlog RPO shortfall cost while proposing the ARR and Tariff for FY 2025-26. However, anticipating that the Hon’ble Commission may pass an Order against the SMP 38 of 2024 in couple of months. Accordingly, **it is prayed before the Hon’ble Commission to kindly specify the source of recovery for backlog RPO shortfall cost and factor in the outcome the SMP 38 of 2024 while approving the ARR and Tariff for FY 2023-24.**

## **A19: MODALITIES FOR IMPLEMENTATION OF PROVISIONS OF SOP FOR SUBSIDY ACCOUNTING AND BILLING**

19.1 It is submitted that, On 29th December 2022, the MoP has issued amendment to the Electricity Rules, 2005, namely the Electricity (Amendment) Rules, 2022 wherein it has been specified that the accounting of subsidy is to be done in accordance with the Standard Operating Procedure (SOP) issued by the Central Government. The relevant extract from the said amended Rules is as under:

*“15. **Subsidy Accounting.**—Accounting of due subsidy for the purpose of section 65 of the Act, shall be done by the distribution licensee, in accordance with the Standard Operating Procedure issued by the Central Government, in this regard.”*

19.2 Further, in pursuant to above amendment, the MoP has issued the SOP on 3rd July 2023 wherein various provision related to subsidy declaration, measurement of energy, subsidy billing and collections, etc., has been stipulated to ensure compliance towards subsidy accounting and payment. Some of the relevant extract from the said SOP is reproduced below:

### **“2.2 Measurement of energy supplied to Subsidized categories**

- iv. *No electricity connection should be released without metering as per extant law and accordingly assessment of energy supplied to subsidized category of consumers is to be computed on the basis of measured energy through proper metering only. **In case of agriculture category, where consumer level metering has not been adopted, energy may be measured at Distribution Transformers (DT) and feeder level through proper metering of DTs/feeders.***
- v. *In case of dedicated agriculture feeder supplying energy to agricultural consumers, energy measured at feeder level through proper metering shall be considered. **The consumption reflected in feeders shall be adjusted for normative T&D losses as determined by SERC/JERC for determination of subsidy.***
- vi. *For mixed feeder, till such time the feeders are segregated, energy shall be measured at feeder level and energy consumed by non-agricultural consumers shall be deducted to arrive at energy consumption of agricultural consumers. The consumption shall be adjusted for normative T&D losses as determined by SERC/JERC for determination of subsidy*
- vii. ***In no case shall the assessment of energy be computed on the basis of contracted load, per HP basis, flat tariff, lumpsum or any other such parameter.***

- viii. *All DISCOMs/PDs shall migrate from flat rate billing to energy per unit rate billing for consumers other than agricultural category Subsidy billing and collection by DISCOMs*

***“2.2 Subsidy billing and collection by Discoms***

.....

.....

- xiii. Till all the subsidized consumers are metered as per clause 2.2. for unmetered flat rate based subsidized consumption, DISCOMS shall assess subsidy requirement for such consumers with the following formula:***

*Subsidy amount = [(Full cost tariff determined by the SERC/JERC \* measured energy consumption as per clause 2.2) – (no. of unmetered flat rate based subsidized consumers \* flat rate tariff)].*

.....” ***{Emphasis Added}***

- 19.3 Subsequently, the MoP vide its Second Amendment to Electricity Rules Dated 26<sup>th</sup> July, 2023 puts in place additional measures for subsidy accounting and payment. As per the Second Amendment, the distribution licensee has been mandated to submit a quarterly report within thirty days from end date of the respective quarter and the State Commission shall examine the report and issue their assessment within thirty days of submission of the quarterly report. The report will inter-alia cover the findings regarding raising of demands for subsidy based on accounts of the energy consumed by the subsidized categories; and the subsidy payable to these categories as announced by State Government and the actual payment of subsidy in accordance with section 65 of the Act.
- 19.4 The Second Amendment also include the provision that if subsidy accounting and the raising of bills for subsidy is not found in accordance with the Act or Rules or Regulations issued there under, the State Commission shall take appropriate action against those responsible for non-compliance as per provisions of the Act. The relevant extract is as reproduced below:

***“15 Subsidy accounting and payment.-.....***

*(2) A quarterly report shall be issued by the State Commission for each distribution licensee, in its jurisdiction, giving findings whether demands for subsidy were raised by the distribution licensee in the relevant quarter based on accounts of the energy consumed by the subsidised category and consumer category wise per unit subsidy declared by the State Government, the actual payment of subsidy in accordance with section 65 of the Act and the gap in subsidy due and paid as well as other relevant details.*

*(3) The quarterly report shall be submitted by the distribution licensee within thirty days from end date of the respective quarter and the State Commission shall examine the report, and issue it with corrections, if any, in accordance with sub-rule (2), within thirty days of the submission*

*(4) In case the subsidy has not been paid in advance, then the State Commission shall issue order for implementation of the tariff without subsidy, in accordance with provisions of the section 65 of the Act.*

*(5) If subsidy accounting and the raising bills for subsidy is not found in accordance with the Act or Rules or Regulations issued there under, the State Commission shall take appropriate action against the concerned officers of the licensee for non-compliance as per provisions of the Act.*

19.5 In view of above, the Petitioners would like to bring kind attention of the Hon'ble Commission that certain provision of aforementioned SOP/Rules are at variance with the existing practice as prevailing in the State with respect to Subsidy Accounting and Billing. Therefore, the Petitioners are finding it difficult to compliance with the provision of the notified SOP and Rules. Accordingly, there are some changes proposed in this Petition as elaborated in the subsequent paras.

19.6 It is submitted that the provisions of SOP under clause **2.2 Measurement of energy supplied to Subsidized categories** stipulates that no electricity connection should be released without metering as per extant law and accordingly assessment of energy supplied to subsidized category of consumers is to be computed on the basis of measured energy through proper metering only. It further stipulates that in no case shall the assessment of energy be computed on the basis of contracted load, per HP basis, flat tariff, lumpsum or any other such parameter.

19.7 In this regard it is submitted that at present there are two subsidized categories wherein unmetered consumers are present, i.e., agriculture and domestic. While as per the provision of SOP, the energy supplied to unmetered consumer under agriculture categories may be measured at Distribution Transformers (DT) and feeder level, there is no such option for domestic unmetered consumers. This translate that the domestic unmetered consumers need to be converted to metered connections for the implementation of aforesaid SOP. In view of this, the Petitioners wish to submit that there are around 4.64 lakhs unmetered consumers under domestic categories and conversion of them into metered connections would require substantial CAPEX burden on Discom which ultimately will be passed on to its end consumers only. The Discoms are already incurring capex under existing schemes for conversion of such unmetered connections into metered connections.

19.8 The Petitioners wish to submit that as a part of RDSS scheme they will be installing/replacing the existing metered connections with prepaid smart meters. The meters so available after replacement is therefore proposed to be utilize for metering of such unmetered domestic consumers. While the metering plan under RDSS is in a phased manner, hence, the metering of unmetered connections could be done in phase manner only as per the availability of released meters. **Therefore, it is proposed that till the time all unmetered connections under domestic category are converted into metered connections, the Petitioners should be allowed to bill the same as per the existing norms which is 75 units per month for rural areas having connected load up to 500**

**watts.**

- 19.9 Further, as regard to measurement of energy for unmetered agriculture consumers, it is submitted that the provision of SOP stipulates that where consumer level metering has not been adopted, energy may be measured at Distribution Transformers (DT) and feeder level through proper metering of DTs/feeders. In this regard it is submitted that at present unmetered agriculture consumers are billed as per norms provided by the Hon'ble Commission as extracted below:

**“Terms and conditions of LV 5 tariff category (Agriculture and allied activities)**

1.3 (ii) For unmetered agriculture consumers under LV 5.4 category, assessed consumption shall be as per following norms:

| Particulars        | No. of units per HP of sanctioned load per month |              |
|--------------------|--|--------------|
|                    | Urban/Rural Area                                 |              |
| Type of Pump/motor | April to Sept                                    | Oct to March |
| Three Phase        | 95   | 170          |
| Single Phase       | 95   | 180          |

- 19.10 However, it is submitted that as per the provisions of SOP the aforesaid norms would become null and the common units or new norms will be determined as per energy measured at Distribution Transformers (DT) and feeder level. The SOP further stipulates different provision for measurement of energy for dedicated and mixed feeder. In this regard the Petitioners envisaged that as per the provision of SOP there would be different norms at each Distribution Transformers (DT) and feeder level, since the consumption pattern and connected load will be different at each DT and feeder level. Also, there would be different norms for consumer connected at dedicated feeder and mixed feeder. This would create complexity and uncertainty of bill amount among the consumers at different DT and feeder level. In order to overcome such envisaged difficulties, it is proposed to measure energy at circle level covering the respective DTs and feeders. This will ensure common norms for each consumer at circle level.

- 19.11 Further, in case of agriculture feeder inclusive of both dedicated and mixed feeder, the common measured norms at circle level are proposed to be calculated as per formula below:

**“Units per HP per Month at circle level (Urban/Rural) or Common Measured Norms = [(1- Normative losses) \* {Σ input energy of agriculture feeder at Circle level + Σ adjusted input energy of mixed feeder at Circle level}] / Σ HP Sanctioned of agriculture and mixed feeders (permanent + temporary) in the circle”**

Wherein, the adjusted input energy of mixed feeder at Circle level is to be determined by deducting the energy consumed by non-agricultural consumers connected to such mixed feeders.

**{Exceptions: -**



***In case Common Measured Norms at circle level based on the above formula exceeds 223.8 Units/HP, then the units for billing/sold shall be treated 223.8 Units/HP only. In other word the higher Common Measured Norms could be only 223.8 Units/HP. The incremental units higher than 223.8 Units/HP shall be booked as losses to the circle.***

*This is mainly because the supply to Agriculture consumer is for 10 hours only and that for 1 HP(0.746 Kw) load running on full load (LF=1) for 30 days on 10 Hours of supply, can consume maximum of 223.8 Units only as calculated below:-*

*Assessed units= L x D x H x F*

*L= 0.746, D= 30 Days, H= 10 Hrs., F= 1*

*Assessed Units = 0.746 x 30 x 10 x 1 = 223.8 Units}*

- 19.12 Further, as regard to billing/determination of subsidy the provision of SOP stipulates as under:

*“XIII. Till all the subsidized consumers are metered as per clause 2.2. for unmetered flat rate based subsidized consumption, DISCOMS shall assess subsidy requirement for such consumers with the following formula:*

***Subsidy amount = [(Full cost tariff determined by the SERC/JERC \* measured energy consumption as per clause 2.2) - (no. of unmetered flat rate based subsidized consumers \* flat rate tariff)]”***

- 19.13 From the above, the first part (A) of the formula, i.e., (Full cost tariff determined by the SERC/JERC \* measured energy consumption as per clause 2.2), provides the Demand raised for unmetered category and the second part (B) of the formula, i.e., (no. of unmetered flat rate based subsidized consumers \* flat rate tariff), provides the consumer contribution against the Demand. The difference of part (A) and part (B) gives the subsidy amount.
- 19.14 From the above, it can be seen that the formula for determination of subsidy amount calls for consideration of **Full Cost tariff determined by the SERC/JERC** under Part (A) of aforesaid formula. In this regard the Petitioners wish to submit that at present while the Hon’ble Commission determines full cost tariff (independent of tariff subsidy) but the same is in two parts, i.e., Energy and Fixed charges. Further, the Hon’ble Commission also determines the Average Billing Rate (ABR), but the Petitioners would like to bring kind attention of the Hon’ble Commission that at present in addition to Energy & Fixed charges the subsidy is also provided for following components under unmetered agriculture category: -

- LTSC (Low Tension Shunt Capacity Surcharge)
- FPPAS

- 19.15 Therefore, in case the approved ABR is taken for computation of subsidy as a full cost tariff determined by the SERC/JERC then there would be loss of subsidy claim pertaining to aforesaid components. Therefore, it is proposed to consider the calculated actual ABR based on the actual billing of consumers considering the approved energy charges & fixed charges along with other applicable charges on the measured energy at circle level as methodology proposed above. Further, the actual ABR is to be calculated as under:

Actual ABR (Full cost Tariff) = Energy Billed /Sold Unit

Wherein;

Energy Billed (for permanent connections only) =  $\Sigma$  (Energy Charge as per billed units at approved rate + Fixed charge as per Sanctioned load of Consumer at approved rate+ PF penalty as per Energy Charge + FPPAS as per sold unit + other applicable charges if any)

Sold Unit = sanctioned load in HP of permanent connections \* common measured norms

Note: As the tariff and subsidy portion is different for permanent unmetered and temporary connections, therefore the actual ABR for unmetered permanent connections need to be calculated separately to correctly measured the subsidy.

- 19.16 Further, for the purpose of ease of calculation of ABR as per formula above, it is proposed to merge the existing slabs being applicable for unmetered agriculture consumers under LV 5.1 and to have a single slab. This will further reduce the complexity in the subsidy calculations.
- 19.17 Further, as regard to computation of part (B) of the aforesaid formula, i.e., determination of consumer contribution, it is submitted that at present the same is determined based on the **per Horse Power (HP) rate as approved in the State Government Subsidy Order**. In other word, at present the consumer contribution to the energy bill is determined by **multiplying the per HP subsidy amount with the pump capacity (in HP) of the unmetered consumer**. However, as against this, as per the notified SOP, the same need to be calculated by multiplying the no. of unmetered flat rate based subsidized consumers with the flat rate tariff.
- 19.18 In view of the above, the Petitioners propose the following changes/modification on the subsidy formula as under:
- Subsidy amount = [(Actual ABR (Full cost tariff) Calculated based on Approved charges) \* measured energy consumption (sold) at circle level (as per para 20.15) - ( $\Sigma$  connected load in HP \* Flat rate per HP as per GoMP subsidy Order)]”*
- 19.19 **Accordingly, the Petitioners request the Hon’ble Commission to approve the modalities as proposed above.**
- 19.20 **For Temporary unmetered connections:** In case of temporary unmetered agriculture consumers, it is proposed that the common measured norms as proposed to be calculated

for unmetered permanent connection at circle level as elaborated at paras above, shall also be applicable for the purpose of billing. This is mainly because the common norms as proposed to be determined for unmetered permanent connection is inclusive of connected load associated with temporary connections and also the energy measured at feeder/DT/Circle level is inclusive if energy being consumed by temporary unmetered connections as well.

- 19.21 Further, it is to be noted that as per existing structure the approved norms for temporary connections is higher than the norms applicable for permanent unmetered connections. However, as per the SOP and as per methodology proposed above, there will be common measured norms for both unmetered permanent and temporary connections. Considering the energy balancing framework, it will not be possible to bill the temporary connections with norms higher than those determined for permanent connections. Therefore, to balance the above, it is proposed to increase the energy, fixed charges and associated charges against temporary connections with multiplying factor of 1.25 as applicable for other temporary connections.
- 19.22 It is further submitted that as per prevailing practice, the unmetered temporary connections are required to deposit temporary advance for the period of connection availed by the consumer. Such advance is adjusted in monthly subsequent billing of consumer for the respective service period. Further, such advance at present is being calculated as per the existing norms separately approved for temporary connections. It is to be noted that as per provision of SOP such existing norms would become Null. Therefore, the Petitioners have envisaged difficulties for calculation and hence, collection of temporary advances.
- 19.23 To overcome the aforesaid difficulties, the Petitioners propose that for the purpose of calculation & collection of temporary advance from unmetered temporary connections, the existing norms should be continued. It is to be clarified that such norms shall be use for the computation of temporary advance only. The actual billing is proposed to be done as per the common measured norms as elaborated at the paras above. Further, the temporary advance so drawn from the consumers shall be adjusted in subsequent billing which will be done considering the common measured norms at circle level and proposed energy, fixed charges as per paras above (i.e., with multiplying factor).
- 19.24 It is to be noted that the subsidy amount of any circle shall be the sum of subsidy of permanent unmetered consumers (dedicated + mixed feeders) and temporary unmetered consumers (dedicated + mixed feeders).
- 19.25 **In addition to the above, the Petitioners wish to submit that in the aforementioned proposed methodology, there may be certain exceptional cases, which are elaborated below:** - In case of off period when the feeder is on no load the billed energy charge shall be Zero however the fixed charge shall be billed and subsidized. But since the subsidy amount as per the formula prescribed in SoP is dependent on Energy, the same would become zero. In order to match billed subsidy and feeder level subsidy for

such condition it is proposed that a 5-unit credit/consumer on feeder is to be provided which may be adjusted in preceding billing cycles.

**Eg: - For a feeder having 10 consumers of connected load of 50 HP (5 HP each consumer)**

| Particulars                   | References        | Case 1 (Recorded Consumption) | Case 2 (Zero Consumption) | Case 3 (5 Unit Per Consumer Credit) |
|-------------------------------|-------------------|-------------------------------|---------------------------|-------------------------------------|
| Input Unit                    | A                 | 1000.00                       | 0.00                      | 50.00                               |
| Normative                     | B                 | 11%                           | 11%                       | 11%                                 |
| Sold Unit                     | $C=(1-B)*A$       | 890.00                        | 0.00                      | 44.50                               |
| No of Consumer                | D                 | 10.00                         | 10.00                     | 10.00                               |
| Sanctioned load per Consumer  | E                 | 5.00                          | 5.00                      | 5.00                                |
| HP                            | $F= D* E$         | 50.00                         | 50.00                     | 50.00                               |
| Per HP Sold                   | $G=C/F$           | 17.80                         | 0.00                      | 0.89                                |
| Per Consumer Sold Unit        | $H=G*E$           | 89.00                         | 0.00                      | 4.45                                |
| EC @ 4.89 Upto 300 Units      | I                 | 435.21                        | 0.00                      | 21.76                               |
| FC @ 60/HP/Month              | J                 | 300.00                        | 300.00                    | 300.00                              |
| PF @ 10 of EC                 | $K= 10\% * I$     | 43.52                         | 0.00                      | 2.18                                |
| FPPAS @ Rs 1/Unit             | $L=H X Rs 1$      | 89.00                         | 0.00                      | 4.45                                |
| ED                            | M                 | 0.00                          | 0.00                      | 0.00                                |
| Demand                        | $N=I+J+K+L+M$     | 867.73                        | 300.00                    | 328.39                              |
| Consumer Demand (750/HP/Year) | $O= (750/12) * E$ | 312.50                        | 312.50                    | 312.50                              |
| Feeder Subsidy                | $P= (N-O) * D$    | 5552.31                       | -125.00                   | 158.87                              |
| Feeder Demand                 | $Q= N*D$          | 8677.31                       | 3000.00                   | 3283.87                             |
| ABR                           | $R=Q/C$           | 9.75                          | 0.00                      | 73.79                               |
| Flat rate Per Consumer        | $S=O$             | 312.50                        | 312.50                    | 312.50                              |
| Subsidy as per SOP Formula    | $T=(R*C) -(S*D)$  | 5552.31                       | 0.00                      | 158.87                              |

19.26 Based on the above, the Petitioners request the Hon'ble Commission to approve the modalities for subsidy accounting and billing as proposed in this Petition.

