

## MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

5<sup>th</sup> Floor, Metro Plaza, Bittan Market, Bhopal - 462 016



### AGGREGATE REVENUE REQUIREMENT FOR FY 2022-23 to FY 2026-27 AND RETAIL SUPPLY TARIFF ORDER FOR FY 2022-23

Petition No. 04/2022

#### PRESENT:

S.P.S. Parihar, Chairman  
Mukul Dhariwal, Member  
Gopal Srivastava, Member (Law)

#### IN THE MATTER OF:

Determination of Aggregate Revenue Requirement (ARR) for Control Period for FY 2022-23 to FY 2026-27 and Retail Supply Tariff for FY 2022-23 based on the ARR & Tariff Petition filed by the Distribution Licensees namely Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited (East DISCOM), Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited (West DISCOM), Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited (Central DISCOM), and M.P. Power Management Company Limited (MPPMCL).

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## List of Abbreviations

A&G	Administrative and General Expenses
AB Cable	Aerial Bunched Cable
APTEL	Appellate Tribunal for Electricity
ARR	Aggregate Revenue Requirement
AS	Additional Surcharge
AT&C	Aggregate Technical and Commercial
ATPS	Amarkantak Thermal Power Station
BPSA	Bulk Power Supply Agreement
CAGR	Compounded Annual Growth Rate
CEA	Central Electrical Authority
CERC	Central Electricity Regulatory Commission
CFA	Cash Financial Assistance
CGS	Central Generating Station
CHPS	Chambal Hydro Power Scheme
COD	Commercial Date of Operation
CPP	Captive Power Plants
CSD	Consumer Security Deposit
CSS	Cross Subsidy Surcharge
CTPS	Chandrapur Thermal Power Station
CWIP	Capital Works in Progress
DA	Dearness Allowance
DBST	Differential Bulk Supply Tariff
DISCOM	Distribution Company
DSM	Demand Side Management
DTR	Distribution Transformer
DVC	Damodar Valley Corporation
EA 2003	Electricity Act, 2003
EHT	Extra High Tension
ER	Eastern Region
FCA	Fuel Cost Adjustment
FY	Financial Year
GAAP	Generally Accepted Accounting Principles
GC	Group Captive
GFA	Gross Fixed Asset
GoI	Government of India
GoMP	Government of Madhya Pradesh
GPP	Gas Power Plant
GST	Goods and Service Tax
GTIS	Group Term Insurance Scheme
HP	Horse Power
HPS	Hydro Power Station



HT	High Tension
IDC	Interest During Construction
IEX	Indian Energy Exchange
IND-AS	Indian Accounting Standards
ISPS	Indira Sagar Power Station
IPDS	Integrated Power Development Scheme
IPP	Independent Power Producer
KAPS	Kakrapar Atomic Power Station
kV	kilo Volt
kVA	kilo Volt Ampere
kVAh	kilo Volt Ampere hour
kW	kilo Watt
kWh	kilo Watt hour
LED	Light Emitting Diode
LT	Low Tension
MD	Maximum Demand
MOD	Merit Order Despatch
MP	Madhya Pradesh
MPERC	Madhya Pradesh Electricity Regulatory Commission
MPPGCL or MP Genco	Madhya Pradesh Power Generating Company Limited
MPPMCL	MP Power Management Company Limited
MPPTCL	Madhya Pradesh Power Transmission Company Limited
MPSEB	Madhya Pradesh State Electricity Board
MTPS	Mejia Thermal Power Plant
MU	Million Unit
MVA	Mega Volt Ampere
MW	Mega Watt
MYT	Multi-Year Tariff
NHDC	Narmada Hydroelectric Development Corporation
NPS	New Pension Scheme
NTPC	NTPC Limited
O&M	Operation & Maintenance
OA	Open Access
OHP	Omkareshwar Hydro Project
PAF	Plant Availability Factor
PF	Provident Fund
PGCIL	Power Grid Corporation of India Ltd.
PLF	Plant Load Factor
PoC	Point of Connection
PPA	Power Purchase Agreement
PPCA	Power Purchase Cost Adjustment
PTR	Power Transformer
PWW	Public Water Works

PXIL	Power Exchange India Limited
R&M	Repair & Maintenance
RBI	Reserve Bank of India
RGGVY	Rajiv Gandhi Grameen Vidyutikaran Yojana
RoE	Return on Equity
RPO	Renewable Purchase Obligation
SAC	State Advisory Committee
SBI	State Bank of India
SEZ	Special Economic Zone
SGTPS	Sanjay Gandhi Thermal Power Station
SLDC	State Load Despatch Centre
SSP	Sardar Sarovar Project
STPS	Super Thermal Power Station
TAPS	Tarapur Atomic Power Station
TBT	Terminal Benefit Trust
ToD	Time of Day
TPS	Thermal Power Station
TP	Tariff Policy
UDAY	Ujwal DISCOM Assurance Yojana
UMPP	Ultra Mega Power Plant
VAT	Value Added Tax
WR	Western Region
WRPC	Western Regional Power Committee

**A1: ORDER***(Passed on this 31<sup>st</sup> Day of March, 2022)*

- 1.1 This order is in response to the Petition No. 04 of 2022 jointly filed by Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited, Jabalpur, Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited, Indore, and Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited, Bhopal (hereinafter individually referred to as East DISCOM, West DISCOM and Central DISCOM, respectively, and collectively referred to as DISCOMs or Distribution Licensees or Licensees or the Petitioners), and MP Power Management Company Limited, Jabalpur (hereinafter referred as the MPPMCL or collectively with DISCOMs referred to as the Petitioners) before Madhya Pradesh Electricity Regulatory Commission (hereinafter referred to as MPERC or the Commission). This Petition has been filed under the provisions 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 {RG-35(III) of 2021}” {hereinafter referred to as the MYT Regulations, 2021 or Regulations}.
- 1.2 The Petitioners jointly filed a Petition bearing Petition No. 04 of 2022 on 7<sup>th</sup> February, 2022. The motion hearing on the Petition was held by the Commission on 9<sup>th</sup> February, 2022, vide which the Commission admitted the Petition and directed the Petitioners to submit draft public notice for approval of the Commission.
- 1.3 Subsequently, the Commission vide letter dated 10<sup>th</sup> February, 2022, directed the Petitioners to publish the public notice as approved by the Commission in Hindi and English in the prominent newspapers of the State for inviting objections /comments/suggestions from the stakeholders on the subject Petition (Petition No. 04 of 2022) by 4<sup>th</sup> March, 2022. Accordingly, the Petitioners published the public notice on 11<sup>th</sup> February, 2022 in the following newspapers as shown in the table below:

**Table 1 : List of Newspapers- Public Notice published by the Petitioners’**

<b>Newspaper</b>	<b>Language</b>
Free Press Journal, Indore	English
Naidunia, Indore	Hindi
The Hitavada, Jabalpur	English
Dainik Bhaskar, Jabalpur	Hindi
Dainik Bhaskar, Sagar	Hindi
Jabalpur Express, Chhindwara	Hindi
Desh Bandhu, Satna	Hindi
Pradesh Today, Rewa	Hindi
Navbharat, Bhopal	Hindi
Central Chronicle, Bhopal	English
Peoples Samachar, Gwalior	Hindi

- 1.4 In response of the public notice, the Commission received 73 comments (East DISCOM: 17 Nos., West DISCOM: 37 Nos., Central DISCOM: 19 Nos.) from different stakeholders. The

Commission scheduled Public Hearing on 8<sup>th</sup> March, 2022 for East DISCOM, 9<sup>th</sup> March, 2022 for West DISCOM and 10<sup>th</sup> March, 2022 for Central DISCOM through video conferencing and heard the objections/comments/suggestions of the stakeholders.

- 1.5 Details of objections/suggestions/comments received, response from the Petitioners and views of the Commission thereof are given in the Chapter ‘A7: Public Objections/suggestions and Comments on Petition’ of this order.

### Snapshot of Petition

- 1.6 The Petitioners through instant Petition have submitted the ARR for the Control Period from FY 2022-23 to FY 2026-27 and tariff proposal for FY 2022-23. The ARR claimed by the Petitioners for the Control Period is shown in the following table:

**Table 2 : Snapshot of ARR for FY 2022-23 to FY 2026-27 submitted by Petitioners (Rs. Crore)**

Particular	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
ARR	48,874	50,595	54,761	58,475	61,818

- 1.7 Further, the Petitioners have prayed to approve the revenue gap of Rs. 3,916 Crores for FY 2022-23 and to recover the same through a tariff hike of 8.71%. Summary of the Tariff proposal as submitted by the Petitioners for FY 2022-23 is as follows:

**Table 3 : Summary of Tariff proposal for FY 2022-23 as submitted by Petitioners (Rs. Crore)**

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Aggregate Revenue Requirement	14,207	19,428	15,239	48,874
Revenue from sale of power as per existing tariff	13,066	17,866	14,026	44,957
<b>Revenue Gap for FY 2022-23</b>	<b>1,141</b>	<b>1,562</b>	<b>1,213</b>	<b>3,916</b>

- 1.8 The Commission vide letter dated 21<sup>st</sup> February, 2022 sought clarification/ information / data gaps, based on the scrutiny of the Petition. MPPMCL and the DISCOMs vide communications dated 7<sup>th</sup> and 17<sup>th</sup> March, 2022, submitted response to the data gaps/ clarification/ information etc.

### State Advisory Committee

- 1.9 The Commission convened a meeting of State Advisory Committee (SAC) on 17<sup>th</sup> February, 2022 through video conferencing. SAC members provided several valuable suggestions on the instant Retail Tariff Petition including suggestions pertaining to sales projections, treatment of surplus energy, concept of green energy tariff, terms and conditions of tariff, etc. SAC members also highlighted the plight of Industrial consumers due to COVID-19 outbreak. The Commission has taken due cognisance of these issues while determining the ARR for FY 2022-23 to FY 2026-27 and Tariff for FY 2022-23.

## Energy Accounting, Meterisation and technical & commercial loss reduction

1.10 The Commission has been emphasising the importance of energy accounting and meterisation from time to time separately and through previous Tariff Orders. Need for proper Energy Accounting and Energy Audit at various levels such as sub-stations, distribution feeders and distribution transformers as well as at the consumer end was also impressed upon the DISCOMs so as to provide reliable data about the actual levels of technical and commercial losses. DISCOMs were directed to prepare and implement appropriate loss reduction strategies and schemes. Meterisation at various levels of the distribution network such as Feeder/ DTR and consumer metering is of prime importance to identify high loss areas and to take action to curb losses. The DISCOMs have achieved 100% meterisation of the domestic connections in urban area but the progress in DTR and consumer metering in rural areas is not satisfactory. There appears to be substantial progress with regard to Feeder meterisation, while meterisation of agricultural DTRs remains neglected by DISCOMs. With regard to individual un-metered domestic connections in rural areas, West DISCOM has almost completed the meterisation, whereas, East and Central DISCOMs have un-metered Domestic Rural connections upto the level of 8.77% and 12.66%, respectively. For East and Central DISCOMs, the Commission has taken a serious note on the poor progress of meterisation in this category and is of the opinion that concerted efforts need to be made to account for the energy at all stages including the Rural Domestic connections. The first step to do so is to meterise all the remaining connections. The energy accounting needs to be carried out on a system driven approach on regular basis. The Commission has also observed that there are number of existing Feeder meters, which are lying defective which need prompt replacements. The status as per periodic reports submitted by DISCOMs with regard to meterisation of un-metered rural domestic connections and agricultural predominant DTRs up to December, 2021 is given below:

**Table 4: Status of meterisation of un-metered rural domestic consumers**

DISCOM	Domestic Rural		
	Total no. of connections	No. of un-metered connections	Percentage (%) Un-metered
East DISCOM	36,76,330	3,22,268	8.77%
West DISCOM	23,25,999	29,726	1.28%
Central DISCOM	23,90,293	3,02,610	12.66%
<b>State</b>	<b>83,92,622</b>	<b>6,54,604</b>	<b>7.80%</b>

**Table 5: Status of meterisation of agricultural DTRs**

DISCOMs	Agricultural DTR		
	Total no. of Pre-Dominant Agricultural DTRs	No. of DTRs provided with meters	Percentage (%) of DTRs provided with meters
East DISCOM	1,10,018	11,898	10.81%
West DISCOM	1,82,679	32,296	17.68%
Central DISCOM	2,78,054	62,492	22.47%
<b>State</b>	<b>5,70,751</b>	<b>1,06,686</b>	<b>18.69%</b>

1.11 The Commission would like to emphasize that the directive for meterisation of agriculture

predominant DTRs is an interim arrangement till meters on all individual agriculture connections are provided. The Commission is of the firm view that all consumers should be metered individually. The present regime of billing on benchmark consumption to either domestic or agriculture consumers provides no incentive for energy saving by the consumers and it makes accounting of actual losses impossible. The Commission has noted that the rate of meterisation of Agriculture DTRs is extremely slow and it needs to be enhanced. Without proper metering system in place, it is not possible to assess the demand and to perform energy audit of the agriculture consumers. The Commission, therefore, directed the DISCOMs to expedite feeder meterisation including replacement of defective meters and DTR meterisation on priority basis. There is also a need to segregate Technical and Commercial losses.

- 1.12 The purpose of providing meters on agriculture DTRs is to assess the consumption of flat rate agriculture consumers and perform energy audit in order to have a proper data of Distribution losses. The Commission has observed that the DISCOMs should perform energy audit on the agriculture DTRs where the meters have already been installed.
- 1.13 With regard to the Domestic unmetered consumers in rural areas, the Commission observes that the West DISCOM has almost completed the metering of Rural Domestic consumers.
- 1.14 In the earlier Tariff Orders, the Commission had directed the Petitioners to make concerted efforts to reduce the distribution losses in line with the loss trajectory specified by the Commission. The Commission has provided sufficient time to the DISCOMs and specified the loss reduction trajectory with achievable targets. The loss reduction trajectory specified in the MYT Regulations, 2021 for the period from FY 2019-20 to FY 2026-27 is given in the following table:

**Table 6: Distribution Loss Trajectory specified in the Regulations**

DISCOMs	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
East DISCOM	16%	16%	16%	15.75%	15.50%	15.25%	15.00%	14.75%
West DISCOM	15%	15%	14%	14.75%	14.50%	14.25%	14.00%	13.75%
Central DISCOM	17%	17%	17%	16.75%	16.50%	16.25%	16.00%	15.75%

- 1.15 Against the aforesaid targets, the actual loss level for FY 2020-21 reported by the DISCOMs in the Tariff Petition is as follows:

**Table 7: Actual Distribution Loss for FY 2020-21**

DISCOMs	FY 2020-21
East DISCOM	29.19%
West DISCOM	12.71%
Central DISCOM	28.69%

- 1.16 The Commission appreciates the performance of West DISCOM for achieving lower Distribution losses, than the loss trajectory specified by the Commission. On the other hand, it is observed that the loss level in other two DISCOMs are much higher than the loss trajectory specified and needs immediate corrective steps. The stakeholders, in their

objections, have also pointed out and shown concern over the high loss level of the DISCOMs. It has been submitted by stakeholders that the higher loss level is adversely affecting the financial viability of DISCOMs as well as services to be delivered to their consumers. The Commission has allowed only normative losses in the Tariff Order, so that consumers are not burdened on account of the inefficiencies of the Distribution Licensees.

- 1.17 In order to bail out the DISCOMs from high debt and to ensure financial turnaround of the DISCOMs, the Government of India launched Ujwal DISCOM Assurance Yojana (UDAY). Madhya Pradesh also participated in the UDAY scheme and committed to reduce AT&C losses as per prescribed targets in a time bound manner. However, from the loss levels reported by the DISCOMs, it appears that the Central and East DISCOMs have failed in their commitment towards AT&C loss reduction.
- 1.18 For reduction in technical and commercial losses through various schemes, the Commission had admitted the capital investment schemes of the DISCOMs in the past years. The Government of India is also providing financial and technological support to the DISCOMs through various schemes. However, it appears that the Central and East DISCOMs are lacking in implementation of these schemes resulting in failure to reduce the distribution losses to the desired levels.
- 1.19 One of the reasons for high losses is unmetered connections and improper energy accounting. Large number of unmetered connections and stopped/defective meters with slow pace of replacement is resulting in lower billing efficiency. Inadequate energy audit system at the feeder as well as DTR level is not allowing to fix the accountability and hence, system is running as usual. In the last Tariff Order, the Commission had directed the DISCOMs to install meters on the remaining unmetered predominant agricultural DTRs for proper energy accounting and recording consumption by the agricultural pumps. However, the progress in this regard is still far from satisfactory. The East and Central DISCOMs also need to focus on meterisation of rural unmetered Domestic connections. The Commission would like to draw attention of the State Government in this regard and emphasizes a need to implement a concrete program to achieve the targeted loss level in a time bound manner for making the DISCOMs financially viable.

### Aggregate Revenue Requirement of DISCOMs

- 1.20 The Commission has determined the ARR for the Control Period from FY 2022-23 to FY 2026-27 and Retail Supply Tariff for FY 2022-23 for the DISCOMs in this order.
- 1.21 The ARR admitted for the DISCOMs for Control Period FY 2022-23 to FY 2026-27, Revenue at Existing Tariff for FY 2022-23 and Revenue Gap/(Surplus) at Existing Tariff for FY 2022-23 is shown below in the table:

**Table 8: ARR (State) admitted by the Commission for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Power Purchase Cost including Inter State Transmission Charges	33,759.57	32,510.99	36,468.97	35,347.97	39,039.14	37,674.53	41,633.49	40,125.88	44,077.09	43,240.23
Intra-State Transmission	4,256.41	4,250.24	4,338.73	4,332.00	4,512.28	4,415.33	4,692.77	4,500.28	4,880.49	4,586.86

Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Charges including SLDC Charges										
O&M Expenses	5,497.35	5,131.80	6,117.96	5,677.81	7,080.55	6,563.49	7,695.84	7,089.51	8,281.81	7,602.73
Depreciation	1,921.03	727.36	2,154.99	820.78	2,508.00	939.78	2,851.28	1,039.37	3,055.49	1,099.41
Interest & Finance Charges										
<i>On Project Loans</i>	948.82	968.31	1,042.48	1,149.13	1,184.69	1,406.70	1,243.88	1,601.36	1,167.89	1,670.65
<i>On Working Capital Loans</i>	138.57	151.61	131.34	131.05	147.36	148.80	158.54	158.75	171.27	169.40
<i>On Consumer Security Deposit</i>	211.65	161.44	232.40	178.28	254.09	195.90	276.78	214.32	300.51	233.59
Return on Equity	793.61	821.12	845.92	874.17	891.48	920.14	928.19	957.24	958.94	988.30
Bad & Doubtful Debts	450.33	0.00	488.71	0.00	526.68	0.00	562.06	0.00	597.23	0.00
<b>Total Expenses Admitted</b>	<b>47,977.33</b>	<b>44,722.88</b>	<b>51,821.50</b>	<b>48,511.19</b>	<b>56,144.26</b>	<b>52,264.67</b>	<b>60,042.83</b>	<b>55,686.70</b>	<b>63,490.71</b>	<b>59,591.17</b>
Less: Other income and Non - Tariff Income	1,134.63	585.70	1,226.12	585.70	1,383.53	585.70	1,567.69	585.70	1,673.11	585.70
<b>Total ARR Admitted</b>	<b>46,842.70</b>	<b>44,137.17</b>	<b>50,595.38</b>	<b>47,925.49</b>	<b>54,760.72</b>	<b>51,678.97</b>	<b>58,475.14</b>	<b>55,101.00</b>	<b>61,817.60</b>	<b>59,005.46</b>
Revenue at Existing Tariff	44,957.44	44,789.92	-	-	-	-	-	-	-	-
Revenue Gap/ (Surplus) at Existing Tariff	1,885.26	(652.75)	-	-	-	-	-	-	-	-

1.22 From above, it can be observed that the Commission has admitted standalone ARR (excluding true up of previous years) of Rs. 44,137.17 Crore for FY 2022-23 against the Petitioners claim of Rs. 46,842.70 Crore. The Commission in approval of ARR has undertaken thorough review of the Petitioners submission and has admitted only the prudent expenses in accordance with the provision of the MYT Regulations, 2021. Instead of considering actual loss level, the Commission allowed ARR on normative loss level specified by the Commission, so that inefficiency of the Distribution Licensee is not passed on to the Consumers. The revenue for FY 2022-23 at existing tariff is Rs. 44,789.92 Crore. Accordingly, on standalone basis for FY 2022-23, the DISCOMs are in revenue surplus of Rs. 652.75 Crore, which would have resulted in reduction in tariff. However, as the approval of tariff and ARR is dependent on many controllable and uncontrollable factors, it is required to be trued-up based on actuals, subject to provision of the Regulations. The Commission has recently approved following True Ups Order for MPPGCL, MPPTCL and DISCOMs as follows:

- (i) Revenue Gap of Rs. 2,030.92 Crore in True Up of ARR of FY 2019-20 of DISCOMs approved vide order dated 12<sup>th</sup> October, 2021 as against Rs. 5,341.13 Crore, claimed by DISCOMs.
- (ii) Revenue Gap of Rs. 34.21 Crore in True Up of ARR of FY 2019-20 of MP Power Transmission Company Ltd. approved vide order dated 07<sup>th</sup> December, 2021 as against Rs. 35.52 Crore claimed by Transmission Licensee.
- (iii) Revenue Gap of Rs. 225.75 Crore in True Up of ARR of FY 2020-21 of DISCOMs approved vide order dated 23<sup>rd</sup> March, 2022 as against Rs. 4,981.94 Crore, claimed by DISCOMs.
- (iv) Revenue Surplus of Rs. 457.12 Crore in True Up of ARR of FY 2019-20 of MP Genco approved vide order dated 24<sup>th</sup> March, 2022 as against Rs. 453.38 Crore, claimed by MP Genco.

1.23 Accordingly, as these expenses have been admitted by the Commission after carrying out due diligence, the same needs to be considered while approving ARR and tariff for FY



2022-23 to enable recovery of the same for DISCOMs. Therefore, considering the above true ups, the revenue gap at existing tariff for FY 2022-23 works out as Rs. 1,181.01 Crore. In order to allow recovery of the same, the Commission in this Order has allowed a tariff hike of 2.64% against the Petitioners claim of 8.71%.

- 1.24 The ARR admitted for the DISCOMs for FY 2022-23, Revenue at Existing Tariff and Proposed/Admitted Tariff is shown in the following table:

**Table 9: ARR admitted and Revenue at Existing/Approved Tariff for FY 2022-23  
(Rs. Crore)**

Particulars	East DISCOM		West DISCOM		Central DISCOM		State	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
<b>Total ARR (excluding True Up)</b>	<b>12,946.51</b>	<b>11,788.09</b>	<b>19,909.68</b>	<b>18,419.29</b>	<b>13,986.51</b>	<b>13,929.80</b>	<b>46,842.70</b>	<b>44,137.17</b>
Revenue Gap of MP Transco True-up of FY 2019-20	-	10.05	-	12.34	-	11.82	-	34.21
Revenue Gap of MP DISCOMs True-up of FY 2019-20	1,260.38	1,260.38	(482.17)	(482.17)	1,252.72	1,252.72	2,030.92	2,030.92
Revenue Gap of MP DISCOMs True-up of FY 2020-21	-	63.91	-	87.45	-	74.39	-	225.75
Revenue Surplus of MP Genco True-up of FY 2019-20	-	(130.60)	-	(164.47)	-	(162.05)	-	(457.12)
<b>Total ARR (including True-up)</b>	<b>14,206.89</b>	<b>12,991.83</b>	<b>19,427.51</b>	<b>17,872.43</b>	<b>15,239.23</b>	<b>15,106.68</b>	<b>48,873.63</b>	<b>45,970.94</b>
Revenue at Existing Tariff	13,065.70	12,657.10	17,865.65	17,414.16	14,026.09	14,718.66	44,957.44	44,789.92
<b>Revenue Gap at Existing Tariff</b>	<b>1,141.19</b>	<b>334.73</b>	<b>1,561.86</b>	<b>458.27</b>	<b>1,213.14</b>	<b>388.01</b>	<b>3,916.19</b>	<b>1,181.01</b>
Revenue at Proposed Tariff	14,206.89	12,992.03	19,427.51	17,872.71	15,239.23	15,106.91	48,873.63	45,971.64
<b>Revenue Gap/ (Surplus) at Proposed Tariff</b>	<b>0.00</b>	<b>(0.20)</b>	<b>0.00</b>	<b>(0.28)</b>	<b>0.00</b>	<b>(0.23)</b>	<b>0.00</b>	<b>(0.71)</b>

- 1.25 The Commission would like to highlight here that the utmost care is taken by the Commission while approving the ARR, Retail Tariff, so that inefficiency of the DISCOMs is not passed onto the consumers of the State. It is notable that in true up of FY 2020-21, the Petitioner had claimed revenue gap of Rs. 4,981.93 Crore. However, the Commission after thorough prudence of the said claim and considering the stakeholders observations has admitted revenue gap of Rs. 225.75 Crore<sup>1</sup>, thereby disallowing expenses towards inefficiency of the DISCOMs.
- 1.26 The Licensees are therefore directed to keep in view the provision of relevant Regulations and ensure compliance with performance criteria. They are also encouraged to avail incentives in terms of R&M expenses and Return on Equity, which are available for better performance for improving consumer services.
- 1.27 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.

<sup>1</sup> Excluding supplementary Power Purchase Cost of Rs. 1184 Crore, which shall be considered after prudence check subject to separate filing of the Petition to justify claim for the same with adequate details.

- 1.28 The Commission has continued with the prescribed mechanism for recovery of Fuel Cost Adjustment (FCA) on quarterly basis so that uncontrollable costs on account of variations in the energy charges of thermal generating stations are adjusted timely in accordance with the provisions of the Electricity Act, 2003. The Commission has made suitable provisions to fulfil the Renewable Purchase Obligations (RPO) in the ARR of the DISCOMs as per relevant Regulations. The Petitioners are directed to fulfil their RPOs accordingly.
- 1.29 In compliance of directives given in the Judgment by Hon'ble APTEL, the Commission has determined the ratio of Average Billing Rate to the Voltage-wise Cost of Supply (VCoS) for various consumer categories based on the proposals submitted by the DISCOMs. It may be mentioned here that the data/ information for working out the VCoS needs to be further validated to get a fair and correct picture. In absence of requisite data the VCoS vis-a-vis cross subsidy percentage worked out in this Tariff Order is only indicative in nature.

### **Implementation of the Order**

- 1.30 The Distribution Licensees must take immediate steps to implement this order after giving seven (7) days Public Notice in prominent newspapers having State wide circulation, in accordance with Regulation 1.30 of MPERC (Details to be furnished and fee payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004, as amended from time to time. The tariff determined by this order shall take effect only after seven (7) days from the date of such publication and bills shall be issued accordingly. The tariff determined by this order shall be applicable until amended or modified by an order of this Commission.
- 1.31 The detailed order provides for the grounds and reasons of determining the ARR, discusses the functional and financial performance of the three DISCOMs and includes a section dealing with the status report on the compliance of the Commission's Directives as well as the responses of the Distribution Licensees thereto along with the Commission's observations on the suggestions/objections/comments received from the stakeholders on the ARR and Tariff proposal. The Commission directs the Petitioners that this order be implemented along with directions given and conditions mentioned in the detailed order and in the schedules of this order. It is further ordered that the DISCOMs are permitted to issue bills to the consumers in accordance with the provisions of this Tariff Order and applicable Regulations.