19.27 Further, it is to bring kind attention of the Hon'ble Commission that historically the consumption of unmetered agriculture consumers is being assessed as per the norms specified in the respective Tariff Order and accordingly, the tariff subsidy and T&D/AT&C losses for the Discoms are being determined. Any changes in the prevailing methodology may have financial impact on the State as the quantum of subsidy requirement will differ for the ensuing year and may also affect the losses of the Discoms. **Accordingly, the Hon'ble Commission, as deemed prudent may suggest any other alternate suitable approach & methodology which will facilitate implementation of the SOP and Rules.**

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## **A20: COMPLIANCE OF DIRECTIVES ISSUED IN TARIFF ORDER OF FY 2024-25**

### **20.1 The response of MP Discoms on the directives issued by Hon'ble Commission in the Retail Supply Tariff**

#### **7.1 Technical studies of the Distribution network to ascertain voltage-wise cost of supply.**

##### ***Commission's Observations/ Directions:***

*The Commission vide letter dated 12<sup>th</sup> December, 2023, has already communicated the methodology for technical loss study and directed the DISCOMs to conduct the study accordingly and submit the results of the study within four months. Therefore, the DISCOMs are directed to expedite the study and submit the study results within the timelines. The Commission also observes that the present accounting practices of DISCOMs do not include the segregation of GFA across voltage levels. Therefore, DISCOMs are directed to segregate the GFA across voltage levels for estimating the voltage-wise cost of supply and submit the desired study report before filing the next ARR and Tariff Petition.*

##### **East DISCOMs Submission:**

It is submitted that West Discom has floated a tender for study of Technical loss Estimation which is under progress. East Discom shall follow the methodology and outcome of the study report of West Discom so as to maintain uniformity in working of all Discoms and reporting before the Hon'ble Commission.

##### **Central DISCOMs Submission:**

Central Discom has awarded the work for "Study on estimation of technical losses in distribution network" to MANIT, Bhopal vide letter No.3408 dated 21.08.2024.

The Work has been started and sample report for 2 No. 11KV feeders was submitted by the Discom to MPERC on dated 07-Nov-2024 through mail.

##### **West DISCOMs Submission:**

With regard to technical loss study a detailed status report incorporating complete chronology has been submitted to Hon'ble Commission vide letter No. 12272 dated 14.08.2024. Further, the price bid for study on estimation of technical losses has been opened on 11-10-2024. All the necessary formalities will be completed by the West Discom soon positively. Discom would make its best efforts to comply with the directive of the Hon'ble Commission as soon as possible. The compliance of the directive regarding segregation of the GFA across voltage level also been submitted vide aforesaid letter dated 14.08.2024.

#### **7.2 Replacement of Stopped and Defective Meters**

##### ***Commission's Observations/ Directions:***

*The Commission has taken note of the Petitioners' submissions. However, the Commission observed that the status of stopped/defective meters is almost at similar level*

as was in pre- RDSS period and there has not been much improvement in status of the same. Further, the Petitioners have not been complying with Regulation 8.26 of the MP Electricity Supply Code, 2021 and with the target specified in MPERC (Distribution Performance Standards) Regulations, 2012 and amendments thereof. In view of these observations, the Petitioners are directed to expedite the replacement of stopped/defective meters within the timelines specified in MP Electricity Supply Code, 2021 and also submit the quarterly progress report to the Commission. Based on the progress reports, the Commission may review RoE incentive in respect of metering of consumers.

#### **East DISCOMs Submission:**

Quarterly progress report has already been submitted to Hon'ble Commission vide letter no.1021 dated 10.09.2024.

#### **Central DISCOMs Submission:**

The status of Categories wise stop defective m as on Oct'24 is mentioned as below:-

| Category     | Consumer       | Defective Meter | % Def. Meter  |
|--------------|----------------|-----------------|---------------|
| DOMESTIC     | 3716482        | 1937058         | 52.12%        |
| LT INDUSTRY  | 35228          | 298             | 0.85%         |
| NON-DOM.     | 385787         | 5065            | 1.31%         |
| OTHER AG.    | 731            | 38              | 5.20%         |
| <b>HT</b>    | <b>26790</b>   | <b>380</b>      | <b>1.42%</b>  |
| <b>Total</b> | <b>4165018</b> | <b>1942839</b>  | <b>46.65%</b> |

- As on Oct; 24 there are 296840 No. defective meter of Urban DL. Connection and it is planned to replace them in six months.
- It submitted that the meters indicated as defective are those which are installed by Discom in Consumer premises but due to either improper functioning properly or any other reason, billing is being done on assessment basis. It is further submitted that number of defective meters appearing in R-15 are on higher side due to the reason that consumers which require assessment is included in defective meter.
- Installation of Smart meters in place of conventional meters has started in Urban Area.
- Working meters removed during installation of Smart meters under RDSS shall be utilised for defective meter replacement in rural area.

#### **West DISCOMs Submission:**

Quarterly progress report is being submitted by the West Discom in timely manner through Reporting of Regulatory Compliance. Further with regard to the status of the stop defective meters and action plan for the replacement of the same Discom has made detailed submission vide letter No. 12272 dated 14.08.2024 and letter No. 15140 dated 15.10.2024.

### **7.3 Alignment of R-15 strictly with the categories, subcategories, and slabs of the Tariff Schedule as per the new Tariff Structure**

**Commission's Observations/ Directions:**

*The Commission has taken note of the Petitioners' submission. However, the Commission observed that the number of consumers, connected load and Sales for various sub-categories in the Statements submitted by the Petitioners aligned with the Tariff Schedule are not matching with standard R-15 Statement. Therefore, the Petitioners are directed to remove the discrepancies within R-15 Statements. Further, from next True-up/ARR Petition, the Petitioners are directed to furnish the information of number of Consumers, Connected Load and Sales strictly as per the Tariff Categories/ sub-categories and slabs approved by the Commission in R-15 statement being submitted to the Commission.*

**East DISCOMs Submission:**

Compliance report has been submitted to Hon'ble Commission vide letter no. 1415 dtd 14.11.2024.

**Central DISCOMs Submission:**

The R-15 report has been generated through the NGB billing system developed by East Discom. The discrepancies observed between the standard and Tariff R-15 reports have been communicated to the East Discom team for resolution and they have removed the discrepancies.

**West DISCOMs Submission:**

It is submitted that tariff category-wise R15 has been aligned with the standard R-15, which is available on the website.

**7.4 Accounting of Rebates/Incentives/Surcharges**

**Commission's Observations/ Directions:**

*The Commission has noted the submissions of the DISCOMs and directs DISCOMs to expedite the process of development of a report in this regard and submit the same on quarterly basis. The Commission has extended applicability of various rebates in this Order. The Commission observes that the Petitioners have not submitted proper analysis to ascertain the impact of various incentive/rebate/surcharge being allowed by the Commission in Tariff Order. Therefore, the Commission once again directs the Petitioners to undertake comprehensive study and analysis to ascertain the impact of various incentive/rebate/surcharge being allowed by the Commission in the Tariff Order. Further, the analysis should cover scenarios for Rabi and non-Rabi seasons separately and also scenario if no incentives/rebates are provided in tariff. The Petitioners are directed to submit the above study accompanied by appropriate analysis before the next Petition filing.*

**East DISCOMs Submission:**

Compliance submitted to Hon'ble Commission vide letters no. 1021 dtd 10.09.2024 and 1425 dtd 18.11.2024.

**Central DISCOMs Submission:**

A comprehensive report on rebate, incentive & surcharge provide to HT consumer has been submitted to MPERC vide letter No. 176 dtd. 21.11.2024.

**West DISCOMs Submission:**

The desired report has been submitted to Hon'ble Commission vide letter No. 12272 dated 14.08.2024.

**7.5 Introduction of kVAh billing Commission's Observations/ Directions:**

*The Commission observed that the outreach of awareness programme conducted by the Petitioners is inadequate. Therefore, the Petitioners are once again directed to conduct consumer awareness programmes across the State to explain the concept of kVAh billing and its implications to consumers of relevant categories such that the consumers are prepared and kVAh based billing may be implemented upon HT consumers in next Tariff Order. Consumers may also be aware of the measured quantities by the energy meter and accessibility to readings of such quantities alongwith use thereof in monitoring reactive power management at consumer's premises.*

*Further, regarding impact assessment study, the Commission observed that the Petitioners have not submitted any impact assessment study on transition from kWh billing to kVAh billing considering yearly average power factor for each category of HT consumers based on last three years data. Therefore, the Petitioners are once again directed to carry out the impact assessment study and submit the study report before next tariff filing. Petitioners are directed to install power analysers at appropriate locations to measure reactive power flow and power factor and identify the consumer categories having low power factor. Results of such measurements be also provided to the Commission before next tariff filing.*

**East DISCOMs Submission:**

Compliance has been submitted to Hon'ble Commission vide letter no. 1021 dtd 10.09.2024.

**Central DISCOMs Submission:**

In compliance with the Commission's directives to conduct consumer awareness programs explaining the concept of KVAh billing, its implications for relevant consumer categories, the measured quantities by energy meters, the monitoring of reactive power management at consumer premises and the impact assessment study, the following actions were taken:-

- i. Consumer Awareness Program :
  - A comprehensive awareness program was conducted across all Circles of the Discom through video conferencing and physical meetings.



- The Association of industries from Bhopal, Mandideep, Gwalior and other region also participated in the KVAh billing awareness programs.

ii. Impact Assessment Study:-

- An impact assessment study on the transition from KWh billing to KVAh billing, based on data from the last years i.e. 2023-24, has been conducted.
- The impact assessment report, along with a category-wise list of consumers with low power factors, has been submitted to Hon'ble Commission vide letter No.177 dtd. 21.11.2024. For installation of power analysers identification of appropriate location is also in progress and the report will be submitted to Commission as soon as possible.

**West DISCOMs Submission:**

In compliance with the Commission's directives to conduct consumer awareness programmes explaining the concept of kVAh billing, its implications for relevant consumer categories, the measured quantities by energy meters, the monitoring of reactive power management at consumer premises, and the impact assessment study, the following actions were taken:

i. **Consumer Awareness Programme:**

- A comprehensive awareness programme was conducted across all Circles of the Discom through
- video conferencing and physical meetings.
- A total of 15 Circles were covered, and 204 HT consumers attended the sessions.
- The Association of Industries from Indore, Pithampur, Dewas, Ujjain, Ratlam, and other regions also participated in the kVAh billing awareness programmes.
- A circle-wise detailed report has already been submitted to the Hon'ble Commission vide this office letter no. 14191, dated 28.09.2024.

ii. **Impact Assessment Study:**

- An impact assessment study on the transition from kWh billing to kVAh billing, based on data from the last three years i.e. FY 2021-22, 2022-23 & 2023-24, has been conducted.
- The impact assessment report, along with a category-wise list of consumers with low power factors, was submitted to the Hon'ble Commission vide letter no. 12068, dated 12.08.2024.

- iii. The status regarding installation of PQ analyzer has been submitted vide letter No. 12272 dated 14.08.2024.

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## FRESH DIRECTIVES ISSUED IN THIS TARIFF ORDER

### 7.6 Consumer services related issues:

*The Commission has taken cognizance with regard to non-compliance of the consumer service-related issues raised during the public hearing. It is also brought to fore that service lines, transformers and associated equipment are not properly maintained by the Petitioners. The Commission, therefore, directs the Discoms as under:-*

1. *Special attention needs to be paid in meeting the Standards of Performance (SoP) parameters as specified in MPERC (Distribution Performance Standards), Regulations 2012 and amendment thereof and payment of compensation for default in meeting SoP.*
2. *Automatic compensation mechanism in the event of default on meeting the Standards of Performance should be immediately put in place by the DISCOMs.*
3. *All out efforts be made in making consumers aware about Standards of Performance parameters and automatic compensation mechanism.*
4. *The field officers should be fully made aware about Standards of Performance (SoP) and implications of default in terms of compensation by DISCOMs. The field officers to ensure that the incidences of not meeting the Standards of Performance are reported accurately and automatic compensation is passed on to the consumers.*
5. *DISCOMs need to take appropriate action to ensure 24x7 supply of electricity to consumers (other than agriculture category) as mandated in the Electricity (Rights of consumers), Rules 2020 and the Commission's Regulations as amended from time to time and accordingly unwarranted load shedding must be avoided.*
6. *DISCOMs to ensure setting up online portal to collate all information/applications regarding planned outages to avoid repeated shut downs in same areas on the account of disjointed applications seeking planned outages.*
7. *DISCOMs are directed to expedite putting in place infrastructure required to provide consumer services as per the provisions of MPERC (Distribution Performance Standards) Regulations, 2012 and MP Supply Code, 2021 and amendments thereof. The Commission further directs the Petitioners to ensure that there is no load shedding due to inadequate Repairs & Maintenance of the network. As per the MYT Regulations, 2021, DISCOMs are eligible for additional return on equity of 0.50% on achievement of R&M expenses targets specified in the Regulations. Therefore, the DISCOMs should take appropriate measure to avail benefit of incurring additional R&M expenses as per Regulations.*
8. *DISCOMs shall submit the report on compliance of these directions to the*

*Commission on quarterly basis including all the incidences of not meeting the Standards of Performance along with the amount of automatic compensation provided to the consumers and specific reasons for denial of compensation, wherever applicable. The report should also include all incidences of category wise load shedding along with the duration of load shedding and reasons for the same.*

**East DISCOMs Submission:**

Compliance submitted to Hon'ble Commission vide letter no. 1021 dtd 10.09.2024 and 1415 dtd. 14.11.2024.

**Central DISCOMs Submission:**

- i. With the increase in distribution network and consumer base and reduction in staff, it is very difficult at every level to provide all services within stringent timelines and adversely impacting the Discom's performance. Thus the Financial condition of Discom does not allow compensating consumer automatically for every service.
- ii. Discom has started automatic compensation for delay in NSC .
- iii. Efforts are being made to aware Consumers.
- iv. Field Officers have been informed regarding the Standards of Performance (SoP).
- v. The directive is being complied.
- vi. The directive will be complied shortly.
- vii. The directive is being complied.
- viii. The directive will be complied timely.

**West DISCOMs Submission:**

Status of compliance of the directive has been submitted to Hon'ble Commission vide letter no. 5934 dated 18.04.2024, letter no.12272 dated 14.08.2024 and letter no.15140 dated 15.10.2024.

**7.7 Preparation of Standard Operating Procedures for Supplementary Bills Commission's Directives:**

*The Petitioners are directed to develop a Standard Operating Procedure for mapping supplementary bills, including all relevant supporting documents, on generating station-wise basis for each financial year. The Petitioners should also ensure that mapping of supplementary bill along with all relevant supporting documents is accessible with IT tools to facilitate retrieving of all relevant information related supplementary bills. The petitioners are required to confirm whether full and final payment against the supplementary bills are made. A comprehensive format in MS Excel be submitted showing calculation of claim amount with vital parameters along with supporting documents.*

*Petitioners are required to submit Standard Operating Procedure to the Commission for approval within three months from date of issuance of this Order and provide comprehensive information with appropriate IT tools at the time of filing petition incorporating supplementary bills.*

**MPPMCL's Submission:**

MPPMCL vide letter no. 82 dated 25.11.2024 has submitted the Standard Operating Procedure for mapping supplementary Bills, to Hon'ble Commission.

**7.8 Scheme for Accountability of Officer In charge – System thereof Commission's Directives:**

- (i) Financial Viability of the Discoms is an area of concern. It is not only affecting performance of the DISCOMs and quality of consumer services, it is also adversely impacting operations of generating companies. In view of cash starved DISCOMs, Govt of India has recently launched RDSS for improving financial conditions of the distribution companies. Under the RDSS, various technical and commercial measures are to be taken up in a time bound manner for improving the sector. The Commission is extending all help to DISCOMs through Regulations and other measures to improve financial and operational performance. The Commission has also been interacting with the DISCOMs to evaluate their performance and to incentivize DISCOMs through tariff regulations on achieving specific performance parameters.*
- (ii) The Commission has observed that in certain circles/divisions performance has been much below company's overall performance particularly in the area of AT&C losses, meterisation, billing and operational parameters including providing Consumer services in timely manner. There is a need to evolve a system of accountability at the level of officer in charge. Performing officers be rewarded suitably while non-performing ones should be guided to improve their performance. Apart from annual performance review, mid-term reviews can be of use for course correction and guidance to officers. It is imperative that a system to bring in individual accountability be put in place at earliest for which the DISCOMs must set up IT enabled MIS.*
- (iii) The Petitioners are directed to develop a Personal Accountability Programme encompassing the roles and responsibilities of the personnel, mechanisms for accountability, reward and penalties and review mechanism. The Petitioners are required to submit Standard Operating Procedure for Personal Accountability Programme to the Commission alongwith reward scheme for approval within three months from the date of issuance of this Order.*

**East DISCOMs Submission:**

Compliance has been submitted to Hon'ble Commission vide letter no. 1415 dtd. 14.11.2024.

**Central DISCOMs Submission:**

To evolve the system of accountability at the level of officer incharge a draft is being prepared and Hon'ble commission will be informed shortly.

**West DISCOMs Submission:**

Status of compliance of the directive has been submitted to Hon'ble Commission vide letter No. 12272 dated 14.08.2024 and letter No. 15140 dated 15.10.2024.

**7.9 Geo-tag of Assets Commission's Directives:**

*The Petitioners as per Regulation 24.1(A)(iii) of MYT Regulations, 2021 and amendment thereof are required to geo-tag the assets and that requisite entries are made in the Fixed Asset Register. In view of this, the Petitioners are directed to geo-tag their assets in Fixed Assets Register as per the format specified by the Commission in MYT Regulations, 2021 and amendments thereof and submit the same in True-up filing for FY 2024-25.*

**East DISCOMs Submission:**

Compliance has been submitted to Hon'ble Commission vide letter no. 1415 dtd. 14.11.2024.

**Central DISCOMs Submission:**

Detailed instructions have been issued to field officer vide circular no. 404 dtd, 30.08.2024 regarding assets mapping GIS survey through mobile application.

**West DISCOMs Submission:**

The status of geo tagging of the assets along with the asset addition report indicating geotagging has been submitted to Hon'ble Commission vide letter No. 15140 dated 15.10.2024 read with email dated 15.10.2024.

**7.10 Adhering to the timelines of RDSS Commission's Directives:**

*The Petitioners are directed to adhere to the pre-determined timelines outlined under RDSS for achievement of Meterisation, up gradation of distribution infrastructure in terms of loss reduction, and modernization. Further, the Petitioners are required to ensure timely fulfilment of stipulated works within the targeted timelines outlined under RDSS for availing financial assistance and additional incentive over and above Gross Budgetary Support (GBS). The Commission also directs the Petitioners to submit quarterly status reports on the aforesaid directions to the Commission.*

**East DISCOMs Submission:**

Compliance has been submitted to Hon'ble Commission vide letter no. 1021 dtd. 10.09.2024.

**Central DISCOMs Submission:**

- i) In RDSS Project (LR), total 212 nos. Capacitor banks (1500KVAR) charges in existing substation out of 526 Nos. awarded Capacitor banks and 37 Nos. Capacitor banks charges at newly constructed 33/11KV Substations out of 83 Nos. awarded substations under RDSS project. Balance 360 Capacitor banks will be charged in next six months.
- ii) In RDSS Project (LR), Installation of Capacitor banks of 27 MVAR are covering the scope of 33 KV feeders from seven nos. EHV substation suggested by MP Transco.
- iii) In addition to the above, installation of 385 nos. 1500 KVAR capacitor banks have been proposed in modernization scheme of RDSS with new and additional substation.
- iv) Almost all 2114 Nos. Capacitor Banks are fully functional.
- v) Urban areas installed Capacitor Bank (530 Nos.) are already under monitoring through SCADA & RT-DAS.
- vi) Rural area installed Capacitor Banks (1584 Nos.) need to have a monitoring mechanism. Decision may be taken at Company level.
- vii) To overcome the reactive compensation on distribution following initiative has been taken:-
  - a) 109 Nos. capacitor bank has been proposed in plan of SSTD 2024-25 in various district amounting to Rs. 18.53 Cr.
  - b) Capacitor banks mentioned by MPERC are also included in this 109 Nos. given above
  - c) In addition to the above, 188 Nos. of 1500KVAR capacitor each bank are proposed in modernization scheme of RDSS with new substation.
  - d) 109 nos. capacitor bank has been proposed in plan of SSTD 2024-25 in various district amounting to RS. 18.53 Cr.
  - e) Capacitor banks mentioned by MPERC are also included in this 109 Nos. given above.

#### **West DISCOMs Submission:**

Quarterly status report of smart metering project has been submitted to Hon'ble Commission vide letter No. 11461 Indore dated 01.08.2024. Further the desired report shall be submitted from time to time.

#### **7.11 Disposal of Surplus Power Commission's Directives:**

*The Petitioners are directed to ensure compliance of the Commission's directives given vide Order dated 10th January, 2023 and 5th January, 2024 in Petition No. 51/2023 and submit the report to the Commission on quarterly basis. Considering the projected surplus power during FY 2024-25, the Commission directs the Petitioners to explore all the options for sale of surplus power including but not limited to bi-lateral sale to the*

*Distribution Licensees in hilly States, sale to other Distribution Licensees by participating in tenders floated by them for procurement of power on short-term basis, sale on Power Exchanges, PushP portal, HP-DAM and OTC Platform, etc.*

**MPPMCL's Submission:**

In compliance to the Commission's directives, MPPMCL is exploring all the options to sale the surplus power so as to optimize the power purchase cost and quarterly report of the Power sold is being submitted to Hon'ble Commission on regular basis.

**7.12 Meterisation of DTRs and Unmetered Rural Domestic Consumers Connections Commission's Directives:**

*The Commission has observed that the progress of the DISCOMs regarding meterisation of DTRs is not satisfactory. In Rural areas, it is observed that focus of DISCOMs is only on metering unmetered consumer and progress for that too is not satisfactory. At the same time, Petitioners are not taking much interest in replacing stopped/defective meters for Rural Domestic consumers. Therefore, the Commission directs the DISCOMs to expedite meterisation of DTRs and unmetered rural Domestic connections. At the same time correct metering is also to be ensured for Rural Domestic connections by replacing stopped/ defective meters timely.*

*Further, the Commission observed that DISCOMs are identified as designated consumers under Energy Conservation Act, 2001. Therefore, DISCOMs are required to conduct energy audit as per Bureau of Energy Efficiency (BEE) (Manner and Intervals for Conduct of Energy Audit in Electricity Distribution Companies) Regulations, 2021 for which DTR metering is required. Therefore, DISCOMs shall submit quarterly progress reports on DTR meterisation along with the Energy Audit Reports to the Commission.*

**East DISCOMs Submission:**

Compliance has been submitted to Hon'ble Commission vide letter no. 1021 dtd. 10.09.2024.

**Central DISCOMs Submission:**

In FY 2024-25, the ROC progress reports for Quarter-II was sent to Hon'ble Commission vide email dated 19-11-2024. This year DTR metering is increased in Urban and agriculture by 825 and 21056 number respectively. The details are given as below:-

| Particulars | 2023-24 | 2024-25 | Diff. |
|-------------|---------|---------|-------|
| Urban       | 26776   | 27601   | 825   |
| Ag.         | 64827   | 85883   | 21056 |

CZ has conducted the energy audit as per the guideline of BEE. CGM (Procurement), CZ issued the order for FY 2020-21 vide order No. 3022 dated 02.06.2023.

The order for energy audit of FY 2021-22 and FY 2022-23 was issued vide letter No.2908 dated 22.12.2022.

The order for energy audit of FY 2023-24 and FY 2024-25 was issued vide order No.3345 dated 10.06.2024.

Quarterly and Annual Energy Audit report is being submitted to Hon'ble Commission as per the regulation on regular basis.

**West DISCOMs Submission:**

With regard to the instant directive, status of compliance has been submitted to Hon'ble Commission vide letter No. 12272 dated 14.08.2024 and 15140 dated 15.10.2024.

**7.13 Establishing of R&D Fund Commission's Directives:**

*MPPMCL is directed to develop a proposal for establishing a Research and Development (R&D) Fund alongwith detailed guidelines/Standard Operating Procedure. This fund shall be utilised in conducting studies and running pilots, whenever required in areas aimed at enhancing the efficiency of distribution licensees. The emphasis is on utilising the fund strategically to support studies, research and support initiatives that contribute to improvements in technological interventions, operational capabilities and cost savings, etc.*

*MPPMCL is directed to make provision for R&D Fund of Rs. 2 Crore for each DISCOM. Expenditure in this head shall be posed before the Commission at the time of true-up of FY 2024-25.*

**MPPMCL's Submission:**

In compliance to the above directive issued by Hon'ble Commission, MPPMCL had submitted the draft guidelines/Standard Operating Procedure for establishment of R&D fund to Hon'ble Commission vide letter no.74 dated 28.10.2024, which was prepared on the basis of inputs received from the Discoms.

Further as the requisition of R&D Fund was raised by the Central Discom, the Finance officer of MPPMCL has been requested for further needful. Requisition of R&D Funds alongwith the details of project to be taken up is still awaited from the East & West Discoms.

**7.14 Tariff Subsidy**

**Commission's Directives:**

*In case of grant of tariff subsidy by the State Government for consumers, action as mandated under Section 65 of the Electricity Act, 2003 and in accordance with Electricity (Second Amendment) Rules, 2023 shall be ensured by all concerned and such consumers shall be billed accordingly by the Distribution Licensees.*

*Additionally, the Petitioners are directed to adhere to the MPERC (Manner of payment of subsidy by the State Government) Regulations, 2024 and ensure following proper procedures in respect of receipt and allocation of subsidies. Further, the Petitioners must submit information/ reports as mandated by GoI Rules and MPERC Regulations.*



**East DISCOMs Submission:**

The subsidy is being provided as per subsidy order issued by the Government of Madhya Pradesh from time to time. Desired report has already been submitted to Hon'ble Commission vide letter no. 1021 dtd. 10.09.2024.

**Central DISCOMs Submission:**

Quarter Q1 FY 24-25 report regarding compliance of MPERC (Manner of payment of Subsidy) Regulation 2007 has been submitted to Hon'ble Commission vide L.no. MD/MK/Comm-1/79/718 Dt.13.09.24 (For Qtr June'24) Quarter Q1 FY 24-25 report regarding Subsidy Accounting and RPO compliance has been submitted to Hon'ble Commission vide L. No.MD/MK/Comm-1/ 847 Dt. 15.10.2024.

**West DISCOMs Submission:**

The subsidy is being provided as per subsidy order issued by the Government of Madhya Pradesh from time to time. The desired report has been submitted to Hon'ble Commission vide letter No 14182 Indore dated 26.09.2024.

# **TARIFF SCHEDULES**

**A21: TARIFF SCHEDULES FOR LOW TENSION CONSUMERS**

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| LV-1                     | Domestic                                   | 203            |
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**Tariff Schedule - LV-1****DOMESTIC:****Applicability:**

This tariff is applicable for light, fan and power for residential use. Dharamshalas, Gaushalas, old age homes, day care centres for senior citizens, rescue houses, orphanages, Affordable Rental Housing Complex established under Pradhan Mantri Awas Yojana, Registered home stays under following Schemes of the State Government: (a) MP Homestay Establishment (Registration and Regulation) Scheme, 2010, Amended 2018, (b) MP Bed and Breakfast Establishment (Registration and Regulation) Scheme, 2019, (c) MP Farm Stay Establishment (Registration and Regulation) Scheme, 2019, (d) MP Gram Stay Establishment (Registration and Regulation) Scheme, 2019, places of worship and religious institutions will also be covered under this category.

**Tariff:****LV 1.1 (Consumers having sanctioned load not more than 100 watts (0.1 kW) and consumption not more than 30 units per month)****(a) Energy Charge and Fixed Charge – For metered connection**

| Monthly Consumption (units) | Existing                       |                      | Proposed                       |                      |
|-----------------------------|--------------------------------|----------------------|--------------------------------|----------------------|
|                             | Energy Charge (paise per unit) | Monthly Fixed Charge | Energy Charge (paise per unit) | Monthly Fixed Charge |
|                             | Urban and Rural                |                      |                                |                      |
| Up to 30 units              | 334                            | NIL                  | 367                            | Nil                  |

**LV 1.2****(i) Energy Charge and Fixed Charge – For metered connection**

| Monthly Consumption Slab Urban / Rural areas (units)            | Existing   |                                       |                                       | Proposed   |                                       |                                       |
|---|--|---------------------------------------|---------------------------------------|--|---------------------------------------|---------------------------------------|
|   | Energy Charge with telescopic benefit (paise per unit) Urban / Rural areas | Monthly Fixed Charge (Rs)             |                                       | Energy Charge with telescopic benefit (paise per unit) Urban / Rural areas | Monthly Fixed Charge (Rs)             |                                       |
|   |  | Urban areas                           | Rural areas                           |  | Urban areas                           | Rural areas                           |
| Up to 50 units  | 427  | 71 per connection                     | 57 per connection                     | 459  | 77 per connection                     | 62 per connection                     |
| 51 to 150 units   | 523  | 124 per connection                    | 101 per connection                    | 562  | 134 per connection                    | 109 per connection                    |
| 151 to 300 units <sup>#</sup> /<br>Above 150 units <sup>*</sup> | 661  | 27 for each 0.1 kW of authorized load | 24 for each 0.1 kW of authorized load | 711  | 29 for each 0.1 KW of authorized load | 26 for each 0.1 KW of authorized load |
| Above 300 units   | 680  | 27 for each 0.1 kW of authorized load | 26 for each 0.1 kW of authorized load |  |                                       |                                       |

#Existing slab \*Proposed

**Notes:**

1. The fixed charges shall be levied considering every 15 units of consumption per month or part thereof equal to 0.1 kW of load. Example: If consumption during the month is 155 units, then the fixed charges shall be levied for 1.1 kW. In case the consumption is 350 units then the fixed charges shall be levied for 2.4 kW.
2. In cases where the readings are recorded for the duration other than the respective days of the month, the consumption shall be prorated for the month so as to arrive at the proportionate units eligible for different slabs in a particular billing month. Accordingly, the Fixed and Energy Charges shall be computed.

**Illustration**

Previous Meter Reading: 4<sup>th</sup> April 2025

Next Meter Reading: 10<sup>th</sup> May 2025

Consumption period: 36 days

Consumption: 450 units

Slab-wise consumption to be considered for billing:

| Slab         | Computation of Consumption on Pro-rata basis | Units to be considered for billing (kWh) |
|--------------|--|--|
| 0-50         | 50 units/30 days*36 days                     | 60                                       |
| 51-150       | 100 units/30 days *36 days                   | 120                                      |
| Above 150    | Balance Units                                | 270                                      |
| <b>Total</b> |  | <b>450</b>                               |

# Billing of fixed charges shall be done after pro-rating the consumption for 30 days (i.e. billing period) in the above manner.

**(ii) Energy Charge and Fixed Charge – For temporary connection and DTR meter**

| Temporary connection  | Existing  |   |   | Proposed  |   |   |
|---|---|---|---|---|---|---|
|   | Energy Charge (paise per unit) Urban/Rural areas            | Monthly Fixed Charge (Rs)   |   | Energy Charge (paise per unit) Urban/Rural areas            | Monthly Fixed Charge (Rs)   |   |
|   |   | Urban areas   | Rural areas   |   | Urban areas   | Rural areas   |
| Temporary connection for construction of own house (max. up to three years) | 1.25 times the tariff applicable as per schedule LV 1.2 (i) |   |   | 1.25 times the tariff applicable as per schedule LV 1.2 (i) |   |   |
| Temporary connection for social/ marriage purposes and religious functions* | 850   | 77 for each one kW of sanctioned or connected or recorded load, whichever is highest, for each 24 | 62 for each one kW of sanctioned or connected or recorded load, whichever is highest, for each 24 | 914   | 83 for each one kW of sanctioned or connected or recorded load, whichever is highest, for | 67 for each one kW of sanctioned or connected or recorded load, whichever is highest, for |

| Temporary connection  | Existing  |                                 |                                 | Proposed   |   |   |
|---|---|---------------------------------|---------------------------------|--|---|---|
|   | Energy Charge (paise per unit)<br>Urban/<br>Rural areas | Monthly Fixed Charge (Rs)       |                                 | Energy Charge (paise per unit)<br>Urban/ Rural areas | Monthly Fixed Charge (Rs)               |   |
|   |   | Urban areas                     | Rural areas                     |  | Urban areas                             | Rural areas                             |
|   |   | hours duration or part thereof. | hours duration or part thereof. |  | each 24 hours duration or part thereof. | each 24 hours duration or part thereof. |
| Supply through DTR meter for clusters of Jhuggi / Jhopadi till individual meters are provided | 355   | Nil                             | Nil                             | 488  | Nil                                     | Nil                                     |

*\*Note: For the consumers in this category, the Distribution Licensee shall provide trivector / bivector Meter capable of recording demand in kVA/kW, kWh, kVAh*

**(iii) Energy Charge and Fixed Charge for un-metered rural domestic connections having connected load up to 500 watts:**

| Particulars  | Existing  |                           | Proposed  |                           |
|--|---|---------------------------|---|---------------------------|
|  | Units and Energy Charge to be billed per month for unmetered connections (Paise per Unit) | Monthly Fixed Charge (Rs) | Units and Energy Charge to be billed per month for unmetered connections (Paise per Unit) | Monthly Fixed Charge (Rs) |
| Un-metered connection in rural areas having connected load up to 500 watts | 75 units @ 530 per unit   | 112 per connection        | 75 units @ 570 per unit   | 121 per connection        |

**Specific Terms and Conditions for LV-1 category:**

- No minimum charges are applicable to this category of consumers.
- In case of prepaid consumers, a rebate of 25 paise per unit shall be applicable on the energy charges and all other charges shall be calculated on the Tariff applicable after rebate. A consumer opting for prepaid meter shall not be required to make any security deposit. Other provisions with regard to prepaid consumers shall be as per the Practice Directions and SOP approved by the Commission.
- Additional charge for Excess connected load or Excess demand: No extra charges are applicable on the energy/ fixed charges due to the excess demand or excess connected load.
- In case of temporary requirement for renovation/upgradation of premises, load for such temporary purpose is allowed to be used from existing metered connection on the same tariff applicable for permanent connection subject to other terms and conditions of LT Domestic Tariff.

- e) **Time of Day (ToD) Rebate/Surcharge:** This rebate/surcharge shall be applicable as specified in General Terms and Conditions of Low-Tension Tariff.
- f) Other terms and conditions shall be as specified under General Terms and Conditions for Low Tension Tariff.

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**Tariff Schedule – LV-2****NON-DOMESTIC:****LV 2.1****Applicability:**

This tariff is applicable for light, fan and power to Schools / Educational Institutions including workshops and laboratories of Engineering Colleges / Polytechnics/ITIs (which are registered with /affiliated/ recognized by the relevant Govt. body or university), Hostels for students or working women or sports persons.

**Tariff:**

Tariff shall be as given in the following table:

| Sub-category   | Existing  |   |   | Proposed  |   |   |
|--|---|---|---|---|---|---|
|  | Energy Charge (paise/unit)<br>Urban/<br>Rural areas | Monthly Fixed Charge (Rs.)                  |   | Energy Charge (paise/unit)<br>Urban/<br>Rural areas | Monthly Fixed Charge (Rs.)                  |   |
|  |   | Urban areas                                 | Rural areas                                 |   | Urban areas                                 | Rural areas                                 |
| Sanctioned load-based tariff (only for connected load up to 10 kW) | 650   | 156 per kW                                  | 125 per kW                                  | 680   | 163 per kW                                  | 131 per kW                                  |
| Demand based tariff Mandatory for Connected load above 10 kW       | 650   | 275 per kW or 220 per kVA of billing demand | 235 per kW or 188 per kVA of billing demand | 680   | 288 per kW or 230 per kVA of billing demand | 246 per kW or 197 per kVA of billing demand |

**LV 2.2****Applicability:**

This tariff is applicable for light, fan and power to Railways (for purposes other than traction and supply to Railway Colonies/water supply), Shops/showrooms, Parlors, All Offices, Hospitals and medical care facilities including Primary Health Centers, clinics, nursing homes belonging to either Govt. or public or private organisations, public buildings, guest houses, Circuit Houses, Government Rest Houses, X-ray plant, recognized Small Scale Service Institutions, clubs, restaurants, eating establishments, meeting halls, places of public entertainment, circus shows, hotels, cinemas, professional's chambers (like Advocates, Chartered Accountants, Consultants, Doctors etc.), bottling plants, marriage gardens, marriage houses, advertisement services, advertisement boards/ hoardings, training or coaching institutes, petrol pumps and service stations, tailoring shops, laundries, gymnasiums, health clubs, telecom towers for mobile communication and any other establishment which is not covered in other LV categories.