**Sd/-**  
**(Gopal Srivastava)**  
**Member (Law)**

**Sd/-**  
**(Mukul Dhariwal)**  
**Member**

**Sd/-**  
**(S.P.S. Parihar)**  
**Chairman**

Date: 31<sup>st</sup> March, 2022  
Place: Bhopal

## **A2: AGGREGATE REVENUE REQUIREMENT FOR PETITIONERS**

### **Sales Forecast**

#### **Sales forecast as submitted by the Petitioners**

- 2.1 For projection of sales for the control period from FY 2022-23 to FY 2026-27, category-wise and slab-wise actual data of the sales, number of consumers, connected/contracted load, etc. as per the Annual R15 statements of the preceding four years, i.e., FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 and available data till month of August 2021 have been considered.
- 2.2 In the previous year filing for FY 2021-22, they had projected the Sales based on the actual data of FY 2019-20. However, as per the actual data of FY 2020-21, the petitioners have observed that the actual sales during FY 2020-21 had variations from the sales forecasted by the Petitioners and those allowed by the Commission during the previous filings. Therefore, petitioners feel that it will be appropriate to revise the sales forecast for FY 2021-22 and thereafter project the sales for the Control Period.
- 2.3 The approach being followed is to analyse 3 years and 2-years Compound Annual Growth Rates (CAGRs) and year on year growth rate of each category and its sub-categories in respect of urban & rural consumers separately. After analysis of the data, appropriate/reasonable growth rates have been assumed for future consumer forecasts. The past CAGR on sales per consumer / sales per kW and connected load have been applied while forecasting the connected load and sales in each category/sub-category. Use of specific consumption, i.e., consumption per consumer and / or consumption per unit load 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. Further, this method has also been recommended by the CEA.
- 2.4 Further, the petitioners have signed a contract with Railways for on-demand supply of electricity for the currently under-development corridor between Itarsi and Katni. With the electrification of Railway Section between Itarsi-Pipariya-Bankhedi-Gadarwada, one new connection under Central DISCOM is expected. Similarly, with the electrification of the Railway Line between Gadarwara-Kareli-Katni, a new connection is expected under East DISCOM. Accordingly, the East and Central DISCOMs have projected approximately 55 MU sales each for FY 2022-23, FY 2023-24, FY 2024-25, FY 2025-26 and FY 2026-27 under this category.
- 2.5 Details of the category-wise sales as projected by the Petitioners, is given in the table as follows:

**Table 10: Category wise sales projected by Petitioners for State for Control Period FY 2022-23 to FY 2026-27 (MU)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
LV-1: Domestic Consumers	19,074	20,903	22,653	24,370	25,881
LV-2: Non-Domestic Consumers	3,776	4,150	4,606	5,118	5,685
LV-3: Public Water Works & Street Light	1,451	1,595	1,745	1,906	2,067
LV-4 LT Industries	1,537	1,705	1,894	2,113	2,351
LV 5: Agriculture and Allied Activities	27,665	29,563	31,191	32,861	34,349
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	3	3	3	3	4
<b>LT Total</b>	<b>53,506</b>	<b>57,919</b>	<b>62,093</b>	<b>66,371</b>	<b>70,337</b>
HV-1: Railway Traction	111	111	111	110	110
HV-2: Coal Mines	554	592	632	676	722
HV-3.1: Industrial	10,532	11,415	12,316	13,158	13,994
HV-3.2: Non-Industries	1,166	1,309	1,455	1,614	1,773
HV-4: Seasonal & Non-Seasonal	25	27	29	31	33
HV-5: Irrigation, Public Water Works and Other than Agricultural	1584	1718	1871	2041	2236
HV-6: Bulk Residential Users	457	483	513	545	580
HV-7: Synchronization and Start-Up Power	22	24	27	30	32
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	6	7	7	8	8
<b>HT Total</b>	<b>14,457</b>	<b>15,687</b>	<b>16,960</b>	<b>18,213</b>	<b>19,488</b>
<b>Total Sales for State</b>	<b>67,963</b>	<b>73,606</b>	<b>79,053</b>	<b>84,584</b>	<b>89,825</b>

**Table 11: Category wise sales projected by Petitioners for East DISCOM for Control Period FY 2022-23 to FY 2026-27 (MU)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
LV-1: Domestic Consumers	6,405	7,057	7,616	8,191	8,590
LV-2: Non-Domestic Consumers	1,417	1,598	1,801	2,030	2,288
LV-3: Public Water Works & Street Light	421	451	484	515	549
LV-4 LT Industries	498	572	656	754	867
LV 5: Agriculture and Allied Activities	7,185	7,544	7,921	8,317	8,733
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	0	0	0	0	0
<b>LT Total</b>	<b>15,926</b>	<b>17,222</b>	<b>18,478</b>	<b>19,808</b>	<b>21,028</b>
HV-1: Railway Traction	55	55	55	55	55
HV-2: Coal Mines	527	564	603	645	690
HV-3.1: Industrial	2,716	2,947	3,157	3,304	3,458
HV-3.2: Non-Industrial	264	309	348	391	441
HV-4: Seasonal & Non-Seasonal	12	14	16	18	20
HV-5: Irrigation, Public Water Works and Other than Agricultural	189	213	242	275	313
HV-6: Bulk Residential Users	275	298	323	351	381
HV-7: Synchronization and Start-Up Power	1	1	1	1	1
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	2	2	2	2	2
<b>HT Total</b>	<b>4,041</b>	<b>4,403</b>	<b>4,746</b>	<b>5,042</b>	<b>5,362</b>
<b>Total for East DISCOM</b>	<b>19,966</b>	<b>21,625</b>	<b>23,224</b>	<b>24,850</b>	<b>26,390</b>

**Table 12: Category wise sales projected by Petitioners for West DISCOM for Control Period FY 2022-23 to FY 2026-27 (MU)**

Financial Year	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
LV-1: Domestic Consumers	6,605	7,139	7,637	8,076	8,495
LV-2: Non-Domestic Consumers	1,330	1,419	1,536	1,666	1,803

<b>Financial Year</b>	<b>FY 2022-23</b>	<b>FY 2023-24</b>	<b>FY 2024-25</b>	<b>FY 2025-26</b>	<b>FY 2026-27</b>
LV-3: Public Water Works & Street Light	599	689	783	888	988
LV-4 LT Industries	734	806	887	983	1,080
LV 5: Agriculture and Allied Activities	11,326	12,146	12,814	13,521	14,145
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	1	1	1	1	1
<b>LT Total</b>	<b>20,596</b>	<b>22,201</b>	<b>23,658</b>	<b>25,135</b>	<b>26,513</b>
HV-1: Railway Traction	-	-	-	-	-
HV-2: Coal Mines	-	-	-	-	-
HV-3.1: Industrial	4,708	5,186	5,716	6,243	6,748
HV-3.2: Non-Industrial	510	570	636	706	765
HV-4: Seasonal & Non-Seasonal	10	11	11	11	11
HV-5: Irrigation, Public Water Works and Other than Agricultural	1105	1197	1301	1420	1555
HV-6: Bulk Residential Users	27	28	30	31	33
HV-7: Synchronization and Start-Up Power	16	18	20	23	25
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	1	1	1	2	2
<b>HT Total</b>	<b>6,378</b>	<b>7,012</b>	<b>7,716</b>	<b>8,435</b>	<b>9,138</b>
<b>Total for West DISCOM</b>	<b>26,973</b>	<b>29,213</b>	<b>31,375</b>	<b>33,570</b>	<b>35,651</b>

**Table 13: Category wise sales projected by Petitioners for Central DISCOM for Control Period FY 2022-23 to FY 2026-27 (MU)**

<b>Particulars</b>	<b>FY 2022-23</b>	<b>FY 2023-24</b>	<b>FY 2024-25</b>	<b>FY 2025-26</b>	<b>FY 2026-27</b>
LV-1: Domestic Consumers	6,064	6,707	7,401	8,103	8,796
LV-2: Non-Domestic Consumers	1,029	1,133	1,270	1,422	1,594
LV-3: Public Water Works & Street Light	431	455	478	503	530
LV-4 LT Industries	305	327	351	376	404
LV 5: Agriculture and Allied Activities	9,154	9,871	10,456	11,023	11,471
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	2	2	2	2	3
<b>LT Total</b>	<b>16,985</b>	<b>18,496</b>	<b>19,957</b>	<b>21,431</b>	<b>22,798</b>
HV-1: Railway Traction	55	55	55	55	55
HV-2: Coal Mines	27	28	29	31	32
HV-3.1: Industrial	3,108	3,283	3,443	3,611	3,788
HV-3.2: Non-Industrial	392	430	471	517	567
HV-4: Seasonal & Non-Seasonal	2	2	2	2	2
HV-5: Irrigation, Public Water Works and Other than Agricultural	290	308	327	346	368
HV-6: Bulk Residential Users	155	157	160	163	166
HV-7: Synchronization and Start-Up Power	5	5	5	6	6
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	3	3	4	4	4
<b>HT Total</b>	<b>4,038</b>	<b>4,272</b>	<b>4,497</b>	<b>4,736</b>	<b>4,991</b>
<b>Total for Central DISCOM</b>	<b>21,024</b>	<b>22,769</b>	<b>24,454</b>	<b>26,166</b>	<b>27,788</b>

### **Commission's Analysis on Sales forecast**

2.6 The Commission has observed that the Petitioners have relied on the actual data pertaining to FY 2017-18 to FY 2021-22 (up to August) for projection of number of consumers, connected load and sales for the Control Period (i.e FY 2022-23 to FY 2026-27). In order to project number of consumers, connected load and sales for the Control Period from FY 2022-23 to FY 2026-27, the Commission has considered it appropriate to consider last five years data from FY 2016-17 to FY 2020-21 and FY 2021-22 (up to August). Based on the actual last five years data, the Commission has also computed actual connected load per

consumer for projection of connected load and sales per unit load (kW) and / or demand (kVA) and sales per consumers. For projection of sales, connected load and no. of consumers based on the said data, the Commission has analysed category wise, sub-category wise 4 Years CAGR, 3 Years CAGR, 2 Years CAGR and Year-on-Year growth rate and compared the same with the growth rates considered by the Petitioners for projections.

2.7 Approach adopted by the Commission, for projection of number of consumers, connected load and sales is as follows:

- Number of Consumers for the Control Period have been projected based on the CAGR analysed.
- Connected load / Contract Demand has been projected considering the growth in connected load / Contract Demand for existing consumers and expected growth in connected load / Contract Demand for new consumers projected for the Control period.
- Sales have been projected considering the growth in sales per consumer and sales per connected load / Contract Demand, as the case may be for existing consumers and expected growth in sales per consumer and sales per connected load / Contract Demand for new consumers projected for the Control Period.
- In Categories like LV-2, LV-4, HV-3, whose sales were impacted in FY 2020-21 due to imposition of lockdown due to outbreak of COVID-19, growth rate excluding the data for FY 2020-21 has been considered.
- For Sub-categories like temporary connections, wherein any peculiar trend in growth rates has not been observed, the number of consumers, connected load and sales has been considered as per Petitioners' projection.
- For Unmetered Agriculture consumers, the sales have been computed for the Control Period considering the norms approved by the Commission for Permanent Unmetered Agriculture Consumers and for Temporary Unmetered Agriculture Consumers in this Order.
- For Categories LV-6 and HV-8 (Electric Vehicle and Charging Stations), as there is no consumer till previous year, number of consumers, connected load and sales has been projected as per Petitioners' submission.
- For HV-1 Railway Traction, Number of connections, connected load and sales has been considered as proposed by the Petitioners.
- For HV-2 Coal Mines, for East DISCOM, growth has been considered as per Petitioner submission which is based on the prospective coal mines under development post allocation and increase in connected load for existing coal mines. For Central DISCOM, no increase in number of consumers and connected load has

been projected under the said category as per Petitioner submission.

- For HV-7 Synchronization of Power for Generators connected to the Grid, growth has been considered as per Petitioner submission as no peculiar trend observed in previous years.

2.8 Based on above approach, the sales admitted for the control period from FY 2022-23 to FY 2026-27 by the Commission is as follows:

**Table 14: Category wise sales admitted by the Commission for State for Control Period (MUs)**

Consumer Categories	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
LV-1: Domestic	19,222.05	20,853.07	22,494.85	24,293.03	26,264.49
LV-2: Non-Domestic	3,886.05	4,266.28	4,692.94	5,172.74	5,713.49
LV-3: Public Water Works & Street Light	1,361.68	1,456.91	1,565.00	1,688.06	1,828.34
LV-4 LT Industries	1,564.36	1,653.65	1,767.91	1,883.79	2,009.77
LV 5: Agriculture and Allied Activities	28,395.22	29,834.58	31,361.30	32,978.18	34,688.64
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	2.62	2.98	3.38	3.84	4.36
<b>LT Total</b>	<b>54,431.99</b>	<b>58,067.47</b>	<b>61,885.37</b>	<b>66,019.63</b>	<b>70,509.08</b>
HV-1: Railway Traction	110.64	110.64	110.64	110.64	110.64
HV-2: Coal Mines	554.46	591.96	632.07	675.23	721.68
<i>HV-3.1: Industrial</i>	8,540.21	9,258.47	10,056.37	10,867.18	11,695.11
<i>HV-3.2: non-Industrial</i>	907.79	981.75	1,062.11	1,150.44	1,233.09
<i>HV-3.3: shopping malls</i>	106.03	117.24	129.48	142.99	155.40
<i>HV-3.4: Power Intensive Industries</i>	2,065.42	2,244.10	2,427.72	2,613.31	2,799.37
HV-3: HT Industrial, Non-Industrial and shopping malls	11,619.45	12,601.56	13,675.69	14,773.94	15,882.96
HV-4: Seasonal & Non-Seasonal	24.65	26.52	28.63	31.02	33.74
HV-5: Irrigation, Public Water Works and Other than Agricultural	1,605.57	1,754.72	1,921.21	2,107.29	2,315.54
HV-6: Bulk Residential Users	426.50	429.17	431.98	434.94	438.07
HV-7: Synchronization/ Start-Up Power	22.11	24.39	26.75	29.38	32.33
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	6.26	6.82	7.44	8.13	8.90
<b>HT Total</b>	<b>14,369.65</b>	<b>15,545.79</b>	<b>16,834.41</b>	<b>18,170.57</b>	<b>19,543.87</b>
<b>Total Sales for State (LT + HT)</b>	<b>68,801.64</b>	<b>73,613.25</b>	<b>78,719.78</b>	<b>84,190.20</b>	<b>90,052.95</b>

**Table 15: Category wise sales admitted by the Commission for East DISCOM for Control Period (MUs)**

Consumer Categories	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
LV-1: Domestic	5,950.51	6,368.88	6,819.42	7,304.67	7,827.38
LV-2: Non-Domestic	1,351.71	1,514.15	1,697.89	1,907.12	2,145.70
LV-3: Public Water Works & Street Light	405.75	427.78	451.43	476.85	504.18
LV-4 LT Industries	460.43	495.51	535.57	580.26	630.14
LV 5: Agriculture and Allied Activities	7,397.28	7,842.08	8,313.94	8,814.57	9,345.80
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	0.05	0.06	0.06	0.07	0.08
<b>LT Total</b>	<b>15,565.72</b>	<b>16,648.45</b>	<b>17,818.31</b>	<b>19,083.54</b>	<b>20,453.28</b>
HV-1: Railway Traction	55.32	55.32	55.32	55.32	55.32
HV-2: Coal Mines	527.23	563.67	602.67	644.68	689.95
<i>HV-3.1: Industrial</i>	2,545.56	2,760.85	2,996.65	3,233.61	3,493.15
<i>HV-3.2: non-Industrial</i>	216.13	226.94	238.29	250.20	262.71
<i>HV-3.3: shopping malls</i>	3.48	3.65	3.84	4.03	4.23
<i>HV-3.4: Power Intensive Industries</i>	135.55	148.19	162.01	177.12	193.64
HV-3: HT Industrial, Non-Industrial and shopping	2,900.73	3,139.63	3,400.78	3,664.96	3,953.73

Consumer Categories	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
malls					
HV-4: Seasonal & Non-Seasonal	12.21	13.82	15.67	17.79	20.22
HV-5: Irrigation, Public Water Works and Other than Agricultural	185.13	208.41	234.69	264.37	297.91
HV-6: Bulk Residential Users	247.99	249.27	250.60	251.98	253.41
HV-7: Synchronization and Start-Up Power	0.99	1.04	1.09	1.15	1.20
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	2.10	2.18	2.28	2.38	2.49
<b>HT Total</b>	<b>3,931.69</b>	<b>4,233.35</b>	<b>4,563.11</b>	<b>4,902.63</b>	<b>5,274.24</b>
<b>Total for East DISCOM (LT + HT)</b>	<b>19,497.42</b>	<b>20,881.80</b>	<b>22,381.42</b>	<b>23,986.17</b>	<b>25,727.52</b>

**Table 16: Category wise sales admitted by the Commission for West DISCOM for Control Period (MUs)**

Consumer Categories	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
LV-1: Domestic	6,637.93	7,225.31	7,756.43	8,332.61	8,958.00
LV-2: Non-Domestic	1,416.71	1,521.97	1,636.28	1,760.53	1,895.71
LV-3: Public Water Works & Street Light	524.95	574.12	631.79	699.59	779.22
LV-4 LT Industries	742.06	779.26	818.63	860.20	904.09
LV 5: Agriculture and Allied Activities	11,367.49	11,920.76	12,501.39	13,110.74	13,750.23
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	0.94	1.04	1.16	1.28	1.42
<b>LT Total</b>	<b>20,690.08</b>	<b>22,022.46</b>	<b>23,345.68</b>	<b>24,764.95</b>	<b>26,288.66</b>
HV-1: Railway Traction	0.00	0.00	0.00	0.00	0.00
HV-2: Coal Mines	0.00	0.00	0.00	0.00	0.00
<i>HV-3.1: Industrial</i>	3,213.89	3,545.16	3,924.96	4,305.25	4,668.11
<i>HV-3.2: non-Industrial</i>	417.65	457.00	499.90	547.65	586.34
<i>HV-3.3: shopping malls</i>	54.75	61.15	68.13	75.85	81.91
<i>HV-3.4: Power Intensive Industries</i>	1,493.40	1,643.38	1,796.11	1,948.47	2,098.75
HV-3: HT Industrial, Non-Industrial and shopping malls	5,179.69	5,706.69	6,289.10	6,877.23	7,435.10
HV-4: Seasonal & Non-Seasonal	10.39	10.56	10.74	10.92	11.10
HV-5: Irrigation, Public Water Works and Other than Agricultural	1,105.39	1,198.39	1,302.07	1,417.84	1,547.37
HV-6: Bulk Residential Users	25.37	25.70	26.06	26.48	26.94
HV-7: Synchronization and Start-Up Power	16.26	18.10	20.17	22.50	25.13
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	1.12	1.28	1.48	1.70	1.95
<b>HT Total</b>	<b>6,338.21</b>	<b>6,960.72</b>	<b>7,649.62</b>	<b>8,356.67</b>	<b>9,047.59</b>
<b>Total for West DISCOM (LT + HT)</b>	<b>27,028.30</b>	<b>28,983.18</b>	<b>30,995.30</b>	<b>33,121.61</b>	<b>35,336.25</b>

**Table 17: Category wise sales admitted by the Commission for Central DISCOM for Control Period (MUs)**

Consumer Categories	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
LV-1: Domestic	6,633.61	7,258.88	7,919.00	8,655.75	9,479.11
LV-2: Non-Domestic	1,117.64	1,230.16	1,358.77	1,505.09	1,672.08
LV-3: Public Water Works & Street Light	430.98	455.01	481.77	511.62	544.94
LV-4 LT Industries	361.87	378.88	413.70	443.33	475.54
LV 5: Agriculture and Allied Activities	9,630.45	10,071.75	10,545.97	11,052.87	11,592.61
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	1.63	1.88	2.16	2.48	2.86
<b>LT Total</b>	<b>18,176.18</b>	<b>19,396.56</b>	<b>20,721.38</b>	<b>22,171.14</b>	<b>23,767.14</b>
HV-1: Railway Traction	55.32	55.32	55.32	55.32	55.32
HV-2: Coal Mines	27.23	28.29	29.40	30.54	31.73
<i>HV-3.1: Industrial</i>	2,780.76	2,952.46	3,134.76	3,328.33	3,533.86
<i>HV-3.2: non-Industrial</i>	274.01	297.81	323.93	352.59	384.04
<i>HV-3.3: shopping malls</i>	47.80	52.43	57.52	63.11	69.26
<i>HV-3.4: Power Intensive Industries</i>	436.47	452.54	469.60	487.72	506.97



Consumer Categories	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
HV-3: HT Industrial, Non-Industrial and shopping malls	3,539.04	3,755.24	3,985.81	4,231.75	4,494.13
HV-4: Seasonal & Non-Seasonal	2.05	2.14	2.23	2.32	2.42
HV-5: Irrigation, Public Water Works and Other than Agricultural	315.05	347.92	384.45	425.07	470.27
HV-6: Bulk Residential Users	153.15	154.20	155.31	156.49	157.72
HV-7: Synchronization and Start-Up Power	4.86	5.25	5.49	5.73	5.99
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	3.04	3.35	3.68	4.05	4.46
<b>HT Total</b>	<b>4,099.75</b>	<b>4,351.71</b>	<b>4,621.68</b>	<b>4,911.27</b>	<b>5,222.04</b>
<b>Total for Central DISCOM (LT + HT)</b>	<b>22,275.93</b>	<b>23,748.27</b>	<b>25,343.06</b>	<b>27,082.41</b>	<b>28,989.17</b>

## Energy Balance

### Petitioners' Submission

- 2.9 For projecting the energy requirement for the Control Period from FY 2022-23 to FY 2026-27, annual sales have been converted into monthly sales using the sales profile actually observed in the past five years including FY 2020-21 for each DISCOM.
- 2.10 Further, the Commission in the MYT Regulations, 2021 has specified normative distribution loss level for the MYT period from FY 2022-23 to FY 2026-27. The actual losses for East, West and Central DISCOM for FY 2020-21 stands at 29.19%, 12.71% and 28.69%, respectively. However, for the instant Petition, the Petitioners have considered normative Distribution Losses as per MYT Regulations, 2021 for the computation of Energy Requirement. The annual distribution loss trajectory is converted into monthly loss trajectory based on the standard deviations of monthly losses from the cumulative annual losses during the past 5 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 MPERC loss level trajectory.
- 2.11 The Intra-State Transmission Losses of 2.59% for FY 2019-20 as reported by MPPTCL to MPPMCL, has been considered by the Petitioners for the Control Period. Further, Inter - State Transmission Losses have been computed for the Control Period from FY 2022-23 to FY 2026-27, considering the actual losses for FY 2020-21 for Western Region, Northern Region & Eastern Region and last 52 weeks moving average losses (1<sup>st</sup> November 2020 – 31<sup>st</sup> October, 2021).
- 2.12 Based on the above, the Petitioners have projected energy requirement for the Control Period by grossing up the projected sales by normative distribution losses and projected transmission losses, as shown in the table below:

**Table 18: Energy Requirement proposed by Petitioners for FY 2022-23 (MU)**

Particulars	Unit	East DISCOM	West DISCOM	Central DISCOM	State
LT	MU	15,926	20,596	16,985	53,506

Particulars	Unit	East DISCOM	West DISCOM	Central DISCOM	State
HT	MU	4,041	6,378	4,038	14,457
<b>Sales</b>	<b>MU</b>	<b>19,966</b>	<b>26,973</b>	<b>21,024</b>	<b>67,963</b>
Distribution loss	%	15.75%	14.75%	16.75%	16.10%
Distribution loss	MU	3,703	5,070	4,264	13,037
Energy Requirement at DISCOM Boundary	MU	23,669	32,044	25,287	81,000
Intra-State Transmission Losses	%	2.59%	2.59%	2.59%	2.59%
Intra-State Transmission Losses	MU	629	852	672	2,154
Energy Requirement at State Boundary	MU	24,299	32,896	25,959	83,154
WR-PGCIL Losses	%	3.04%	3.04%	3.04%	3.04%
NR-PGCIL Losses	%	3.29%	3.29%	3.29%	3.29%
ER-PGCIL Losses	%	3.43%	3.43%	3.43%	3.43%
External Losses	MU	447	603	475	1,525
<b>Ex-Bus Energy Requirement</b>	<b>MU</b>	<b>24,746</b>	<b>33,498</b>	<b>26,435</b>	<b>84,679</b>

Table 19: Energy Requirement proposed by Petitioners for FY 2023-24 (MU)

Particulars	Unit	East DISCOM	West DISCOM	Central DISCOM	State
LT	MU	17,221	22,201	18,496	57,919
HT	MU	4,403	7,012	4,272	15,687
<b>Sales</b>	<b>MU</b>	<b>21,625</b>	<b>29,213</b>	<b>22,769</b>	<b>73,606</b>
Distribution loss	%	15.50%	14.50%	16.50%	15.84%
Distribution loss	MU	3,933	5,387	4,535	13,855
Energy Requirement at DISCOM Boundary	MU	25,558	34,600	27,303	87,461
Intra-State Transmission Losses	%	2.59%	2.59%	2.59%	2.59%
Intra-State Transmission Losses	MU	680	920	726	2,325
Energy Requirement at State Boundary	MU	26,237	35,520	28,029	89,787
WR-PGCIL Losses	%	3.04%	3.04%	3.04%	3.04%
NR-PGCIL Losses	%	3.29%	3.29%	3.29%	3.29%
ER-PGCIL Losses	%	3.43%	3.43%	3.43%	3.43%
External Losses	MU	465	627	494	1,587
<b>Ex-Bus Energy Requirement</b>	<b>MU</b>	<b>26,702</b>	<b>36,147</b>	<b>28,524</b>	<b>91,373</b>

Table 20: Energy Requirement proposed by Petitioners for FY 2024-25 (MU)

Particulars	Unit	East DISCOM	West DISCOM	Central DISCOM	State
LT	MU	18,478	23,658	19,957	62,093
HT	MU	4,746	7,716	4,497	16,960
<b>Sales</b>	<b>MU</b>	<b>23,224</b>	<b>31,375</b>	<b>24,454</b>	<b>79,053</b>
Distribution loss	%	15.25%	14.25%	16.25%	15.59%
Distribution loss	MU	4,144	5,675	4,782	14,601
Energy Requirement at DISCOM Boundary	MU	27,368	37,050	29,236	93,654
Intra-State Transmission Losses	%	2.59%	2.59%	2.59%	2.59%
Intra-State Transmission Losses	MU	728	985	777	2,490
Energy Requirement at State Boundary	MU	28,096	38,035	30,013	96,144
WR-PGCIL Losses	%	3.04%	3.04%	3.04%	3.04%
NR-PGCIL Losses	%	3.29%	3.29%	3.29%	3.29%
ER-PGCIL Losses	%	3.43%	3.43%	3.43%	3.43%

Particulars	Unit	East DISCOM	West DISCOM	Central DISCOM	State
External Losses	MU	490	658	521	1,669
<b>Ex-Bus Energy Requirement</b>	<b>MU</b>	<b>28,586</b>	<b>38,693</b>	<b>30,534</b>	<b>97,813</b>

**Table 21: Energy Requirement proposed by Petitioners for FY 2025-26 (MU)**

Particulars	Unit	East DISCOM	West DISCOM	Central DISCOM	State
LT	MU	19,808	25,135	21,431	66,373
HT	MU	5,042	8,435	4,736	18,213
<b>Sales</b>	<b>MU</b>	<b>24,850</b>	<b>33,570</b>	<b>26,166</b>	<b>84,587</b>
Distribution loss	%	15.00%	14.00%	16.00%	15.34%
Distribution loss	MU	4,347	5,955	5,022	15,325
Energy Requirement at DISCOM Boundary	MU	29,197	39,526	31,189	99,912
Intra-State Transmission Losses	%	2.59%	2.59%	2.59%	2.59%
Intra-State Transmission Losses	MU	776	1,051	829	2,657
Energy Requirement at State Boundary	MU	29,974	40,577	32,018	1,02,568
WR-PGCIL Losses	%	3.04%	3.04%	3.04%	3.04%
NR-PGCIL Losses	%	3.29%	3.29%	3.29%	3.29%
ER-PGCIL Losses	%	3.43%	3.43%	3.43%	3.43%
External Losses	MU	512	688	545	1,745
<b>Ex-Bus Energy Requirement</b>	<b>MU</b>	<b>30,485</b>	<b>41,265</b>	<b>32,563</b>	<b>1,04,313</b>

**Table 22: Energy Requirement proposed by Petitioners for FY 2026-27 (MU)**

Particulars	Unit	East DISCOM	West DISCOM	Central DISCOM	State
LT	MU	21,028	26,513	22,798	70,339
HT	MU	5,362	9,138	4,991	19,491
<b>Sales</b>	<b>MU</b>	<b>26,390</b>	<b>35,651</b>	<b>27,788</b>	<b>89,830</b>
Distribution loss	%	14.75%	13.75%	15.75%	15.09%
Distribution loss	MU	4,526	6,201	5,235	15,962
Energy Requirement at DISCOM Boundary	MU	30,916	41,852	33,024	1,05,792
Intra-State Transmission Losses	%	2.59%	2.59%	2.59%	2.59%
Intra-State Transmission Losses	MU	822	1,113	878	2,813
Energy Requirement at State Boundary	MU	31,738	42,965	33,902	1,08,605
WR-PGCIL Losses	%	3.04%	3.04%	3.04%	3.04%
NR-PGCIL Losses	%	3.29%	3.29%	3.29%	3.29%
ER-PGCIL Losses	%	3.43%	3.43%	3.43%	3.43%
External Losses	MU	537	722	572	1,830
<b>Ex-Bus Energy Requirement</b>	<b>MU</b>	<b>32,276</b>	<b>43,686</b>	<b>34,473</b>	<b>1,10,435</b>

## Commission's Analysis

- 2.13 For arriving at the total quantum of energy requirement, the Commission has considered annual sales grossed up by specified loss levels as per the calculations shown in subsequent paragraphs/ tables. Further, to compute the monthly energy requirement for the control period, monthly sales profile has been considered same as submitted by the Petitioner which is based on the actual sales profile of last five years.

- 2.14 The distribution loss level trajectory as specified in the MYT Regulations, 2021 is given in the table below:

**Table 23: Loss targets as per Regulations (in %)**

DISCOMs	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
East	15.75%	15.50%	15.25%	15.00%	14.75%
West	14.75%	14.50%	14.25%	14.00%	13.75%
Central	16.75%	16.50%	16.25%	16.00%	15.75%

- 2.15 The Commission has considered the distribution losses as specified in the MYT Regulations, 2021 for projecting the energy requirement for the Control Period. The Commission has not considered any deviation in the monthly losses as proposed by the Petitioner and rather has considered the normative losses as specified in the MYT Regulations, 2021.
- 2.16 Further, the Commission has 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 April, 2021 to March 2022 (52-weeks data).
- 2.17 Intra-State transmission losses has been considered as per actual losses for FY 2020-21 i.e., 2.62% as submitted by MPPTCL in their annual report of regulatory compliance for FY 2020-21.
- 2.18 The energy balance / Energy requirement computed based on admitted sales and normative losses for the Control Period, is shown in the following tables:

**Table 24: Energy requirement admitted by the Commission for FY 2022-23**

Particular	East DISCOM	West DISCOM	Central DISCOM	State
Total Sales (MU)	19,497.42	27,028.30	22,275.93	68,801.64
Distribution loss (%)	15.75%	14.75%	16.75%	15.69%
Distribution loss (MU)	3,644.92	4,676.45	4,481.94	12,803.31
Input at T-D interface (MU)	23,142.34	31,704.75	26,757.87	81,604.96
Intra State Transmission loss (%)	2.62%	2.62%	2.62%	2.62%
Intra State Transmission loss (MU)	622.64	853.01	719.92	2,195.57
Input at G-T interface (MU)	23,764.98	32,557.76	27,477.79	83,800.53
Inter State Transmission Losses (MU)	537.20	744.69	613.75	1,895.65
<b>Power Purchase Requirement for FY 2022-23 (MU)</b>	<b>24,302.18</b>	<b>33,302.46</b>	<b>28,091.54</b>	<b>85,696.18</b>

**Table 25: Energy requirement admitted by the Commission for FY 2023-24**

Particular	East DISCOM	West DISCOM	Central DISCOM	State
Total Sales (MU)	20,881.80	28,983.18	23,748.27	73,613.25
Distribution loss (%)	15.50%	14.50%	16.50%	15.44%
Distribution loss (MU)	3,830.39	4,915.28	4,692.77	13,438.44

Particular	East DISCOM	West DISCOM	Central DISCOM	State
Input at T-D interface (MU)	24,712.19	33,898.46	28,441.04	87,051.69
Intra State Transmission loss (%)	2.62%	2.62%	2.62%	2.62%
Intra State Transmission loss (MU)	664.88	912.03	765.20	2,342.12
Input at G-T interface (MU)	25,377.07	34,810.49	29,206.24	89,393.81
Inter State Transmission Losses (MU)	644.79	894.95	733.31	2,273.05
<b>Power Purchase Requirement for FY 2023-24 (MU)</b>	<b>26,021.87</b>	<b>35,705.45</b>	<b>29,939.55</b>	<b>91,666.86</b>

Table 26: Energy requirement admitted by the Commission for FY 2024-25

Particular	East DISCOM	West DISCOM	Central DISCOM	State
Total Sales (MU)	22,381.42	30,995.30	25,343.06	78,719.78
Distribution loss (%)	15.25%	14.25%	16.25%	15.19%
Distribution loss (MU)	4,027.33	5,150.82	4,917.31	14,095.47
Input at T-D interface (MU)	26,408.75	36,146.12	30,260.37	92,815.25
Intra State Transmission loss (%)	2.62%	2.62%	2.62%	2.62%
Intra State Transmission loss (MU)	710.53	972.51	814.15	2,497.19
Input at G-T interface (MU)	27,119.28	37,118.63	31,074.52	95,312.44
Inter State Transmission Losses (MU)	666.90	925.64	758.45	2,350.99
<b>Power Purchase Requirement for FY 2024-25 (MU)</b>	<b>27,786.18</b>	<b>38,044.27</b>	<b>31,832.97</b>	<b>97,663.42</b>

Table 27: Energy requirement admitted by the Commission for FY 2025-26

Particular	East DISCOM	West DISCOM	Central DISCOM	State
Total Sales (MU)	23,986.17	33,121.61	27,082.41	84,190.20
Distribution loss (%)	15.00%	14.00%	16.00%	14.94%
Distribution loss (MU)	4,232.85	5,391.89	5,158.55	14,783.30
Input at T-D interface (MU)	28,219.03	38,513.51	32,240.96	98,973.50
Intra State Transmission loss (%)	2.62%	2.62%	2.62%	2.62%
Intra State Transmission loss (MU)	759.23	1,036.20	867.44	2,662.87
Input at G-T interface (MU)	28,978.26	39,549.71	33,108.40	1,01,636.37
Inter State Transmission Losses (MU)	680.69	944.77	774.13	2,399.60
<b>Power Purchase Requirement for FY 2025-26 (MU)</b>	<b>29,658.95</b>	<b>40,494.48</b>	<b>33,882.53</b>	<b>1,04,035.97</b>

Table 28: Energy requirement admitted by the Commission for FY 2026-27

Particular	East DISCOM	West DISCOM	Central DISCOM	State
Total Sales (MU)	25,727.52	35,336.25	28,989.17	90,052.95
Distribution loss (%)	14.75%	13.75%	15.75%	14.69%
Distribution loss (MU)	4,451.39	5,633.32	5,419.34	15,504.05
Input at T-D interface (MU)	30,178.91	40,969.57	34,408.52	1,05,556.99
Intra State Transmission loss (%)	2.62%	2.62%	2.62%	2.62%
Intra State Transmission loss (MU)	811.96	1,102.28	925.76	2,840.00

Particular	East DISCOM	West DISCOM	Central DISCOM	State
Input at G-T interface (MU)	30,990.87	42,071.85	35,334.27	1,08,396.99
Inter State Transmission Losses (MU)	983.13	1,364.55	1,118.08	3,465.76
<b>Power Purchase Requirement for FY 2026-27 (MU)</b>	<b>31,973.99</b>	<b>43,436.40</b>	<b>36,452.36</b>	<b>1,11,862.75</b>

## Assessment of Energy Availability

### Petitioners' Submission

- 2.19 The Petitioners have assessed availability of energy for the State, on the following basis:
- Existing long-term allocated generation capacity of MP
  - New generation capacity additions during the control period from FY 2022-23 to FY 2026-27 for MPPGCL, Central Sector, Joint venture and by Private players awarded through competitive bidding.
  - Impact of generation capacity allocation in Western Region (WR), Eastern Region (ER) and Northern Region (NR).
- 2.20 Further, the petitioners in reply to data gaps submitted that Petitioners have considered following approach for forecast of Energy Availability: -
- New generation capacity additions during the control period from FY 2022-23 to FY 2026-27 considered as per Power Purchase Agreements.
  - Allocation of Power to the State of MP, from Central Generating Stations is as per Regional Power Committees and communication held with their concerned offices.
  - The details of chosen Plant Availability Factor (PAF) and Capacity Utilisation Factor (CUF) for various plants are as indicated below:
    - PAF of MP GENCO Thermal plants have been considered on the basis of past pattern.
    - PAF of Central Generating Stations have been considered as 85% for coal based Thermal Power Plants and 60% for Gas based Thermal Power Plants.
    - PAF of IPPs have also been considered as 85%, except for BLA power, for which it has been considered at 75%.
    - CUF of solar plants has been considered as 21% and that of Non solar plants has been considered as 21.50%.
    - PAF of all new thermal power plants has been considered as 85%.
    - Predicting hydel availability is quite difficult, which totally depends on the rainfall. Accordingly, a suitable multiplying factor to Design Energy is assumed on the basis of past five years data, by ignoring abnormal variations.
    - RPO has been considered as per MPERC's Regulations.
    - COD of new thermal units has been considered as intimated by concerned

developers.

- 2.21 Allocation of power to the State of MP from Central Generating Stations is as per Western Regional Power Committee letter No. WRPC/Comml-I/6/Alloc/2020/9876 dated 6<sup>th</sup> November, 2020 and from Eastern Region NTPC Kahalgaon-2 as per GoI MoP letter no. 5/31/2006 dated 21<sup>st</sup> February, 2007 and from Northern Region as per Northern Regional Power Committee letter no. NRPC/OPR/103/02/2020/6084/6111 dated 25<sup>th</sup> June 2020 and communication held with their concerned offices.
- 2.22 MPPMCL has already decided to foreclose the PPAs with DVC for 400 MW (MTPS & CTPS) and 100 MW (DTPS) w.e.f. 01<sup>st</sup> March, 2018 & 15<sup>th</sup> May, 2017, respectively. Hence, no power is being scheduled from these stations after the said date. The costs of such plants have not been considered while calculating the power purchase cost for 2022-23 to FY 2026-27. However, in case the PPAs with DVC remain in force in 2022-23 to FY 2026-27, MPPMCL will be obligated to pay fixed charges for these stations.
- 2.23 During FY 2021-22, power from Essar, BLA and Sugan Torrent Generating Stations has been scheduled following MoD whereas in the Tariff Order for FY 2021-22, the Commission had not considered availability and the cost thereon from these plants. The power purchase expenditure incurred on these plants will be submitted before the Commission in the true up of FY 2021-22. For FY 2022-23 to FY 2026-27, the availability from these plants has been considered as the PPAs with these plants remain in force.
- 2.24 New Central and State Generating Stations are scheduled to commence generation during FY 2022-23 to FY 2026-27 as follows:

**Table 29: Upcoming Stations and Technical Parameters**

Sr. No.	Particulars	Capacity (MW)	MP Share		Energy Availability (MU)	CoD
			(%)	(MW)		
1	NHPC Lower Subanshiri HEP Unit-1	1x250	5%	13	73	June, 2023
2	NTPC Lara STPS, Raigarh, Unit III	1x800	8%	64	361	September, 2024
3	NTPC Lara STPS, Raigarh, Unit IV	1x800	8%	64	361	March, 2025
4	NTPC Lara STPS, Raigarh, Unit V	1x800	8%	64	440	December, 2025
5	DB Power STPS Unit-1	1x660	38%	248	320	October, 2022
6	Pench Thermal Energy, Unit-1	1x660	100%	660	889	December, 2026
7	<b>TOTAL</b>	<b>3,970</b>		<b>1,112</b>		

- 2.25 Following table shows allocated existing stations as well as the new capacity additions, which are expected to become operational during the Control Period:

Table 30: Allocated stations submitted by the Petitioners for FY 2022-23 to FY 2026-27

Sr. no.	Source	Plant Capacity (MW)	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
			MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW
1	Amarkantak TPS Ph-III	210	100%	210	100%	210	100%	210	100%	210	100%	210
2	Satpura TPS Ph-II & III	840	99%	830	99%	830	99%	830	99%	830	99%	830
3	Satpura TPS Ph-IV	500	100%	500	100%	500	100%	500	100%	500	100%	500
4	SGTPS Ph-I & II	840	100%	840	100%	840	100%	840	100%	840	100%	840
5	SGTPS Ph-III	500	100%	500	100%	500	100%	500	100%	500	100%	500
6	Shri Singaji STPS Phase-I	1200	100%	1200	100%	1200	100%	1200	100%	1200	100%	1200
7	Shri Singaji STPS Phase-II	1320	100%	1320	100%	1320	100%	1320	100%	1320	100%	1320
<b>A</b>	<b>Total (MP Genco Thermal-MP Share)</b>	<b>5410</b>	<b>100%</b>	<b>5400</b>	<b>100%</b>	<b>5400</b>	<b>100%</b>	<b>5400</b>	<b>100%</b>	<b>5400</b>	<b>100%</b>	<b>5400</b>
8	Rani Awanti Bai Sagar, Bargi HPS	90	100%	90	100%	90	100%	90	100%	90	100%	90
9	Bansagar Ph I HPS (Tons)	315	100%	315	100%	315	100%	315	100%	315	100%	315
10	Bansagar Ph-II HPS (Silpara)	30	100%	30	100%	30	100%	30	100%	30	100%	30
11	Bansagar Ph-III HPS (Deolond)	60	100%	60	100%	60	100%	60	100%	60	100%	60
12	Bansagar Ph-IV HPS (Jhinna)	20	100%	20	100%	20	100%	20	100%	20	100%	20
13	Birsinghpur HPS	20	100%	20	100%	20	100%	20	100%	20	100%	20
14	Madikheda HPS	60	100%	60	100%	60	100%	60	100%	60	100%	60
15	Rajghat HPS	45	50%	23	50%	23	50%	23	50%	23	50%	23
16	Gandhisagar HPS	115	50%	58	50%	58	50%	58	50%	58	50%	58
17	Ranapratap Sagar HPS	172	50%	86	50%	86	50%	86	50%	86	50%	86
18	Jawahar Sagar HPS	99	50%	50	50%	50	50%	50	50%	50	50%	50
19	Pench HPS	160	67%	107	67%	107	67%	107	67%	107	67%	107
<b>B</b>	<b>Total (MP Genco Hydel)</b>	<b>1186</b>	<b>77%</b>	<b>917</b>	<b>77%</b>	<b>917</b>	<b>77%</b>	<b>917</b>	<b>77%</b>	<b>917</b>	<b>77%</b>	<b>917</b>
20	NHDC Indira Sagar HPS	1000	100%	1000	100%	1000	100%	1000	100%	1000	100%	1000
21	NHDC Omkareshwar HPS	520	100%	520	100%	520	100%	520	100%	520	100%	520
22	NVDA Sardar Sarovar HPS	1450	57%	827	57%	827	57%	827	57%	827	57%	827



Sr. no.	Source	Plant Capacity (MW)	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
			MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW
23	Rihand HPS	300	15%	45	15%	45	15%	45	15%	45	15%	45
24	Matatila HPS	31	33%	10	33%	10	33%	10	33%	10	33%	10
25	SJVN Rampur HPS	412	0%	1	0%	1	0%	1	0%	1	0%	1
26	SJVN Jhakri HPS	1500	0%	2	0%	2	0%	2	0%	2	0%	2
27	Tehri HPS	1000	0%	2	0%	2	0%	2	0%	2	0%	2
28	Koteshwar HPP	400	0%	1	0%	1	0%	1	0%	1	0%	1
29	NHPC Parbati III	520	0%	1	0%	1	0%	1	0%	1	0%	1
30	NHPC Chamera II	300	0%	1	0%	1	0%	1	0%	1	0%	1
31	NHPC Chamera III	231	0%	1	0%	1	0%	1	0%	1	0%	1
32	NHPC Dulhasti	390	0%	1	0%	1	0%	1	0%	1	0%	1
33	NHPC Dhauliganga	280	0%	1	0%	1	0%	1	0%	1	0%	1
34	NHPC Sewa II	120	0%	0	0%	0	0%	0	0%	0	0%	0
35	NHPC Uri II	240	0%	1	0%	1	0%	1	0%	1	0%	1
36	NHPC Kishanganga	330	0%	1	0%	1	0%	1	0%	1	0%	1
37	NTPC Koldam HPP I	800	0%	1	0%	1	0%	1	0%	1	0%	1
38	NTPC Singrauli Small HPP	8	0%	0	0%	0	0%	0	0%	0	0%	0
39	NHPC Lower Subansiri HEP Unit-1	250	5%	13	5%	13	5%	13	5%	13	5%	13
<b>C</b>	<b>Total (JV Hydel &amp; Other Hydel)</b>	<b>10082</b>	<b>24%</b>	<b>2427</b>	<b>24%</b>	<b>2427</b>	<b>24%</b>	<b>2427</b>	<b>24%</b>	<b>2427</b>	<b>24%</b>	<b>2427</b>
40	NTPC Korba	2100	23%	473	23%	473	23%	473	23%	473	23%	473
41	NTPC Korba III	500	14%	72	14%	72	14%	72	14%	72	14%	72
42	NTPC Vindychal I	1260	35%	435	35%	435	35%	435	35%	435	35%	435
43	NTPC Vindychal II	1000	31%	312	31%	312	31%	312	31%	312	31%	312
44	NTPC Vindychal III	1000	24%	239	24%	239	24%	239	24%	239	24%	239
45	NTPC Vindychal IV	1000	28%	275	28%	275	28%	275	28%	275	28%	275
46	NTPC Vindychal V Unit 1	500	27%	137	27%	137	27%	137	27%	137	27%	137
47	NTPC Sipat I	1980	16%	320	16%	320	16%	320	16%	320	16%	320
48	NTPC Sipat II	1000	18%	181	18%	181	18%	181	18%	181	18%	181

Sr. no.	Source	Plant Capacity (MW)	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
			MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW
49	NTPC Mouda I	1000	2%	19	2%	19	2%	19	2%	19	2%	19
50	NTPC Mouda II Unit 1	1320	2%	24	2%	24	2%	24	2%	24	2%	24
51	NTPC Solapur STPS	1320	24%	321	24%	321	24%	321	24%	321	24%	321
52	NTPC Gadarwara STPS, Unit-1	800	52%	415	52%	415	52%	415	52%	415	52%	415
53	NTPC Lara STPS, Raigarh, Unit I	800	11%	89	11%	89	10%	76	8%	64	8%	64
54	NTPC Khargone STPS, Unit-I & II	1320	52%	685	52%	685	52%	685	52%	685	52%	685
55	NTPC Kawas GPP	656	21%	140	21%	140	21%	140	21%	140	21%	140
56	NTPC Gandhar GPP	657	18%	117	18%	117	18%	117	18%	117	18%	117
57	KAPP Kakrapar	440	25%	111	25%	111	25%	111	25%	111	25%	111
58	TAPP Tarapur	1080	21%	231	21%	231	21%	231	21%	231	21%	231
59	NTPC Gadarwara STPS, Unit-2	800	52%	415	52%	415	52%	415	52%	415	52%	415
60	NTPC Lara STPS, Raigarh, Unit II	800	11%	89	11%	89	10%	76	8%	64	8%	64
61	NTPC Lara STPS, Raigarh, Unit III	800	0%		0%	0	10%	76	8%	64	8%	64
62	NTPC Lara STPS, Raigarh, Unit IV	800	0%		0%	0	10%	76	8%	64	8%	64
63	NTPC Lara STPS, Raigarh, Unit V	800	0%		0%	0	0%		8%	64	8%	64
<b>D</b>	<b>Total WR Region</b>	<b>23,733</b>	<b>21%</b>	<b>5,100.56</b>	<b>21%</b>	<b>5,100.51</b>	<b>22%</b>	<b>5,228.16</b>	<b>22%</b>	<b>5,242</b>	<b>22%</b>	<b>5,242.02</b>
64	NTPC Kahalgaon II	1500	5%	74	5%	74	5%	74	5%	74	5%	74
<b>E</b>	<b>Total ER Region</b>	<b>1500.00</b>	<b>5%</b>	<b>74.00</b>	<b>5%</b>	<b>74.00</b>	<b>5%</b>	<b>74.00</b>	<b>5%</b>	<b>74.00</b>	<b>5%</b>	<b>74.00</b>
65	NTPC Auraiya GPP	663	0%	2	0%	2	0%	2	0%	2	0%	2
66	NTPC Dadri GPP	830	0%	2	0%	2	0%	2	0%	2	0%	2
67	NTPC Anta GPP	419	0%	1	0%	1	0%	1	0%	1	0%	1
68	NTPC Firoz Gandhi Unchahar I	420	0%	0	0%	0	0%	0	0%	0	0%	0
69	NTPC Firoz Gandhi Unchahar II	420	0%	1	0%	1	0%	1	0%	1	0%	1
70	NTPC Firoz Gandhi Unchahar III	210	0%	1	0%	1	0%	1	0%	1	0%	1
71	NTPC Firoz Gandhi Unchahar IV	500	0%	1	0%	1	0%	1	0%	1	0%	1
72	NTPC Rihand TPS-I	1000	0%	2	0%	2	0%	2	0%	2	0%	2
73	NTPC Rihand TPS-II	1000	0%	2	0%	2	0%	2	0%	2	0%	2

Sr. no.	Source	Plant Capacity (MW)	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
			MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW	MP's Share in %	MP's Share in MW
74	NTPC Rihand TPS-III	1000	0%	2	0%	2	0%	2	0%	2	0%	2
75	NTPC NCTP Dadri II	980	0%	2	0%	2	0%	2	0%	2	0%	2
76	NTPC Singrauli	2000	0%	4	0%	4	0%	4	0%	4	0%	4
77	NTPC IGPS I Jhajjar	1500	0%	2	0%	2	0%	2	0%	2	0%	2
78	MEJA Urja Nigam	660	0%	1	0%	1	0%	1	0%	1	0%	1
79	NTPC Tanda	660	0%	1	0%	1	0%	1	0%	1	0%	1
80	NTPC Badarpur	0	0%	0	0%	0	0%	0	0%	0	0%	0
81	Rajasthan (NPCIL)	440	0%	1	0%	1	0%	1	0%	1	0%	1
82	NARORA (NPCIL)	440	0%	1	0%	1	0%	1	0%	1	0%	1
<b>F</b>	<b>Total NR Region</b>	<b>13142</b>	<b>0%</b>	<b>27</b>	<b>0%</b>	<b>27</b>	<b>0%</b>	<b>27</b>	<b>0%</b>	<b>27</b>	<b>0%</b>	<b>27</b>
83	Torrent Power	1148	4%	50	4%	50	4%	50	4%	50	4%	50
84	BLA Power, Unit-I & II	90	35%	32	35%	32	35%	32	35%	32	35%	32
85	Jaypee Bina Power	500	70%	350	70%	350	70%	350	70%	350	70%	350
86	Lanco Amarkantak TPS Unit 1	300	100%	300	100%	300	100%	300	100%	300	100%	300
87	Reliance UMPP, Sasan	3960	38%	1485	38%	1485	38%	1485	38%	1485	38%	1485
88	Essar Power STPS	1200	5%	60	5%	60	5%	60	5%	60	5%	60
89	Jaiprakash Power STPS, Nigri	1320	38%	495	38%	495	38%	495	38%	495	38%	495
90	MB Power STPS, Unit-I	600	35%	210	35%	210	35%	210	35%	210	35%	210
91	MB Power STPS, Unit-II	600	35%	210	35%	210	35%	210	35%	210	35%	210
92	Jhabua Power STPS, Unit-1	600	35%	210	35%	210	35%	210	35%	210	35%	210
93	DB Power STPS Unit-1	660	38%	248	38%	248	38%	248	38%	248	38%	248
94	Pench Thermal Energy, Unit-1											660
<b>G</b>	<b>Total (IPPs)</b>	<b>10978</b>	<b>33%</b>	<b>3649</b>	<b>33%</b>	<b>3649</b>	<b>33%</b>	<b>3649</b>	<b>33%</b>	<b>3649</b>	<b>39%</b>	<b>4309</b>
95	Renewable Energy (Solar)	3438	100%	3438	100%	3578	100%	3578	100%	3578	100%	3578
96	Renewable Energy (other than Solar)	2542	100%	2542	100%	2548	100%	2548	100%	2548	100%	2541
<b>H</b>	<b>Total Renewable Energy</b>	<b>5980</b>	<b>100%</b>	<b>5980</b>	<b>100%</b>	<b>6126</b>	<b>100%</b>	<b>6126</b>	<b>100%</b>	<b>6126</b>	<b>100%</b>	<b>6119</b>
<b>I</b>	<b>Grand Total</b>	<b>72,011</b>	<b>33%</b>	<b>23,575</b>	<b>33%</b>	<b>23,721</b>	<b>33%</b>	<b>23,848</b>	<b>33%</b>	<b>23,862</b>	<b>34%</b>	<b>24,515</b>

- 2.26 The Petitioners have submitted that after meeting the requirement of the State and selling power on the Power Exchanges, the Petitioners still have to back-down plants partially so as to save on the energy costs being incurred. The Petitioners have applied month-wise merit order dispatch principles on the basis of projected energy charges for FY 2022-23 and thereafter, after considering all generating stations allocated to MPPMCL.
- 2.27 The Petitioners have projected partially back down units/stations, which are higher up in the MoD by an average rate of energy sale at IEX during the past 36 months, i.e., at Rs. 3.45/kWh for FY 2022-23, during those periods when their operation is not required to meet the demand in that period and the market rates do not justify their running either. This addresses demand fluctuations and ensures that power procured from cheaper sources is fully utilized and avoids procurement of power from costlier sources. The resultant benefits of reduced power procurement cost or sale at a higher rate, whichever the case may be, is in turn passed on to the consumers.
- 2.28 The following table shows the stations which are considered by the Petitioners for partial/full back down:

**Table 31: Stations which are considered by the Petitioners for partial /full back down (MU)**

Sr. No	Source	FY 2022-23			FY 2023-24			FY 2024-25		
		Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown
1	Amarkantak TPS Ph-III	1540	1540	0	1544	1544	0	1540	1540	0
2	Satpura TPS Ph-II & III	0	0	0	0	0	0	0	0	0
3	Satpura TPS Ph-IV	3388	3388	0	3397	3397	0	3388	3388	0
4	SGTPS Ph-I & II	4754	4754	0	4768	4768	0	4754	4754	0
5	SGTPS Ph-III	3468	3468	0	3477	3477	0	3468	3468	0
6	Shri Singaji STPS Phase-I	8421	3026	5396	8445	4613	3832	8421	6127	2294
7	Shri Singaji STPS Phase-II	9141	0	9141	9166	0	9166	9141	1644	7497
<b>A</b>	<b>Total (MP Genco Thermal-MP Share)</b>	<b>30712</b>	<b>16176</b>	<b>14536</b>	<b>30797</b>	<b>17800</b>	<b>12998</b>	<b>30712</b>	<b>20921</b>	<b>9791</b>
8	Rani Awanti Bai Sagar, Bargi HPS	380	380	0	380	380	0	380	380	0
9	Bansagar Ph I HPS (Tons)	898	898	0	898	898	0	898	898	0
10	Bansagar Ph-II HPS (Silpara)	92	92	0	92	92	0	92	92	0
11	Bansagar Ph-III HPS (Deolond)	107	107	0	107	107	0	107	107	0

Sr. No	Source	FY 2022-23			FY 2023-24			FY 2024-25		
		Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown
12	Bansagar Ph-IV HPS (Jhinna)	76	76	0	76	76	0	76	76	0
13	Birsinghpur HPS	36	36	0	36	36	0	36	36	0
14	Madikheda HPS	110	110	0	110	110	0	110	110	0
15	Rajghat HPS	37	37	0	37	37	0	37	37	0
16	Gandhisagar HPS	125	125	0	167	167	0	167	167	0
17	Ranapratap Sagar HPS	201	201	0	201	201	0	201	201	0
18	Jawahar Sagar HPS	147	147	0	147	147	0	147	147	0
19	Pench HPS	199	199	0	199	199	0	199	199	0
<b>B</b>	<b>Total (MP Genco Hydel)</b>	<b>2409</b>	<b>2409</b>	<b>0</b>	<b>2450</b>	<b>2450</b>	<b>0</b>	<b>2450</b>	<b>2450</b>	<b>0</b>
20	NHDC Indira Sagar HPS	2359	2359	0	2359	2359	0	2359	2359	0
21	NHDC Omkareshwar HPS	1043	1043	0	1043	1043	0	1043	1043	0
22	NVDA Sardar Sarovar HPS	1696	1696	0	1696	1696	0	1696	1696	0
23	Rihand HPS	82	82	0	82	82	0	82	82	0
24	Matatila HPS	29	29	0	29	29	0	29	29	0
25	SJVN Rampur HPS	2	2	0	2	2	0	2	2	0
26	SJVN Jhakri HPS	9	9	0	9	9	0	9	9	0
27	Tehri HPS	6	6	0	6	6	0	6	6	0
28	Koteshwar HPP	3	3	0	3	3	0	3	3	0
29	NHPC Parbati III	5	5	0	5	5	0	5	5	0
30	NHPC Chamera II	3	3	0	3	3	0	3	3	0
31	NHPC Chamera III	2	2	0	2	2	0	2	2	0
32	NHPC Dulhasti	4	0	4	4	0	4	4	1	3
33	NHPC Dhauliganga	3	3	0	3	3	0	3	3	0
34	NHPC Sewa II	1	0	1	1	0	1	1	0	1
35	NHPC Uri II	0	0	0	0	0	0	0	0	0
36	NHPC Kishanganga	3	3	0	3	3	0	3	3	0
37	NTPC Koldam HPP I	4	4	0	4	4	0	4	4	0
38	NTPC Singrauli Small HPP	0	0	0	0	0	0	0	0	0

Sr. No	Source	FY 2022-23			FY 2023-24			FY 2024-25		
		Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown
39	NHPC Lower Subansiri HEP Unit-1	0	0	0	73	73	0	267	267	0
<b>C</b>	<b>Total (JV Hydel &amp; Other Hydel)</b>	<b>5254</b>	<b>5249</b>	<b>5</b>	<b>5327</b>	<b>5322</b>	<b>5</b>	<b>5520</b>	<b>5517</b>	<b>4</b>
40	NTPC Korba	3286	3286	0	3295	3295	0	3286	3286	0
41	NTPC Korba III	505	505	0	506	506	0	505	505	0
42	NTPC Vindychal I	2947	2947	0	2955	2955	0	2947	2947	0
43	NTPC Vindychal II	2190	2190	0	2196	2196	0	2190	2190	0
44	NTPC Vindychal III	1677	1677	0	1682	1682	0	1677	1677	0
45	NTPC Vindychal IV	1931	1931	0	1937	1937	0	1931	1931	0
46	NTPC Vindychal V Unit 1	963	963	0	966	966	0	963	963	0
47	NTPC Sipat I	2247	2247	0	2253	2253	0	2247	2247	0
48	NTPC Sipat II	1273	1273	0	1276	1276	0	1273	1273	0
49	NTPC Mouda I	135	90	44	135	98	37	135	110	25
50	NTPC Mouda II Unit 1	171	30	141	172	78	94	171	61	110
51	NTPC Solapur STPS	2250	396	1854	2257	813	1444	2250	806	1444
52	NTPC Gadawara STPS, Unit-1	2913	2673	239	2921	2921	0	2913	2913	0
53	NTPC Lara STPS, Raigarh, Unit I	622	622	0	624	624	0	361	361	0
54	NTPC Kargone STPS, Unit-I & II	4806	3594	1211	4819	3608	1211	4806	4411	395
55	NTPC Kawas GPP	718	412	306	720	540	180	718	601	117
56	NTPC Gandhar GPP	601	549	51	602	602	0	601	601	0
57	KAPP Kakrapar	728	728	0	730	730	0	728	728	0
58	TAPP Tarapur	1513	1513	0	1518	1518	0	1513	1513	0
59	NTPC Gadawara STPS, Unit-2	2913	2178	734	2921	2434	487	2913	2673	239
60	NTPC Lara STPS, Raigarh, Unit II	622	622	0	624	624	0	361	361	0
61	NTPC Lara STPS, Raigarh, Unit III	0	0	0	0	0	0	361	361	0
62	NTPC Lara STPS, Raigarh, Unit IV	0	0	0	0	0	0	361	361	0
63	NTPC Lara STPS, Raigarh, Unit V	0	0	0	0	0	0	0	0	0