**Tariff:**

Tariff shall be as given in the following table:

| Sub-category  | Existing  |  |  | Proposed   |  |  |
|---|---|--|--|--|--|--|
|   | Energy Charge (paise/unit)<br>Urban/ Rural areas  | Monthly Fixed Charge (Rs.)   |  | Energy Charge (paise/unit)<br>Urban/ Rural areas   | Monthly Fixed Charge (Rs.)   |  |
|   |   | Urban areas  | Rural areas  |  | Urban areas  | Rural areas  |
| Sanctioned load-based tariff (only for connected load up to 10kW) On all units if monthly consumption is <b>up to 50 units*</b>                 | 630   | 82 per kW  | 67 per kW  | 659  | 86 per kW  | 70 per kW  |
| Sanctioned load-based tariff (only for connected load up to 10kW) On all units in casemonthly consumption exceeds <b>50 units*</b>              | 780   | 138 per kW   | 117 per kW   | 816  | 144 per kW   | 122 per kW   |
| Demand based tariff ( <b>Mandatory</b> for Connected load above 10 kW)  | 690   | 296 per kW or 237 per kVA of billing demand  | 214 per kW or 171 per kVA of billing demand  | 722  | 310 per kW or 248 per kVA of billing demand  | 224 per kW or 179 per kVA of billing demand  |
| Temporary connection including Multi point temporary connections at LT for Mela**   | 870   | 224 per kW or part thereof of sanctioned or connected or recorded load, whichever is the highest   | 195 per kW or part thereof of sanctioned or connected or recorded load whichever is the highest  | 910  | 234 per kW or part thereof of sanctioned or connected or recorded load, whichever is the highest   | 204 per kW or part thereof of sanctioned or connected or recorded load whichever is the highest  |
| Temporary connection for marriage purposes at marriage gardens or marriage halls or any other premises covered under LV. 2.1 and 2.2 categories | 870 (Minimum consumption charges shall be billed @ 6 Units per kW or part thereof of sanctioned or connected or recorded load, whichever is the highest for each 24 hours duration or part there of subject to a minimum of Rs.500/-) | 87 for each kW or part thereof of sanctioned or connected or recorded load, whichever is the highest for each 24 hours duration or part thereof. | 67 for each kW or part thereof of sanctioned or connected or recorded load, whichever is the highest for each 24 hours duration or part thereof. | 910 (Minimum consumption charges shall be billed @ 6 Units per kW or part thereof of sanctioned or connected or recorded load, whichever is the highest for each 24 hours duration or part there of subject to a minimum of Rs.1000/-) | 91 for each kW or part thereof of sanctioned or connected or recorded load, whichever is the highest for each 24 hours duration or part thereof. | 70 for each kW or part thereof of sanctioned or connected or recorded load, whichever is the highest for each 24 hours duration or part thereof. |

\*The applicability of sanctioned load based tariff shall be subject to monthly consumption corresponding to minimum charges leviable under the specific terms and conditions for LV-2 category.

\*\*In case permission for organizing Mela is granted by Competent Authorities of the Government of Madhya Pradesh.

**Specific Terms and Conditions for LV-2 category:**

- a) **Minimum charges:** The consumer shall pay minimum annual charges based on consumption of 240 units per kW or part thereof in urban areas and 180 units per kW or part thereof in rural areas of sanctioned load or contract demand (in case of demand based charges) irrespective of whether any energy is consumed or not during the year. However, the load of X-Ray unit shall be excluded while considering the load of the consumer for calculation of minimum charges. The method of billing of minimum charges shall be as given in General Terms and Conditions of Low Tension tariff.
- b) **Additional Charge for Excess demand:** Shall be billed as given in General Terms and Conditions of Low Tension tariff.
- c) For LV-2.1 and LV-2.2: For the consumers having connected load in excess of 10 kW, demand based tariff is mandatory. The consumers having connected load upto and including 10 kW may also opt for Demand based tariff.
- d) In case of prepaid consumers, a rebate of 25 paise per unit shall be applicable on the energy charges and all other charges shall be calculated on the Tariff applicable after rebate. A consumer opting for prepaid meter shall not be required to make any security deposit. Other provisions with regard to prepaid consumers shall be as per the Practice Directions and SOP approved by the Commission.
- e) **Time of Day (ToD) Rebate/Surcharge:** This rebate/surcharge shall be applicable as specified in General Terms and Conditions of Low-Tension Tariff.
- f) Other terms and conditions shall be as specified under ***General Terms and Conditions of Low-Tension Tariff.***

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**Tariff Schedule – LV-3****PUBLIC WATER WORKS AND STREET LIGHTS****Applicability:**

The tariff LV-3 is applicable for Public Utility Water Supply Schemes, Sewage Treatment Plants, Sewage Pumping Installations run by P.H.E. Department or Local Bodies or Gram Panchayats or any other organization authorised by the Government to supply/ maintain public water works / sewerage installations, traffic signals and lighting of public streets or public places including parks, town halls, monuments and its institutions, museums, public toilets, public libraries, reading rooms run by the Government or Local Bodies, and Sulabh Shochalaya and shall also be applicable to electric crematorium maintained by local bodies/trusts.

**Note: Private water supply scheme, water supply schemes run by institutions for their own use/ employees/ townships etc. shall not fall in this category. These shall be billed under the appropriate tariff category to which such institution belongs. In case water supply is being used for two or more different purposes then entire consumption shall be billed for purpose for which the tariff is higher.**

**Tariff:**

| Category of consumers/area of applicability                             | Existing                       |                                  |                      | Proposed                       |                                  |                      |
|---|--------------------------------|----------------------------------|----------------------|--------------------------------|----------------------------------|----------------------|
|   | Energy Charge (Paise per unit) | Monthly Fixed Charge (Rs per KW) | Minimum charges (Rs) | Energy Charge (Paise per unit) | Monthly Fixed Charge (Rs per KW) | Minimum charges (Rs) |
| Municipal Corporation/ Cantonment board /Municipality / Nagar Panchayat | 583                            | 367                              | No Minimum Charges   | 624                            | 393                              | No Minimum Charges   |
| Gram Panchayat  | 555                            | 179                              |                      | 597                            | 192                              |                      |

**Specific Terms and Conditions for LV-3 category:****a) Incentives for adopting Demand Side Management:**

An **incentive** equal to 5 % of Energy Charges shall be given on installation and use of energy saving devices (such as ISI energy efficient motors for pump sets and programmable on-off/ dimmer switch with automation for street lights). **Incentive** will be admissible only if full bill is paid within due dates failing which all consumed units will be charged at normal rates. Such incentive will be admissible from the month following the month in which energy saving devices are put to use and are verified by a person authorized by the Distribution Licensee. This incentive will continue to be allowed till such time these energy saving devices remain in service. The Distribution Licensee is required to arrange wide publicity of above incentive.

**b) Tariff for temporary connection shall be 1.25 times the applicable tariff.**

- c) **Time of Day (ToD) Rebate/Surcharge:** This rebate/surcharge shall be applicable as specified in General Terms and Conditions of Low-Tension Tariff.
- d) Other terms and conditions shall be as specified under ***General Terms and Condition of Low-Tension Tariff.***

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**Tariff Schedule – LV-4****LT INDUSTRIAL****Applicability:**

Tariff LV-4 is applicable to light, fan and power for operating equipment used by printing press and any other industrial establishments and workshops (where any processing or manufacturing takes place including tyre re-treading). These tariffs are also applicable to cold storage, gur (jaggery) making machines, flour mills, Masala Chakkies, hullers, khandsari units, ginning and pressing units, sugar cane crushers (including sugar cane juicing machine), power looms, dal mills, besan mills, and ice factories and any other manufacturing or processing units (excluding bottling plant) producing/processing food items or processing agriculture produce for preservation/increasing its shelf life and Dairy units ( where milk is processed to produce other end products of milk other than chilling, pasteurization etc.)

**Tariff:**

| Sr. no.    | Category of consumers/area of applicability | Existing                                    |   |                                | Proposed                                    |   |                                |
|------------|---|---|---|--------------------------------|---|---|--------------------------------|
|            |   | Monthly Fixed Charge (Rs per KW)            |   | Energy Charge (Paise per unit) | Monthly Fixed Charge (Rs per KW)            |   | Energy Charge (Paise per unit) |
|            |   | Urban Areas                                 | Rural Areas                                 |                                | Urban Areas                                 | Rural Areas                                 |                                |
| <b>4.1</b> | <b>Non seasonal consumers</b>               |   |   |                                |   |   |                                |
| 4.1 a      | Demand based tariff*                        | 320 per kW or 256 per kVA of billing demand | 205 per kW or 164 per kVA of billing demand | 660                            | 333 per kW or 266 per kVA of billing demand | 213 per kW or 170 per kVA of billing demand | 686                            |

\* The Demand based tariff shall be applicable for Contract demand up to the limit specified for LT Supply in the Madhya Pradesh Electricity Supply Code, 2021 and its amendments thereof. Further, in case of consumers having contract demand up to 20 HP/15 kW, the energy charges and fixed charges shall be billed at a rate 30% less than the charges shown in above table for tariff category 4.1a.

Provided that, consumers whose recorded maximum demand during a month is more than 20 HP/15 kW, rebate of 30% shall not be applicable for that particular month.

| 4.2   |                          | Seasonal Consumers (This tariff shall be applicable to such seasonal industries / consumers defined under this schedule) |   |  |   |   |  |
|-------|--------------------------|--|---|--|---|---|--|
| 4.2 a | <b>During Season</b>     | Normal tariff as for Non seasonal consumers  | Normal tariff as for Non seasonal consumers   | Normal tariff as for Non seasonal consumers          | Normal tariff as for Non seasonal consumers   | Normal tariff as for Non seasonal consumers   | Normal tariff as for Non seasonal consumers          |
| 4.2 b | <b>During Off season</b> | Normal tariff as for Non-seasonal consumers on 10 % of contract demand or actual recorded demand,                        | Normal tariff as for Non-seasonal consumers on 10 % of contract demand or actual recorded demand, | 120 % of normal tariff as for Non-seasonal consumers | Normal tariff as for Non-seasonal consumers on 10 % of contract demand or actual recorded demand, | Normal tariff as for Non-seasonal consumers on 10 % of contract demand or actual recorded demand, | 120 % of normal tariff as for Non-seasonal consumers |

|  |  |                      |                      |  |                      |                      |  |
|--|--|----------------------|----------------------|--|----------------------|----------------------|--|
|  |  | whichever<br>is more | whichever<br>is more |  | whichever<br>is more | whichever<br>is more |  |
|--|--|----------------------|----------------------|--|----------------------|----------------------|--|

**Specific Terms and Conditions for LV-4 category:**

- (a) The maximum demand of the consumer in each month shall be reckoned as four times the largest amount of kilovolt ampere hours delivered at the point of supply of the consumer during any continuous fifteen minutes in that month.
- (b) Demand based tariff is mandatory for all the LT industrial consumers.
- (c) **Additional Charge for Excess Demand:** Shall be billed as given in the General Terms and Conditions of Low Tension Tariff.
- (d) **Time of Day (ToD) Rebate/Surcharge:** This rebate/surcharge shall be applicable as specified in General Terms and Conditions of Low-Tension Tariff.
- (e) No minimum charges are applicable to this category of consumers.
- (f) **Other Terms and conditions for seasonal consumers:**
- i. Season shall mean continuous period up to 6 months with a ceiling of 185 days.
  - ii. Period other than the declared season shall be considered as the off season period.
  - iii. The consumer has to declare months of season and off season for a year within 60 days of issuance of this tariff order and inform the same to the Distribution Licensee. The Year in this case shall be a period of 12 months commencing from start of season / off season, as applicable. If the consumer has already declared the period of season and off-season prior to issuance of this order, same shall be taken into cognizance for the purpose and accepted by the Distribution Licensee.
  - iv. The seasonal period once declared by the consumer cannot be changed during the year.
  - v. If the declared season or off-season spreads over two tariff periods, then the tariff for the respective period shall be applicable.
  - vi. This tariff is not applicable to composite units having seasonal and other category of loads.
  - vii. The consumer will be required to restrict his monthly off season consumption to 15% of the highest of average monthly consumption during the preceding three seasons. In case this limit is exceeded in any off season month, the consumer will be billed under Non seasonal tariff for the whole year (as opted) as per the tariff in force.
  - viii. The consumer will be required to restrict his maximum demand during off season up to 30% of the contract demand. In case the maximum demand recorded in any month

of the declared off season exceeds 36% of CD (120% of 30% of CD), the consumer will be billed under Non seasonal tariff for the whole year (as opted) as per the tariff in force.

- (g) The tariff for temporary connection for Non seasonal consumers shall be 1.25 times of the applicable tariff.
- (h) Other terms and conditions shall be as specified under ***General Terms and Condition of Low Tension Tariff.***

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**Tariff Schedule – LV-5****AGRICULTURE AND ALLIED ACTIVITIES****Applicability:**

**The tariff LV-5.1** shall apply to connections for agricultural pump, chaff cutters, threshers, winnowing machines, seeding machines, irrigation pumps of lift irrigation schemes including water drawn by agriculture pumps for use by cattle and pump connections for the purpose of fodder farming associated to Gaushalas.

**The tariff LV-5.2** shall apply to connections for nurseries, farms growing flowers/ plants/ saplings/ fruits, mushroom and grasslands.

**The tariff LV-5.3** shall apply to connections for fisheries ponds, aquaculture, sericulture, hatcheries, poultry farms, cattle breeding farms and those dairy units only where extraction of milk and its processing such as chilling, pasteurization etc. is done.

The tariff LV- 5.4 shall apply to connections for permanent agricultural pump, chaff cutters, threshers, winnowing machines, seeding machines, irrigation pumps of lift irrigation schemes including water drawn by agriculture pumps for use by cattle and pump connections for the purpose of fodder farming associated to Gaushalas to whom flat rate tariff is applicable.

**Tariff:**

| Sr. no.       | Sub-Category                                 | Existing                    |                                 | Proposed                             |                                 |
|---------------|--|-----------------------------|---------------------------------|--------------------------------------|---------------------------------|
|               |  | Monthly Fixed charges (Rs.) | Energy charges (Paise per unit) | Monthly Fixed charges (Rs.)          | Energy charges (Paise per unit) |
| <b>LV-5.1</b> |  |                             |                                 |                                      |                                 |
| a)(i)         | First 300 units per month                    | 60                          | 489                             | 87                                   | 600                             |
| (ii)          | Above 300 units up to 750 units in the month | 76                          | 592                             |                                      |                                 |
| (iii)         | Rest of the units in the month               | 84                          | 620                             |                                      |                                 |
| b)            | Temporary connections                        | 84                          | 620                             | @1.25 times of the applicable tariff |                                 |
| c)            | DTR metered group consumers                  | Nil                         | 469                             | Nil                                  | 507                             |
| <b>LV-5.2</b> |  |                             |                                 |                                      |                                 |
| a)(i)         | First 300 units per month                    | 60                          | 489                             | 87                                   | 600                             |
| (ii)          | Above 300 units up to 750 units in the month | 76                          | 592                             |                                      |                                 |
| (iii)         | Rest of the units in the month               | 84                          | 620                             |                                      |                                 |
| b)            | Temporary connections                        | 84                          | 620                             | @1.25 times of the applicable tariff |                                 |
| <b>LV-5.3</b> |  |                             |                                 |                                      |                                 |
| a)            | Up to 25 HP in <b>Urban areas</b>            | 122 per HP                  | 545                             | 133 per HP                           | 590                             |
| b)            | Up to 25 HP in <b>Rural areas</b>            | 91 per HP                   | 528                             | 99 per HP                            | 571                             |



| Sr. no.                            | Sub-Category   | Existing                                    |                                 | Proposed                                    |                                 |
|------------------------------------|--|---|---------------------------------|---|---------------------------------|
|                                    |  | Monthly Fixed charges (Rs.)                 | Energy charges (Paise per unit) | Monthly Fixed charges (Rs.)                 | Energy charges (Paise per unit) |
| c)                                 | Demand based tariff* (Mandatory above 25 HP) in <b>Urban areas</b> | 281 per kW or 225 per kVA of billing demand | 620                             | 306 per kW or 245 per kVA of billing demand | 671                             |
| d)                                 | Demand based tariff* (Mandatory above 25 HP) in <b>Rural areas</b> | 150 per kW or 120 per kVA of billing demand | 620                             | 164 per kW or 131 per kVA of billing demand | 671                             |
| <b>LV-5.4</b>                      |  |   |                                 |   |                                 |
| See para 1.2 of terms & conditions |  |   |                                 | See para 1.2 of terms & conditions          |                                 |

\* The Demand based tariff shall be applicable for Contract demand up to the limit specified for LT Supply in the Madhya Pradesh Electricity Supply Code, 2021 and its amendments thereof.

**Note:**

1. The agriculture consumers in urban area connected to a feeder other than separated agriculture feeder will be billed as per consumption recorded in the meter. Existing unmetered consumers may be billed as per flat rate till meters are installed. DISCOMs must ensure that meters on all such connections are installed by the end of the current financial year.
2. Tariff for Temporary connections under LV-5.1, LV-5.2 and LV-5.3 sub-categories will be 1.25 times the applicable tariff.

**Specific Terms and Conditions for LV-5 category:**

**1.1 Billing of consumers under tariff schedule LV 5.1:** Billing to the consumers covered under tariff schedule LV 5.1 shall be done on a monthly basis based on the consumption recorded in the meter. Unmetered temporary connection under this schedule shall be billed on the basis of assessment of consumption provided under condition 1.3 (iii) of this schedule.

**1.2 Billing of consumers under tariff schedule LV 5.4:**

The bill for the consumer covered under the tariff category LV 5.4 shall be calculated at the rates specified under the tariff schedule LV 5.1 based on norms for assessment of units per HP specified under condition 1.3 of this schedule. In event of tariff subsidy for consumers, action as mandated under Section 65 of the Electricity Act, 2003 shall be ensured by all concerned and such consumers shall be billed accordingly by the Distribution Licensees.

**1.3 Basis of energy audit and accounting for categories LV 5.1 and LV 5.4:**

- (i) For energy audit and accounting purposes, actual billed consumption of LV 5.4 and metered consumers covered under tariff schedule LV 5.1 shall be considered.
- (ii) For unmetered agriculture consumers under LV 5.4 category, assessed

consumption shall be as per following norms **till the time provisions of SOP issued under the Electricity (Amendment) Rules 2022 approved by the Hon'ble Commission**

| Particulars        | No. of units per HP of sanctioned load per month |              |
|--------------------|--|--------------|
|                    | Urban/Rural Area                                 |              |
| Type of Pump/Motor | April to Sept                                    | Oct to March |
| Three Phase        | 95   | 170          |
| Single Phase       | 95   | 180          |

Note: Once the modalities as proposed in this Petition for implementation of SOP issued under the Electricity (Amendment) Rules 2022 are approved, the consumption will be captured as per Measured Common Norms as proposed in this Petition.

(iii) For unmetered temporary agriculture consumers under LV 5.1 category, assessed consumption shall be as per following norms:

| Particulars        | No. of units per HP of sanctioned load per month |              |
|--------------------|--|--------------|
|                    | Urban/Rural Area                                 |              |
| Type of Pump/Motor | April to Sept                                    | Oct to March |
| Three Phase        | 220  | 195          |
| Single Phase       | 230  | 205          |

Note: Once the modalities as proposed in this Petition for implementation of SOP issued under the Electricity (Amendment) Rules 2022 are approved, the consumption will be captured as per Measured Common Norms for each circle as proposed in this Petition.

However, the norms for unmetered temporary agriculture consumers as per table above shall remain same and will be used for the purpose of computation and recovery of temporary advance from the consumers.

**1.4** Agricultural consumers opting for temporary supply shall have to pay the charges in advance for three months including those who request to avail connection for one month only subject to replenishment from time to time for extended period and adjustment as per final bill after disconnection. Regarding temporary connection for the purpose of threshing the crops, temporary connection for a period of one month can be served at the end of Rabi and Kharif seasons only with payment of one month's charges in advance.