Sr. No	Source	FY 2022-23			FY 2023-24			FY 2024-25		
		Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown
<b>D</b>	<b>Total WR Region</b>	<b>35011</b>	<b>30429</b>	<b>4582</b>	<b>35106</b>	<b>31654</b>	<b>3453</b>	<b>35211</b>	<b>32882</b>	<b>2330</b>
64	NTPC Kahalgaon II	519	519	0	521	521	0	519	519	0
<b>E</b>	<b>Total ER Region</b>	<b>519</b>	<b>519</b>	<b>0</b>	<b>521</b>	<b>521</b>	<b>0</b>	<b>519</b>	<b>519</b>	<b>0</b>
65	NTPC Auraiya GPP	12	11	1	12	12	0	12	12	0
66	NTPC Dadri GPP	15	15	0	15	15	0	15	15	0
67	NTPC Anta GPP	7	2	5	7	6	2	7	6	2
68	NTPC Firoz Gandhi Unchahar I	2	0	2	2	1	1	2	1	2
69	NTPC Firoz Gandhi Unchahar II	7	0	7	7	0	7	7	2	5
70	NTPC Firoz Gandhi Unchahar III	4	1	3	4	2	2	4	1	2
71	NTPC Firoz Gandhi Unchahar IV	9	3	6	9	7	2	9	7	2
72	NTPC Rihand TPS-I	15	15	0	15	15	0	15	15	0
73	NTPC Rihand TPS-II	16	16	0	16	16	0	16	16	0
74	NTPC Rihand TPS-III	17	17	0	17	17	0	17	17	0
75	NTPC NCTP Dadri II	16	3	13	16	7	9	16	5	11
76	NTPC Singrauli	28	28	0	28	28	0	28	28	0
77	NTPC IGPS I Jhajjar	14	0	14	14	0	14	14	0	14
78	MEJA Urja Nigam	6	2	4	6	5	2	6	5	2
79	NTPC Tanda	8	5	3	8	6	2	8	7	1
80	NTPC Badarpur	0	0	0	0	0	0	0	0	0
81	Rajasthan (NPCIL)	8	8	0	8	8	0	8	8	0
82	NARORA (NPCIL)	7	7	0	7	7	0	7	7	0
<b>F</b>	<b>Total NR Region</b>	<b>191</b>	<b>133</b>	<b>58</b>	<b>191</b>	<b>150</b>	<b>42</b>	<b>191</b>	<b>150</b>	<b>40</b>
83	Torrent Power	256	0	256	257	0	257	256	0	256
84	BLA Power, Unit-I & II	188	32	156	189	82	106	188	65	123
85	Jaypee Bina Power	2372	0	2372	2378	640	1738	2372	844	1528
86	Lanco Amarkantak TPS Unit 1	2033	2033	0	2038	2038	0	2033	2033	0
87	Reliance UMPP, Sasan	10422	10422	0	10450	10450	0	10422	10422	0
88	Essar Power STPS	421	0	421	422	0	422	421	0	421

Sr. No	Source	FY 2022-23			FY 2023-24			FY 2024-25		
		Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown
89	Jaiprakash Power STPS, Nigri	3474	3474	0	3483	3483	0	3474	3474	0
90	MB Power STPS, Unit-I	1474	1474	0	1478	1478	0	1474	1474	0
91	MB Power STPS, Unit-II	1474	1474	0	1478	1478	0	1474	1474	0
92	Jhabua Power STPS, Unit-1	1474	1474	0	1478	1478	0	1474	1474	0
93	DB Power STPS Unit-1	616	616	0	1723	1723	0	1718	1718	0
94	Pench Thermal Energy, Unit-1	0	0	0	0	0	0	0	0	0
<b>G</b>	<b>Total (IPPs)</b>	<b>24202</b>	<b>20997</b>	<b>3205</b>	<b>25374</b>	<b>22850</b>	<b>2524</b>	<b>25305</b>	<b>22977</b>	<b>2328</b>
95	Renewable Energy (Solar)	7555	7555	0	9764	9764	0	10501	10501	0
96	Renewable Energy (other than Solar)	4515	4515	0	4534	4534	0	4534	4534	0
<b>H</b>	<b>Total Renewable Energy</b>	<b>12070</b>	<b>12070</b>	<b>0</b>	<b>14299</b>	<b>14299</b>	<b>0</b>	<b>15035</b>	<b>15035</b>	<b>0</b>
<b>I</b>	<b>Total</b>	<b>110368</b>	<b>87982</b>	<b>22386</b>	<b>114066</b>	<b>95045</b>	<b>19021</b>	<b>114944</b>	<b>100451</b>	<b>14493</b>

SI No	Source	FY 2025-26			FY 2026-27		
		Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown
1	Amarkantak TPS Ph-III	1540	1540	0	1540	1540	0
2	Satpura TPS Ph-II & III	0	0	0	0	0	0
3	Satpura TPS Ph-IV	3388	3388	0	3388	3388	0
4	SGTPS Ph-I & II	4754	4754	0	4754	4754	0
5	SGTPS Ph-III	3468	3468	0	3468	3468	0
6	Shri Singaji STPS Phase-I	8421	8421	0	8421	8421	0
7	Shri Singaji STPS Phase-II	9141	1486	7655	9141	3263	5878
<b>A</b>	<b>Total (MP Genco Thermal-MP Share)</b>	<b>30712</b>	<b>23057</b>	<b>7655</b>	<b>30712</b>	<b>24834</b>	<b>5878</b>
8	Rani Awanti Bai Sagar, Bargi HPS	380	380	0	380	380	0
9	Bansagar Ph I HPS (Tons)	898	898	0	898	898	0
10	Bansagar Ph-II HPS (Silpara)	92	92	0	92	92	0



SI No	Source	FY 2025-26			FY 2026-27		
		Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown
11	Bansagar Ph-III HPS (Deolond)	107	107	0	107	107	0
12	Bansagar Ph-IV HPS (Jhinna)	76	76	0	76	76	0
13	Birsinghpur HPS	36	36	0	36	36	0
14	Madikheda HPS	110	110	0	110	110	0
15	Rajghat HPS	37	37	0	37	37	0
16	Gandhisagar HPS	167	167	0	167	167	0
17	Ranapratap Sagar HPS	201	201	0	201	201	0
18	Jawahar Sagar HPS	147	147	0	147	147	0
19	Pench HPS	199	199	0	199	199	0
<b>B</b>	<b>Total (MP Genco Hydel)</b>	<b>2450</b>	<b>2450</b>	<b>0</b>	<b>2450</b>	<b>2450</b>	<b>0</b>
20	NHDC Indira Sagar HPS	2359	2359	0	2359	2359	0
21	NHDC Omkareshwar HPS	1043	1043	0	1043	1043	0
22	NVDA Sardar Sarovar HPS	1696	1696	0	1696	1696	0
23	Rihand HPS	82	82	0	82	82	0
24	Matatila HPS	29	29	0	29	29	0
25	SJVN Rampur HPS	2	2	0	2	2	0
26	SJVN Jhakri HPS	9	9	0	9	9	0
27	Tehri HPS	6	6	0	6	6	0
28	Koteshwar HPP	3	3	0	3	3	0
29	NHPC Parbati III	5	5	0	5	5	0
30	NHPC Chamera II	3	3	0	3	3	0
31	NHPC Chamera III	2	2	0	2	2	0
32	NHPC Dulhasti	4	1	2	4	2	1
33	NHPC Dhauliganga	3	3	0	3	3	0
34	NHPC Sewa II	1	0	1	1	0	1
35	NHPC Uri II	0	0	0	0	0	0
36	NHPC Kishanganga	3	3	0	3	3	0
37	NTPC Koldam HPP I	4	4	0	4	4	0

SI No	Source	FY 2025-26			FY 2026-27		
		Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown
38	NTPC Singrauli Small HPP	0	0	0	0	0	0
39	NHPC Lower Subansiri HEP Unit-1	387	387	0	387	387	0
<b>C</b>	<b>Total (JV Hydel &amp; Other Hydel)</b>	<b>5641</b>	<b>5637</b>	<b>3</b>	<b>5641</b>	<b>5638</b>	<b>3</b>
40	NTPC Korba	3286	3286	0	3286	3286	0
41	NTPC Korba III	505	505	0	505	505	0
42	NTPC Vindiyachal I	2947	2947	0	2947	2947	0
43	NTPC Vindiyachal II	2190	2190	0	2190	2190	0
44	NTPC Vindiyachal III	1677	1677	0	1677	1677	0
45	NTPC Vindiyachal IV	1931	1931	0	1931	1931	0
46	NTPC Vindiyachal V Unit 1	963	963	0	963	963	0
47	NTPC Sipat I	2247	2247	0	2247	2247	0
48	NTPC Sipat II	1273	1273	0	1273	1273	0
49	NTPC Mouda I	135	135	0	1162	1162	0
50	NTPC Mouda II Unit 1	171	171	0	1620	1257	363
51	NTPC Solapur STPS	2250	1639	611	2250	1639	611
52	NTPC Gadawara STPS, Unit-1	2913	2913	0	2913	2913	0
53	NTPC Lara STPS, Raigarh, Unit I	440	440	0	518	518	0
54	NTPC Khargone STPS, Unit-I & II	4806	4806	0	4806	4806	0
55	NTPC Kawas GPP	718	718	0	718	718	0
56	NTPC Gandhar GPP	601	601	0	601	601	0
57	KAPP Kakrapar	728	728	0	728	728	0
58	TAPP Tarapur	1513	1513	0	1513	1513	0
59	NTPC Gadawara STPS, Unit-2	2913	2913	0	2913	2913	0
60	NTPC Lara STPS, Raigarh, Unit II	440	440	0	518	518	0
61	NTPC Lara STPS, Raigarh, Unit III	440	440	0	518	518	0
62	NTPC Lara STPS, Raigarh, Unit IV	440	440	0	518	518	0
63	NTPC Lara STPS, Raigarh, Unit V	440	440	0	518	518	0
<b>D</b>	<b>Total WR Region</b>	<b>35968</b>	<b>35357</b>	<b>611</b>	<b>38830</b>	<b>37856</b>	<b>974</b>

SI No	Source	FY 2025-26			FY 2026-27		
		Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown
64	NTPC Kahalgaon II	519	519	0	519	519	0
<b>E</b>	<b>Total ER Region</b>	<b>519</b>	<b>519</b>	<b>0</b>	<b>519</b>	<b>519</b>	<b>0</b>
65	NTPC Auraiya GPP	12	12	0	12	12	0
66	NTPC Dadri GPP	15	15	0	15	15	0
67	NTPC Anta GPP	7	7	0	7	7	0
68	NTPC Firoz Gandhi Unchahar I	2	2	1	2	2	1
69	NTPC Firoz Gandhi Unchahar II	7	3	4	7	5	2
70	NTPC Firoz Gandhi Unchahar III	4	2	1	4	2	1
71	NTPC Firoz Gandhi Unchahar IV	9	9	0	9	9	0
72	NTPC Rihand TPS-I	15	15	0	15	15	0
73	NTPC Rihand TPS-II	16	16	0	16	16	0
74	NTPC Rihand TPS-III	17	17	0	17	17	0
75	NTPC NCTP Dadri II	16	16	0	16	16	0
76	NTPC Singrauli	28	28	0	28	28	0
77	NTPC IGPS I Jhajjar	14	0	14	14	0	14
78	MEJA Urja Nigam	6	6	0	6	6	0
79	NTPC Tanda	8	8	0	8	8	0
80	NTPC Badarpur	0	0	0	0	0	0
81	Rajasthan (NPCIL)	8	8	0	8	8	0
82	NARORA (NPCIL)	7	7	0	7	7	0
<b>F</b>	<b>Total NR Region</b>	<b>191</b>	<b>171</b>	<b>20</b>	<b>191</b>	<b>173</b>	<b>18</b>
83	Torrent Power	256	0	256	256	0	256
84	BLA Power, Unit-I & II	188	188	0	188	188	0
85	Jaypee Bina Power	2372	1361	1011	2372	1579	792
86	Lanco Amarkantak TPS Unit 1	2033	2033	0	2033	2033	0
87	Reliance UMPP, Sasan	10422	10422	0	10422	10422	0
88	Essar Power STPS	421	0	421	421	0	421
89	Jaiprakash Power STPS, Nigri	3474	3474	0	3474	3474	0

SI No	Source	FY 2025-26			FY 2026-27		
		Energy Availability	Energy Scheduled	Backdown	Energy Availability	Energy Scheduled	Backdown
90	MB Power STPS, Unit-I	1474	1474	0	1474	1474	0
91	MB Power STPS, Unit-II	1474	1474	0	1474	1474	0
92	Jhabua Power STPS, Unit-1	1474	1474	0	1474	1474	0
93	DB Power STPS Unit-1	1718	1718	0	1718	1718	0
94	Pench Thermal Energy, Unit-1	0	0	0	889	889	0
<b>G</b>	<b>Total (IPPs)</b>	<b>25305</b>	<b>23617</b>	<b>1688</b>	<b>26194</b>	<b>24724</b>	<b>1470</b>
95	Renewable Energy (Solar)	10501	10501	0	10501	10501	0
96	Renewable Energy (other than Solar)	4534	4534	0	4531	4531	0
<b>H</b>	<b>Total Renewable Energy</b>	<b>15035</b>	<b>15035</b>	<b>0</b>	<b>15032</b>	<b>15032</b>	<b>0</b>
<b>I</b>	<b>Total</b>	<b>115821</b>	<b>105844</b>	<b>9977</b>	<b>119570</b>	<b>111228</b>	<b>8342</b>

2.29 The following table shows the overall availability of all the stations after application of merit order dispatch and backing-down for the period FY 2022-23 to FY 2026-27 as submitted by the Petitioners:

**Table 32: Total Availability of Energy submitted by the Petitioners for FY 2022-23 to FY 2026-27 (MU)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Ex-Bus Availability	1,10,368	1,14,066	1,14,944	1,15,821	1,19,570
Ex-Bus Energy Required by DISCOMs	84,679	91,373	97,813	104,313	110,435
Backdown of Power including Surplus Sale of Power	25,689	22,693	17,132	11,508	9,134
Backdown	22,386	19,021	14,493	9,977	8,342
Surplus Units available for Sale	3,303	3,672	2,638	1,531	792

## **Commission's Analysis**

- 2.30 The Commission observed that the Petitioners have not considered the allocation from Western and Northern Region as per the latest allocation specified by Regional Power Committee. Accordingly, the Commission directed the Petitioners to submit the latest allocation from Western and Northern Regions, which was submitted by the Petitioners.
- 2.31 Accordingly, the Commission has considered the CGS allocation for the control period from FY 2022-23 to FY 2026-27 as provided by Western Regional Power Committee in their letter No. WRPC/Comm1-I/6/Alloc/2021/3294 dated 24<sup>th</sup> December, 2021 and from Eastern Region NTPC Kahalgaon-2 communicated vide GoI MoP letter no. 5/31/2006- dated 21<sup>st</sup> February, 2007 and from Northern Region as per Northern Regional Power Committee letter no. NRPC/OPR/103/02/2021/9347/74 dated 1<sup>st</sup> October, 2021. Further, the Commission has considered the allocation of remaining generating stations as per notification no. 2211/F-3-13/2016/XIII dated 21<sup>st</sup> March, 2016, by Energy Deptt. Govt. of Madhya Pradesh.
- 2.32 The Commission has considered allocation of existing stations to MPPMCL and new capacity additions proposed during the Control Period as shown in the following table:

Table 33: Allocation of Generating Station considered by the Commission for FY 2022-23 to FY 2026-27

Sr. No.	Generating Stations	Region	Installed Capacity (MW)	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
				Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)
<b>I</b>	<b>Central Generating Stations</b>		<b>39,696</b>		<b>5,193</b>		<b>5,193</b>		<b>5,193</b>		<b>5,193</b>		<b>5,193</b>
1	NTPC Korba	WR	2,100	22.49%	472	22.49%	472	22.49%	472	22.49%	472	22.49%	472
2	NTPC Korba III	WR	500	14.33%	72	14.33%	72	14.33%	72	14.33%	72	14.33%	72
3	NTPC Vindychal I	WR	1,260	34.48%	434	34.48%	434	34.48%	434	34.48%	434	34.48%	434
4	NTPC Vindychal II	WR	1,000	31.16%	312	31.16%	312	31.16%	312	31.16%	312	31.16%	312
5	NTPC Vindychal III	WR	1,000	23.86%	239	23.86%	239	23.86%	239	23.86%	239	23.86%	239
6	NTPC Vindychal IV	WR	1,000	27.47%	275	27.47%	275	27.47%	275	27.47%	275	27.47%	275
7	NTPC Vindychal V Unit 1	WR	500	27.40%	137	27.40%	137	27.40%	137	27.40%	137	27.40%	137
8	NTPC Sipat I	WR	1,980	16.12%	319	16.12%	319	16.12%	319	16.12%	319	16.12%	319
9	NTPC Sipat II	WR	1,000	18.10%	181	18.10%	181	18.10%	181	18.10%	181	18.10%	181
10	NTPC Mouda I	WR	1,000	1.86%	19	1.86%	19	1.86%	19	1.86%	19	1.86%	19
11	NTPC Mouda II Unit 1	WR	1,320	1.78%	24	1.78%	24	1.78%	24	1.78%	24	1.78%	24
12	NTPC Kawas GPP	WR	656	21.36%	140	21.36%	140	21.36%	140	21.36%	140	21.36%	140
13	NTPC Gandhar GPP	WR	657	17.83%	117	17.83%	117	17.83%	117	17.83%	117	17.83%	117
14	NTPC Auraiya GPP	NR	663	0.24%	2	0.24%	2	0.24%	2	0.24%	2	0.24%	2
15	NTPC Dadri GPP	NR	830	0.24%	2	0.24%	2	0.24%	2	0.24%	2	0.24%	2
16	NTPC Anta GPP	NR	419	0.24%	1	0.24%	1	0.24%	1	0.24%	1	0.24%	1
17	NTPC Kahalgaon 2	ER	1,500	4.93%	74	4.93%	74	4.93%	74	4.93%	74	4.93%	74
18	KAPP Kakrapar	WR	440	25.22%	111	25.22%	111	25.22%	111	25.22%	111	25.22%	111
19	TAPP Tarapur	WR	1,080	21.34%	230	21.34%	230	21.34%	230	21.34%	230	21.34%	230
20	RAPP Rawabhatta	NR	440	0.24%	1	0.24%	1	0.24%	1	0.24%	1	0.24%	1
21	NAPP Narora	NR	440	0.24%	1	0.24%	1	0.24%	1	0.24%	1	0.24%	1
22	NTPC Solapur STPS, Phase-1	WR	1,320	24.24%	320	24.24%	320	24.24%	320	24.24%	320	24.24%	320
23	NTPC Gadawara STPS, Unit-1	WR	800	51.83%	415	51.83%	415	51.83%	415	51.83%	415	51.83%	415
24	NTPC Gadawara STPS, Unit-2	WR	800	51.83%	415	51.83%	415	51.83%	415	51.83%	415	51.83%	415
25	NTPC Lara STPS, Raigarh, Unit I	WR	800	11.02%	88	11.02%	88	11.02%	88	11.02%	88	11.02%	88
26	NTPC Lara STPS, Raigarh, Unit II	WR	800	11.02%	88	11.02%	88	11.02%	88	11.02%	88	11.02%	88
27	NTPC Lara STPS, Raigarh, Unit III	WR	800	8.00%	0	8.00%	0	8.00%	0	8.00%	0	8.00%	0
28	NTPC Lara STPS, Raigarh, Unit IV	WR	800	8.00%	0	8.00%	0	8.00%	0	8.00%	0	8.00%	0

Sr. No.	Generating Stations	Region	Installed Capacity (MW)	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
				Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)
29	NTPC Lara STPS, Raigarh, Unit V	WR	800	8.00%	0	8.00%	0	8.00%	0	8.00%	0	8.00%	0
30	NTPC Firoz Gandhi Unchahar I	NR	420	0.08%	0	0.08%	0	0.08%	0	0.08%	0	0.08%	0
31	NTPC Firoz Gandhi Unchahar II	NR	420	0.24%	1	0.24%	1	0.24%	1	0.24%	1	0.24%	1
32	NTPC Firoz Gandhi Unchahar III	NR	210	0.24%	1	0.24%	1	0.24%	1	0.24%	1	0.24%	1
33	NTPC Firoz Gandhi Unchahar IV	NR	500	0.24%	1	0.24%	1	0.24%	1	0.24%	1	0.24%	1
34	NTPC Rihand I	NR	1,000	0.20%	2	0.20%	2	0.20%	2	0.20%	2	0.20%	2
35	NTPC Rihand II	NR	1,000	0.22%	2	0.22%	2	0.22%	2	0.22%	2	0.22%	2
36	NTPC Rihand III	NR	1,000	0.24%	2	0.24%	2	0.24%	2	0.24%	2	0.24%	2
37	NTPC NCTP Dadri II	NR	980	0.23%	2	0.23%	2	0.23%	2	0.23%	2	0.23%	2
38	NTPC Singrauli	NR	2,000	0.21%	4	0.21%	4	0.21%	4	0.21%	4	0.21%	4
39	NTPC IGPS I Jhajjar	NR	1,500	0.12%	2	0.12%	2	0.12%	2	0.12%	2	0.12%	2
40	NTPC Khargone STPS, Unit-I	WR	660	51.83%	342	51.83%	342	51.83%	342	51.83%	342	51.83%	342
41	NTPC Khargone STPS, Unit-II	WR	660	51.83%	342	51.83%	342	51.83%	342	51.83%	342	51.83%	342
42	Meja Urja Nigam	NR	1,320	0.12%	2	0.12%	2	0.12%	2	0.12%	2	0.12%	2
43	NTPC Tanda Stage-II	NR	1,320	0.16%	2	0.16%	2	0.16%	2	0.16%	2	0.16%	2
<b>II</b>	<b>MP Genco Power Station (Thermal &amp; Hydro)</b>		<b>6,596</b>		<b>6,327</b>		<b>6,327</b>		<b>6,327</b>		<b>6,327</b>		<b>6,327</b>
44	Amarkantak TPS Ph-III	State	210	100.00%	210	100.00%	210	100.00%	210	100.00%	210	100.00%	210
45	Satpura TPS Phase III	State	840	100.00%	840	100.00%	840	100.00%	840	100.00%	840	100.00%	840
46	Satpura TPS Ph-IV	State	500	100.00%	500	100.00%	500	100.00%	500	100.00%	500	100.00%	500
47	SGTPS Ph-I & II	State	840	100.00%	840	100.00%	840	100.00%	840	100.00%	840	100.00%	840
48	SGTPS Ph-III	State	500	100.00%	500	100.00%	500	100.00%	500	100.00%	500	100.00%	500
49	Shri Singaji STPS, Ph-I	State	1,200	100.00%	1,200	100.00%	1,200	100.00%	1,200	100.00%	1,200	100.00%	1,200
50	Shri Singaji STPS, Ph-2	State	1,320	100.00%	1,320	100.00%	1,320	100.00%	1,320	100.00%	1,320	100.00%	1,320
51	Rani Awanti Bai Sagar, Bargi HPS	State	90	100.00%	90	100.00%	90	100.00%	90	100.00%	90	100.00%	90
52	Bansagar Ph I HPS (Tons)	State	315	100.00%	315	100.00%	315	100.00%	315	100.00%	315	100.00%	315
53	Bansagar Ph-II HPS (Silpara)	State	30	100.00%	30	100.00%	30	100.00%	30	100.00%	30	100.00%	30
54	Bansagar Ph-III HPS (Deolond)	State	60	100.00%	60	100.00%	60	100.00%	60	100.00%	60	100.00%	60
55	Bansagar Ph-IV HPS (Jhinna)	State	20	100.00%	20	100.00%	20	100.00%	20	100.00%	20	100.00%	20
56	Birsinghpur HPS	State	20	100.00%	20	100.00%	20	100.00%	20	100.00%	20	100.00%	20
57	Marhikheda HPS	State	60	100.00%	60	100.00%	60	100.00%	60	100.00%	60	100.00%	60
58	Rajghat HPS	State	45	50.00%	23	50.00%	23	50.00%	23	50.00%	23	50.00%	23

Sr. No.	Generating Stations	Region	Installed Capacity (MW)	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
				Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)
59	Gandhisagar HPS	State	115	50.00%	58	50.00%	58	50.00%	58	50.00%	58	50.00%	58
60	Ranapratap Sagar & Jawahar Sagar HPS	State	271	50.00%	136	50.00%	136	50.00%	136	50.00%	136	50.00%	136
61	Pench HPS	State	160	66.69%	107	66.69%	107	66.69%	107	66.69%	107	66.69%	107
<b>III</b>	<b>JV Hydel &amp; Other Hydels</b>		<b>10,082</b>		<b>2,413</b>		<b>2,426</b>		<b>2,426</b>		<b>2,426</b>		<b>2,426</b>
62	NHDC Indira Sagar HPS	State	1,000	100.00%	1,000	100.00%	1,000	100.00%	1,000	100.00%	1,000	100.00%	1,000
63	NHDC Omkareshwar HPS	State	520	100.00%	520	100.00%	520	100.00%	520	100.00%	520	100.00%	520
64	Sardar Sarovar HPS	WR	1,450	57.00%	827	57.00%	827	57.00%	827	57.00%	827	57.00%	827
65	Rihand HPS	NR	300	15.00%	45	15.00%	45	15.00%	45	15.00%	45	15.00%	45
66	Matatila HPS	NR	31	32.68%	10	32.68%	10	32.68%	10	32.68%	10	32.68%	10
67	SJVN Rampur HPS	NR	412	0.15%	1	0.15%	1	0.15%	1	0.15%	1	0.15%	1
68	SJVN Jhakri HPS	NR	1,500	0.16%	2	0.16%	2	0.16%	2	0.16%	2	0.16%	2
69	Tehri HPS	NR	1,000	0.16%	2	0.16%	2	0.16%	2	0.16%	2	0.16%	2
70	Koteshwar HPP	NR	400	0.16%	1	0.16%	1	0.16%	1	0.16%	1	0.16%	1
71	NHPC Parbati III	NR	520	0.24%	1	0.24%	1	0.24%	1	0.24%	1	0.24%	1
72	NHPC Chamera II	NR	300	0.29%	1	0.29%	1	0.29%	1	0.29%	1	0.29%	1
73	NHPC Chamera III	NR	231	0.24%	1	0.24%	1	0.24%	1	0.24%	1	0.24%	1
74	NHPC Dulhasti	NR	390	0.24%	1	0.24%	1	0.24%	1	0.24%	1	0.24%	1
75	NHPC Dhauliganga	NR	280	0.24%	1	0.24%	1	0.24%	1	0.24%	1	0.24%	1
76	NHPC Sewa II	NR	120	0.25%	0	0.25%	0	0.25%	0	0.25%	0	0.25%	0
77	NHPC Uri II	NR	240	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
78	NHPC Kishanganga	NR	330	0.24%	1	0.24%	1	0.24%	1	0.24%	1	0.24%	1
79	NTPC Koldam HPP I	NR	800	0.12%	1	0.12%	1	0.12%	1	0.12%	1	0.12%	1
80	NTPC Singrauli Small HPP	NR	8	0.24%	0	0.24%	0	0.24%	0	0.24%	0	0.24%	0
81	NHPC Lower Subansiri HEP Unit-1	NER	250	5.25%	0	5.25%	13	5.25%	13	5.25%	13	5.25%	13
<b>IV</b>	<b>IPPs</b>		<b>11,638</b>		<b>3,402</b>		<b>3,402</b>		<b>3,402</b>		<b>4,062</b>		
82	Torrent Power	WR	1,148	4.36%	50	4.36%	50	4.36%	50	4.36%	50	4.36%	50
83	BLA Power	State	90	35.00%	32	35.00%	32	35.00%	32	35.00%	32	35.00%	32
84	Jaypee Bina Power	State	500	70.00%	350	70.00%	350	70.00%	350	70.00%	350	70.00%	350
85	Lanco Amarkantak TPS Unit 1	WR	300	100.00%	300	100.00%	300	100.00%	300	100.00%	300	100.00%	300
86	Reliance UMPP, Sasan	WR	3,960	37.50%	1,485	37.50%	1,485	37.50%	1,485	37.50%	1,485	37.50%	1,485
87	Essar Power STPS	WR	1,200	5.00%	60	5.00%	60	5.00%	60	5.00%	60	5.00%	60



Sr. No.	Generating Stations	Region	Installed Capacity (MW)	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
				Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)	Allocation (%)	Allocation (MW)
88	Jaiprakash Power STPS, Nigri	WR	1,320	37.50%	495	37.50%	495	37.50%	495	37.50%	495	37.50%	495
89	MB Power STPS	WR	1,200	35.00%	420	35.00%	420	35.00%	420	35.00%	420	35.00%	420
90	Jhabua Power STPS, Unit-1	WR	600	35.00%	210	35.00%	210	35.00%	210	35.00%	210	35.00%	210
91	DB Power STPS Unit-1	WR	660	37.58%	0	37.58%	0	37.58%	0	37.58%	0	37.58%	0
92	Pench Thermal Energy, Unit-1	WR	660	100.00%	0	100.00%	0	100.00%	0	100.00%	0	100.00%	660
<b>V</b>	<b>Renewables</b>				<b>5,980</b>		<b>6,126</b>		<b>6,126</b>		<b>6,126</b>		<b>6,119</b>
93	Solar			100.00%	3,438	100.00%	3,578	100.00%	3,578	100.00%	3,578	100.00%	3,578
94	Other than Solar			100.00%	2,542	100.00%	2,548	100.00%	2,548	100.00%	2,548	100.00%	2,541

- 2.33 The Commission in order to project energy availability for FY 2022-23 to FY 2026-27 has analysed the following:
- (i) Actual average scheduled energy for previous three years, i.e., FY 2019-20 to FY 2021-22 (Upto December, 2021) as per State Energy Accounts;
  - (ii) Actual availability of Central Generating Stations as per Regional Energy Account for FY 2018-19 to FY 2020-21;
  - (iii) Actual availability of IPPs, MPPGCL, NHDC and NVDA as per State / Regional Energy Account for FY 2018-19 to FY 2020-21;
  - (iv) Projections made by NHDC, NVDA and MPPGCL for FY 2022-23 to FY 2026-27;
  - (v) Actual availability of RE Power from existing PPA for compliance of RPO.

#### **Energy Availability from Central Generating Stations & Nuclear Power Plants**

- 2.34 With regard to the energy availability from Central Generating Stations (Thermal Power Plants), the Commission observed that the actual availability for FY 2020-21 is in line with the average of the scheduled energy in previous three years. Accordingly, the Commission has projected the availability for these stations considering the actual plant availability in FY 2020-21.
- 2.35 Further, the Commission has projected energy availability from the Central Hydro Generating Stations considering the actual plant availability in previous years given in the Hydro Performance Review 2018-19 published by CEA.
- 2.36 For Nuclear Power Corporation of India Ltd. (NPCIL) generating stations, the Commission has considered energy availability as per average of the actual energy scheduled in last three years as per State Energy Accounts.

#### **Energy Availability from MPPGCL, NVDA & NHDC Generating Stations**

- 2.37 The Commission observed that the MPPGCL has projected availability for the Control Period from its stations considering the maintenance schedule projected for its various stations during the Control Period. Accordingly, the Commission has considered the energy availability from MPPGCL thermal generating stations & Hydro generating stations as per the projection submitted by the MPPGCL. Further, the petitioner and MPPGCL submitted that the proposal for decommissioning of Satpura Phase-III plants has been submitted by MPPGCL to the State Government and presently no power is being scheduled from the Station. Accordingly, the Commission has not considered availability from the said generating station for the control period.
- 2.38 Similarly, the energy availability projections as provided by the NHDC for Indira Sagar Power Station (ISPS), Omkareshwar (OSP) and as provided by NVDA for Sardar Sarovar Project (SSP) has been considered by the Commission for the Control Period.

### **Energy Availability from Renewable Energy Generating Stations**

- 2.39 The energy availability from Solar and Non-Solar sources has been considered in accordance to existing power purchase agreement as per Petitioners submission. Further, shortfall if any in fulfilment of Renewable Purchase Obligation (RPO) specified by the Commission in MPERC (Cogeneration and Generation from Renewable Energy Sources), 2021 has been considered to be met through additional procurement during the Control Period. The details of availability from existing power purchase agreements and additional procurement for fulfilment of RPO projected for the Control Period has been specified in the subsequent Section of this Order.

### **Energy Availability from New Generating Stations**

- 2.40 With regard to new NTPC Stations, i.e., NTPC Lara STPS, Raigarh, Units III, IV and V Thermal Power Stations, the Commission enquired latest status of the plants from Petitioners. In reply, the Petitioners submitted that as per NTPC communication, the plant is expected to be commissioned within 52 months. As these units are expected to be commissioned at the end of the Control Period, the Commission has decided not to consider availability from these units for the Control Period.
- 2.41 Similarly, DB Power STPS Unit-1, is also not expected to be commissioned during the Control Period. Accordingly, availability from the same has not been considered for the Control Period.
- 2.42 With regards to NHPC Lower Subhansiri HEP Unit-1, NHPC has communicated that the station is expected to be Commissioned during August 2023. Therefore, the availability from this generating station has been considered as per Petitioners submission from FY 2023-24 onwards.
- 2.43 With regard to Pench Thermal Energy Power Station, Unit-1, the station is expected to be commissioned during the FY 2026-27 as per Commissions approval vide order dated 19.05.2021 in Petition No. 53 of 2020. Accordingly, the availability from this station has been considered at normative availability of 65% for first 90 days during FY 2026-27 and then 85% for rest of the period during FY 2026-27.
- 2.44 The Commission vide Orders dated 22 May, 2015 and 25 July, 2015 in Petition Nos. 16/2014 and 36/2015, respectively, had disallowed the availability and cost of power procured from Unit No. 1 of M/s BLA Power. In Appeal No. 201 of 2017, Hon'ble APTEL vide Order dated 19.04.2018 remanded the matter to the Commission for determination of tariff for Unit No. 1 of BLA power plant for FY 2016-17 to FY 2018-19. The aforesaid order has been challenged by the Commission before the Hon'ble Supreme Court in Civil Appeal No. 5733 of 2018 and the same has been admitted and presently sub-judice before the Hon'ble Supreme Court. In view of aforesaid status, the availability and cost of generation from Unit No. 1 of M/s BLA Power plant as filed by the Petitioner has not been considered in this Order.
- 2.45 The Commission vide order dated 25<sup>th</sup> October, 2021, in Petition No. 17 of 2018 has

approved tariff for BLA Unit No. 2. Accordingly, the Commission has projected the availability and considered the fixed cost of the BLA Power Unit No. 2 as per the said Order.

- 2.46 Further, availability from Essar power as concessional energy submitted in the Petition is not in accordance with the Commission's Order dated 4<sup>th</sup> May, 2016 in SMP No 51/2015. Therefore, the availability from Essar power as proposed by the petitioners for the control period has not been considered in this Order. Also, the Commission has not considered the availability and the cost there on for the Sugan Torrent Generating Station in view of past practice followed by the Commission in its Retail Supply Tariff Orders from 2016-17 onwards, Further, the Petitioners could not respond satisfactorily to the Commission's queries through separate communications with regard to PPA. However, the Petitioner is at liberty to approach the Commission with a separate Petition in this regard.
- 2.47 Based on the above, month-wise and generating station-wise details of projected availability for FY 2022-23 to FY 2026-27 is shown in the following table:

**Table 34 : Month wise energy availability projection for FY 2022-23 (MU)**

Particulars	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
NTPC Korba	330	329	309	328	309	309	283	300	301	307	293	291	3,689
NTPC Korba III	52	52	52	48	46	41	51	51	52	52	50	52	599
NTPC Vindychal I	269	270	241	294	246	254	233	231	277	276	270	280	3,140
NTPC Vindychal II	236	229	191	144	159	217	182	207	188	209	216	233	2,410
NTPC Vindychal III	162	177	160	181	148	147	174	171	173	163	148	147	1,951
NTPC Vindychal IV	189	179	171	188	181	177	160	180	160	139	116	152	1,992
NTPC Vindychal V Unit 1	89	97	92	105	93	93	92	88	99	84	68	92	1,092
NTPC Sipat I	208	230	216	217	230	167	152	183	207	228	213	230	2,482
NTPC Sipat II	124	125	121	120	127	115	108	92	105	110	85	115	1,346
NTPC Mouda I	21	14	22	43	28	20	15	20	30	46	31	34	322
NTPC Mouda II Unit 1	20	18	31	47	29	10	12	26	29	43	36	50	352
NTPC Kawas GPP	200	208	131	74	82	113	68	57	33	57	49	69	1,143
NTPC Gandhar GPP	85	107	42	145	103	80	0	6	14	24	86	246	938
NTPC Auraiya GPP	3	1	1	1	0	5	0	1	0	0	1	1	13
NTPC Dadri GPP	3	1	2	3	0	1	1	0	1	0	1	2	16
NTPC Anta GPP	0	0	2	4	1	0	0	1	0	0	0	0	8
NTPC Kahalgaon 2	45	35	30	48	30	31	29	31	39	37	42	48	444
KAPP Kakrapar	48	53	59	67	68	64	72	70	64	68	65	69	765
TAPP Tarapur	148	147	153	147	152	127	122	140	127	88	98	127	1,576
RAPP Rawabhata	1	1	1	1	1	1	1	1	1	1	0	0	10
NAPP Narora	1	1	1	1	1	1	1	1	1	0	1	1	8
NTPC Solapur STPS, Phase-1	103	0	56	360	190	223	219	290	386	204	244	264	2,538
NTPC Gadarwara STPS, Unit-1	237	51	0	395	396	375	372	278	215	167	227	456	3,169
NTPC Gadarwara STPS, Unit-2	268	58	0	340	355	350	420	314	243	186	216	420	3,169
NTPC Lara STPS, Raigarh, Unit I	52	36	37	50	58	45	44	89	103	35	63	98	711
NTPC Lara STPS, Raigarh, Unit II	63	45	45	62	72	55	54	93	88	28	40	66	711
NTPC Firoz Gandhi Unchahar I	0	0	0	1	0	0	0	0	0	0	0	0	3
NTPC Firoz Gandhi Unchahar II	0	0	1	2	1	1	0	0	1	0	1	0	8
NTPC Firoz Gandhi Unchahar III	0	0	0	1	1	0	0	0	0	0	0	0	4
NTPC Firoz Gandhi Unchahar IV	1	0	1	2	1	1	0	1	0	0	1	0	9
NTPC Rihand I	1	1	1	2	1	2	1	1	1	0	1	1	14

Particulars	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
NTPC Rihand II	1	2	1	3	2	2	2	1	1	1	1	1	18
NTPC Rihand III	1	1	1	3	3	2	2	1	1	1	1	1	19
NTPC NCTP Dadri II	1	0	0	8	4	1	1	1	0	0	2	0	19
NTPC Singrauli	2	3	2	4	3	5	3	3	2	1	1	2	29
NTPC IGPS I Jhajjar	0	0	1	6	3	2	1	1	0	0	0	0	15
NTPC Khargone STPS, Unit-I	269	84	1	167	190	166	217	314	311	314	197	276	2,506
NTPC Khargone STPS, Unit-II	269	84	1	167	190	166	217	314	311	314	197	276	2,506
Meja Urja Nigam	2	1	1	1	1	1	1	1	1	0	0	2	11
NTPC Tanda Stage-II	1	0	0	2	2	1	1	8	2	0	0	0	16
Amarkantak TPS Ph-III	133	138	133	68	0	131	140	136	140	140	126	140	1,425
Satpura TPS Ph-IV	296	306	296	150	251	291	312	302	312	312	282	312	3,425
SGTPS Ph-I & II	388	320	325	315	294	300	339	438	452	452	408	452	4,482
SGTPS Ph-III	309	319	309	311	311	301	320	309	320	320	289	320	3,736
Shri Singaji STPS, Ph-I	647	669	647	325	542	315	703	681	703	703	635	703	7,275
Shri Singaji STPS, Ph-2	708	731	472	711	533	630	751	727	751	751	678	751	8,194
Rani Awanti Bai Sagar, Bargi HPS	37	35	24	29	41	45	50	25	35	35	35	35	425
Bansagar Ph I HPS (Tons)	49	54	64	99	99	109	99	99	79	79	79	79	993
Bansagar Ph-II HPS (Silpara)	7	6	8	9	9	10	10	10	8	8	8	8	99
Bansagar Ph-III HPS (Deolond)	0	0	0	12	20	25	30	10	0	0	0	0	97
Bansagar Ph-IV HPS (Jhinna)	8	6	4	4	3	7	9	9	9	9	9	9	86
Birsinghpur HPS	0	0	1	10	11	10	10	5	5	5	0	0	57
Marhikheda HPS	0	0	2	10	23	14	20	15	11	10	5	5	113
Rajghat HPS	0	0	0	4	7	6	10	6	6	3	3	3	47
Gandhisagar HPS	6	6	6	6	10	10	10	20	25	20	15	15	147
Ranapratap Sagar & Jawahar Sagar HPS	0	0	1	3	14	8	20	40	41	33	29	18	205
Pench HPS	4	6	12	12	18	42	40	16	17	10	10	10	199
NHDC Indira Sagar HPS	116	120	116	120	120	116	120	116	120	120	108	120	1,409
NHDC Omkareshwar HPS	71	73	71	73	73	71	73	71	73	73	66	73	862
Sardar Sarovar HPS	121	120	162	57	112	288	188	149	136	150	120	105	1,706
Rihand HPS	5	5	12	3	3	19	15	11	9	11	10	9	111
Matatila HPS	2	2	3	3	4	4	4	2	3	5	4	3	40
SJVN Rampur HPS	0	0	0	0	0	0	0	0	0	0	0	0	3
SJVN Jhakri HPS	0	1	1	2	2	1	1	1	0	0	0	0	10

Particulars	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
Tehri HPS	0	0	1	1	1	1	0	0	0	0	0	0	4
Koteshwar HPP	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Parbati III	0	0	0	0	0	0	0	0	0	0	0	0	3
NHPC Chamera II	0	0	0	1	1	1	0	0	0	0	0	0	4
NHPC Chamera III	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Dulhasti	0	1	1	1	1	1	0	0	0	0	0	0	4
NHPC Dhauliganga	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Sewa II	0	0	0	0	0	0	0	0	0	0	0	0	1
NHPC Kishanganga	0	0	0	1	1	0	0	0	0	0	0	0	3
NTPC Koldam HPP I	0	0	0	1	1	0	0	0	0	0	0	0	4
NTPC Singrauli Small HPP	0	0	0	0	0	0	0	0	0	0	0	0	0
BLA Power Unit No-2	0	4	25	33	46	21	9	5	11	6	7	10	179
Jaypee Bina Power	162	66	250	302	176	211	217	336	241	192	222	268	2,642
Lanco Amarkantak TPS Unit 1	190	134	196	177	115	108	158	187	194	190	172	210	2,033
Reliance UMPP, Sasan	983	1,001	985	955	903	865	994	977	972	983	949	1,012	11,580
Jaiprakash Power STPS, Nigri	274	298	314	315	247	256	299	327	322	323	254	246	3,474
MB Power STPS	249	220	226	320	266	253	208	215	270	234	267	219	2,947
Jhabua Power STPS, Unit-1	106	108	111	171	146	101	75	132	126	106	126	166	1,474
Solar	621	642	621	642	642	621	642	621	642	642	580	642	7,555
Other than Solar	581	601	581	601	601	581	601	581	601	601	542	601	7,070
<b>Total</b>	<b>9,582</b>	<b>8,633</b>	<b>8,162</b>	<b>9,635</b>	<b>9,151</b>	<b>9,143</b>	<b>9,789</b>	<b>10,144</b>	<b>10,204</b>	<b>9,711</b>	<b>9,104</b>	<b>10,647</b>	<b>1,13,903</b>

Table 35 : Month wise energy availability projection for FY 2023-24 (MU)

Particulars	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
NTPC Korba	331	330	310	329	310	309	284	301	302	308	294	292	3,699
NTPC Korba III	52	52	52	48	46	41	51	52	53	53	50	52	600
NTPC Vindychal I	270	271	241	295	247	254	234	231	278	276	271	281	3,148
NTPC Vindychal II	237	229	191	144	159	218	182	208	189	209	216	233	2,417
NTPC Vindychal III	163	177	160	181	148	147	175	171	174	164	149	148	1,957
NTPC Vindychal IV	190	180	171	189	182	177	160	181	160	139	116	152	1,997
NTPC Vindychal V Unit 1	89	97	92	105	94	93	92	88	99	85	68	93	1,095
NTPC Sipat I	208	231	217	218	231	167	153	184	208	229	214	230	2,489
NTPC Sipat II	125	125	121	120	127	115	108	92	106	110	85	116	1,350

Particulars	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
NTPC Mouda I	21	14	22	43	28	20	15	20	30	46	31	34	322
NTPC Mouda II Unit 1	20	18	31	47	29	10	12	26	29	43	36	50	352
NTPC Kawas GPP	201	209	132	75	83	114	68	58	34	57	49	69	1,146
NTPC Gandhar GPP	85	108	42	145	103	81	0	6	14	24	86	246	940
NTPC Auraiya GPP	3	1	1	1	0	5	0	1	0	0	1	1	13
NTPC Dadri GPP	3	1	2	3	0	1	1	0	1	0	1	2	16
NTPC Anta GPP	0	0	2	4	1	0	0	1	0	0	0	0	8
NTPC Kahalgaon 2	45	36	30	48	30	31	29	31	39	37	42	48	445
KAPP Kakrapar	48	53	59	67	68	64	72	70	64	68	65	69	765
TAPP Tarapur	148	147	153	147	152	127	122	140	127	88	98	127	1,576
RAPP Rawabhatta	1	1	1	1	1	1	1	1	1	1	0	0	10
NAPP Narora	1	1	1	1	1	1	1	1	1	0	1	1	8
NTPC Solapur STPS, Phase-1	104	0	56	361	190	223	219	291	387	205	245	265	2,545
NTPC Gadarwara STPS, Unit-1	238	51	0	396	397	376	373	279	215	167	228	457	3,177
NTPC Gadarwara STPS, Unit-2	269	58	0	341	356	351	421	315	243	186	217	421	3,177
NTPC Lara STPS, Raigarh, Unit I	52	37	37	50	59	45	44	89	104	35	63	99	713
NTPC Lara STPS, Raigarh, Unit II	63	45	45	62	72	55	54	93	89	28	40	66	713
NTPC Firoz Gandhi Unchahar I	0	0	0	1	0	0	0	0	0	0	0	0	3
NTPC Firoz Gandhi Unchahar II	0	0	1	2	1	1	0	0	1	0	1	0	8
NTPC Firoz Gandhi Unchahar III	0	0	0	1	1	0	0	0	0	0	0	0	4
NTPC Firoz Gandhi Unchahar IV	1	0	1	2	1	1	0	1	0	0	1	0	9
NTPC Rihand I	1	1	1	2	1	2	1	1	1	0	1	1	14
NTPC Rihand II	1	2	1	3	2	2	2	1	1	1	1	1	18
NTPC Rihand III	1	1	1	3	3	2	2	1	1	1	1	1	19
NTPC NCTP Dadri II	1	0	0	8	4	1	1	1	0	0	2	0	19
NTPC Singrauli	2	3	2	4	3	5	3	3	2	1	1	2	30
NTPC IGPS I Jhajjar	0	0	1	6	3	2	1	1	0	0	0	0	15
NTPC Khargone STPS, Unit-I	270	84	1	167	190	166	218	315	312	314	198	277	2,513
NTPC Khargone STPS, Unit-II	270	84	1	167	190	166	218	315	312	314	198	277	2,513
Meja Urja Nigam	2	1	1	1	1	1	1	1	1	0	0	2	11
NTPC Tanda Stage-II	1	0	0	2	2	1	1	8	2	0	0	0	16
Amarkantak TPS Ph-III	128	132	128	126	126	122	133	128	133	133	124	133	1,546
Satpura TPS Ph-IV	301	311	301	231	154	298	316	306	316	316	295	316	3,461



Particulars	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
SGTPS Ph-I & II	449	464	337	333	332	250	471	456	471	471	441	471	4,946
SGTPS Ph-III	326	337	326	0	219	318	337	326	337	337	315	337	3,515
Shri Singaji STPS, Ph-I	643	665	643	478	478	625	674	652	674	674	631	674	7,511
Shri Singaji STPS, Ph-2	717	741	717	724	533	330	756	731	756	756	707	756	8,224
Rani Awanti Bai Sagar, Bargi HPS	37	35	24	29	41	45	50	25	35	35	35	35	425
Bansagar Ph I HPS (Tons)	49	54	64	99	99	109	99	99	79	79	79	79	993
Bansagar Ph-II HPS (Silpara)	7	6	8	9	9	10	10	10	8	8	8	8	99
Bansagar Ph-III HPS (Deolond)	0	0	0	12	20	25	30	10	0	0	0	0	98
Bansagar Ph-IV HPS (Jhinna)	8	6	4	4	3	7	9	9	9	9	9	9	86
Birsinghpur HPS	0	0	1	10	11	10	10	5	5	5	0	0	57
Marhikheda HPS	0	0	2	10	23	14	20	15	11	10	5	5	113
Rajghat HPS	0	0	0	4	7	6	10	6	6	3	3	3	47
Gandhisagar HPS	4	5	5	5	10	10	10	20	25	20	15	15	142
Ranapratap Sagar & Jawahar Sagar HPS	3	0	1	3	14	8	25	47	48	40	34	18	241
Pench HPS	4	6	12	12	18	42	40	16	17	10	10	10	199
NHDC Indira Sagar HPS	116	120	116	120	120	116	120	116	120	120	108	120	1,409
NHDC Omkareshwar HPS	71	73	71	73	73	71	73	71	73	73	66	73	862
Sardar Sarovar HPS	121	120	162	57	112	288	188	149	136	150	120	105	1,706
Rihand HPS	5	5	12	3	3	19	15	11	9	11	10	9	111
Matatila HPS	2	2	3	3	4	4	4	2	3	5	4	3	40
SJVN Rampur HPS	0	0	0	0	0	0	0	0	0	0	0	0	3
SJVN Jhakri HPS	0	1	1	2	2	1	1	1	0	0	0	0	10
Tehri HPS	0	0	1	1	1	1	0	0	0	0	0	0	4
Koteshwar HPP	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Parbati III	0	0	0	0	0	0	0	0	0	0	0	0	3
NHPC Chamera II	0	0	0	1	1	1	0	0	0	0	0	0	4
NHPC Chamera III	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Dulhasti	0	1	1	1	1	1	0	0	0	0	0	0	4
NHPC Dhauliganga	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Sewa II	0	0	0	0	0	0	0	0	0	0	0	0	1
NHPC Kishanganga	0	0	0	1	1	0	0	0	0	0	0	0	3
NTPC Koldam HPP I	0	0	0	1	1	0	0	0	0	0	0	0	4
NTPC Singrauli Small HPP	0	0	0	0	0	0	0	0	0	0	0	0	0

Particulars	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
NHPC Lower Subansiri HEP Unit-1	11	8	12	11	8	0	0	0	1	2	9	12	73
BLA Power Unit No-2	0	4	25	33	46	21	9	5	11	6	7	10	179
Jaypee Bina Power	163	66	250	303	176	211	218	337	242	193	222	269	2,649
Lanco Amarkantak TPS Unit 1	191	134	197	177	115	109	158	188	195	191	173	211	2,038
Reliance UMPP, Sasan	986	1,004	988	957	905	868	997	980	975	986	951	1,015	11,612
Jaiprakash Power STPS, Nigri	275	298	315	316	247	257	300	328	323	323	255	246	3,483
MB Power STPS	250	221	226	321	267	253	209	216	271	235	268	219	2,956
Jhabua Power STPS, Unit-1	106	109	111	172	146	101	75	132	126	106	126	166	1,478
Solar	803	829	803	829	829	803	829	803	829	829	749	829	9,764
Other than Solar	615	635	615	635	635	615	635	615	635	635	574	635	7,478
<b>Total</b>	<b>9,906</b>	<b>9,042</b>	<b>8,668</b>	<b>9,896</b>	<b>9,308</b>	<b>9,346</b>	<b>10,151</b>	<b>10,388</b>	<b>10,458</b>	<b>9,964</b>	<b>9,425</b>	<b>10,905</b>	<b>1,17,457</b>

Table 36 : Month wise energy availability projection for FY 2024-25 (MU)

Particulars	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
NTPC Korba	330	329	309	328	309	309	283	300	301	307	293	291	3,689
NTPC Korba III	52	52	52	48	46	41	51	51	52	52	50	52	599
NTPC Vindychal I	269	270	241	294	246	254	233	231	277	276	270	280	3,140
NTPC Vindychal II	236	229	191	144	159	217	182	207	188	209	216	233	2,410
NTPC Vindychal III	162	177	160	181	148	147	174	171	173	163	148	147	1,951
NTPC Vindychal IV	189	179	171	188	181	177	160	180	160	139	116	152	1,992
NTPC Vindychal V Unit 1	89	97	92	105	93	93	92	88	99	84	68	92	1,092
NTPC Sipat I	208	230	216	217	230	167	152	183	207	228	213	230	2,482
NTPC Sipat II	124	125	121	120	127	115	108	92	105	110	85	115	1,346
NTPC Mouda I	21	14	22	43	28	20	15	20	30	46	31	34	322
NTPC Mouda II Unit 1	20	18	31	47	29	10	12	26	29	43	36	50	352
NTPC Kawas GPP	200	208	131	74	82	113	68	57	33	57	49	69	1,143
NTPC Gandhar GPP	85	107	42	145	103	80	0	6	14	24	86	246	938
NTPC Auraiya GPP	3	1	1	1	0	5	0	1	0	0	1	1	13
NTPC Dadri GPP	3	1	2	3	0	1	1	0	1	0	1	2	16
NTPC Anta GPP	0	0	2	4	1	0	0	1	0	0	0	0	8
NTPC Kahalgaon 2	45	35	30	48	30	31	29	31	39	37	42	48	444
KAPP Kakrapar	48	53	59	67	68	64	72	70	64	68	65	69	765
TAPP Tarapur	148	147	153	147	152	127	122	140	127	88	98	127	1,576
RAPP Rawabhatta	1	1	1	1	1	1	1	1	1	1	0	0	10
NAPP Narora	1	1	1	1	1	1	1	1	1	0	1	1	8
NTPC Solapur STPS, Phase-1	103	0	56	360	190	223	219	290	386	204	244	264	2,538

Particulars	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
NTPC Gadarwara STPS, Unit-1	237	51	0	395	396	375	372	278	215	167	227	456	3,169
NTPC Gadarwara STPS, Unit-2	268	58	0	340	355	350	420	314	243	186	216	420	3,169
NTPC Lara STPS, Raigarh, Unit I	52	36	37	50	58	45	44	89	103	35	63	98	711
NTPC Lara STPS, Raigarh, Unit II	63	45	45	62	72	55	54	93	88	28	40	66	711
NTPC Firoz Gandhi Unchahar I	0	0	0	1	0	0	0	0	0	0	0	0	3
NTPC Firoz Gandhi Unchahar II	0	0	1	2	1	1	0	0	1	0	1	0	8
NTPC Firoz Gandhi Unchahar III	0	0	0	1	1	0	0	0	0	0	0	0	4
NTPC Firoz Gandhi Unchahar IV	1	0	1	2	1	1	0	1	0	0	1	0	9
NTPC Rihand I	1	1	1	2	1	2	1	1	1	0	1	1	14
NTPC Rihand II	1	2	1	3	2	2	2	1	1	1	1	1	18
NTPC Rihand III	1	1	1	3	3	2	2	1	1	1	1	1	19
NTPC NCTP Dadri II	1	0	0	8	4	1	1	1	0	0	2	0	19
NTPC Singrauli	2	3	2	4	3	5	3	3	2	1	1	2	29
NTPC IGPS I Jhajjar	0	0	1	6	3	2	1	1	0	0	0	0	15
NTPC Khargone STPS, Unit-I	269	84	1	167	190	166	217	314	311	314	197	276	2,506
NTPC Khargone STPS, Unit-II	269	84	1	167	190	166	217	314	311	314	197	276	2,506
Meja Urja Nigam	2	1	1	1	1	1	1	1	1	0	0	2	11
NTPC Tanda Stage-II	1	0	0	2	2	1	1	8	2	0	0	0	16
Amarkantak TPS Ph-III	131	135	131	64	64	125	136	131	136	136	123	136	1,448
Satpura TPS Phase III	0	0	0	0	0	0	0	0	0	0	0	0	0
Satpura TPS Ph-IV	301	311	301	149	308	298	316	306	316	316	285	316	3,523
SGTPS Ph-I & II	449	464	337	388	332	250	471	456	471	471	425	471	4,985
SGTPS Ph-III	307	317	307	309	309	299	318	308	318	318	287	318	3,715
Shri Singaji STPS, Ph-I	643	665	643	310	646	625	674	652	674	674	609	674	7,489
Shri Singaji STPS, Ph-2	711	735	340	715	715	692	747	723	747	747	674	747	8,293
Rani Awanti Bai Sagar, Bargi HPS	37	35	24	29	41	45	50	25	35	35	35	35	424
Bansagar Ph I HPS (Tons)	64	64	89	104	110	124	99	99	79	79	79	79	1,074
Bansagar Ph-II HPS (Silpara)	7	6	8	9	9	10	10	10	8	8	8	8	100
Bansagar Ph-III HPS (Deolond)	0	0	0	12	20	25	30	10	0	0	0	0	98
Bansagar Ph-IV HPS (Jhinna)	8	6	4	4	3	7	9	9	9	9	9	9	86
Birsinghpur HPS	0	0	1	10	11	10	10	5	5	5	0	0	57
Marhikheda HPS	0	0	2	10	23	14	20	15	11	10	5	5	113
Rajghat HPS	0	0	0	4	7	6	10	6	6	3	3	3	47
Gandhisagar HPS	2	2	3	5	10	8	10	20	25	20	15	15	133
Ranapratap Sagar & Jawahar Sagar HPS	3	0	1	3	14	8	32	57	58	50	39	20	286
Pench HPS	4	6	12	12	18	42	40	16	17	10	10	10	199
NHDC Indira Sagar HPS	116	120	116	120	120	116	120	116	120	120	108	120	1,409