**1.5** Following **incentive\*** shall be given to the metered agricultural consumers on installation of energy saving devices –

| Sr.no. | Particulars of Energy Saving Devices   | Rate of rebate    |
|--------|--|-------------------|
| 1.     | ISI / BEE star labelled motors for pump sets   | 15 paise per unit |
| 2.     | ISI / BEE star labelled motors for pump sets and use of frictionless PVC pipes and foot valve  | 30 paise per unit |
| 3.     | ISI / BEE star labeled motors for pump sets and use of frictionless PVC pipes and foot valves along with installation of shunt capacitor of appropriate rating | 45 paise per unit |

\* Incentive shall be allowed on the consumer's contribution part of the normal tariff (full tariff minus amount of Govt. subsidy per unit, if any) for installation of energy saving devices under demand side management. This incentive will be admissible only if full bill is paid within due dates failing which all consumed units will be charged at normal rates. Incentive will be admissible from the month following the month in which Energy Saving Devices are put to use and its verification by a person authorized by the Distribution Licensee. The Distribution Licensee is required to arrange wide publicity to above incentive in rural areas. The licensee is required to place quarterly information regarding incentives provided on its website.

**1.6 Additional Charge for Excess Demand:** Shall be billed as given in the *General Terms and Conditions of Low Tension Tariff*.

**1.7 Delayed payment surcharge** in case of agriculture consumers on LV - 5.4 (proposed to be merged under LV: 5.1) flat rate tariff shall be levied @ of Rs 1 every month for each block or part thereof of arrears of Rs.100/-. For other sub categories of this Tariff Schedule, the delayed payment surcharge shall be billed as specified under General Terms and Conditions of Low Tension Tariff.

**1.8 Specific conditions for DTR metered consumers:**

- a) All the consumers connected to the DTR shall pay the energy charges for the units worked out based on their actual connected load.
- b) The Distribution Licensee will obtain consent of such connected consumers for billing as per procedure specified in (a) above.

**1.9** One CFL/ LED lamp up to 20 Watt is permitted at or near the pump in the power circuit.

**1.10** The use of three phase agriculture pump by installing external device during the period when the supply is available on single phase, shall be treated as illegal extraction of energy and action as per prevailing rules and Regulations shall be taken against the defaulting consumer.

**1.11** No minimum charges are applicable to this category of consumers.

**1.12** Other terms and conditions shall be as specified under General Terms and Conditions *of Low Tension Tariff*.

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**Tariff Schedule - LV-6****E- VEHICLE / E-RICKSHAWS CHARGING STATIONS****Applicability:**

The tariff is applicable exclusively for Electric Vehicle / Electric Rickshaws charging and battery swapping stations. However, tariff for other consumers who use electricity for charging their own Vehicle / Rickshaws shall be the same as applicable for the relevant category of metered connection from which the Vehicle / Rickshaws are being charged.

**Tariff:**

| Category  | Energy Charge<br>(Paise/unit) |          |
|---|-------------------------------|----------|
|   | Existing                      | Proposed |
| Electric Vehicle/ Rickshaw charging installations | 690                           | 734      |

**Specific Terms and Conditions for LV-6 category:**

- a) The energy charges for E- Vehicle / E- Rickshaws charging stations shall be applicable as below:-
  - (i) **During Solar Hours (9 AM to 5 PM):** Rebate of 20% on normal rate of energy charge shall be applicable on energy consumed during this period and;
  - (ii) **During Non-Solar Hours (for remaining part of Day):** Surcharge of 20% on normal rate of energy charge shall be applicable on energy consumed during this period.
- b) Other terms and conditions shall be as specified under ***General Terms and Conditions of Low Tension Tariff.***

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## **GENERAL TERMS AND CONDITIONS OF LOW TENSION TARIFF**

1. **Rural Areas** mean those areas notified by the GoMP vide notification no. 2010/F13 /05/13/2006 dated 25<sup>th</sup> March 2006 as may be amended from time to time. **Urban areas** mean all areas other than those notified by the GoMP as Rural Areas.
2. Tariff for Green Energy shall be inclusive of normal tariff as applicable to that category of consumer and Green Energy Charges as mentioned in Clause 12 of General Terms and Conditions of LT Tariff.
3. **Rounding off:** All bills will be rounded off to the nearest rupee i.e. up to 49 paisa shall be ignored and 50 paisa upwards shall be rounded off to next Rupee.
4. **Billing Demand:** In case of demand based tariff, the billing demand for the month shall be the actual maximum kVA demand of the consumer during the month or 90% of the contract demand, whichever is higher. The billing demand shall be rounded off to the nearest integer number i.e. fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored.
5. **Fixed charges billing:** Unless specified otherwise, fractional load for the purposes of billing of fixed charges shall be rounded off to nearest integer i.e. fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored. However, for loads less than one kW/HP, it shall be treated as one kW/HP.
6. **Method of billing of minimum consumption:**
  - A. **For other consumers where applicable:**
    - a. The consumer shall be billed one twelfth of annual minimum consumption (kWh) specified for his category each month in case the actual consumption is less than above mentioned minimum consumption.
    - b. During the month in which actual cumulative consumption equals or is greater than the annual minimum consumption, no further billing of monthly minimum consumption shall be done in subsequent months of the financial year and only actual recorded consumption shall be billed.
    - c. Minimum consumption shall be adjusted in the month in which cumulative actual or billed monthly consumption exceeds cumulative monthly prorated minimum annual consumption. If actual cumulative consumption does not get fully adjusted in that month, adjustment shall continue to be provided in subsequent months of the financial year. The following example illustrates the procedure for monthly billing of consumption where prorated monthly minimum consumption is 100 kWh based on annual consumption of 1200 kWh.

| Month | Actual cumulative consumption (kWh) | Cumulative minimum consumption (kWh) | Higher of 2 and 3 (kWh) | Already billed in the year (kWh) | To be billed in the month = (4-5) (kWh) |
|-------|-------------------------------------|--------------------------------------|-------------------------|----------------------------------|---|
| 1     | 2                                   | 3                                    | 4                       | 5                                | 6                                       |
| April | 95                                  | 100                                  | 100                     | 0                                | 100                                     |
| May   | 215                                 | 200                                  | 215                     | 100                              | 115                                     |
| June  | 315                                 | 300                                  | 315                     | 215                              | 100                                     |
| July  | 395                                 | 400                                  | 400                     | 315                              | 85                                      |
| Aug   | 530                                 | 500                                  | 530                     | 400                              | 130                                     |
| Sept  | 650                                 | 600                                  | 650                     | 530                              | 120                                     |
| Oct   | 725                                 | 700                                  | 725                     | 650                              | 75                                      |
| Nov   | 805                                 | 800                                  | 805                     | 725                              | 80                                      |
| Dec   | 945                                 | 900                                  | 945                     | 805                              | 140                                     |
| Jan   | 1045                                | 1000                                 | 1045                    | 945                              | 100                                     |
| Feb   | 1135                                | 1100                                 | 1135                    | 1045                             | 90                                      |
| March | 1195                                | 1200                                 | 1200                    | 1135                             | 65                                      |

7. **Additional Charge for Excess connected load or Excess Demand:** Shall be billed as per the following procedure:

a) **For demand based tariff:** The consumers availing supply at demand based tariff shall restrict their actual maximum demand within the contract demand. However, in case the actual maximum demand recorded in any month exceeds 120% of the contract demand, the tariff in this schedule shall apply to the extent of 120 % of the contract demand only. The consumer shall be charged for demand recorded in excess of 120% of contract demand (termed as Excess Demand) at the following rates: -

i. **Energy charges for Excess Load:** No extra charges are applicable on energy charges due to excess demand or excess connected load.

ii. **Fixed Charges for Excess Demand:** These charges shall be billed as per following:

a. **Fixed Charges for Excess Demand when the recorded maximum demand is up to 130% of the contract demand:** Fixed Charges for Excess Demand over and above the 120 % of contract demand shall be charged at 1.3 times the normal rate of Fixed Charges.

b. **Fixed Charges for Excess Demand when the recorded maximum demand exceeds 130% of contract demand:** In addition to Fixed Charges in 1 above, recorded demand over and above 130 % of the contract demand shall be charged at 2 times the normal rate of Fixed Charges.

b) **For connected load based tariff:** The consumers availing supply at connected load based tariff shall restrict their actual connected load within the sanctioned load. However, in case the actual connected load in any month exceeds 120% of the

sanctioned load, the tariff in this schedule shall apply to the extent of 120 % of the sanctioned load only. The consumer shall be charged for the connected load found in excess of 120% of the sanctioned load (termed as Excess Load) at the following rates:-

- i. **Energy charges for Excess Load:** No extra charges are applicable on energy charges due to excess demand or excess connected load.
- ii. **Fixed Charges for Excess load:** These charges shall be billed as per following, for the period for which the use of excess load is determined in condition i) above:
  - a. **Fixed Charges for Excess load when the connected load is found up to 130% of the sanctioned load:** Fixed Charges for Excess load over and above the 120 % of sanctioned load shall be charged at 1.3 times the normal rate of Fixed Charges.
  - b. **Fixed Charges for Excess load when the connected load exceeds 130% of sanctioned load:** In addition to Fixed Charges in 1 above, connected load found over and above 130 % of the sanctioned load shall be charged at 2 times the normal rate of Fixed Charges.
- c) The above billing for Excess Connected Load or Excess Demand, applicable to consumers is without prejudice to the Distribution Licensee's right to ask for revision of agreement and other such rights that are provided under the Regulations notified by the Commission or under any other law.
- d) The maximum demand of the consumer in each month shall be reckoned as four times the largest amount of kilovolt-ampere hours delivered at the point of supply of the consumer during any continuous fifteen minutes in that month.

#### 8. Incentives/Rebates:

- (a) **Rebate on advance payment:** For advance payment made before commencement of consumption period for which bill is prepared, a rebate at one twelfth of annual interest rate in percentage applicable on working capital shall be given on the amount (excluding security deposit), which remains with the Distribution Licensee at the end of billing month. However, such amount shall be credited to the account of the consumer after adjusting any amount payable to the Distribution Licensee.
- (b) **Incentive for prompt payment:** An incentive for prompt payment @ 0.50% of the bill amount (excluding security deposit, any subsidy given by Government and Government levies viz. Electricity Duty and Cess etc.) shall be given in case the payment is made at least 7 days in advance of the due date of payment where the current month billing amount is equal to or greater than Rs. Ten Thousand. The consumers in arrears shall not be entitled for this incentive.

**(c) Rebate for online bill payment:**

- (i) Rebate of 0.50% on the total bill amount subject to maximum Rs.20 and minimum Rs 5 shall be applicable.

Provided that the consumer covered under LV-1: Domestic, shall be eligible for rebate of 0.50%, without any ceiling on maximum rebate amount.

- (ii) The Rebate as per clause 8 (c)(i) above, shall also be applicable to prepaid consumer on all types of recharges irrespective of mode of recharge i.e., Online of Offline.

Provided that such rebate shall not be applicable for initial recharge amount brought forward from security deposit amount of the prepaid consumers.

**(d) Load Factor incentive:** Following slabs of incentive shall be allowed for consumers billed under demand based tariff:

| <b>Load factor</b>                                      | <b>Concession in energy charges</b>   |
|---|---|
| Above 25% and up to 30 % load factor on contract demand | 12 paise per unit concession on the normal energy charges for all energy consumption over and above 25% load factor during the billing month  |
| Above 30% and up to 40 % load factor on contract demand | In addition to load factor concession available up to 30% load factor, concession at the rate of 24 paise per unit on the normal energy charges for all energy consumption over and above 30 % load factor during the billing month |
| Above 40% load factor on contract demand                | In addition to load factor concession available up to 40% load factor, concession at the rate of 36 paise per unit on the normal energy charges for all energy consumption over and above 40% load factor during the billing month  |

The **load factor** shall be calculated as per the following formula:

$$\text{Load Factor (\%)} = \frac{\text{Monthly consumption} \times 100}{\text{No. of hours in the billing month} \times \text{Demand (KW)}}$$

- i.** Monthly consumption shall be units (kWh) consumed in the month excluding those received from sources other than Licensee.
- ii.** No. of Hours in billing month shall exclude period of scheduled outages in hours.
- iii.** Demand shall be maximum demand recorded or contract demand whichever is higher.

**Note:** The Load Factor (%) shall be rounded off to the nearest lower integer.  
The billing month shall be the period in number of days between the two



consecutive dates of meter readings taken for the purpose of billing to the consumer for the period under consideration as a month.

- (e) **Power Factor Incentive:** If the average monthly power factor of consumer (other than LV-1: Domestic Consumer), is 86% or above, incentive shall be payable as follows:

| Power Factor | Percentage incentive payable on billed energy charges |
|--------------|---|
| 86%          | 0.5   |
| 87%          | 1.0   |
| 88%          | 1.5   |
| 89%          | 2.0   |
| 90%          | 2.5   |
| 91%          | 3.0   |
| 92%          | 3.5   |
| 93%          | 4.0   |
| 94%          | 4.5   |
| 95%          | 5.0   |
| 96%          | 6.0   |
| 97%          | 7.0   |
| 98%          | 8.0   |
| 99%          | 9.0   |
| 100%         | 10.0  |

Note:

For this purpose, the “average monthly power factor” shall have the same meaning as in Madhya Pradesh Electricity Supply Code, 2021, as amended from time to time.

Provided that this Incentive shall be billed on the basis of energy actually consumed during the month.

**All the rebates/incentives shall be calculated on amount excluding Government Subsidy, if any.**

- (f) **Time of Day (ToD) Rebate/Surcharge:** Following ToD rebate/surcharge shall be applicable to consumer having sanctioned load/contract demand exceeding 10 kW covered under LV categories (except agriculture):

| Sr. No | Category of Consumers  | Surcharge / Rebate on energy charges on energy consumed during the corresponding period |
|--------|--|---|
|        | <b>Consumers having sanctioned load/contract demand exceeding 10 kW covered under LV categories (except agriculture)</b> |   |

|   |   |  |
|---|---|--|
| 1   | Peak hours (6 AM to 9 AM and 5 PM to 10 PM) | Surcharge of 20% on normal rate of energy charge shall be applicable for energy consumed during this period. |
| 2   | Off peak /Solar hours (9 AM to 5 PM)        | Rebate of 20% on normal rate of energy charge shall be applicable for energy consumed during this period.    |
| <b>Consumers installed with Smart Meters having sanction load/contract demand up to 10 kW</b> |   |  |
| 1   | Off peak /Solar hours (9 AM to 5 PM)        | Rebate of 20% on normal rate of energy charge shall be applicable for energy consumed during this period.    |

## 9. Other Terms and Conditions:

- (a) The Sanctioned Load / Connected Load (for sanctioned load based tariff) or Contract Demand (for demand based tariff), as the case may be, should not exceed applicable threshold limit as specified in the Madhya Pradesh Electricity Supply Code, 2021 and its amendments thereof except where a higher limit is specified categorically or the category is exempted from the ceiling on connected load. If the consumer exceeds his connected load or contract demand as the case may be beyond this ceiling in two consecutive billing months during the tariff period, the Distribution Licensee may insist on the consumer to avail HT supply.
- (b) No metering charges shall be levied.
- (c) In case the cheque presented by the consumer is dishonoured, without prejudice to Distribution Licensee's rights to take recourse to such other action as may be available under the relevant law, a service charge of Rs. 200 plus applicable GST per cheque shall be levied in addition to delayed payment surcharge
- (d) Other charges, wherever applicable shall be as specified in Madhya Pradesh Electricity Regulatory Commission (Recovery of Expenses and other Charges for providing Electric Line or Plant used for the purpose of giving Supply) Regulations, 2022 and amendments thereof.
- (e) Existing LT power consumer (other than LV-1: Domestic Consumer) shall ensure that LT capacitor of proper rating is provided. In this regard, the Madhya Pradesh Electricity Supply Code, 2021, as amended from time to time may be referred for guidance. It shall be the responsibility of the consumer to ensure that overall average power factor during any month is not less than 0.8 (80%) failing which the consumer shall be liable to pay low power factor surcharge on the entire billed amount against energy charges during the month. Provided that such surcharge shall be billed on the basis of energy actually consumed during the month. Power factor surcharge shall be billed at the rates given below in e(1) and e(2):

### **e(1) For the consumer whose meter is capable of recording average power factor:**

| <b>Power Factor</b> | <b>Percentage Surcharge payable on billed energy charges</b> |
|---------------------|--|
| 79%                 | 1%   |
| 78%                 | 2%   |
| 77%                 | 3%   |
| 76%                 | 4%   |
| 75%                 | 5%   |
| 74%                 | 6.25%  |
| 73%                 | 7.50%  |
| 72%                 | 8.75%  |
| 71%                 | 10.00%   |
| Below 71%           | 10.00%   |

For this purpose, the “average monthly power factor” shall have the same meaning as in Madhya Pradesh Electricity Supply Code, 2021, as amended from time to time.

In case of billing or credit of minimum consumption such surcharge shall be billed with respect to energy actually consumed during the month.

**e(2) For the consumer other than e(1) above:** The consumer (other than LV-1: Domestic Consumer) shall ensure that LT capacitors of proper rating are provided and are in good working condition. In this regard, the Madhya Pradesh Electricity Supply Code, 2021, as amended from time to time may be referred for guidance. In case of failure to meet the above criteria, the consumer would be levied a low power factor surcharge of 10% on the entire billed amount against energy charges during the month and would be continued to be billed till such time the consumer meets the above criteria.

In case of billing or credit of minimum consumption such surcharge shall be billed with respect to energy actually consumed during the month.”

- (f)** Levy of power factor surcharge as indicated hereinabove shall be without prejudice to the rights of the Licensee to disconnect the consumer’s installation, if steps are not taken to improve the power factor by installing suitable shunt capacitors.
- (g)** In case of any dispute on applicability of tariff on a particular LT category, the decision of the Commission shall be final.
- (h)** The tariff does not include any tax, cess or duty, etc. on electrical energy that may be payable at any time in accordance with any law then in force. Such charges, if any, shall also be payable by the consumer in addition to the tariff charges and applicable miscellaneous charges.
- (i) Delayed payment Surcharge for all categories:** Surcharge at the rate of 1.25 % per month or part thereof on the amount outstanding (including arrears) will be payable if the bills are not paid up to due date subject to a minimum of Rs.5/- per month for total

outstanding bill amount up to Rs. 500/- and Rs 10/ per month for amount of bill more than Rs.500/. The part of a month will be reckoned as full month for the purpose of calculation of delayed payment surcharge. The delayed payment surcharge will not be levied for the period after supply to the consumer is permanently disconnected. However, for the temporary connection, if any, amount is outstanding after disconnection, Delayed Payment Surcharge at the rate of 1.25% per month or part thereof shall be applicable as per Madhya Pradesh Electricity Supply Code, 2021 as amended from time to time.