Particulars	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
NHDC Omkareshwar HPS	71	73	71	73	73	71	73	71	73	73	66	73	862
Sardar Sarovar HPS	121	120	162	57	112	288	188	149	136	150	120	105	1,706
Rihand HPS	5	5	12	3	3	19	15	11	9	11	10	9	111
Matatila HPS	2	2	3	3	4	4	4	2	3	5	4	3	40
SJVN Rampur HPS	0	0	0	0	0	0	0	0	0	0	0	0	3
SJVN Jhakri HPS	0	1	1	2	2	1	1	1	0	0	0	0	10
Tehri HPS	0	0	1	1	1	1	0	0	0	0	0	0	4
Koteshwar HPP	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Parbati III	0	0	0	0	0	0	0	0	0	0	0	0	3
NHPC Chamera II	0	0	0	1	1	1	0	0	0	0	0	0	4
NHPC Chamera III	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Dulhasti	0	1	1	1	1	1	0	0	0	0	0	0	4
NHPC Dhauliganga	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Sewa II	0	0	0	0	0	0	0	0	0	0	0	0	1
NHPC Uri II	0	0	0	0	0	0	0	0	0	0	0	0	0
NHPC Kishanganga	0	0	0	1	1	0	0	0	0	0	0	0	3
NTPC Koldam HPP I	0	0	0	1	1	0	0	0	0	0	0	0	4
NTPC Singrauli Small HPP	0	0	0	0	0	0	0	0	0	0	0	0	0
NHPC Lower Subansiri HEP Unit-1	38	31	44	39	28	1	0	0	5	6	32	42	267
BLA Power Unit No-2	0	4	25	33	46	21	9	5	11	6	7	10	179
Jaypee Bina Power	162	66	250	302	176	211	217	336	241	192	222	268	2,642
Lanco Amarkantak TPS Unit 1	190	134	196	177	115	108	158	187	194	190	172	210	2,033
Reliance UMPP, Sasan	983	1,001	985	955	903	865	994	977	972	983	949	1,012	11,580
Essar Power STPS	0	0	0	0	0	0	0	0	0	0	0	0	0
Jaiprakash Power STPS, Nigri	274	298	314	315	247	256	299	327	322	323	254	246	3,474
MB Power STPS	249	220	226	320	266	253	208	215	270	234	267	219	2,947
Jhabua Power STPS, Unit-1	106	108	111	171	146	101	75	132	126	106	126	166	1,474
Solar	863	892	863	892	892	863	892	863	892	892	806	892	10,501
Other than Solar	738	763	738	763	763	738	763	738	763	763	689	763	8,980
<b>Total</b>	<b>10,094</b>	<b>9,227</b>	<b>8,502</b>	<b>10,146</b>	<b>10,047</b>	<b>9,876</b>	<b>10,310</b>	<b>10,544</b>	<b>10,621</b>	<b>10,130</b>	<b>9,502</b>	<b>11,087</b>	<b>1,20,087</b>

Table 37 : Month wise energy availability projection for FY 2025-26 (MU)

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
NTPC Korba	330	329	309	328	309	309	283	300	301	307	293	291	3,689
NTPC Korba III	52	52	52	48	46	41	51	51	52	52	50	52	599
NTPC Vindychal I	269	270	241	294	246	254	233	231	277	276	270	280	3,140
NTPC Vindychal II	236	229	191	144	159	217	182	207	188	209	216	233	2,410

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
NTPC Vindychal III	162	177	160	181	148	147	174	171	173	163	148	147	1,951
NTPC Vindychal IV	189	179	171	188	181	177	160	180	160	139	116	152	1,992
NTPC Vindychal V Unit 1	89	97	92	105	93	93	92	88	99	84	68	92	1,092
NTPC Sipat I	208	230	216	217	230	167	152	183	207	228	213	230	2,482
NTPC Sipat II	124	125	121	120	127	115	108	92	105	110	85	115	1,346
NTPC Mouda I	21	14	22	43	28	20	15	20	30	46	31	34	322
NTPC Mouda II Unit 1	20	18	31	47	29	10	12	26	29	43	36	50	352
NTPC Kawas GPP	200	208	131	74	82	113	68	57	33	57	49	69	1,143
NTPC Gandhar GPP	85	107	42	145	103	80	0	6	14	24	86	246	938
NTPC Auraiya GPP	3	1	1	1	0	5	0	1	0	0	1	1	13
NTPC Dadri GPP	3	1	2	3	0	1	1	0	1	0	1	2	16
NTPC Anta GPP	0	0	2	4	1	0	0	1	0	0	0	0	8
NTPC Kahalgaon 2	45	35	30	48	30	31	29	31	39	37	42	48	444
KAPP Kakrapar	48	53	59	67	68	64	72	70	64	68	65	69	765
TAPP Tarapur	148	147	153	147	152	127	122	140	127	88	98	127	1,576
RAPP Rawabhatta	1	1	1	1	1	1	1	1	1	1	0	0	10
NAPP Narora	1	1	1	1	1	1	1	1	1	0	1	1	8
NTPC Solapur STPS, Phase-1	103	0	56	360	190	223	219	290	386	204	244	264	2,538
NTPC Gadarwara STPS, Unit-1	237	51	0	395	396	375	372	278	215	167	227	456	3,169
NTPC Gadarwara STPS, Unit-2	268	58	0	340	355	350	420	314	243	186	216	420	3,169
NTPC Lara STPS, Raigarh, Unit I	52	36	37	50	58	45	44	89	103	35	63	98	711
NTPC Lara STPS, Raigarh, Unit II	63	45	45	62	72	55	54	93	88	28	40	66	711
NTPC Firoz Gandhi Unchahar I	0	0	0	1	0	0	0	0	0	0	0	0	3
NTPC Firoz Gandhi Unchahar II	0	0	1	2	1	1	0	0	1	0	1	0	8
NTPC Firoz Gandhi Unchahar III	0	0	0	1	1	0	0	0	0	0	0	0	4
NTPC Firoz Gandhi Unchahar IV	1	0	1	2	1	1	0	1	0	0	1	0	9
NTPC Rihand I	1	1	1	2	1	2	1	1	1	0	1	1	14
NTPC Rihand II	1	2	1	3	2	2	2	1	1	1	1	1	18
NTPC Rihand III	1	1	1	3	3	2	2	1	1	1	1	1	19
NTPC NCTP Dadri II	1	0	0	8	4	1	1	1	0	0	2	0	19
NTPC Singrauli	2	3	2	4	3	5	3	3	2	1	1	2	29
NTPC IGPS I Jhajar	0	0	1	6	3	2	1	1	0	0	0	0	15
NTPC Khargone STPS, Unit-I	269	84	1	167	190	166	217	314	311	314	197	276	2,506
NTPC Khargone STPS, Unit-II	269	84	1	167	190	166	217	314	311	314	197	276	2,506
Meja Urja Nigam	2	1	1	1	1	1	1	1	1	0	0	2	11
NTPC Tanda Stage-II	1	0	0	2	2	1	1	8	2	0	0	0	16
Amarkantak TPS Ph-III	126	131	126	124	124	120	131	127	131	131	119	131	1,521
Satpura TPS Phase III	0	0	0	0	0	0	0	0	0	0	0	0	0

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
Satpura TPS Ph-IV	300	310	300	306	154	296	314	304	314	314	284	314	3,510
SGTPS Ph-I & II	448	462	336	331	331	321	470	454	470	470	424	470	4,987
SGTPS Ph-III	326	337	326	0	329	318	337	326	337	337	305	337	3,615
Shri Singaji STPS, Ph-I	656	677	656	435	435	637	687	665	687	687	621	687	7,530
Shri Singaji STPS, Ph-2	739	764	363	616	742	718	774	749	774	774	699	774	8,486
Rani Awanti Bai Sagar, Bargi HPS	37	35	24	29	41	45	50	25	35	35	35	35	425
Bansagar Ph I HPS (Tons)	64	64	94	104	110	124	99	99	84	84	84	79	1,094
Bansagar Ph-II HPS (Silpara)	7	6	8	9	9	10	10	10	8	8	8	8	99
Bansagar Ph-III HPS (Deolond)	0	0	0	12	20	25	30	10	0	0	0	0	98
Bansagar Ph-IV HPS (Jhinna)	8	6	4	4	3	7	9	9	9	9	9	9	86
Birsinghpur HPS	0	0	1	10	11	10	10	5	5	5	0	0	57
Marhikheda HPS	0	0	2	10	23	14	20	15	11	10	5	5	113
Rajghat HPS	0	0	0	4	7	6	10	6	6	3	3	3	47
Gandhisagar HPS	5	6	6	6	12	12	12	20	25	20	15	15	152
Ranapratap Sagar & Jawahar Sagar HPS	3	2	2	4	15	10	32	57	58	50	39	20	293
Pench HPS	4	6	12	12	18	42	40	16	17	10	10	10	199
NHDC Indira Sagar HPS	116	120	116	120	120	116	120	116	120	120	108	120	1,409
NHDC Omkareshwar HPS	71	73	71	73	73	71	73	71	73	73	66	73	862
Sardar Sarovar HPS	121	120	162	57	112	288	188	149	136	150	120	105	1,706
Rihand HPS	5	5	12	3	3	19	15	11	9	11	10	9	111
Matatila HPS	2	2	3	3	4	4	4	2	3	5	4	3	40
SJVN Rampur HPS	0	0	0	0	0	0	0	0	0	0	0	0	3
SJVN Jhakri HPS	0	1	1	2	2	1	1	1	0	0	0	0	10
Tehri HPS	0	0	1	1	1	1	0	0	0	0	0	0	4
Koteshwar HPP	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Parbati III	0	0	0	0	0	0	0	0	0	0	0	0	3
NHPC Chamera II	0	0	0	1	1	1	0	0	0	0	0	0	4
NHPC Chamera III	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Dulhasti	0	1	1	1	1	1	0	0	0	0	0	0	4
NHPC Dhauliganga	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Sewa II	0	0	0	0	0	0	0	0	0	0	0	0	1
NHPC Uri II	0	0	0	0	0	0	0	0	0	0	0	0	0
NHPC Kishanganga	0	0	0	1	1	0	0	0	0	0	0	0	3
NTPC Koldam HPP I	0	0	0	1	1	0	0	0	0	0	0	0	4
NTPC Singrauli Small HPP	0	0	0	0	0	0	0	0	0	0	0	0	0
NHPC Lower Subansiri HEP Unit-1	55	45	63	57	41	1	0	0	7	9	47	61	387
BLA Power Unit No-2	0	4	25	33	46	21	9	5	11	6	7	10	179
Jaypee Bina Power	162	66	250	302	176	211	217	336	241	192	222	268	2,642

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
Lanco Amarkantak TPS Unit 1	190	134	196	177	115	108	158	187	194	190	172	210	2,033
Reliance UMPP, Sasan	983	1,001	985	955	903	865	994	977	972	983	949	1,012	11,580
Essar Power STPS	0	0	0	0	0	0	0	0	0	0	0	0	0
Jaiprakash Power STPS, Nigri	274	298	314	315	247	256	299	327	322	323	254	246	3,474
MB Power STPS	249	220	226	320	266	253	208	215	270	234	267	219	2,947
Jhabua Power STPS, Unit-1	106	108	111	171	146	101	75	132	126	106	126	166	1,474
Solar	955	987	955	987	987	955	987	955	951	951	962	987	11,618
Other than Solar	875	904	875	904	904	875	904	875	904	904	817	904	10,650
<b>Total</b>	<b>10,397</b>	<b>9,537</b>	<b>8,808</b>	<b>10,280</b>	<b>10,041</b>	<b>10,233</b>	<b>10,600</b>	<b>10,822</b>	<b>10,881</b>	<b>10,390</b>	<b>9,855</b>	<b>11,394</b>	<b>1,23,237</b>

Table 38 : Month wise energy availability projection for FY 2026-27 (MU)

Particulars	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27	Total
NTPC Korba	330	329	309	328	309	309	283	300	301	307	293	291	3,689
NTPC Korba III	52	52	52	48	46	41	51	51	52	52	50	52	599
NTPC Vindychal I	269	270	241	294	246	254	233	231	277	276	270	280	3,140
NTPC Vindychal II	236	229	191	144	159	217	182	207	188	209	216	233	2,410
NTPC Vindychal III	162	177	160	181	148	147	174	171	173	163	148	147	1,951
NTPC Vindychal IV	189	179	171	188	181	177	160	180	160	139	116	152	1,992
NTPC Vindychal V Unit 1	89	97	92	105	93	93	92	88	99	84	68	92	1,092
NTPC Sipat I	208	230	216	217	230	167	152	183	207	228	213	230	2,482
NTPC Sipat II	124	125	121	120	127	115	108	92	105	110	85	115	1,346
NTPC Mouda I	21	14	22	43	28	20	15	20	30	46	31	34	322
NTPC Mouda II Unit 1	20	18	31	47	29	10	12	26	29	43	36	50	352
NTPC Kawas GPP	200	208	131	74	82	113	68	57	33	57	49	69	1,143
NTPC Gandhar GPP	85	107	42	145	103	80	0	6	14	24	86	246	938
NTPC Auraiya GPP	3	1	1	1	0	5	0	1	0	0	1	1	13
NTPC Dadri GPP	3	1	2	3	0	1	1	0	1	0	1	2	16
NTPC Anta GPP	0	0	2	4	1	0	0	1	0	0	0	0	8
NTPC Kahalgaon 2	45	35	30	48	30	31	29	31	39	37	42	48	444
KAPP Kakrapar	48	53	59	67	68	64	72	70	64	68	65	69	765
TAPP Tarapur	148	147	153	147	152	127	122	140	127	88	98	127	1,576
RAPP Rawabhata	1	1	1	1	1	1	1	1	1	1	0	0	10
NAPP Narora	1	1	1	1	1	1	1	1	1	0	1	1	8
NTPC Solapur STPS, Phase-1	103	0	56	360	190	223	219	290	386	204	244	264	2,538
NTPC Gadawara STPS, Unit-1	260	269	260	269	269	260	269	260	269	269	243	269	3,169
NTPC Gadawara STPS, Unit-2	260	269	260	269	269	260	269	260	269	269	243	269	3,169
NTPC Lara STPS, Raigarh, Unit I	52	36	37	50	58	45	44	89	103	35	63	98	711
NTPC Lara STPS, Raigarh, Unit II	63	45	45	62	72	55	54	93	88	28	40	66	711

Particulars	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27	Total
NTPC Firoz Gandhi Unchahar I	0	0	0	1	0	0	0	0	0	0	0	0	3
NTPC Firoz Gandhi Unchahar II	0	0	1	2	1	1	0	0	1	0	1	0	8
NTPC Firoz Gandhi Unchahar III	0	0	0	1	1	0	0	0	0	0	0	0	4
NTPC Firoz Gandhi Unchahar IV	1	0	1	2	1	1	0	1	0	0	1	0	9
NTPC Rihand I	1	1	1	2	1	2	1	1	1	0	1	1	14
NTPC Rihand II	1	2	1	3	2	2	2	1	1	1	1	1	18
NTPC Rihand III	1	1	1	3	3	2	2	1	1	1	1	1	19
NTPC NCTP Dadri II	1	0	0	8	4	1	1	1	0	0	2	0	19
NTPC Singrauli	2	3	2	4	3	5	3	3	2	1	1	2	29
NTPC IGPS I Jhajjar	0	0	1	6	3	2	1	1	0	0	0	0	15
NTPC Khargone STPS, Unit-I	206	213	206	213	213	206	213	206	213	213	192	213	2,506
NTPC Khargone STPS, Unit-II	206	213	206	213	213	206	213	206	213	213	192	213	2,506
Meja Urja Nigam	2	1	1	1	1	1	1	1	1	0	0	2	11
NTPC Tanda Stage-II	1	0	0	2	2	1	1	8	2	0	0	0	16
Amarkantak TPS Ph-III	126	131	126	124	0	120	131	127	131	131	119	131	1,397
Satpura TPS Phase III	0	0	0	0	0	0	0	0	0	0	0	0	0
Satpura TPS Ph-IV	300	310	300	306	152	296	314	304	314	314	284	314	3,508
SGTPS Ph-I & II	448	462	336	331	331	321	470	454	470	470	424	470	4,987
SGTPS Ph-III	326	337	326	329	329	318	337	326	337	337	305	337	3,944
Shri Singaji STPS, Ph-I	656	677	656	443	443	637	687	665	687	687	621	687	7,546
Shri Singaji STPS, Ph-2	730	754	376	615	733	710	765	740	765	765	691	765	8,409
Rani Awanti Bai Sagar, Bargi HPS	37	35	24	29	41	45	50	25	35	35	35	35	425
Bansagar Ph I HPS (Tons)	85	65	90	105	110	125	100	100	80	80	80	80	1,097
Bansagar Ph-II HPS (Silpara)	7	6	8	8	9	10	10	10	8	8	8	8	98
Bansagar Ph-III HPS (Deolond)	0	0	0	14	20	25	30	15	0	0	0	0	104
Bansagar Ph-IV HPS (Jhinna)	8	6	4	4	3	7	9	9	9	9	9	9	84
Birsinghpur HPS	0	0	1	10	11	10	10	5	5	5	0	0	56
Marhikheda HPS	0	0	2	10	23	14	20	15	12	10	5	5	114
Rajghat HPS	0	0	0	4	7	6	10	6	6	3	3	3	47
Gandhisagar HPS	2	2	5	6	15	15	15	25	25	20	15	15	158
Ranapratap Sagar & Jawahar Sagar HPS	3	0	1	5	15	10	35	57	58	50	39	25	299
Pench HPS	4	6	12	12	20	42	42	17	18	12	12	12	208
NHDC Indira Sagar HPS	116	120	116	120	120	116	120	116	120	120	108	120	1,409
NHDC Omkareshwar HPS	71	73	71	73	73	71	73	71	73	73	66	73	862
Sardar Sarovar HPS	121	120	162	57	112	288	188	149	136	150	120	105	1,706
Rihand HPS	5	5	12	3	3	19	15	11	9	11	10	9	111
Matatila HPS	2	2	3	3	4	4	4	2	3	5	4	3	40
SJVN Rampur HPS	0	0	0	0	0	0	0	0	0	0	0	0	3



Particulars	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27	Total
SJVN Jhakri HPS	0	1	1	2	2	1	1	1	0	0	0	0	10
Tehri HPS	0	0	1	1	1	1	0	0	0	0	0	0	4
Koteshwar HPP	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Parbati III	0	0	0	0	0	0	0	0	0	0	0	0	3
NHPC Chamera II	0	0	0	1	1	1	0	0	0	0	0	0	4
NHPC Chamera III	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Dulhasti	0	1	1	1	1	1	0	0	0	0	0	0	4
NHPC Dhauliganga	0	0	0	0	0	0	0	0	0	0	0	0	2
NHPC Sewa II	0	0	0	0	0	0	0	0	0	0	0	0	1
NHPC Uri II	0	0	0	0	0	0	0	0	0	0	0	0	0
NHPC Kishanganga	0	0	0	1	1	0	0	0	0	0	0	0	3
NTPC Koldam HPP I	0	0	0	1	1	0	0	0	0	0	0	0	4
NTPC Singrauli Small HPP	0	0	0	0	0	0	0	0	0	0	0	0	0
NHPC Lower Subansiri HEP Unit-1	55	45	63	57	41	1	0	0	7	9	47	61	387
BLA Power Unit No-2	0	4	25	33	46	21	9	5	11	6	7	10	179
Jaypee Bina Power	162	66	250	302	176	211	217	336	241	192	222	268	2,642
Lanco Amarkantak TPS Unit 1	190	134	196	177	115	108	158	187	194	190	172	210	2,033
Reliance UMPP, Sasan	983	1,001	985	955	903	865	994	977	972	983	949	1,012	11,580
Essar Power STPS	0	0	0	0	0	0	0	0	0	0	0	0	0
Jaiprakash Power STPS, Nigri	274	298	314	315	247	256	299	327	322	323	254	246	3,474
MB Power STPS	249	220	226	320	266	253	208	215	270	234	267	219	2,947
Jhabua Power STPS, Unit-1	106	108	111	171	146	101	75	132	126	106	126	166	1,474
Solar	1,118	1,155	1,118	1,155	1,155	1,118	1,155	1,118	1,155	1,114	1,085	1,155	13,600
Other than Solar	989	1,022	989	1,022	1,022	989	1,022	989	889	1,022	1,056	1,022	12,031
<b>Total</b>	<b>10,571</b>	<b>10,494</b>	<b>10,021</b>	<b>10,799</b>	<b>10,037</b>	<b>10,379</b>	<b>10,622</b>	<b>10,814</b>	<b>11,266</b>	<b>10,966</b>	<b>10,532</b>	<b>11,539</b>	<b>1,28,040</b>

## Assessment of Power Purchase Cost

### Petitioners' Submission

2.48 Details of the fixed cost and energy charges of MPPMCL allocated stations as submitted by the Petitioners are mentioned in the table below:

**Table 39 : Fixed cost and Energy charges of MPPMCL allocated stations as submitted by the Petitioners for FY 2022-23**

Sl. No	Source	Fixed Charge (Rs. Crore)	Basis for Fixed Charges	Energy Charge (Rs. /kWh)	Basis for Energy Charges
1	Amarkantak TPS Ph-III	136	Fixed charges as per Weighted Avg of 12 months Bills ( Sep-20 to Aug-21)	1.28	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-20 to Aug-21)
2	Satpura TPS Ph-II & III	0	NIL due to decommissioning of plant	0.00	NIL due to decommissioning of plant
3	Satpura TPS Ph-IV	674	Fixed charges as per Weighted Avg of 12 months Bills ( Sep-20 to Aug-21)	2.29	Energy Charge as per Weighted Avg of past 12 months Bills ( Sep-20 to Aug-21)
4	SGTPS Ph-I & II	398	Fixed charges as per Weighted Avg of 12 months Bills (Sep-20 to Aug-21)	2.39	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-20 to Aug-21)
5	SGTPS Ph-III	335	Fixed charges as per Weighted Avg of 12 months Bills (Sep-20 to Aug-21)	1.92	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-20 to Aug-21)
6	Shri Singaji STPS Phase-I	1211	Fixed charges as per Weighted Avg of 12 months Bills (Sep-20 to Aug-21)	3.12	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-20 to Aug-21)
7	Shri Singaji STPS Phase-II	361	Considered Same as that of Singaji STPS Phase-I	3.57	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-20 to Aug-21)
<b>A</b>	<b>Total (MP Genco Thermal-MP Share)</b>	<b>3116</b>			
8	Rani Awanti Bai Sagar, Bargi HPS	8	Fixed charge as per Weighted Average of past 12 months Bills (Sep-20 to Aug-21)	1.02	Energy charge as per Weighted Average of past 12 months Bills (Sep-20 to Aug-21)
9	Bansagar Ph I HPS (Tons)	43	Fixed charge as per Weighted Average of past 12 months Bills (Sep-20 to Aug-21)	0.75	Energy charge as per Weighted Average of past 12 months Bills (Sep-20 to Aug-21)
10	Bansagar Ph-II HPS (Silpara)	6	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	0.60	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
11	Bansagar Ph-III HPS (Deolond)	12	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	0.95	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
12	Bansagar Ph-IV HPS (Jhinna)	8	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	0.93	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
13	Birsinghpur HPS	2	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	0.76	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
14	Madikheda HPS	15	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.81	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
15	Rajghat HPS	4	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.09	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
16	Gandhisagar HPS	2	Fixed charge as per Weighted Average of	1.23	Energy charge as per Weighted Average of past 12

Sl. No	Source	Fixed Charge (Rs. Crore)	Basis for Fixed Charges	Energy Charge (Rs. /kWh)	Basis for Energy Charges
			past 12 months Bills ( Sep-20 to Aug-21)		months Bills ( Sep-20 to Aug-21)
17	Ranapratap Sagar HPS	0	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.51	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
18	Jawahar Sagar HPS	0	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.51	Considered same as that of RP Sagar
19	Pench HPS	7	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	0.48	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
<b>B</b>	<b>Total (MP Genco Hydel)</b>	<b>105</b>			
20	NHDC Indira Sagar HPS	274	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.71	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
21	NHDC Omkareshwar HPS	189	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	2.00	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
22	NVDA Sardar Sarovar HPS	178	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	0.82	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
23	Rihand HPS	0	NIL	0.40	As per the Tariff Order for FY 2021-22
24	Matatila HPS	0	NIL	0.40	As per the Tariff Order for FY 2021-22
25	SJVN Rampur HPS	1	Energy Charge as per Last 12 months avg (Sept-15 to Aug-16) in absence of supply in previous months	2.50	Energy Charge as per Last 12 months avg (Sept-15 to Aug-16) in absence of supply in previous months
26	SJVN Jhakri HPS	1	Energy Charge as per Last 12 months avg (Sept-15 to Aug-16) in absence of supply in previous months	1.14	Energy Charge as per Last 12 months avg (Sept-15 to Aug-16) in absence of supply in previous months
27	Tehri HPS	1	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.19	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
28	Koteshwar HPP	0	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.47	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
29	NHPC Parbati III	1	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.57	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
30	NHPC Chamera II	0	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.17	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
31	NHPC Chamera III	1	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	2.03	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)

Sl. No	Source	Fixed Charge (Rs. Crore)	Basis for Fixed Charges	Energy Charge (Rs. /kWh)	Basis for Energy Charges
32	NHPC Dulhasti	2	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	3.43	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
33	NHPC Dhauliganga	0	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.85	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
34	NHPC Sewa II	0	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	5.01	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
35	NHPC Uri II	1	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	3.19	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
36	NHPC Kishanganga	1	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	2.29	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
37	NTPC Koldam HPP I	1	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	2.43	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
38	NTPC Singrauli Small HPP	0	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	9.32	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
39	NHPC Lower Subansiri HEP Unit-1	0	NIL	0.00	Energy Charges considered same as that of Singrauli Small HEP
<b>C</b>	<b>Total (JV Hydel &amp; Other Hydel)</b>	<b>651</b>			
40	NTPC Korba	238	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.56	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
41	NTPC Korba III	74	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.47	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
42	NTPC Vindychal I	253	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.93	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
43	NTPC Vindychal II	146	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.78	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
44	NTPC Vindychal III	181	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.75	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
45	NTPC Vindychal IV	306	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.74	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
46	NTPC Vindychal V Unit 1	151	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.80	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
47	NTPC Sipat I	303	Fixed charge as per Weighted Average of	1.54	Energy charge as per Weighted Average of past 12

Sl. No	Source	Fixed Charge (Rs. Crore)	Basis for Fixed Charges	Energy Charge (Rs. /kWh)	Basis for Energy Charges
			past 12 months Bills ( Sep-20 to Aug-21)		months Bills ( Sep-20 to Aug-21)
48	NTPC Sipat II	159	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)	1.59	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
49	NTPC Mouda I	25	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	2.90	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
50	NTPC Mouda II Unit 1	26	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	3.20	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
51	NTPC Solapur STPS	533	Fixed charges as per the Actaul for FY 2020-21	3.26	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
52	NTPC Gadarwara STPS, Unit-1	570	As per the Tariff Order for FY 2021-22 and MW Allocation ratio	2.83	As per the Tariff Order for FY 2021-22
53	NTPC Lara STPS, Raigarh, Unit I	119		2.28	
54	NTPC Khargone STPS, Unit-I & II	853	As per the Admitted fixed Cost in Tariff Order for FY 2021-22	2.89	As per the Admitted fixed Cost in Tariff Order for FY 2021-22
55	NTPC Kawas GPP	85	Fixed charges as per Weighted Average of past 12 months Bills (Sep-20 to Aug-21)	3.05	Energy charge as per Weighted Average of past 12 months Bills (Sep-20 to Aug-21)
56	NTPC Gandhar GPP	86	Fixed charges as per Weighted Average of past 12 months Bills (Sep-20 to Aug-21)	2.80	Energy charge as per Weighted Average of past 12 months Bills (Sep-20 to Aug-21)
57	KAPP Kakrapar	0	Fixed charge as per Weighted Average of past 12 months Bills (Sep-20 to Aug-21) and % of Allocation	2.29	Energy charge as per Weighted Average of past 12 months Bills (Sep-20 to Aug-21)
58	TAPP Tarapur	0	Fixed charge as per Weighted Average of past 12 months Bills (Sep-20 to Aug-21) and % of Allocation	3.38	Energy charge as per Weighted Average of past 12 months Bills (Sep-20 to Aug-21)
59	NTPC Gadarwara STPS, Unit-2	570	As per the Tariff Order for FY 2021-22 and MW Allocation ratio	2.83	As per the Tariff Order for FY 2021-22
60	NTPC Lara STPS, Raigarh, Unit II	119	As per the Tariff Order for FY 2021-22	2.28	As per the Tariff Order for FY 2021-22
61	NTPC Lara STPS, Raigarh, Unit III	0	As per the Tariff Order for FY 2021-22	0.00	As per the Tariff Order for FY 2021-22
62	NTPC Lara STPS, Raigarh, Unit IV	0	As per the Tariff Order for FY 2021-22	0.00	As per the Tariff Order for FY 2021-22
63	NTPC Lara STPS, Raigarh, Unit V	0	As per the Tariff Order for FY 2021-22	0.00	As per the Tariff Order for FY 2021-22

Sl. No	Source	Fixed Charge (Rs. Crore)	Basis for Fixed Charges	Energy Charge (Rs. /kWh)	Basis for Energy Charges
<b>D</b>	<b>Total WR Region</b>	<b>4796</b>			
64	NTPC Kahalgaon II	51	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	2.20	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
65	NTPC Auraiya GPP	1	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	2.77	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
66	NTPC Dadri GPP	1	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	2.57	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
67	NTPC Anta GPP	1	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	3.09	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
68	NTPC Firoz Gandhi Unchahar I	1	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	3.25	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
69	NTPC Firoz Gandhi Unchahar II	1	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	3.31	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
70	NTPC Firoz Gandhi Unchahar III	1	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	3.23	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
71	NTPC Firoz Gandhi Unchahar IV	2	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	3.11	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
72	NTPC Rihand TPS-I	1	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	1.51	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
73	NTPC Rihand TPS-II	2	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	1.52	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
74	NTPC Rihand TPS-III	3	Fixed charge as per Weighted Average of	1.58	Energy charge as per Weighted Average of past 12

Sl. No	Source	Fixed Charge (Rs. Crore)	Basis for Fixed Charges	Energy Charge (Rs. /kWh)	Basis for Energy Charges
			past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation		months Bills ( Sep-20 to Aug-21)
75	NTPC NCTP Dadri II	3	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	3.18	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
76	NTPC Singrauli	2	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	1.59	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
77	NTPC IGPS I Jhajjar	2	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	3.96	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
78	MEJA Urja Nigam	2	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	3.08	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
79	NTPC Tanda	2	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	3.02	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
80	NTPC Badarpur	0	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	0.00	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
81	Rajasthan (NPCIL)	0	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	3.97	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
82	NARORA (NPCIL)	0	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	3.02	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
83	Torrent Power	31	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	4.62	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
84	BLA Power, Unit-I & II	17	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	3.15	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)