- (j) In case of conversion of LT connection into HT connection, it is mandatory on the part of both the consumer and the licensee to get the HT agreement executed before availing supply at HT.
- (k) **Use of mix loads in one connection:** Unless otherwise permitted specifically in the tariff category, the consumer using mix loads for different purposes shall be billed for the purpose for which the tariff is higher.
- (l) Consumers in the notified Industrial Growth Centres/Industrial areas/Industrial parks receiving supply under urban discipline shall be billed urban tariff.
- (m) No change in the tariff or the tariff structure including minimum charges for any category of consumer is permitted except with prior written permission from the Commission. Any action taken without such written permission of the Commission shall be treated as null and void and shall also be liable for action under relevant provisions of the Electricity Act, 2003.
- (n) All conditions prescribed herein shall be applicable to the consumer notwithstanding if any contrary provisions exist in the agreement entered into by the consumer with the licensee.
- (o) If any difficulty arises in giving effect to any of the provisions of this order, the Commission may, by general or special order, direct the Licensees to do or undertake things, which in the opinion of the Commission is necessary or expedient for the purpose of removing the difficulties.

#### **10. Additional conditions for Temporary Supply at LT:**

Temporary supply cannot be demanded by a prospective/existing consumer as a matter of right but will normally be arranged by the Distribution Licensee when a requisition giving due notice is made. The temporary additional supply to an existing consumer also shall be treated as a separate service and charged subject to following conditions. However, service under Tatkal Scheme shall be made available within 24 hours subject to charges as specified in Madhya Pradesh Electricity Regulatory Commission (Recovery of Expenses and other Charges for providing Electric Line or Plant used for the purpose of giving Supply) Regulations, 2022 and amendments thereof.

- (a) Fixed Charge and Energy Charge for temporary supply shall be billed at 1.25 times the normal charges as applicable to relevant category if not specified otherwise specifically.
- (b) Estimated bill amount is payable in advance before serving the temporary connection subject to replenishment from time to time and adjustment as per final bill after disconnection. No interest shall be given to consumers for this advance payment.
- (c) The Sanctioned load / connected load (for sanctioned load based tariff) or contract demand (for demand based tariff), as the case may be, shall not exceed applicable threshold limit as specified in the Madhya Pradesh Electricity Supply Code, 2021 and its amendments thereof.
- (d) The month for the purpose of billing of charges for temporary supply shall mean 30 days from the date of connection. Any period less than 30 days shall be treated as full month for the purpose of billing.

Estimated bill amount is payable in advance for serving the temporary connection subject to replenishment from time to time and adjustment as per final bill after disconnection. No interest shall be given to consumers for this advance payment. With regard to the un-metered temporary agricultural connection Fuel and Power Purchase Adjustment Surcharge (FPPAS) shall be billed at the rate prevailing as on the date of raising the demand of estimated bill amount payable in advance.

- (e) Connection and disconnection charges and other miscellaneous charges shall be paid separately as specified in Madhya Pradesh Electricity Regulatory Commission (Recovery of Expenses and other Charges for providing Electric Line or Plant used for the purpose of giving Supply) Regulations, 2022 and amendments thereof.
- (f) Load factor concession shall not be allowed on the consumption for temporary connection.
- (g) Power factor incentive/penalty shall be applicable at the same rate as applicable for permanent connection.

**11.** Consumers availing Green Energy from Distribution Licensee only for the purpose of reducing their carbon footprint and seeking Certification to this effect shall be required to pay Green Energy Charges at the rate of Rs. 0.49/kWh and such charges shall be applicable over and above the normal tariff for that category of consumers. This facility shall be available to consumers who requisition any quantum of power up to 100% of their monthly consumption for availing power from RE sources. Further, such consumers may avail Green Energy for any number of days in a billing month.

**12.** The Consumers availing green energy from Distribution Licensee in accordance with provisions of MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof, shall be required to pay Green Energy Charges at Rs. 0.07/ kWh for Wind, Rs. 2.90/ kWh for HPO and Rs. 0.20/ kWh for Other, which shall be over and above the normal tariff of respective consumer category as per this Tariff Order.

- 13. Standby Charges:-** Standby Charges for the purpose of Madhya Pradesh Electricity Regulatory Commission (Methodology for determination of Open Access charges and Banking charges for Green Energy Open Access consumers) Regulations, 2023 as amended from time to time, shall be 0.25 times of the tariff applicable to the consumer availing Green Energy Open Access, which shall be over and above the normal tariff of the respective consumer category.
- 14.** The accounting and settlement for consumers availing net metering facility shall be as per Madhya Pradesh Electricity Regulatory Commission (Grid Interactive Renewable Energy System and Related Matters) Regulations, 2022 as amended from time to time.
- 15.** Wherever, there is contradiction in general terms & conditions and specific terms & conditions for

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**A22: TARIFF SCHEDULES FOR HIGH TENSION CONSUMERS**

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**Tariff Schedule - HV-1****RAILWAY TRACTION:****Applicability:**

This Tariff shall apply to the Railways for Traction loads only.

**Tariff:**

| Category of consumer                | Existing   |                              | Proposed   |                              |
|-------------------------------------|--|------------------------------|--|------------------------------|
|                                     | Monthly Fixed Charge (Rs. per kVA of billing demand per month) | Energy Charge (paise / unit) | Monthly Fixed Charge (Rs. per kVA of billing demand per month) | Energy Charge (paise / kVAh) |
| Railway Traction on 132 kV / 220 kV | 320  | 605                          | 344  | 606                          |

**Note: A rebate of Rs. 2 per Unit in energy charges is applicable. This rebate shall be applicable up to FY 2025-26.**

**Specific Terms and Conditions for HV-1 category:**

- (a) In order to give impetus to electrification of Railway network in the State, a rebate of 15% in energy charges for new Railway traction projects shall be allowed for a period up to FY 2025-26 for new projects. The rebate provided in earlier orders shall remain in force at the rate and for the duration as mentioned in those tariff orders.
- (b) The dedicated feeder maintenance charges shall not be applicable.
- (c) Annual Minimum charges shall be based on minimum consumption of 1596 units (kVAh) per kVA of Contract Demand. The method of billing of minimum charges shall be as given in General Terms and Conditions of High Tension Tariff.
- (d) The consumer shall at all times restrict their actual maximum demand within the contract demand. In case the actual maximum demand in any month exceeds 120% of the contract demand, the tariffs given in various schedules shall apply to the extent of the 120% of the contract demand only. The consumer shall be charged for excess demand computed as difference of recorded maximum demand and 120% of contract demand on fixed charges and while doing so, the other terms and conditions of tariff, if any, shall also be applicable on the said excess demand.
- (e) Energy charges for excess demand: No extra charges are applicable on the energy charges due to the excess demand or excess connected load.



- (f) The excess demand so computed as per above, if any, in any month shall be charged at the following rates:
- (a) When the recorded maximum demand is up to 130% of contract demand- Excess Demand over and above 115 % of the contract demand at the rate of Rs. 379 per kVA.
  - (b) When the recorded maximum demand exceeds 130% of contract demand:  
- In addition to fixed charges in (a) above, recorded demand over and above 30 % of the contract demand shall be charged at the rate of Rs. 516 per kVA

While doing so, other provisions of electricity tariff (such as tariff minimum charge etc.) will also be applicable on aforesaid excess demand.

**(g) Power Factor Penalty:**

- i. If the average monthly power factor of a consumer falls to 89 percent or below but up to 85 %, penalty will be levied at the rate of one percent of total energy charges for the month for each one percent fall in the average monthly power factor below 90 percent. **For determination of power factor, lag only logic shall be used and no power factor penalty shall be levied if leading power factor is recorded.**
- ii. If the average monthly power factor of a consumer falls to 84 percent or below, the consumer shall be levied a penalty of 5% (five percent) plus @ 2% (two percent) for each one percent fall in his average monthly power factor below 85 percent, on the subject to the condition that overall penalty on account of low power factor does not exceed 35%.
- iii. For this purpose, “the average monthly power factor” shall have the same meaning as in Madhya Pradesh Electricity Supply Code, 2021, as amended from time to time.
- iv. Notwithstanding what has been stated above, if the average power factor of a new connection of the consumer is found to be 89% or less in any month during the first 6 (six) months from the date of connection, the consumer shall be entitled to a maximum period of six months to improve it to not less than 90% subject to following conditions:
  - This period of six months shall be reckoned from the month in which the average power factor was found for the first time to be 89% or less.
  - In all cases, the consumer will be billed penal charges for low power factor, but in case the consumer maintains the average power factor in subsequent three months (thus in all four months) to not less than 90%, the charges on

account of low power factor billed during the said six months period, shall be withdrawn and credited in next monthly bills.

- The facility, as mentioned herein, shall be available not more than once to new consumer whose average power factor is 89% or less at any time during 6 months from the date of connection. Thereafter, the charges on account of low average power factor, if found 89% or less, shall be payable as by any other consumer.
- (h) **Emergency feed extension:** Provided that if as a result of the emergency in the traction substation or in the transmission line supplying load or part thereof is transferred to an adjacent traction substation, the M.D. for the month for that adjacent traction substation shall be as the average of M.D. for previous three months during which no emergency had occurred.
- (i) Other terms and conditions shall be as mentioned in the ***General Terms and Conditions of High Tension Tariff.***

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**Tariff Schedule - HV-2****COAL MINES:****Applicability:**

This Tariff shall apply to the Coal Mines for power, ventilation, lights, fans, coolers, etc. which shall mean and include all energy consumed for coal mines and lighting in the offices, stores, canteen, compound lighting etc. and the consumption for residential use therein.

**Tariff:**

| Sub category  | Existing   |   |  | Proposed   |  |   |
|---------------|--|---|--|--|--|---|
|               | Monthly Fixed Charge (Rs./kVA of billing demand per month) | Energy Charge for consumption up to 50% load factor | Energy Charge for consumption in excess of 50% load factor | Monthly Fixed Charge (Rs./kVA of billing demand per month) | Energy Charge for consumption up to 50% load factor (paise / kVAh) | Energy Charge for consumption in excess of 50% load factor (paise / kVAh) |
| 11 kV supply  | 715  | 751   | 665  | 751  | 735  | 651   |
| 33 kV supply  |  | 743   | 644  |  | 727  | 630   |
| 132 kV supply |  | 723   | 623  |  | 708  | 610   |
| 220 kV supply |  | 701   | 601  |  | 686  | 588   |

**Specific Terms and Conditions for HV-2 category:**

- a. **Minimum charges based on consumption** shall be on the following basis :

| Supply Voltage                    | Existing guaranteed Annual minimum consumption in units (kWh) per kVA of contract demand | Proposed guaranteed Annual minimum consumption in units (kVAh) per kVA of contract demand |
|-----------------------------------|--|---|
| <i>For supply at 220 / 132 kV</i> | 1620   | 1740  |
| <i>For supply at 33 / 11 kV</i>   | 1200   | 1284  |

**Note:** The method of billing of minimum consumption shall be as given in *General Terms and Conditions of High Tension Tariff*.

- b. **Time of Day (ToD) Rebate / Surcharge:** This rebate /surcharge shall be applicable as specified in *General Terms and Conditions of High Tension Tariff*.
- c. Other terms and conditions shall be as specified under *General Terms and Conditions of High Tension Tariff*.

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## **Tariff Schedule - HV-3**

### **INDUSTRIAL, NON-INDUSTRIAL AND SHOPPING MALLS**

#### **Applicability:**

The tariff **HV-3.1(Industrial)** shall apply to all HT industrial consumers including mines (other than coal mines) for power, light and fan etc. which shall mean and include all energy consumed for factory and lighting in the offices, main factory building, stores, canteen, residential colonies of industries, compound lighting, common and ancillary facilities such as Telecom tower, Banks, General purpose shops, Water supply, Sewage pumps, Police Stations, etc. located within the premises of the industrial units and Dairy units where milk is processed (other than chilling, pasteurization etc.) to produce other end products of milk. This tariff shall also apply to cold storages.

The tariff **HV-3.2 (Non Industrial)** shall apply to establishments like Railway Stations, Offices, Hotels, Hospitals, Institutions etc. (excluding group of consumers) having mixed load for power, light and fan etc. which shall mean and include all energy consumed for lighting in the offices, stores, canteen, compound lighting etc. This shall also cover all other categories of consumers, defined in LT non-domestic category subject to the condition that the HT consumer shall not redistribute/sub-let the energy in any way to other person.

The tariff **HV-3.3 (Shopping malls)** shall apply to establishments of shopping malls having group of non-industrial consumers subject to the specific terms and conditions specified in (i) of this schedule.

**Shopping Mall** shall be a multi-storeyed shopping centre in an urban area having a system of enclosed walkways with collection of independent retail stores, services and parking areas constructed and maintained by a management firm/ developer as a unit.

The tariff **HV-3.4 (Power intensive industries)** shall apply to Mini Steel Plants (MSP), MSP with rolling mills/ sponge iron plants in the same premises, electro chemical/ electro thermal industry, Ferro alloy industry which shall mean and include all energy consumed for factory and lighting in the offices, main factory building, stores, canteen, residential colonies of industries, compound lighting etc.

**Note: This tariff shall apply to only those Mini Steel Plants (MSP), MSP with re-rolling mills / sponge iron plants in the same premises and Ferro Alloy plants where smelting / heating of iron & steel is being done using Electric Furnaces only.**

**Tariff:**

| S. no.     | Sub-Category of consumer           | Existing  |   |  | Proposed  |   |   |
|------------|------------------------------------|---|---|--|---|---|---|
|            |                                    | Monthly Fixed Charge (Rs/kVA) of billing demand per month | Energy Charge for consumption on up to 50% load factor (paise/unit) | Energy Charge for consumption in excess 50% load factor (paise/unit) | Monthly Fixed Charge (Rs/kVA) of billing demand per month | Energy Charge for consumption on up to 50% load factor (paise/kVAh) | Energy Charge for consumption in excess 50% load factor (paise/ kVAh) |
| <b>3.1</b> | <b>Industrial</b>                  |   |   |  |   |   |   |
|            | 11 kV supply                       | 384   | 730   | 630  | 413   | 732   | 631   |
|            | 33 kV supply                       | 616   | 726   | 621  | 662   | 727   | 622   |
|            | 132 kV supply                      | 704   | 685   | 586  | 757   | 686   | 587   |
|            | 220/400 kV supply                  | 704   | 640   | 540  | 757   | 641   | 541   |
| <b>3.2</b> | <b>Non-Industrial</b>              |   |   |  |   |   |   |
|            | 11 kV supply                       | 348   | 770   | 680  | 365   | 754   | 665   |
|            | 33 kV supply                       | 501   | 753   | 655  | 526   | 737   | 641   |
|            | 132 kV supply & above              | 593   | 705   | 595  | 623   | 690   | 582   |
| <b>3.3</b> | <b>Shopping Malls</b>              |   |   |  |   |   |   |
|            | 11 kV supply                       | 356   | 750   | 675  | 374   | 734   | 661   |
|            | 33 kV supply & above               | 413   | 740   | 635  | 434   | 724   | 621   |
| <b>3.4</b> | <b>Power Intensive Industries*</b> |   |   |  |   |   |   |
|            | 33 kV supply                       | 627   | 565   | 565  | 674   | 566   | 566   |
|            | 132 kV supply & above              | 766   | 541   | 541  | 824   | 542   | 542   |

**Specific Terms and Conditions for HV-3 category:**

- (a) **Minimum Charges based on Consumption** for all the above categories shall be on following basis :

| Supply Voltage                        | Sub- category                 | Existing Annual minimum consumption in units (kWh) per kVA of contract demand | Proposed Annual minimum consumption in units (kVAh) per kVA of contract demand |
|---------------------------------------|-------------------------------|---|--|
| <b>For supply at 132 kV and above</b> | Rolling Mills                 | 1200  | 1284   |
|                                       | Educational institutions      | 720   | 768  |
|                                       | Others                        | 1800  | 1932   |
| <b>For supply at 33 / 11 kV</b>       | Educational institutions      | 600   | 648  |
|                                       | Contract demand up to 100 kVA | 600   | 648  |
|                                       | Others                        | 1200  | 1284   |

**Note:** The method of billing of minimum charges shall be as given in **General Terms and Conditions of High Tension Tariff**.

- (b) **Time of Day (ToD) Rebate / Surcharge:** This rebate /surcharge shall be applicable as specified in **General Terms and Conditions of High Tension Tariff**.

(c) **Rebate for supply through feeders feeding supply to predominantly rural areas:** HT consumers of this category receiving supply through rural feeders shall be entitled to 5 % rebate on Fixed Charges and 20 % reduction in Minimum Consumption (kWh) as specified above for respective voltage levels.

(d) **Rebate for existing HT connections:** A rebate of Rs. 1 per Unit in energy charges is applicable for incremental monthly consumption w.r.t corresponding month of FY 2015-16. For any new consumer served during and after FY 2015-16, the base months for calculation of incremental monthly consumption shall be the first 12 months subsequent to the month of availing the connection. The incremental consumption for any month shall be worked out considering the consumption of the corresponding base month.

The consumer availing this rebate shall not be entitled to the rebate of new HT connection/ Green field connection under clause (e) below.

(e) **Rebate for new HT connections:** A rebate of Rs 1 per Unit or 20% whichever would be less is applicable in energy charges for new connection for the consumption recorded. The rebate shall be allowed up to FY 2025-26 from the date of connection for such new projects for which agreements for availing supply from licensee are finalized during and after FY 2016-17.

Provided that no rebate shall be applicable for connections obtained by virtue of change in ownership in existing connection or by reconnection.

Provided also that new connection on the permanently disconnected premises shall only be eligible for such rebate, if, the application for new service connection on such premises is received not before the expiry of six months from the date of its permanent disconnection.

The consumer availing this rebate shall not be entitled for the rebate of incremental consumption under clause (d) above.

(f) **Rebate for Captive power plant consumers:**

**Applicability:** The rebate shall be applicable to consumers-

- i. Who have been meeting their demand either fully or partially during FY 2016-17 and/or FY 2017-18 and/or FY 2018-19 and/or FY 2019-20 and/or FY 2020-21 and/or FY 2021-22 and/or FY 2022-23 and/or FY 2023-24 and/or FY 2024-25 through their captive power plants located in Madhya Pradesh.
- ii. The rebate shall be applicable up to FY 2025-26 from the date of request submitted by the consumer to the Licensee during and after FY 2017-18. The consumer shall be required to apply to the Licensee for the rebate indicating

that he would be willing to avail supply from Licensee by switching consumption from his existing captive power plant.

- iii. The **base year** shall be the financial year preceding the year during which the consumer has applied for switching consumption from his captive power plant to the licensee.