Sl. No	Source	Fixed Charge (Rs. Crore)	Basis for Fixed Charges	Energy Charge (Rs. /kWh)	Basis for Energy Charges
85	Jaypee Bina Power	461	Fixed Charges as per MPERC Order in Petition No. 44/2020 dated 30.04.2021	3.29	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
86	Lanco Amarkantak TPS Unit 1	224	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	1.91	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
87	Reliance UMPP, Sasan	174	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	1.36	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
88	Essar Power STPS	0	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	4.56	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
89	Jaiprakash Power STPS, Nigri	633	Fixed charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21) and % of Allocation	0.70	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
90	MB Power STPS, Unit-I	271	Fixed Charges as per MPERC Order in Petition No. 46/2020 dated 01.05.2021	2.43	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
91	MB Power STPS, Unit-II	271	Fixed Charges as per MPERC Order in Petition No. 46/2020 dated 01.05.2021	2.59	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
92	Jhabua Power STPS, Unit-1	280	Fixed Charges as per MPERC Order in Petition No. 47/2020 dated 08.05.2021	2.65	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
93	DB Power STPS Unit-1	320	Since there is no tariff order available, therefore Considered in Fixed Charges in MW proportions wrt MB Power and energy Cost as per the MB Power	2.43	Since there is no tariff order available, therefore Considered in Fixed Charges in MW proportions wrt MB Power and energy Cost as per the MB Power
94	Pench Thermal Energy, Unit-1	0	Fixed cost of Rs. 2.898 per unit as per the MPERC Order in Petition No. 28 of 2020 dated 26th May 2020	0.00	Fuel cost of Rs. 1.982 per unit as per the MPERC Order in Petition No. 28 of 2020 dated 26th May 2020
95	Renewable Energy (Solar)	-		3.46	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)
96	Renewable Energy (other than Solar)	-		5.50	Energy charge as per Weighted Average of past 12 months Bills ( Sep-20 to Aug-21)



2.49 Further, the Petitioners have projected an increase of 2% in Energy Charge and Fixed Charge during each year of the Control Period. Based on the projected energy charges for the Control Period, the Merit Order Dispatch (MOD) stack applied for FY 2022-23 to FY 2026-27, as submitted by the Petitioners is given in the following table:

**Table 40 : MOD for Control Period FY 2022-23 to FY 2026-27 as submitted by the Petitioners**

Sr. No	Merit Order Dispatch Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
		Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)
1	KAPP Kakrapar	229	728	234	730	238	728	243	728	248	728
2	TAPP Tarapur	338	1,513	345	1,518	352	1,513	359	1,513	366	1,513
3	NTPC Lara STPS, Raigarh, Unit III	0	0	0	0	228	361	233	440	237	518
4	NTPC Lara STPS, Raigarh, Unit IV	0	0	0	0	228	361	233	440	237	518
5	NTPC Lara STPS, Raigarh, Unit V	0	0	0	0	0	0	228	440	233	518
6	Rajasthan (NPCIL)	397	8	405	8	413	8	421	8	429	8
7	NARORA (NPCIL)	302	7	308	7	315	7	321	7	327	7
8	Satpura TPS Ph-II & III	0	0	0	0	0	0	0	0	0	0
9	NHPC Lower Subansiri HEP Unit-1	0	0	951	73	970	267	990	387	1,009	387
10	Pench Thermal Energy, Unit-1	0	0	0	0	0	0	0	0	189	889
11	Renewable Energy (Solar)	346	7,555	322	9,764	316	10,501	316	10,501	316	10,501
12	Renewable Energy (other than Solar)	550	4,515	550	4,534	550	4,534	549	4,534	549	4,531
13	Rihand HPS	40	82	41	82	42	82	42	82	43	82
14	Matatila HPS	40	29	41	29	42	29	42	29	43	29
15	Pench HPS	48	199	49	199	50	199	51	199	52	199
16	Bansagar Ph-II HPS (Silpara)	60	92	61	92	62	92	64	92	65	92
17	Jaiprakash Power STPS, Nigri	70	3,474	72	3,483	73	3,474	75	3,474	76	3,474
18	Bansagar Ph I HPS (Tons)	75	898	77	898	78	898	80	898	81	898
19	Birsinghpur HPS	76	36	77	36	79	36	80	36	82	36
20	NVDA Sardar Sarovar HPS	82	1,696	84	1,696	85	1,696	87	1,696	89	1,696
21	Bansagar Ph-IV HPS (Jhinna)	93	76	95	76	97	76	99	76	101	76
22	Bansagar Ph-III HPS (Deolond)	95	107	97	107	99	107	101	107	103	107
23	Rani Awanti Bai Sagar, Bargi HPS	102	380	104	380	106	380	108	380	110	380
24	Rajghat HPS	109	37	111	37	113	37	115	37	118	37
25	SJVN Jhakri HPS	114	9	116	9	118	9	121	9	123	9

Sr. No	Merit Order Dispatch Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
		Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)
26	NHPC Chamera II	117	3	120	3	122	3	125	3	127	3
27	Tehri HPS	119	6	121	6	124	6	126	6	129	6
28	Gandhisagar HPS	123	125	125	167	128	167	130	167	133	167
29	Amarkantak TPS Ph-III	128	1,540	130	1,544	133	1,540	135	1,540	138	1,540
30	Reliance UMPP, Sasan	136	10,422	138	10,450	141	10,422	144	10,422	147	10,422
31	NTPC Korba III	147	505	150	506	153	505	156	505	159	505
32	Koteshwar HPP	147	3	150	3	153	3	156	3	159	3
33	Ranapatap Sagar HPS	151	201	154	201	157	201	160	201	163	201
34	Jawahar Sagar HPS	151	147	154	147	157	147	160	147	163	147
35	NTPC Rihand TPS-I	151	15	154	15	158	15	161	15	164	15
36	NTPC Rihand TPS-II	152	16	155	16	158	16	161	16	164	16
37	NTPC Sipat I	154	2,247	157	2,253	160	2,247	163	2,247	166	2,247
38	NTPC Korba	156	3,286	159	3,295	162	3,286	165	3,286	169	3,286
39	NHPC Parbati III	157	5	160	5	163	5	166	5	169	5
40	NTPC Rihand TPS-III	158	17	161	17	165	17	168	17	171	17
41	NTPC Sipat II	159	1,273	162	1,276	165	1,273	168	1,273	172	1,273
42	NTPC Singrauli	159	28	162	28	165	28	168	28	172	28
43	NHDC Indira Sagar HPS	171	2,359	174	2,359	178	2,359	182	2,359	185	2,359
44	NTPC Vindyachal IV	174	1,931	178	1,937	181	1,931	185	1,931	188	1,931
45	NTPC Vindyachal III	175	1,677	178	1,682	182	1,677	186	1,677	189	1,677
46	NTPC Vindyachal II	178	2,190	182	2,196	186	2,190	189	2,190	193	2,190
47	NTPC Vindyachal V Unit 1	180	963	184	966	187	963	191	963	195	963
48	Madikheda HPS	181	110	184	110	188	110	192	110	196	110
49	NHPC Dhauliganga	185	3	188	3	192	3	196	3	200	3
50	Lanco Amarkantak TPS Unit 1	191	2,033	195	2,038	199	2,033	203	2,033	207	2,033
51	SGTPS Ph-III	192	3,468	196	3,477	199	3,468	203	3,468	207	3,468
52	NTPC Vindyachal I	193	2,947	196	2,955	200	2,947	204	2,947	208	2,947
53	NHDC Omkareshwar HPS	200	1,043	204	1,043	208	1,043	213	1,043	217	1,043
54	NHPC Chamera III	203	2	207	2	212	2	216	2	220	2
55	NTPC Kahalgaon II	220	519	224	521	229	519	233	519	238	519
56	NTPC Lara STPS, Raigarh, Unit I	228	622	233	624	237	361	242	440	247	518

Sr. No	Merit Order Dispatch Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
		Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)
57	NTPC Lara STPS, Raigarh, Unit II	228	622	233	624	237	361	242	440	247	518
58	Satpura TPS Ph-IV	229	3,388	233	3,397	238	3,388	243	3,388	248	3,388
59	NHPC Kishanganga	229	3	233	3	238	3	243	3	248	3
60	SGTPS Ph-I & II	239	4,754	244	4,768	248	4,754	253	4,754	258	4,754
61	MB Power STPS, Unit-I	243	1,474	248	1,478	253	1,474	258	1,474	263	1,474
62	DB Power STPS Unit-1	243	616	248	1,723	253	1,718	258	1,718	263	1,718
63	NTPC Koldam HPP I	243	4	248	4	253	4	258	4	263	4
64	SJVN Rampur HPS	250	2	255	2	261	2	266	2	271	2
65	NTPC Dadri GPP	257	15	262	15	267	15	272	15	278	15
66	MB Power STPS, Unit-II	259	1,474	265	1,478	270	1,474	275	1,474	281	1,474
67	Jhabua Power STPS, Unit-1	265	1,474	270	1,478	275	1,474	281	1,474	286	1,474
68	NTPC Auraiya GPP	277	12	282	12	288	12	294	12	299	12
69	NTPC Gandhar GPP	280	601	285	602	291	601	297	601	303	601
70	NTPC Gadawara STPS, Unit-1	283	2,913	289	2,921	295	2,913	301	2,913	307	2,913
71	NTPC Gadawara STPS, Unit-2	283	2,913	289	2,921	295	2,913	301	2,913	307	2,913
72	NTPC Khargone STPS, Unit-I & II	289	4,806	295	4,819	301	4,806	307	4,806	313	4,806
73	NTPC Mouda I	290	135	295	135	301	135	307	135	313	1,162
74	NTPC Tanda	302	8	308	8	314	8	321	8	327	8
75	NTPC Kawas GPP	305	718	311	720	318	718	324	718	331	718
76	MEJA Urja Nigam	308	6	314	6	320	6	327	6	333	6
77	NTPC Anta GPP	309	7	315	7	322	7	328	7	335	7
78	NTPC Firoz Gandhi Unchahar IV	311	9	318	9	324	9	331	9	337	9
79	Shri Singaji STPS Phase-I	312	8,421	318	8,445	325	8,421	331	8,421	338	8,421
80	BLA Power, Unit-I & II	315	188	321	189	328	188	334	188	341	188
81	NTPC NCTP Dadri II	318	16	325	16	331	16	338	16	344	16
82	NHPC Uri II	319	0	325	0	331	0	338	0	345	0
83	NTPC Mouda II Unit 1	320	171	326	172	333	171	339	171	346	1,620
84	NTPC Firoz Gandhi Unchahar III	323	4	329	4	336	4	343	4	350	4
85	NTPC Firoz Gandhi Unchahar I	325	2	331	2	338	2	345	2	352	2
86	NTPC Solapur STPS	326	2,250	333	2,257	340	2,250	346	2,250	353	2,250
87	Jaypee Bina Power	329	2,372	336	2,378	343	2,372	350	2,372	357	2,372

Sr. No	Merit Order Dispatch Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
		Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)	Energy Charge (Paisa/kWh)	Availability (MUs)
88	NTPC Firoz Gandhi Unchahar II	331	7	337	7	344	7	351	7	358	7
89	NHPC Dulhasti	343	4	350	4	357	4	364	4	371	4
90	Shri Singaji STPS Phase-II	357	9,141	364	9,166	371	9,141	378	9,141	386	9,141
91	NTPC IGPS I Jhajjar	396	14	404	14	412	14	420	14	428	14
92	Essar Power STPS	456	421	465	422	474	421	484	421	494	421
93	Torrent Power	462	256	471	257	481	256	490	256	500	256
94	NHPC Sewa II	501	1	511	1	522	1	532	1	543	1
95	NTPC Singrauli Small HPP	932	0	951	0	970	0	990	0	1,009	0
<b>Total</b>			<b>110,368</b>		<b>114,066</b>		<b>114,944</b>		<b>115,821</b>		<b>119,570</b>

2.50 The table below shows generating station-wise details of fixed costs and energy costs for FY 2022-23 to FY 2026-27 as submitted by the Petitioners:

**Table 41 : Fixed cost and Energy cost as Claimed by Petitioners for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Sr. No	Particulars	FY 2022-23			FY 2023-24			FY 2024-25			FY 2025-26			FY 2026-27		
		Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total
1	Amarkantak TPS Ph-III	136	196	332	139	201	340	142	204	346	144	208	353	147	213	360
2	Satpura TPS Ph-II & III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Satpura TPS Ph-IV	674	775	1,449	688	792	1,480	702	806	1,508	716	822	1,538	730	839	1,569
4	SGTPS Ph-I & II	398	1,128	1,526	406	1,161	1,567	414	1,181	1,595	422	1,205	1,627	430	1,229	1,659
5	SGTPS Ph-III	335	665	1,000	342	680	1,022	349	691	1,040	356	705	1,061	363	719	1,083
6	Shri Singaji STPS Phase-I	1,211	808	2,020	1,235	1,043	2,279	1,260	1,366	2,626	1,285	2,448	3,733	1,311	2,615	3,926
7	Shri Singaji STPS Phase-II	361	0	361	368	0	368	375	645	1,020	383	807	1,190	391	1,375	1,765
<b>A</b>	<b>Total (MP Genco Thermal-MP Share)</b>	<b>3,116</b>	<b>3,573</b>	<b>6,688</b>	<b>3,178</b>	<b>3,877</b>	<b>7,055</b>	<b>3,241</b>	<b>4,894</b>	<b>8,136</b>	<b>3,306</b>	<b>6,195</b>	<b>9,501</b>	<b>3,372</b>	<b>6,989</b>	<b>10,362</b>
8	Rani Awanti Bai Sagar, Bargi HPS	8	39	46	8	39	47	8	40	48	8	41	49	8	42	50
9	Bansagar Ph I HPS (Tons)	43	67	110	44	69	112	44	70	114	45	71	117	46	73	119
10	Bansagar Ph-II HPS (Silpara)	6	6	11	6	6	11	6	6	12	6	6	12	6	6	12

Sr. No	Particulars	FY 2022-23			FY 2023-24			FY 2024-25			FY 2025-26			FY 2026-27		
		Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total
11	Bansagar Ph-III HPS (Deolond)	12	10	22	13	10	23	13	11	23	13	11	24	13	11	24
12	Bansagar Ph-IV HPS (Jhinna)	8	7	15	8	7	15	8	7	15	8	7	16	8	8	16
13	Birsinghpur HPS	2	3	5	2	3	5	2	3	5	2	3	5	2	3	5
14	Madikheda HPS	15	20	35	15	20	35	15	21	36	15	21	37	16	22	37
15	Rajghat HPS	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
16	Gandhisagar HPS	2	15	17	2	21	23	2	21	23	2	22	23	2	22	24
17	Ranapratap Sagar HPS	0	30	30	0	31	31	0	32	32	0	32	32	0	33	33
18	Jawahar Sagar HPS	0	22	22	0	23	23	0	23	23	0	24	24	0	24	24
19	Pench HPS	7	10	17	8	10	17	8	10	18	8	10	18	8	10	19
<b>B</b>	<b>Total (MP Genco Hydrel)</b>	<b>105</b>	<b>233</b>	<b>338</b>	<b>107</b>	<b>243</b>	<b>350</b>	<b>110</b>	<b>248</b>	<b>357</b>	<b>112</b>	<b>253</b>	<b>365</b>	<b>114</b>	<b>258</b>	<b>372</b>
20	NHDC Indira Sagar HPS	274	404	677	279	412	691	285	420	705	291	428	719	296	437	733
21	NHDC Omkareshwar HPS	189	209	398	193	213	406	197	217	414	201	222	423	205	226	431
22	NVDA Sardar Sarovar HPS	178	139	317	181	142	323	185	145	330	189	148	336	193	151	343
23	Rihand HPS	0	3	3	0	3	3	0	3	3	0	3	3	0	4	4
24	Matatila HPS	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1
25	SJVN Rampur HPS	1	0	1	1	1	1	1	1	1	1	1	1	1	1	2
26	SJVN Jhakri HPS	1	1	2	1	1	2	1	1	3	2	1	3	2	1	3
27	Tehri HPS	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
28	Koteshwar HPP	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1
29	NHPC Parbati III	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
30	NHPC Chamera II	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1
31	NHPC Chamera III	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1
32	NHPC Dulhasti	2	0	2	2	0	2	2	0	2	2	0	2	2	1	3
33	NHPC Dhauliganga	0	0	1	0	0	1	0	1	1	0	1	1	0	1	1
34	NHPC Sewa II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	NHPC Uri II	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1
36	NHPC Kishanganga	1	1	1	1	1	1	1	1	1	1	1	2	1	1	2
37	NTPC Koldam HPP I	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
38	NTPC Singrauli Small HPP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	NHPC Lower Subansiri HEP Unit-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>C</b>	<b>Total (JV Hydrel &amp; Other)</b>	<b>651</b>	<b>762</b>	<b>1,413</b>	<b>664</b>	<b>778</b>	<b>1,442</b>	<b>678</b>	<b>794</b>	<b>1,471</b>	<b>691</b>	<b>809</b>	<b>1,501</b>	<b>705</b>	<b>826</b>	<b>1,531</b>

Sr. No	Particulars	FY 2022-23			FY 2023-24			FY 2024-25			FY 2025-26			FY 2026-27		
		Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total
	Hydel)															
40	NTPC Korba	238	512	750	243	524	766	248	532	780	253	543	796	258	554	812
41	NTPC Korba III	74	74	148	75	76	151	77	77	154	78	79	157	80	80	160
42	NTPC Vindiyachal I	253	567	820	258	580	838	263	590	854	269	602	871	274	614	888
43	NTPC Vindiyachal II	146	391	537	149	400	549	152	407	558	155	415	569	158	423	581
44	NTPC Vindiyachal III	181	293	474	184	300	484	188	305	493	192	311	503	196	318	513
45	NTPC Vindiyachal IV	306	336	642	312	344	656	318	350	668	325	357	681	331	364	695
46	NTPC Vindiyachal V Unit 1	151	173	325	154	177	332	158	180	338	161	184	345	164	188	352
47	NTPC Sipat I	303	345	648	309	353	662	315	359	674	321	366	687	327	374	701
48	NTPC Sipat II	159	202	361	163	207	369	166	210	376	169	214	383	173	219	391
49	NTPC Mouda I	25	14	39	26	19	44	26	30	56	27	38	64	27	364	391
50	NTPC Mouda II Unit 1	26	5	30	26	20	46	27	20	47	27	45	72	28	435	463
51	NTPC Solapur STPS	533	20	552	543	206	749	554	274	828	565	522	1,087	577	579	1,156
52	NTPC Gadawara STPS, Unit-1	570	686	1,255	581	760	1,341	593	820	1,412	605	876	1,480	617	893	1,510
53	NTPC Lara STPS, Raigarh, Unit I	119	142	261	122	145	267	124	86	210	127	107	233	129	128	257
54	NTPC Khargone STPS, Unit-I & II	853	617	1,471	870	762	1,632	888	1,228	2,116	906	1,415	2,321	924	1,505	2,428
55	NTPC Kawas GPP	85	70	155	87	111	197	88	167	255	90	213	303	92	237	329
56	NTPC Gandhar GPP	86	154	239	87	157	245	89	175	264	91	178	269	93	182	275
57	KAPP Kakrapar	0	167	167	0	171	171	0	174	174	0	177	177	0	181	181
58	TAPP Tarapur	0	512	512	0	524	524	0	533	533	0	544	544	0	554	554
59	NTPC Gadawara STPS, Unit-2	570	560	1,130	581	674	1,255	593	788	1,381	605	876	1,480	617	893	1,510
60	NTPC Lara STPS, Raigarh, Unit II	119	142	261	122	145	267	124	86	210	127	107	233	129	128	257
61	NTPC Lara STPS, Raigarh, Unit III	0	0	0	0	0	0	86	82	168	86	102	188	86	123	209
62	NTPC Lara STPS, Raigarh, Unit IV	0	0	0	0	0	0	86	82	168	86	102	188	86	123	209
63	NTPC Lara STPS, Raigarh, Unit V	0	0	0	0	0	0	0	0	0	86	100	186	86	120	206
<b>D</b>	<b>Total WR Region</b>	<b>4,796</b>	<b>5,981</b>	<b>10,777</b>	<b>4,892</b>	<b>6,653</b>	<b>11,545</b>	<b>5,161</b>	<b>7,556</b>	<b>12,717</b>	<b>5,347</b>	<b>8,473</b>	<b>13,820</b>	<b>5,449</b>	<b>9,578</b>	<b>15,027</b>

Sr. No	Particulars	FY 2022-23			FY 2023-24			FY 2024-25			FY 2025-26			FY 2026-27		
		Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total
64	NTPC Kahalgaon II	51	114	165	52	117	169	53	119	172	54	121	175	55	124	179
<b>E</b>	<b>Total ER Region</b>	<b>51</b>	<b>114</b>	<b>165</b>	<b>52</b>	<b>117</b>	<b>169</b>	<b>53</b>	<b>119</b>	<b>172</b>	<b>54</b>	<b>121</b>	<b>175</b>	<b>55</b>	<b>124</b>	<b>179</b>
65	NTPC Auraiya GPP	1	3	4	1	3	4	1	3	4	1	3	4	1	3	4
66	NTPC Dadri GPP	1	3	4	1	4	5	1	4	5	1	4	5	1	4	5
67	NTPC Anta GPP	1	1	1	1	1	2	1	2	2	1	2	3	1	2	3
68	NTPC Firoz Gandhi Unchahar I	1	0	1	1	0	1	1	0	2	1	1	2	1	1	2
69	NTPC Firoz Gandhi Unchahar II	1	0	1	2	0	2	2	1	2	2	1	3	2	2	3
70	NTPC Firoz Gandhi Unchahar III	1	0	1	1	0	1	1	0	1	1	1	2	1	1	2
71	NTPC Firoz Gandhi Unchahar IV	2	1	3	2	1	4	2	2	4	2	3	5	2	3	5
72	NTPC Rihand TPS-I	1	2	4	1	2	4	1	2	4	2	2	4	2	2	4
73	NTPC Rihand TPS-II	2	2	4	2	3	4	2	3	4	2	3	4	2	3	4
74	NTPC Rihand TPS-III	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6
75	NTPC NCTP Dadri II	3	0	3	3	2	5	3	2	5	3	4	7	3	5	8
76	NTPC Singrauli	2	4	6	2	5	6	2	5	7	2	5	7	2	5	7
77	NTPC IGPS I Jhajjar	2	0	2	2	0	2	2	0	2	2	0	2	3	0	3
78	MEJA Urja Nigam	2	1	3	2	1	3	2	1	3	2	2	4	2	2	4
79	NTPC Tanda	2	1	2	2	1	3	2	2	4	2	2	4	2	3	4
80	NTPC Badarpur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81	Rajasthan (NPCIL)	0	3	3	0	3	3	0	3	3	0	3	3	0	3	3
82	NARORA (NPCIL)	0	2	2	0	2	2	0	2	2	0	2	2	0	2	2
<b>F</b>	<b>Total NR Region</b>	<b>25</b>	<b>27</b>	<b>52</b>	<b>25</b>	<b>32</b>	<b>57</b>	<b>26</b>	<b>35</b>	<b>61</b>	<b>26</b>	<b>41</b>	<b>68</b>	<b>27</b>	<b>44</b>	<b>71</b>
83	Torrent Power	31	0	31	31	0	31	32	0	32	33	0	33	33	0	33
84	BLA Power, Unit-I & II	17	5	22	18	21	39	18	21	39	19	50	68	19	55	74
85	Jaypee Bina Power	461	0	461	470	172	642	479	289	768	489	379	867	498	563	1,061
86	Lanco Amarkantak TPS Unit I	224	389	612	228	397	626	233	404	637	238	412	650	242	421	663
87	Reliance UMPP, Sasan	174	1,412	1,587	178	1,445	1,623	181	1,469	1,651	185	1,499	1,684	189	1,529	1,718
88	Essar Power STPS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
89	Jaiprakash Power STPS, Nigri	633	244	877	646	250	896	659	254	913	672	259	931	686	264	950
90	MB Power STPS, Unit-I	271	334	605	277	366	643	282	372	654	288	380	667	294	387	681
91	MB Power STPS, Unit-II	271	357	628	277	371	647	282	398	680	288	406	693	294	414	707

Sr. No	Particulars	FY 2022-23			FY 2023-24			FY 2024-25			FY 2025-26			FY 2026-27		
		Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total
92	Jhabua Power STPS, Unit-1	280	355	635	286	364	649	291	406	697	297	414	711	303	422	725
93	DB Power STPS Unit-1	320	149	470	327	427	753	333	434	767	340	443	783	347	451	798
94	Pench Thermal Energy, Unit-1	0	0	0	0	0	0	0	0	0	0	0	0	258	168	426
<b>G</b>	<b>Total (IPPs)</b>	<b>2,683</b>	<b>3,246</b>	<b>5,929</b>	<b>2,737</b>	<b>3,812</b>	<b>6,549</b>	<b>2,791</b>	<b>4,048</b>	<b>6,839</b>	<b>2,847</b>	<b>4,240</b>	<b>7,087</b>	<b>3,162</b>	<b>4,675</b>	<b>7,836</b>
95	Renewable Energy (Solar)	0	2,613	2,613	0	3,146	3,146	0	3,323	3,323	0	3,323	3,323	0	3,323	3,323
96	Renewable Energy (other than Solar)	0	2,483	2,483	0	2,493	2,493	0	2,492	2,492	0	2,491	2,491	0	2,489	2,489
<b>H</b>	<b>Total Renewable Energy</b>	<b>0</b>	<b>5,096</b>	<b>5,096</b>	<b>0</b>	<b>5,639</b>	<b>5,639</b>	<b>0</b>	<b>5,815</b>	<b>5,815</b>	<b>0</b>	<b>5,814</b>	<b>5,814</b>	<b>0</b>	<b>5,812</b>	<b>5,812</b>
<b>I</b>	<b>Total</b>	<b>11,427</b>	<b>19,032</b>	<b>30,459</b>	<b>11,656</b>	<b>21,150</b>	<b>32,806</b>	<b>12,060</b>	<b>23,508</b>	<b>35,568</b>	<b>12,384</b>	<b>25,946</b>	<b>38,330</b>	<b>12,884</b>	<b>28,305</b>	<b>41,190</b>



## Commission's Analysis

- 2.51 The Commission observed that petitioners have considered actual fixed and energy charges as per bills for the period from September 2020 to August 2021 for claiming power purchase cost for FY 2022-23. Further, the petitioners have projected annual increase of 2% in Fixed and Energy Charges for each generating station for projecting the power purchase cost for subsequent years.
- 2.52 The Commission has determined fixed and energy charges for the generating station for the control period considering following approach: -

### Determination of Energy Cost

#### Central, State and IPPs Thermal Generating Stations

- 2.53 The Commission has analysed the actual energy charges for CGS, MPPGCL and IPPs for last five years, wherein it is observed that the energy charges for these generating stations in totality increased as follows:

**Table 42: Increase in Energy Charges in last 5 years (%)**

Particulars	Increase (%)
Central Generating Stations (CGS)	3.27%
State Generating Stations (MPPGCL)	1.36%
IPPs	0.37%

- 2.54 Accordingly, the Commission has considered energy charges for the Thermal generating stations as per actuals during the period September, 2020 to August 2021 as submitted by the Petitioners for FY 2022-23. For FY 2023-24 onwards, the Commission has considered escalation in energy charges of CGS, MPPGCL and IPPs Thermal Power Generating Stations as shown in "Table 42: Increase in Energy Charges in last 5 years (%)" above.

#### Central and State Hydro Generating Stations

- 2.55 For Hydro Generating Stations, the Commission has computed the energy charges considering the methodology specified in the CERC / MPERC Regulations.

#### NPCIL Generating Stations

- 2.56 For Nuclear Power Generating Stations, it is observed that energy charges for these stations increased from Rs. 2.93/kWh in FY 2016-17 to Rs. 2.98/kWh in FY 2020-21 at a CAGR of 0.44%. Accordingly, Commission has considered escalation rate of 0.44% for increase in energy charges for Nuclear Power Generating Stations during each year from FY 2023-24 to FY 2026-27.

#### Renewable Sources

- 2.57 The Commission has considered rate of power purchase from existing Solar and Non-solar energy sources, as the weighted average purchase rates as per the Power Purchase Agreements. However, for fulfillment of Solar RPO, additional power procurement has been considered at rate of Rs. 2.62/kWh i.e., Rate of latest signed PPA. For fulfillment of

shortfall in Non- Solar RPO, additional Non-Solar power procurement has been considered at rate of Rs. 2.77/kWh, i.e., Rate discovered in SECI's latest competitive bidding from which MPPMCL has proposed to procure power.

### **New generating stations**

- 2.58 The Commission has considered energy charge for Subhansiri HEP as submitted by the Petitioner in reply to data gaps i.e., Rs. 5.39/kWh, whereas for Pench Thermal Power Station, the Energy Charge has been considered of Rs. 1.892/kWh as per the Commission Order dated 26.05.2020 in Petition No. 28 of 2020.