*e.g., If a consumer applies for switching his consumption from captive power plant to Licensee in August, 2018, then his base year for calculation of incremental consumption would be FY 2017-18.*

- iv. Who have recorded an incremental consumption i.e., an increase in the units consumed from the Licensee in any month of the current year (FY 2025-26) compared to the same month in base year.
- v. A rebate of Rs 2 per unit shall be applicable on incremental units of the consumer subject to reduction in captive generation as per the methodology given below:-

| Scenario   | Base Year  |   | Current Financial Year                               |   | Incremental Consumption from Discom<br>Units | Reduction in Captive Generation<br>Units | Units eligible for 60 paise rebate in energy charges as per Clause (c) of specific terms & conditions<br>Units | Units eligible for Rs 2/ Unit rebate on incremental units<br>Units |
|------------|--|---|--|---|--|--|--|--|
|            | Consumption from Discom (Units)<br>(A <sub>1</sub> ) | Captive Generation Units<br>(B <sub>1</sub> ) | Consumption from Discom (Units)<br>(A <sub>2</sub> ) | Captive Generation (Units)<br>(B <sub>2</sub> ) |  |  |  |  |
|            |  |   |  |   | X = A <sub>2</sub> -A <sub>1</sub>           | Y = B <sub>1</sub> -B <sub>2</sub>       |  |  |
| Scenario 1 | 100  | 90  | 110  | 90  | 10   | 0  | 10   | 0  |
| Scenario 2 | 100  | 90  | 110  | 80  | 10   | 10                                       | 0  | 10   |
| Scenario 3 | 100  | 90  | 110  | 70  | 10   | 20                                       | 0  | 10   |
| Scenario 4 | 100  | 90  | 100  | 80  | 0  | 10                                       | 0  | 0  |
| Scenario 5 | 100  | 90  | 120  | 80  | 20   | 10                                       | 10   | 10   |

Note: 1) Captive power plant referred above shall be the "Captive Generating Plant" as defined in Rule 3 of the Electricity Rules, 2005.

- 2) For new consumers added during this tariff period who were fully meeting their demand from their captive power Plants during the previous financial year then their consumption from Discom may be treated as zero for the base year.

X = the incremental consumption recorded by the captive consumer in any month of the current financial year compared to the same month of base year.

And

Y = the quantum of reduction in units consumed from captive plant (self-consumption) achieved by the captive consumer in any month of the current financial year compared to the same month in the base year.

For all other cases of incremental consumption i.e when  $X > Y$ , the existing rebate of Rs 1/unit in energy charges will be applicable on  $X - Y$  units (as per the rebate for incremental consumption given in clause d in the Specific Terms & Conditions for HV-3).

**Scenario 1:** There is no reduction in Captive Generation but only incremental consumption from DISCOM, hence a rebate of Rs 1/unit in energy charges is applicable on incremental consumption from DISCOM (as per the rebate for incremental consumption given in clause (d) or (e) in the Specific Terms & Conditions for HV-3).

**Scenario 2:** The incremental consumption from DISCOM is due to the reduction of captive consumption by same quantum of units hence it will attract a rebate of Rs 2 per unit on incremental units.

**Scenario 3:** There is higher reduction in Captive Generation as compared to incremental Consumption from DISCOM hence incremental units consumed from the DISCOM as shown in the table, shall qualify for a Rebate of Rs 2 per unit

**Scenario 4:** There shall not be any rebate due to absence of incremental Consumption from DISCOM irrespective of reduction in Captive Generation.

**Scenario 5:** This scenario depicts higher incremental consumption from DISCOM (X) than reduction in Captive Generation (Y) hence units corresponding to  $(X - Y)$  shall qualify for rebate of Rs 1/unit in energy charges (as per the rebate for incremental consumption given in clause (d) or (e) in the Specific Terms & Conditions for HV-3) while units Y shall qualify for Rebate of Rs 2 per unit.

#### **(g) Rebate for Open Access Consumers**

**Applicability:** The rebate shall be applicable to consumers

- i. Who have been availing open access during the last financial year (FY 2024-25).
- ii. Who have recorded an incremental consumption i.e., an increase in the units consumed from the Licensees in any month of the current year (FY 2025-26) compared to the same month in last year (FY 2024-25).
- iii. The rebate shall be applicable from the date of request submitted by the consumer to the Licensee during FY 2025-26.
- iv. The consumer shall be required to apply with the Licensee for the rebate indicating that he would be willing to avail supply from Licensee by switching consumption from open access.



- v. A rebate of Rs 1 per unit shall be applicable on incremental units of the consumer subject to reduction in open access consumption as per the methodology given below.

| Scenarios  | FY 2024-25                                |                                 | FY 2025-26                                |                                 | Incremental Consumption from Discom<br>$X = A_2 - A_1$ | Reduction in OA units<br>$Y = B_1 - B_2$ | 60 paise rebate applicable units as per clause (c) of specific terms & conditions | Rs 1/unit rebate on incremental units of Open Access |
|------------|---|---------------------------------|---|---------------------------------|--|--|---|--|
|            | Consumption from Discom (A <sub>1</sub> ) | Wheeled Units (B <sub>1</sub> ) | Consumption from Discom (A <sub>2</sub> ) | Wheeled Units (B <sub>2</sub> ) |  |  |   |  |
| Scenario 1 | 100                                       | 90                              | 110                                       | 90                              | 10   | 0  | 10  | 0  |
| Scenario 2 | 100                                       | 90                              | 110                                       | 80                              | 10   | 10                                       | 0   | 10   |
| Scenario 3 | 100                                       | 90                              | 110                                       | 70                              | 10   | 20                                       | 0   | 10   |
| Scenario 4 | 100                                       | 90                              | 100                                       | 80                              | 0  | 10                                       | 0   | 0  |
| Scenario 5 | 100                                       | 90                              | 120                                       | 80                              | 20   | 10                                       | 10  | 10   |

X = the incremental consumption recorded by the open access consumer in any month of the current financial year as compared to the same month of base year.

And

Y = the quantum of reduction in units consumed from open access by the consumer in any month of the current financial year as compared to the same month in the base year.

For all other cases of incremental consumption i.e when  $X > Y$ , the existing rebate of Rs 1/unit in energy charges will be applicable on  $X - Y$  units (as per the rebate for incremental consumption given in clause (d) in the Specific Terms & Conditions for HV-3).

**Scenario 1:** There is no reduction in open access consumption but only incremental consumption from DISCOM, hence a rebate of Rs 1/unit in energy charges is applicable on incremental consumption from DISCOM (as per the rebate for incremental consumption given in clause (d) in the Specific Terms & Conditions for HV-3).

**Scenario 2:** The incremental consumption from DISCOM is due to the reduction of open access consumption by same quantum of units hence it will attract a rebate of Rs1 per unit on incremental units.

**Scenario 3:** There is higher reduction in open access consumption as compared to incremental Consumption from DISCOM hence incremental units consumed from the DISCOM as shown in the table, shall qualify for a Rebate of Rs 1 per unit.

**Scenario 4:** There shall not be any rebate due to absence of incremental Consumption from DISCOM irrespective of reduction in open access consumption.

**Scenario 5:** This scenario depicts incremental consumption from DISCOM (X) and reduction in open access consumption (Y) hence units corresponding to (X-Y) shall qualify for rebate of Rs 1/unit in energy charges (as per the rebate for incremental consumption given in clause d in the Specific Terms & Conditions for HV-3) while units Y shall qualify for Rebate of Rs 1 per unit.

**(h) Conversion of Existing LT Industrial/Non-domestic connection to corresponding HT connection**

A rebate of Rs. 1 per unit in the energy charges on the HT tariff shall be provided to those existing LT consumers who convert to HV 3 category during FY 2025-26. The rebate is applicable for FY 2025-26 for the units billed only after the commencement of HT Agreement during FY 2025-26.

**(i) Additional specific terms and conditions for shopping mall**

Individual end user shall not be levied a rate which is exceeding non-domestic-commercial tariff (LV 2.2) in case of LT connection and HT non-industrial tariff (HV 3.2) in case of HT connection, as determined by the Commission.

*Note: For calculating applicable rebates or incentives e.g. incremental rebate for HT consumers, units of energy, i.e., kVAh shall be kept same for both consumption period and applicable base years/months.*

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**Tariff Schedule - HV-4****SEASONAL:-****Applicability:**

This tariff shall be applicable to such seasonal industries / consumers requiring energy for the production purposes for season defined under this schedule.

The licensee shall allow this tariff to any industry having seasonal use only.

**Tariff:**

| Sub-Category of consumer | Existing   |   |  | Proposed   |   |  |
|--------------------------|--|---|--|--|---|--|
|                          | Monthly Fixed Charge (Rs/kVA) of billing demand per month  | Energy Charge for consumption on up to 50% load factor (paise/unit) | Energy Charge for consumption in excess 50% load factor (paise/unit) | Monthly Fixed Charge (Rs/kVA) of billing demand per month  | Energy Charge for consumption on up to 50% load factor (paise/kVAh) | Energy Charge for consumption in excess 50% load factor (paise/kVAh) |
| <b>During Season</b>     |  |   |  |  |   |  |
| 11 kV supply             | 405  | 708   | 602  | 405  | 660   | 561  |
| 33 kV supply             | 448  | 688   | 583  | 448  | 641   | 543  |
| <b>During Non Season</b> |  |   |  |  |   |  |
| 11 kV supply             | Rs. 405 on 10% of contract demand or actual recorded demand during the season, whichever is higher | 850 i.e. 120% of seasonal Energy Charge                             | Not applicable   | Rs. 405 on 10% of contract demand or actual recorded demand during the season, whichever is higher | 792 i.e. 120% of seasonal Energy Charge                             | Not applicable   |
| 33 kV supply             | Rs. 448 on 10% of contract demand or actual recorded demand during the season, whichever is higher | 826 i.e. 120% of seasonal Energy Charge                             | Not applicable   | Rs. 448 on 10% of contract demand or actual recorded demand during the season, whichever is higher | 770 i.e. 120% of seasonal Energy Charge                             | Not applicable   |

**Specific Terms and Conditions for HV-4 category:**

- Season shall mean continuous period up to 6 months with a ceiling of 185 days and minimum period of 3 months.
- Period other than the declared season shall be considered as the off season period.
- The consumer has to declare months of season and off season for a year within 60 days of issue of this tariff order and inform the same to the Distribution Licensee. The Year in this case shall be a period of 12 months commencing from start of season / off season, as applicable. If the consumer has already declared the period of season and off-season prior to issuance of this order, same shall be taken into cognizance for the purpose and accepted by the Distribution Licensee.
- The seasonal period once declared by the consumer during Year cannot be changed.

- e) If the declared season or off-season spreads over two tariff periods, then the tariff for the respective period shall be applicable.
- f) This tariff is not applicable to composite units having seasonal and other category of loads.
- g) **Annual Minimum Charges shall be based on minimum consumption** of 960 (kVAh) per kVA of contract demand to be equally distributed in seasonal months. The method of billing of minimum charges shall be as given in General Terms and Conditions of High Tension Tariff.
- h) **Time of Day (ToD) Rebate / Surcharge:** This rebate /surcharge shall be applicable as specified in General Terms and Conditions of High Tension Tariff.
- i) The consumer will be required to restrict his monthly off season consumption to 15% of highest of the average monthly consumption of the preceding three seasons. In case this limit is exceeded in any off season month, the consumer will be billed under HV-3.1 Industrial Schedule for the whole year (as opted).
- j) The consumer will be required to restrict his maximum demand during off season up to 30 % of the contract demand. In case the maximum demand recorded in any month of the declared off season exceeds 36% of CD (120% of 30% of CD), the consumer will be billed under HV 3.1 Industrial tariff for the whole year (as opted) as per the tariff in force.
- k) Other terms and conditions shall be as per the ***General Terms and Conditions of High Tension Tariff.***

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**Tariff Schedule - HV-5****IRRIGATION, PUBLIC WATER WORKS AND OTHER THAN AGRICULTURAL****Applicability:**

This Tariff Category shall apply to supply of power to lift irrigation schemes, group irrigation, Public Utility Water Supply schemes, sewage treatment plants /sewage pumping plants and for energy used in lighting pump house.

This Tariff category shall also applicable to River link projects implemented by government or its agency provided that the supply of power is utilized for purposes covered under this category only.

**Note: Private water supply scheme, water supply schemes run by institutions for their own use/employees/townships etc. will not fall in this category but billed under the appropriate tariff category to which such institution belongs. In case water supply is being used for two or more different purposes then the highest tariff shall be applicable.**

This tariff category shall also apply to supply of power to other than agriculture pump connections i.e. the connection for hatcheries, fisheries ponds, poultry farms, cattle breeding farms, grasslands, vegetables/ fruits/ floriculture/ mushroom growing units etc. and dairy (for those dairy units where only extraction/collection of milk and its processing such as chilling, pasteurization etc. is done). However, in units where milk is processed to produce other end products of milk, billing shall be done under HV-3.1 (Industrial) category.

**Tariff:**

| Sub-Category          | Existing  |                               | Proposed  |                                |
|-----------------------|---|-------------------------------|---|--------------------------------|
|                       | Monthly Fixed Charge (Rs. /KVA of billing demand per month) | Energy Charge (paise per kWh) | Monthly Fixed Charge (Rs. /KVA of billing demand per month) | Energy Charge (paise per kVAh) |
| 11 kV supply          | 384   | 610                           | 413   | 611                            |
| 33 kV supply          |   | 596                           |   | 597                            |
| 132 kV & above supply |   | 556                           |   | 557                            |

**Specific Terms and Conditions for HV-5 category:**

- (a) **Annual Minimum Charge shall be based on Consumption** of 828 kVAh per kVA of contract demand. The method of billing of minimum charges shall be as given in General Terms and Conditions of High-Tension Tariff.
- (b) **Time of Day (ToD) Rebate / Surcharge:** This rebate /surcharge shall be applicable as specified in General Terms and Conditions of High-Tension Tariff.
- (c) **Incentive for adopting Demand Side Management**

An **incentive** equal to 5 % energy charges shall be given on installation and use of energy saving devices (such as ISI energy efficient motors for pump sets). **Incentive** will only be admissible if full bill is paid within due dates failing which all consumed units will be charged at normal rates as the case may be. Such incentive will be admissible from the month following the month in which energy saving devices are put to use and its verification by a person authorized by the licensee. The incentive will continue to be allowed till such time these energy saving devices remain in service. The Distribution Licensee is required to arrange wide publicity for above incentive. The Distribution Licensee is required to place quarterly information regarding incentives provided on its web site.

- (d) Other terms and conditions shall be as per the ***General Terms and Conditions of High Tension Tariff.***

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**Tariff Schedule - HV-6****BULK RESIDENTIAL USERS****Applicability:**

The tariff category **HV-6.1** is applicable for supply to industrial or any other township (e.g. that of University or academic institutions, hospitals, MES and Border villages, etc.) for domestic purpose only such as lighting, fans, heating etc.

Provided that the connected load for essential common facilities such as Non-domestic supply in residential area, street lighting shall be within the limits specified hereunder: -

- (i) Water supply and Sewage pumping, Hospital - **No limit**
- (ii) Non-domestic and other General purpose put together - **20 % of total connected load.**

The tariff category **HV-6.2** is applicable for supply to Registered Cooperative Group Housing Societies as per the Ministry of Power's notification no. S.O.798 (E) dated 9<sup>th</sup> June, 2005 and also to other Registered Group Housing Societies and individual domestic user, old age homes, day care centres for senior citizens, rescue houses and orphanages run by Govt./charitable trust. The Terms and Conditions to this category of consumers shall be applicable as per relevant provisions of the Madhya Pradesh Electricity Supply Code, 2021 as amended from time to time.

**Tariff:**

| S. no.   | Sub-Category of consumer           | Existing  |   |  | Proposed  |   |  |
|----------|------------------------------------|---|---|--|---|---|--|
|          |                                    | Monthly Fixed Charge (Rs/kVA) of billing demand per month | Energy Charge for consumption on up to 50% load factor (paise/unit) | Energy Charge for consumption in excess 50% load factor (paise/unit) | Monthly Fixed Charge (Rs/kVA) of billing demand per month | Energy Charge for consumption on up to 50% load factor (paise/kVAh) | Energy Charge for consumption in excess 50% load factor (paise/kVAh) |
| <b>1</b> | <b>For Tariff Sub-Category 6.1</b> |   |   |  |   |   |  |
|          | 11 kV supply                       | 362   | 637   | 572  | 389   | 638   | 573  |
|          | 33 kV supply                       |   | 622   | 552  |   | 623   | 553  |
|          | 132 kV supply                      |   | 600   | 530  |   | 601   | 531  |
| <b>2</b> | <b>For Tariff Sub-Category 6.2</b> |   |   |  |   |   |  |
|          | 11 kV supply                       | 230   | 637   | 572  | 247   | 638   | 573  |
|          | 33 kV supply                       |   | 622   | 552  |   | 623   | 553  |
|          | 132 kV supply                      |   | 555   | 515  |   | 556   | 516  |

**Specific Terms and Conditions for HV-6 category:**

- (a) **Annual Minimum Charges shall be based on Consumption** of 900 (kVAh) per kVA of contract demand. The method of billing of minimum consumption shall be as given in General Terms and Conditions of High Tension Tariff.
- (b) The individual end user shall not be levied a rate exceeding the tariff applicable to the corresponding LT category.
- (c) **Time of Day (ToD) Rebate / Surcharge:** This rebate /surcharge shall be applicable

as specified in General Terms and Conditions of High-Tension Tariff.

- (d) Other terms and conditions shall be as specified under ***General Terms and Conditions of High Tension Tariff.***

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**Tariff Schedule - HV-7****SYNCHRONIZATION OF POWER FOR GENERATORS CONNECTED TO THE GRID****Applicability:**

This Tariff shall apply to those generators who are already connected to the grid and seek to avail power for synchronization with the grid. This Tariff category shall also be applicable to the Generator/Co-generation plant from Renewable Sources entitled to draw power exclusively for its own use from the State Distribution Licensee for synchronization of plant with the grid or during shutdown period of its plant or during other emergencies (but not for construction) or for auxiliaries or forced outage.

**Tariff for all voltages:**

| Category of consumers                 | Energy Charge            |                           |
|---------------------------------------|--------------------------|---------------------------|
|                                       | Existing<br>(paise/unit) | Proposed<br>(paise/ KVAh) |
| For all Voltage levels of HV category | 1009                     | 1025                      |

**Specific Terms and Conditions for HV-7 category:**

- (a) The supply for above purpose with the grid shall not exceed 15% of the capacity of the Power Plant. In case of drawl of power above 15% of the capacity of the power plant on any occasion, the excess energy drawn during the billing month shall be billed at the rate of 2 times of the normal energy charges.
- (b) The condition for minimum consumption shall not be applicable to the generators including CPP. Billing shall be done for energy recorded on each occasion of availing supply during the billing month.
- (c) The supply shall not be allowed to the CPP for production purpose for which they may avail stand-by support under the relevant Regulations.
- (d) The synchronization with the grid shall only be made available after commissioning of the plant.
- (e) The generator including CPP shall execute an agreement with the Licensee for meeting the requirement of synchronization/power with the grid incorporating the above terms and conditions.

**Tariff Schedule - HV-8****E- VEHICLE / E- RICKSHAWS CHARGING STATIONS****Applicability:**

The tariff is applicable exclusively for Electric Vehicle / Electric Rickshaws charging and Battery Swapping stations. However, tariff for other consumers who use electricity for charging their own Vehicles/Rickshaws shall be the same as applicable for the relevant category of connection from which the Vehicles/Rickshaws is being charged at such premises.

**Applicable Tariff:**

| Category  | Energy Charge            |                          |
|---|--------------------------|--------------------------|
|   | Existing<br>(Paise/unit) | Proposed<br>(Paise/kVAh) |
| Electric Vehicle/ Rickshaw charging installations | 690                      | 685                      |

**Specific Terms and Conditions for HV-8 category:**

- a) The energy charges for E- Vehicle / E- Rickshaws charging stations shall be applicable as given below:-
- (i) **During Solar Hours (9 AM to 5 PM):** Rebate of 20% on normal rate of energy charge shall be applicable on energy consumed during this period and;
  - (ii) **During Non-Solar Hours (for remaining part of Day):** Surcharge of 20% on normal rate of energy charge shall be applicable on energy consumed during this period.
- b) Other terms and conditions shall be as specified under ***General Terms and Conditions for High Tension Tariff.***

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**Tariff Schedule - HV-9****METRO RAIL:****Applicability:**

This Tariff shall apply to Metro Rail for Traction and Non-Traction loads.

**Tariff:**

| S. no. | Category   | Existing  |                            | Proposed  |                             |
|--------|--|---|----------------------------|---|-----------------------------|
|        |  | Monthly Fixed Charge (Rs. /KVA of billing demand per month) | Energy Charge (Paise/Unit) | Monthly Fixed Charge (Rs. /KVA of billing demand per month) | Energy Charge (paise/kVAh ) |
| 1.     | Sub-Urban Rail Transport (Metro Rail) at 132kV/220kV | 310   | 570                        | 310   | 531                         |

**Specific Terms and Conditions for HV-8 category:**

- (a) **Additional Charge for Excess demand:** Shall be billed as given in General Terms and Conditions for High Tension tariff.
- (b) Annual Minimum charges shall be based on minimum consumption of 960 units (kVAh) per kVA of Contract Demand, this being the first year of operation of Metro Rail project in the State. The method of billing of minimum charges shall be as given in General Terms and Conditions of High Tension Tariff.
- (c) **Time of Day (ToD) Rebate/Surcharge:** This rebate/surcharge shall be applicable as specified in General Terms and Conditions of High Tension Tariff.
- (d) Other terms and conditions shall be as mentioned in the *General Terms and Conditions of High Tension Tariff*.

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**GENERAL TERMS AND CONDITIONS OF HIGH TENSION TARIFF**

**The following terms and conditions shall be applicable to all HT consumer categories subject to Specific Terms and Conditions for that category as mentioned in the Tariff Schedule of respective category:**

- 1.1 The contract demand shall be expressed in whole number only.
- 1.2 Tariff for Green Energy shall be inclusive of normal tariff as applicable to that category of consumer and Green Energy Charges as mentioned in Clause 1.26 of General Terms and Conditions of HT Tariff.
- 1.3 **Character of Service:** The character of service shall be as per the Madhya Pradesh Electricity Supply Code, 2021 as amended from time to time.
- 1.4 **Point of Supply:**
  - (a) The power will be supplied to the consumer ordinarily at a single point for the entire premises.
  - (b) In case of Railway Traction, the supply at each sub-station shall be separately metered and charged.
  - (c) In case of coal mines, the power will be supplied ordinarily at a single point for the entire premises. The power may, however, be supplied, on the request of the consumer, at more than one point subject to technical feasibility. In such cases, metering and billing will be done for each point of supply separately.
- 1.5 **Determination of Demand:** The **maximum demand** of the supply in each month shall be four times the largest number of kilovolt ampere hours delivered at the point of supply during any continuous 15 minutes during the month as per sliding window principle of measurement of demand.
- 1.6 **Billing demand:** The billing demand for the month shall be the actual maximum kVA demand of the consumer during the month or 90% of the contract demand, whichever is higher. In case power is availed through open access, the billing demand for the month shall be the actual maximum kVA demand during the month excluding the demand availed through open access for the period for which open access is availed or 90% of the contract demand, whichever is higher, subject to clause 3.4 of the M.P. Electricity Supply Code, 2021.

The provisions regarding additional charges for excess demand shall be applicable as per clause 1.16 of these conditions.

**Note:** The billing demand shall be rounded off to the nearest integer number i.e. the fraction of 0.5 or above will be rounded off to next integer figure and the fraction of less than 0.5 shall be ignored

**1.7 Minimum charges shall be billed as follows:**

- 1) The consumer shall be billed for annual minimum charges based on consumption (kVAh) number of units per kVA of contract demand specified for their category, irrespective of whether any energy is consumed or not during the year.
- 2) The consumer shall be billed one twelfth of annual minimum consumption (kVAh) specified for their category each month in case the actual consumption is less than above mentioned minimum consumption. However, for Seasonal consumers the annual minimum consumption shall be equally distributed during seasonal months and during off season only actual consumption shall be considered for billing subject to adjustment of actual cumulative consumption against cumulative minimum consumption.
- 3) During the month in which actual cumulative consumption equals or greater than the annual minimum consumption, no further billing of monthly minimum consumption shall be done in subsequent months of the financial year.
- 4) Tariff minimum consumption shall be adjusted in the month in which cumulative actual or billed monthly consumption exceeds cumulative monthly prorated minimum annual consumption. If actual cumulative consumption does not get fully adjusted in that month, adjustment shall continue to be provided in subsequent months of the financial year. The following example illustrates the procedure for monthly billing of consumption where prorated monthly minimum consumption is 100 kVAh based on annual consumption of 1200 kVAh.

| Month | Actual cumulative consumption (kVAh) | Cumulative minimum consumption * (kVAh) | Higher of 2 and 3 (kVAh) | Already billed in the year (kVAh) | To be billed in the month = (4-5) (kVAh) |
|-------|--------------------------------------|---|--------------------------|-----------------------------------|--|
| 1     | 2                                    | 3                                       | 4                        | 5                                 | 6  |
| April | 95                                   | 100                                     | 100                      | 0                                 | 100                                      |
| May   | 215                                  | 200                                     | 215                      | 100                               | 115                                      |
| June  | 315                                  | 300                                     | 315                      | 215                               | 100                                      |
| July  | 395                                  | 400                                     | 400                      | 315                               | 85                                       |
| Aug   | 530                                  | 500                                     | 530                      | 400                               | 130                                      |
| Sept  | 650                                  | 600                                     | 650                      | 530                               | 120                                      |
| Oct   | 725                                  | 700                                     | 725                      | 650                               | 75                                       |
| Nov   | 805                                  | 800                                     | 805                      | 725                               | 80                                       |
| Dec   | 945                                  | 900                                     | 945                      | 805                               | 140                                      |
| Jan   | 1045                                 | 1000                                    | 1045                     | 945                               | 100                                      |
| Feb   | 1135                                 | 1100                                    | 1135                     | 1045                              | 90                                       |
| March | 1195                                 | 1200                                    | 1200                     | 1135                              | 65                                       |

- 1.8 Rounding off:** All bills will be rounded off to the nearest rupee, i.e., up to 49 paisa shall be ignored and 50 paisa upwards shall be rounded off to next Rupee.

### **Incentive/ Rebate / Penalties**

1.9 **Power Factor Incentive:** Since, kVAH billing is proposed for HT Consumers, provision for Power Factor Incentive is no longer required.

#### 1.10 **Load factor calculation**

1) The **Load Factor** shall be calculated as per the following formula:

$$\text{Load Factor \%} = \frac{\text{Monthly Consumption (kVAh)} \times 100}{\text{No. of Hours in the billing month} \times \text{Demand (kVA)}}$$

- i. Monthly consumption shall be units (kVAh) consumed in the month excluding those received from sources other than Licensee.
- ii. No. of Hours in billing month shall exclude period of scheduled outages in hours.
- iii. Demand shall be maximum demand recorded or contract demand whichever is higher.

**Note:** The load factor (%) shall be rounded off to the nearest lower integer. In case the consumer is getting power through open access, units set off from other sources, the net energy (after deducting units set off from other sources, from the consumed units) billed to consumer shall only be taken for the purpose of working out load factor. The billing month shall be the period in number of days between the two consecutive dates of meter readings taken for the purpose of billing to the consumer.

1.11 **Incentive for advance payment:** For advance payment made before commencement of consumption period for which bill is prepared, an incentive at one twelfth of annual interest rate in percentage applicable on working capital shall be given on the amount (excluding security deposit), which remains with the Distribution Licensee at the end of billing month. However, such amount shall be credited to the account of the consumer after adjusting any amount payable to the Distribution Licensee

1.12 **Rebate for online bill payment:** Rebate of 0.5% on the total bill amount maximum up to Rs 1000 will be applicable for making online payment of bill.

1.13 **Prompt payment incentive:** An incentive for prompt payment @0.25% of bill amount (excluding security deposit, meter rent and Government levies viz. Electricity Duty and Cess) shall be given in case the payment is made at least 7 days in advance of the due date of payment where the current month billing amount is equal to or greater than Rs. One Lakh. The consumers in arrears shall not be entitled for this incentive.

1.14 **Time of Day (ToD) Surcharge / Rebate:** This rebate/surcharge shall be applicable to HT consumer categories for which applicability of ToD rebate/surcharge is specifically

mentioned in this petition. The rebate/surcharge on energy charges according to the period of consumption during different periods of the day shall be applicable as per following table:

| Sr. No | Peak / Off-peak Hrs                          | Surcharge / Rebate on energy charges on energy consumed during the corresponding period                      |
|--------|--|--|
| 1      | Peak hours (6 AM to 9 AM and 5 PM to 10 PM ) | Surcharge of 20% on normal rate of energy charge shall be applicable for energy consumed during this period. |
| 2      | Off peak /Solar hours (9 AM to 5 PM)         | Rebate of 20% on normal rate of energy charge shall be applicable for energy consumed during this period.    |
| 3      | Normal hours (10 PM to 6 AM next day)        | Normal rate of energy charge shall be applicable for energy consumed during this period.                     |

**Note:**

- 1.Fixed charges shall always be billed at normal rates, i.e., ToD Surcharge / Rebate shall not be applied on Fixed Charges.
- 2.The above mentioned off-peak period and peak period shall also be applicable for the purpose of banking as per the provision of Madhya Pradesh Electricity Regulatory Commission (Methodology for determination of Open Access charges and Banking charges for Green Energy Open Access consumers) Regulations, 2023 and amendments thereof.

1.15 **Power Factor Penalty (For consumers other than Railway Traction HV-1):** Since, kVAH billing is proposed for HT Consumers, provision for Power Factor Penalty is no longer required.

1.16 **Additional Charges for Excess Demand**

- i. The consumer shall at all times restrict their actual maximum demand within the contract demand. In case the actual maximum demand in any month exceeds 120% of the contract demand, the tariffs given in various schedules shall apply to the extent of the 120% of the contract demand only. The consumer shall be charged for excess demand computed as difference of recorded maximum demand and 120% of contract demand on fixed charges and while doing so, the other terms and conditions of tariff, if any, shall also be applicable on the said excess demand. The excess demand so computed, if any, in any month shall be charged at the following rates from all consumers except Railway Traction.
- ii. **Energy charges for excess demand:** No extra charges are applicable on the energy charges due to the excess demand or excess connected load.
- iii. **Fixed charges for Excess Demand:** - These charges shall be billed as per following:

1. **Fixed charges for Excess Demand when the recorded maximum demand is up to 130% of the contract demand:** Fixed charges for Excess Demand over and above the 120 % of contract demand shall be charged at 1.3 times the normal fixed charges.

2. **Fixed charges for Excess Demand when the recorded maximum demand exceeds 130% of contract demand:** In addition to fixed charges in 1 above, recorded demand over and above 130 % of the contract demand shall be charged at 2 times the normal fixed charges.

**Example for fixed charges billing for excess demand:** If the contract demand of a consumer is 100 kVA and the maximum demand recorded in the billing month is 140 kVA, the consumer shall be billed towards fixed charges as under:-

- a) Up to 120 kVA at normal tariff.
  - b) Above 120 kVA up to 130 kVA, i.e., for 10 kVA at 1.3 times the normal tariff.
  - c) Above 130 kVA up to 140 kVA, i.e., for 10 kVA at 2 times the normal tariff.
- iv. The excess demand computed in any month will be charged along with the monthly bill and shall be payable by the consumer.
- v. The billing of excess demand at higher tariff is without prejudice to the Licensee's right to discontinue the supply in accordance with the provisions contained in the Madhya Pradesh Electricity Supply Code, 2021 as amended from time to time.

1.17 **Delayed Payment Surcharge:** Surcharge at the rate of 1.25 % per month or part thereof on the amount outstanding (including arrears) will be payable if the bills are not paid up to due date. The part of a month will be reckoned as full month for the purpose of calculation of delayed payment surcharge. The delayed payment surcharge will not be applicable after supply to the consumer is permanently disconnected. However, for the temporary connection, if any, amount is outstanding after disconnection, Delayed Payment Surcharge at the rate of 1.25% per month or part thereof shall be applicable as per Madhya Pradesh Electricity Supply Code, 2021 as amended from time to time.

1.18 All the rebates/incentives shall be calculated on amount excluding Government Subsidy.

1.19 **Service Charge for Dishonoured Cheques:** In case the cheque(s) presented by the consumer are dishonoured, a service charge at the rate of Rs. 1000/- plus applicable GST per cheque shall be levied in addition to delayed payment surcharge as per rules. This is without prejudice to the Distribution Licensee's rights to take action in accordance with any other applicable law.



1.20 **Temporary supply at HT:** The character of temporary supply shall be as defined in the M.P. Electricity Supply Code, 2021 as amended from time to time. If any consumer requires temporary supply then it shall be treated as separate service and charged subject to the following conditions.

- (a) Fixed Charges and Energy Charges shall be charged at 1.25 times the normal tariff. The fixed charges shall be recovered for the number of days for which the connection is availed during the month by prorating the monthly fixed charges. Month shall be considered as the number of total days in that billing month.
- (b) The consumer shall ensure minimum consumption (kVAh) as applicable to the permanent consumers on pro-rata based on number of days as detailed below:

$$\text{Minimum consumption for additional supply for temporary period} = \frac{\text{Annual minimum consumption as applicable to permanent supply} \times \text{No. of days of temporary connection}}{\text{No. of days in the year}}$$

- (c) The billing demand shall be the demand requisitioned by the consumer or the highest monthly maximum demand during the period of supply commencing from the month of connection ending with the billing month, whichever is higher. For example:

| Month     | Recorded Maximum Demand (kVA) | Billing Demand (kVA) |
|-----------|-------------------------------|----------------------|
| April     | 100                           | 100                  |
| May       | 90                            | 100                  |
| June      | 80                            | 100                  |
| July      | 110                           | 110                  |
| August    | 100                           | 110                  |
| September | 80                            | 110                  |
| October   | 90                            | 110                  |
| November  | 92                            | 110                  |
| December  | 95                            | 110                  |
| January   | 120                           | 120                  |
| February  | 90                            | 120                  |
| March     | 80                            | 120                  |

- (d) The consumer shall pay the estimated charges in advance, before serving the Temporary Connection subject to replenishment from time to time and adjustment as per final bill after disconnection. No interest shall be given on such advance payment.
- (e) Connection and Disconnection Charges shall also be paid.
- (f) In case existing HT consumer requires temporary supply for the purpose of addition and/or alteration within the premises of existing HT connection, then the consumer is allowed to avail the same through its existing permanent connection to the extent

of its Contract Demand and such consumer shall be billed at applicable tariff for permanent connection. Excess demand, if any, shall be treated as per the provisions in clause 1.16 above.

- (g) The condition for Time of Day Surcharge / rebate shall be applicable at the same rate as for permanent connection.

**Other Terms and Conditions for permanent connections:**

- 1.21 The existing 11 kV consumer with contract demand exceeding 300 kVA who want to continue to avail supply at 11 kV at his request, shall be required to pay additional charge at 3%. This additional charge of 3% shall be applicable for enhanced maximum demand recorded for fixed charges and incremental units proportionate to enhanced maximum demand recorded for energy charges.
- 1.22 The existing 33 kV consumer with contract demand exceeding 10,000 kVA who **want** to continue to avail supply at 33 kV at his request, shall be required to pay additional charge at 2%. This additional charge of 2% shall be applicable for enhanced maximum demand recorded for fixed charges and incremental units proportionate to enhanced maximum demand recorded for energy charges.
- 1.23 The existing 132 kV consumer with contract demand exceeding 50,000 kVA who want to continue to avail supply at 132 kV at his request, shall be required to pay additional charge at 1%. This additional charge of 1% shall be applicable for enhanced maximum demand recorded for fixed charges and incremental units proportionate to enhanced maximum demand recorded for energy charges.
- 1.24 No Metering Charges shall be levied.
- 1.25 Consumers availing Green Energy from Distribution Licensee only for the purpose of reducing their carbon footprint and seeking Certification to this effect shall be required to pay Green Energy Charges at the rate of Rs. 0.49/kWh and such charges shall be applicable over and above the normal tariff for that category of consumers. This facility shall be available to consumers who requisition any quantum of power up to 100% of their monthly consumption for availing power from RE sources. Further, such consumers may avail Green Energy for any number of days in a billing month.
- 1.26 The Consumers availing green energy from Distribution Licensee in accordance with provisions of MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof, shall be required to pay Green Energy Charges at Rs. 0.07/ kWh for Wind, Rs. 2.90/ kWh for HPO and Rs. 0.20/ kWh for Other, which shall be over and above the normal tariff of respective consumer category as per this Tariff Order.
- 1.27 Standby Charges:- Standby Charges for the purpose of Madhya Pradesh Electricity Regulatory Commission (Methodology for determination of Open Access charges and Banking charges for Green Energy Open Access consumers) Regulations, 2023 as

amended from time to time, shall be 0.25 times of the tariff applicable to the consumer availing Green Energy Open Access, which shall be over and above the normal tariff of the respective consumer category.

- 1.28 The accounting and settlement for consumers availing net metering facility shall be as per Madhya Pradesh Electricity Regulatory Commission (Grid Interactive Renewable Energy System and Related Matters) Regulations, 2022 as amended from time to time.
- 1.29 The tariff does not include any tax or duty, etc. on electrical energy that may be payable at any time in accordance with any law then in force. Such charges, if any, shall be payable by the consumer in addition to the tariff charges.
- 1.30 No changes in the tariff or the tariff structure including minimum charges for any category of consumer are permitted except with prior written permission of the Commission. Any order without such written permission of the Commission will be treated as null and void and also shall be liable for action under relevant provisions of the Electricity Act, 2003.
- 1.31 In case a consumer, at his/her request, avails supply at a voltage higher than the standard supply voltage as specified under relevant category, he/she shall be billed at the rates applicable for actually availed supply voltage and no extra charges shall be levied on account of higher voltage.
- 1.32 All consumers to whom fixed charges are applicable are required to pay fixed charges in each month irrespective of whether any energy is consumed or not.
- 1.33 If any difficulty arises in giving effect to any of the provisions of this order, the Commission may, by general or special order, direct the Licensees to do or undertake things, which in the opinion of the Commission is necessary or expedient for the purpose of removing the difficulties.
- 1.34 All conditions prescribed herein shall be applicable notwithstanding if any contrary provisions, exist in the agreement entered into by the consumer with the licensee.
- 1.35 Wherever, there is contradiction in general terms & conditions and specific terms & conditions given for any particular category, the specific terms and conditions shall prevail for that category.
- 1.36 In case any dispute arises regarding interpretation of this tariff order and/or applicability of this tariff, the decision of the Commission shall be final and binding.

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