### **Determination of Fixed Cost**

#### **Central, State and IPPs Generating Stations**

- 2.59 For Central/Inter-State Generating Stations (Thermal and Hydro), the Commission has considered latest available Tariff Orders issued by CERC for individual stations.
- 2.60 For MPPGCL stations (Thermal and Hydro), the Fixed Charges has been considered in accordance with latest available MYT Orders issued by the Commission.
- 2.61 The Commission has considered fixed costs of IPPs for which tariff is determined by the Commission, based on the latest available MYT Order.
- 2.62 Further, the Commission has not considered any escalation in fixed charges for the Control Period.
- 2.63 For new generating stations for which tariff are yet to be determined/admitted by the appropriate Commission, the Fixed Charges have been considered based on actual bills of previous one year.

#### **Power Purchase from Captive Power Plants (CPP)**

- 2.64 Regulation 3.2 of MPERC (Power purchase and other matters with respect to conventional fuel based Captive Power Plants) Regulations (revision –1) 2009 dated 31st January, 2009, specifies as follows:

*“3.2 The maximum rate of purchase of power from a CPP Holder by the Distribution Licensee shall be as determined by the Commission in its tariff order issued from time to time. However, the concerned Distribution Licensee shall have the option of procuring short-term / long-term power from any CPP Holder based on competitive bidding, using the guidelines specified by the Ministry of Power, Government of India in this regard but not exceeding the rates as determined by the Commission. In such an event, the Commission shall adopt the rate for power purchase as decided through such competitive bidding. In all such cases, the agreement shall be executed by M.P. Power Trading Co. Ltd. on behalf of the Distribution Licensee.”*

- 2.65 The Commission has observed that the Petitioner has not projected any availability of power from Captive Power Plants for the Control Period. Accordingly, the Commission has not

considered availability from the CPPs. As per the above Regulations, the Petitioner may purchase power from captive power plants at the tariff discovered through competitive bidding and file a separate Petition before the Commission for its approval. On the basis of the same, the Commission may consider the actual power purchase from CPP and its cost at the time of truing up.

### **New generating stations**

- 2.66 For Subhansiri HEP, no fixed charge has been considered in accordance to the Petitioner submission in reply to data gaps (i.e., the levelized tariff), in absence of any details pertaining to its fixed cost of the generating station. With regard to Fixed Cost of Pench Thermal Power Generating Station, the same has been computed considering the Fixed Charge of Rs. 2.898/kWh in accordance to MPERC Order dated 26.05.2020 in Petition No. 28 of 2020.
- 2.67 On the basis of the above, the Fixed and Energy Charges considered for the Control Period is shown in the table below:

**Table 43: Basis of Fixed and Energy charges for the generating stations during FY 2022-23 to FY 2026-27**

Sr. No.	Generating Station	Fixed Charges for FY 2022-23 (Rs. Crore)					Basis	Energy Charges (Rs./kWh)					Basis
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	
1	NTPC Korba	1,002	1,002	1,002	1,002	1,002	CERC Order 24-02-2017 in P.no. 323/GT/2014 for 01-04-2014 to 31-03-2019	1.56	1.61	1.66	1.72	1.77	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
2	NTPC Korba III	489	489	489	489	489	CERC Order 03-03-2017 in P.no. 340/GT/2014 for 01-04-2014 to 31-03-2019	1.47	1.52	1.57	1.62	1.67	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
3	NTPC Vindychal I	765	783	783	783	783	CERC Order 31-01-2022 in P.no. 401/GT/2022 for 01-04-2019 to 31-03-2024	1.93	1.99	2.05	2.12	2.19	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
4	NTPC Vindychal II	488	488	488	488	488	CERC Order 06-02-2017 in P.no. 327/GT/2014 for 01-04-2014 to 31-03-2019	1.78	1.84	1.90	1.97	2.03	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
5	NTPC Vindychal III	736	736	736	736	736	CERC Order 24-02-2017 in P.no. 342/GT/2014 for 01-04-2014 to 31-03-2019	1.75	1.81	1.87	1.93	1.99	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
6	NTPC Vindychal IV	1,105	1,105	1,105	1,105	1,105	CERC Order 10-03-2017 in P.no. 339/GT/2014 for 01-04-2014 to 31-03-2019	1.74	1.80	1.86	1.92	1.98	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
7	NTPC Vindychal V Unit I	583	583	583	583	583	CERC Order 31-08-2016 in P.no. 234/GT/2015 for 30-10-2015 to 31-03-2019	1.80	1.86	1.92	1.98	2.05	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
8	NTPC Sipat I	1,824	1,824	1,824	1,824	1,824	CERC Order 29-03-2017 in P.no. 337/GT/2014 for 01-04-2014 to 31-03-2019	1.54	1.59	1.64	1.69	1.75	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
9	NTPC Sipat II	874	874	874	874	874	CERC Order 21-03-2017	1.59	1.64	1.69	1.75	1.80	As per Petitioner submission for

Sr. No.	Generating Station	Fixed Charges for FY 2022-23 (Rs. Crore)					Basis	Energy Charges (Rs./kWh)					Basis
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	
							& 15-12-2017 in P.no. 322/GT/2014 & P.no. 28/RP/2017 for 01-04-2014 to 31-03-2019						FY 2022-23 and thereafter considered admitted escalation rate.
10	NTPC Mouda I	1,315	1,315	1,315	1,315	1,315	CERC Order 01-02-2017 in P.no. 328/GT/2014 for 01-04-2014 to 31-03-2019	2.90	2.99	3.09	3.19	3.29	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
11	NTPC Mouda II Unit 1	1,387	1,387	1,387	1,387	1,387	CERC Order 05-04-2019 in P.no. 142/GT/2016 for COD to 31-03-2019	3.20	3.30	3.41	3.52	3.64	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
12	NTPC Kawas GPP	407	407	407	407	407	CERC Order 24-03-2017 in P.no. 341/GT/2017 for 01-04-2014 to 31-03-2019	3.05	3.15	3.26	3.36	3.47	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
13	NTPC Gandhar GPP	516	516	516	516	516	CERC Order 10-04-2017 & 19-02-2019 in P.no. 325/GT/2014 & P.no. 32/RP/2017 for 01-04-2014 to 31-03-2019	2.80	2.89	2.98	3.08	3.18	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
14	NTPC Auraiya GPP	309	309	309	309	309	CERC Order 18-04-2017 in P.no. 285/GT/2014 for 01-04-2014 to 31-03-2019	2.77	2.86	2.95	3.05	3.15	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
15	NTPC Dadri GPP	309	318	318	318	318	CERC Order 13-11-2021 in P.no. 400/GT/2020 for 01-04-2019 to 31-03-2024	2.57	2.65	2.74	2.83	2.92	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
16	NTPC Anta GPP	218	218	218	218	218	CERC Order 19-09-2017 in P.no. 287/GT/2014 for 01-04-2014 to 31-03-2019	3.09	3.19	3.30	3.41	3.52	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
17	NTPC Kahalgaon 2	1,149	1,149	1,149	1,149	1,149	CERC Order 21-01-2017 in P.no. 283/GT/2014 for 01-04-2014 to 31-03-2019	2.20	2.27	2.34	2.42	2.50	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation

Sr. No.	Generating Station	Fixed Charges for FY 2022-23 (Rs. Crore)					Basis	Energy Charges (Rs./kWh)					Basis
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	
													rate.
18	KAPP Kakrapar	-	-	-	-	-	-	2.29	2.30	2.31	2.32	2.33	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
19	TAPP Tarapur	-	-	-	-	-	-	3.38	3.40	3.41	3.43	3.44	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
20	RAPP Rawabhatta	-	-	-	-	-	-	3.97	3.98	4.00	4.02	4.04	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
21	NAPP Narora	-	-	-	-	-	-	3.02	3.04	3.05	3.06	3.08	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
22	NTPC Solapur STPS, Phase-1	2,011	2,011	2,011	2,011	2,011	CERC Order dated 06.01.2020 in P. No. 178/GT/2017	3.26	3.37	3.48	3.59	3.71	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
23	NTPC Gadawara STPS, Unit-1	1,100	1,100	1,100	1,100	1,100	Prorated Fixed Charges based on actual bills for the Period January 2020 to December 2020	2.83	2.93	3.02	3.12	3.22	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
24	NTPC Gadawara STPS, Unit-2	1,100	1,100	1,100	1,100	1,100	Same as Fixed Charges for Gadawara Unit-1	2.83	2.93	3.02	3.12	3.22	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
25	NTPC Lara STPS, Raigarh, Unit I	1,253	1,253	1,253	1,253	1,253	Prorated Fixed Charges based on actual bills for the Period January 2020 to December 2020	2.28	2.35	2.43	2.51	2.59	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
26	NTPC Lara STPS, Raigarh, Unit II	1,253	1,253	1,253	1,253	1,253	Same as Fixed Charges for Lara Unit-1	2.28	2.35	2.43	2.51	2.59	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation

Sr. No.	Generating Station	Fixed Charges for FY 2022-23 (Rs. Crore)					Basis	Energy Charges (Rs./kWh)					Basis
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	
													rate.
27	NTPC Lara STPS, Raigarh, Unit III	-	-	-	-	-	Not considered	-	-	-	-	-	Not considered
28	NTPC Lara STPS, Raigarh, Unit IV	-	-	-	-	-	Not considered	-	-	-	-	-	Not considered
29	NTPC Lara STPS, Raigarh, Unit V	-	-	-	-	-	Not considered	-	-	-	-	-	Not considered
30	NTPC Firoz Gandhi Unchahar I	309	316	316	316	316	CERC Order dated 12.12.2021 in P. No. 438/GT/2020	3.25	3.35	3.46	3.58	3.69	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
31	NTPC Firoz Gandhi Unchahar II	291	291	291	291	291	CERC Order dated 02.08.2020 in P. No. 300/GT/2020	3.31	3.42	3.53	3.64	3.76	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
32	NTPC Firoz Gandhi Unchahar III	179	179	179	179	179	CERC Order dated 19.04.2017 in P. No. 373/GT/2014	3.23	3.34	3.44	3.56	3.67	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
33	NTPC Firoz Gandhi Unchahar IV	551	551	551	551	551	CERC Order dated 06.12.2019 in P. No. 197/GT/2017	3.11	3.22	3.32	3.43	3.54	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
34	NTPC Rihand I	586	586	586	586	586	CERC Order dated 23.08.2016 in P. No. 291/GT/2014	1.51	1.56	1.62	1.67	1.72	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
35	NTPC Rihand II	497	497	497	497	497	CERC Order 01-12-2016 in P.no. 318/GT/2014 for 01-04-2014 to 31-03-2019	1.52	1.57	1.62	1.67	1.73	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
36	NTPC Rihand III	1,019	1,019	1,019	1,019	1,019	CERC Order 06-02-2017 in P.no. 372/GT/2014 for 01-04-2014 to 31-03-2019	1.58	1.63	1.69	1.74	1.80	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
37	NTPC NCTP Dadri	925	925	925	925	925	CERC Order 02-05-2017	3.18	3.29	3.39	3.50	3.62	As per Petitioner submission for

Sr. No.	Generating Station	Fixed Charges for FY 2022-23 (Rs. Crore)					Basis	Energy Charges (Rs./kWh)					Basis
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	
	II						in P.no. 324/GT/2014 for 01-04-2014 to 31-03-2019						FY 2022-23 and thereafter considered admitted escalation rate.
38	NTPC Singrauli	907	907	907	907	907	CERC Order 28-07-2016 in P.no. 290/GT/2014 for 01-04-2014 to 31-03-2019	1.59	1.64	1.69	1.75	1.80	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
39	NTPC IGPS I Jhajjar	1,709	1,709	1,709	1,709	1,709	CERC Order 09-03-2017 in P.no. 266/GT/2014 for 01-04-2014 to 31-03-2019	3.96	4.09	4.22	4.36	4.50	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
40	NTPC Khargone STPS, Unit-I	822	822	822	822	822	Prorated Fixed Charges as per actual bills for the period April 2020 to March 2021	2.89	2.99	3.08	3.19	3.29	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
41	NTPC Khargone STPS, Unit-II	822	822	822	822	822	Prorated Fixed Charges as per actual bills for the period April 2020 to March 2021	2.89	2.99	3.08	3.19	3.29	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
42	Meja Urja Nigam	1,700	1,700	1,700	1,700	1,700	Prorated Fixed Charges as per Petitioner submission	3.08	3.18	3.28	3.39	3.50	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
43	NTPC Tanda Stage-II	1,069	1,069	1,069	1,069	1,069	Prorated Fixed Charges as per Petitioner submission	3.02	3.12	3.22	3.33	3.44	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
44	Amarkantak TPS Ph-III	164	164	164	164	164	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	1.28	1.29	1.31	1.33	1.35	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
45	Satpura TPS Phase III	-	-	-	-	-	Not Considered	-	-	-	-	-	Not Considered
46	Satpura TPS Ph-IV	615	604	604	604	604	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	2.29	2.32	2.35	2.38	2.41	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation



Sr. No.	Generating Station	Fixed Charges for FY 2022-23 (Rs. Crore)					Basis	Energy Charges (Rs./kWh)					Basis
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	
													rate.
47	SGTPS Ph-I & II	464	457	457	457	457	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	2.39	2.42	2.45	2.49	2.52	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
48	SGTPS Ph-III	311	309	309	309	309	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	1.92	1.94	1.97	2.00	2.02	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
49	Shri Singaji STPS, Ph-I	1,277	1,247	1,247	1,247	1,247	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	3.12	3.16	3.20	3.25	3.29	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
50	Shri Singaji STPS, Ph-2	1,340	1,314	1,314	1,314	1,314	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	3.57	3.61	3.66	3.71	3.76	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
51	Rani Awanti Bai Sagar, Bargi HPS	18	18	18	18	18	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.18	0.18	0.18	0.18	0.18	Computed based on the Design Energy as per Tariff Order
52	Bansagar Ph I HPS (Tons)	154	156	156	156	156	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.73	0.74	0.79	0.80	0.80	Computed based on the Design Energy as per Tariff Order
53	Bansagar Ph-II HPS (Silpara)						MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.73	0.74	0.79	0.80	0.80	Computed based on the Design Energy as per Tariff Order
54	Bansagar Ph-III HPS (Deolond)						MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.73	0.74	0.79	0.80	0.80	Computed based on the Design Energy as per Tariff Order
55	Bansagar Ph-IV HPS (Jhinna)	10	10	10	10	10	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.64	0.65	0.65	0.65	0.64	Computed based on the Design Energy as per Tariff Order
56	Birsinghpur HPS	6	6	6	6	6	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.65	0.66	0.66	0.66	0.65	Computed based on the Design Energy as per Tariff Order
57	Marhikheda HPS	19	19	19	19	19	MPERC Order dated	1.72	1.71	1.71	1.71	1.72	Computed based on the Design

Sr. No.	Generating Station	Fixed Charges for FY 2022-23 (Rs. Crore)					Basis	Energy Charges (Rs./kWh)					Basis
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	
							19.05.2021 in P. No. 53 of 2020						Energy as per Tariff Order
58	Rajghat HPS	15	15	15	15	15	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.93	0.95	0.95	0.95	0.95	Computed based on the Design Energy as per Tariff Order
59	Gandhisagar HPS	16	16	16	16	16	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.19	0.19	0.19	0.19	0.19	Computed based on the Design Energy as per Tariff Order
60	Ranapratap Sagar & Jawahar Sagar HPS	0	0	0	0	0	As per Petitioner Submission	1.51	1.51	1.51	1.51	1.51	Computed based on the Design Energy as per Tariff Order
61	Pench HPS	28	28	28	28	28	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.44	0.45	0.45	0.45	0.45	Computed based on the Design Energy as per Tariff Order
62	NHDC Indira Sagar HPS	535	559	559	559	559	CERC order dated: 06.1.2022, Petition No.106/GT/2020	1.91	1.99	1.99	1.99	1.99	Computed based on the Design Energy as per Tariff Order
63	NHDC Omkareshwar HPS	398	398	398	398	398	CERC order dated: 26.5.2016, Petition No.264/GT/2014	2.65	2.65	2.65	2.65	2.65	Computed based on the Design Energy as per Tariff Order
64	Sardar Sarovar HPS	356	356	356	356	356	MPERC Order dated August 6,2013 in P. No. 18 of 2013	1.05	1.05	1.05	1.05	1.05	Computed based on the Design Energy as per Tariff Order
65	Rihand HPS	0	0	0	0	0	As per Petitioner submission	0.40	0.40	0.40	0.40	0.40	Computed based on the Design Energy as per Tariff Order
66	Matatila HPS	0	0	0	0	0	As per Petitioner submission	0.40	0.40	0.40	0.40	0.40	Computed based on the Design Energy as per Tariff Order
67	SJVN Rampur HPS	674	673	673	673	673	CERC Order dated 24.01.2022 in P. No. 28/GT/2020	2.18	2.18	2.18	2.18	2.18	Computed based on the Design Energy as per Tariff Order
68	SJVN Jhakri HPS	1,345	1,345	1,345	1,345	1,345	CERC Order dated 19.06.2019 in P. No. 314/GT/2018 for FY 2014-15 to FY 2018-19	1.29	1.29	1.29	1.29	1.29	Computed based on the Design Energy as per Tariff Order
69	Tehri HPS	1,289	1,289	1,289	1,289	1,289	CERC Order dated 29.03.2017 in P. No. 178/GT/2015 for 2014-15	2.75	2.75	2.75	2.75	2.75	Computed based on the Design Energy as per Tariff Order

Sr. No.	Generating Station	Fixed Charges for FY 2022-23 (Rs. Crore)					Basis	Energy Charges (Rs./kWh)					Basis
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	
							to FY 2018-19						
70	Koteshwar HPP	466	466	466	466	466	CERC Order dated 4.6.2019 in RP No. 47/RP/2018 in P. No. 117/GT/2018	2.38	2.38	2.38	2.38	2.38	Computed based on the Design Energy as per Tariff Order
71	NHPC Parbati III	519.52	519.52	519.52	519.52	519.52	CERC Order dated 23.04.2019 in P. No. 6/GT/2017	1.52	1.52	1.52	1.52	1.52	Computed based on the Design Energy as per Tariff Order
72	NHPC Chamera II	262	262	262	262	262	CERC Order dated 17.6.2016 in P. No. 233/GT/2014	1.08	1.08	1.08	1.08	1.08	Computed based on the Design Energy as per Tariff Order
73	NHPC Chamera III	375	375	375	375	375	CERC Order dated 29.01.2020 in P. No. 321/GT/2018	1.99	1.99	1.99	1.99	1.99	Computed based on the Design Energy as per Tariff Order
74	NHPC Dulhasti	912	912	912	912	912	CERC Order dated 30.8.2016 in P. No. 231/GT/2014	2.78	2.78	2.78	2.78	2.78	Computed based on the Design Energy as per Tariff Order
75	NHPC Dhauliganga	240	240	240	240	240	CERC Order dated 26.4.2016 in P. No. 230/GT/2014	1.25	1.25	1.25	1.25	1.25	Computed based on the Design Energy as per Tariff Order
76	NHPC Sewa II	243	243	243	243	243	CERC in Order dated 05.02.2020 in P. No. 322/GT/2018 for FY 2014-15 to FY 2018-19.	2.73	2.73	2.73	2.73	2.73	Computed based on the Design Energy as per Tariff Order
77	NHPC Uri II	-	-	-	-	-	No allocation	-	-	-	-	-	No allocation
78	NHPC Kishanganga	498	498	498	498	498	CERC Tariff Order 28.10.2019 in P. No. 43/GT/2018	1.66	1.66	1.66	1.66	1.66	Computed based on the Design Energy as per Tariff Order
79	NTPC Koldam HPP I	1,310	1,310	1,310	1,310	1,310	CERC order dated 05.04.2018 in P. No. 107/GT/2015 upto FY 2018-19	2.58	2.58	2.58	2.58	2.58	Computed based on the Design Energy as per Tariff Order
80	NTPC Singrauli Small HPP	-	-	-	-	-	As per Petitioner submission	9.32	9.32	9.32	9.32	9.32	Computed based on the Design Energy as per Tariff Order
81	NHPC Lower Subansiri HEP Unit-	-	-	-	-	-	As per Petitioner submission	0.00	5.39	5.39	5.39	5.39	As per Petitioner submission in reply to data gaps

Sr. No.	Generating Station	Fixed Charges for FY 2022-23 (Rs. Crore)					Basis	Energy Charges (Rs./kWh)					Basis
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	
	1												
82	Torrent Power	-	-	-	-	-	Not Considered	-	-	-	-	-	Not Considered
83	BLA Power Unit No-2	64	64	64	64	64	MPERC Order in P. No. 17 of 2018 dated 25.10.2021	3.15	3.16	3.17	3.18	3.19	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
84	Jaypee Bina Power	647	636	636	636	636	MPERC Order in P. No. 44 of 2020 dated 30.04.2021	3.29	3.31	3.32	3.33	3.34	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
85	Lanco Amarkantak TPS Unit 1	264	264	264	264	264	MPERC Order in P.No. 60 of 2020 dated 24.08.2021	1.91	1.92	1.93	1.93	1.94	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
86	Reliance UMPP, Sasan	444	444	444	444	444	As per Petitioner submission	1.36	1.36	1.37	1.37	1.38	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
87	Essar Power STPS	-	-	-	-	-	Not considered	-	-	-	-	-	Not considered
88	Jaiprakash Power STPS, Nigri	1,647	1,605	1,605	1,605	1,605	MPERC order in Petition No. 43 of 2020 dated 03.05.2021	0.70	0.71	0.71	0.71	0.71	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
89	MB Power STPS	1,508	1,467	1,467	1,467	1,467	MPERC Order in Petition No. 46 of 2020 dated 01.05.2021	2.59	2.60	2.61	2.62	2.63	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
90	Jhabua Power STPS, Unit-1	776	752	752	752	752	MPERC order in Petition No. 47 of 2020 dated 08.05.2021	2.65	2.66	2.67	2.68	2.69	As per Petitioner submission for FY 2022-23 and thereafter considered admitted escalation rate.
91	DB Power STPS Unit-1	-	-	-	-	-	Not considered	-	-	-	-	-	Not considered
92	Pench Thermal Energy, Unit-1	-	-	-	-	368	MPERC Order dated 26.05.2020 in P. No. 28 of 2020	-	-	-	-	1.892	MPERC Order dated 26.05.2020 in P. No. 28 of 2020

Sr. No.	Generating Station	Fixed Charges for FY 2022-23 (Rs. Crore)					Basis	Energy Charges (Rs./kWh)					Basis
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	
93	Solar	-	-	-	-	-	-	3.46	3.22	3.16	3.11	3.04	Weighted average purchase rate from existing sources and new capacity addition.
94	Other than Solar	-	-	-	-	-	-	4.86	5.50	5.04	4.69	4.47	Weighted average purchase rate from existing sources and new capacity addition.

2.68 For determination of power purchase expenses, the Commission has applied the principles of Merit Order Dispatch (MOD) on the basis of energy charges admitted for all generating stations for the Control Period. Further, the Commission directs the Petitioners to not unduly restrict supply to any category of consumers during the Control Period.

2.69 The allocation of Merit Order Dispatch for generating station applicable for the Control Period from FY 2022-23 to FY 2026-27 is shown in the table below:

**Table 44: MOD on allocated generating stations for Control Period FY 2022-23 to FY 2026-27**

Sr. No.	Generating Station	Dispatch Type (1 Must Run, 0 Others)	Energy Charges (Paisa/kWh)				
			FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	KAPP Kakrapar	1	229	230	231	232	233
2	TAPP Tarapur	1	338	340	341	343	344
3	RAPP Rawabhata	1	397	398	400	402	404
4	NAPP Narora	1	302	304	305	306	308
5	Rani Awanti Bai Sagar, Bargi HPS	1	18	18	18	18	18
6	Bansagar Ph I HPS (Tons)	1	73	74	79	80	80
7	Bansagar Ph-II HPS (Silpara)	1	73	74	79	80	80
8	Bansagar Ph-III HPS (Deolond)	1	73	74	79	80	80
9	Bansagar Ph-IV HPS (Jhinna)	1	64	65	65	65	64
10	Birsinghpur HPS	1	65	66	66	66	65
11	Marhikheda HPS	1	172	171	171	171	172
12	Rajghat HPS	1	93	95	95	95	95
13	Gandhisagar HPS	1	19	19	19	19	19
14	Ranapratap Sagar & Jawahar Sagar HPS	1	151	151	151	151	151
15	Pench HPS	1	44	45	45	45	45

Sr. No.	Generating Station	Dispatch Type (1 Must Run, 0 Others)	Energy Charges (Paisa/kWh)				
			FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
16	NTPC Singrauli Small HPP	1	932	932	932	932	932
17	Solar	1	346	322	316	311	304
18	Other than Solar	1*	486	550	504	469	447
19	NTPC Korba	0	156	161	166	172	177
20	NTPC Korba III	0	147	152	157	162	167
21	NTPC Vindychal I	0	193	199	205	212	219
22	NTPC Vindychal II	0	178	184	190	197	203
23	NTPC Vindychal III	0	175	181	187	193	199
24	NTPC Vindychal IV	0	174	180	186	192	198
25	NTPC Vindychal V Unit 1	0	180	186	192	198	205
26	NTPC Sipat I	0	154	159	164	169	175
27	NTPC Sipat II	0	159	164	169	175	180
28	NTPC Mouda I	0	290	299	309	319	329
29	NTPC Mouda II Unit 1	0	320	330	341	352	364
30	NTPC Kawas GPP	0	305	315	326	336	347
31	NTPC Gandhar GPP	0	280	289	298	308	318
32	NTPC Auraiya GPP	0	277	286	295	305	315
33	NTPC Dadri GPP	0	257	265	274	283	292
34	NTPC Anta GPP	0	309	319	330	341	352
35	NTPC Kahalgaon 2	0	220	227	234	242	250
36	NTPC Solapur STPS, Phase-1	0	326	337	348	359	371
37	NTPC Gadarwara STPS, Unit-1	0	283	293	302	312	322
38	NTPC Gadarwara STPS, Unit-2	0	283	293	302	312	322
39	NTPC Lara STPS, Raigarh, Unit I	0	228	235	243	251	259
40	NTPC Lara STPS, Raigarh, Unit II	0	228	235	243	251	259
41	NTPC Firoz Gandhi Unchahar I	0	325	335	346	358	369
42	NTPC Firoz Gandhi Unchahar II	0	331	342	353	364	376
43	NTPC Firoz Gandhi Unchahar III	0	323	334	344	356	367
44	NTPC Firoz Gandhi Unchahar IV	0	311	322	332	343	354
45	NTPC Rihand I	0	151	156	162	167	172
46	NTPC Rihand II	0	152	157	162	167	173
47	NTPC Rihand III	0	158	163	169	174	180

Sr. No.	Generating Station	Dispatch Type (1 Must Run, 0 Others)	Energy Charges (Paisa/kWh)				
			FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
48	NTPC NCTP Dadri II	0	318	329	339	350	362
49	NTPC Singrauli	0	159	164	169	175	180
50	NTPC IGPS I Jhajjar	0	396	409	422	436	450
51	NTPC Khargone STPS, Unit-I	0	289	299	308	319	329
52	NTPC Khargone STPS, Unit-II	0	289	299	308	319	329
53	Meja Urja Nigam	0	308	318	328	339	350
54	NTPC Tanda Stage-II	0	302	312	322	333	344
55	Amarkantak TPS Ph-III	0	128	129	131	133	135
56	Satpura TPS Ph-IV	0	229	232	235	238	241
57	SGTPS Ph-I & II	0	239	242	245	249	252
58	SGTPS Ph-III	0	192	194	197	200	202
59	Shri Singaji STPS, Ph-I	0	312	316	320	325	329
60	Shri Singaji STPS, Ph-2	0	357	361	366	371	376
61	NHDC Indira Sagar HPS	0	191	199	199	199	199
62	NHDC Omkareshwar HPS	0	265	265	265	265	265
63	Sardar Sarovar HPS	0	105	105	105	105	105
64	Rihand HPS	0	40	40	40	40	40
65	Matatila HPS	0	40	40	40	40	40
66	SJVN Rampur HPS	0	218	218	218	218	218
67	SJVN Jhakri HPS	0	129	129	129	129	129
68	Tehri HPS	0	275	275	275	275	275
69	Koteshwar HPP	0	238	238	238	238	238
70	NHPC Parbati III	0	152	152	152	152	152
71	NHPC Chamera II	0	108	108	108	108	108
72	NHPC Chamera III	0	199	199	199	199	199
73	NHPC Dulhasti	0	278	278	278	278	278
74	NHPC Dhauliganga	0	125	125	125	125	125
75	NHPC Sewa II	0	273	273	273	273	273
76	NHPC Kishanganga	0	166	166	166	166	166
77	NTPC Koldam HPP I	0	258	258	258	258	258
78	NHPC Lower Subansiri HEP Unit-1	0	0	539	539	539	539
79	BLA Power Unit No.-2	0	315	316	317	318	319









Sr. No.	Generating Station	FY 2022-23			FY 2023-24			FY 2024-25			FY 2025-26			FY 2026-27		
		Fixed Charges	Energy Charges	Total	Fixed Charges	Energy Charges	Total	Fixed Charges	Energy Charges	Total	Fixed Charges	Energy Charges	Total	Fixed Charges	Energy Charges	Total
82	NTPC Firoz Gandhi Unchahar I	0.25	0.12	0.36	0.25	0.12	0.37	0.25	0.15	0.40	0.25	0.21	0.46	0.25	0.29	0.55
83	NTPC Solapur STPS, Phase-1	487.44	59.81	547.25	487.44	82.47	569.91	487.44	156.06	643.50	487.44	161.83	649.27	487.44	519.84	1,007.28
84	Jaypee Bina Power	420.60	0.00	420.60	413.65	81.00	494.65	413.65	137.26	550.91	413.65	373.13	786.78	413.65	493.46	907.11
85	NTPC Firoz Gandhi Unchahar II	0.70	0.00	0.70	0.70	0.24	0.94	0.70	0.31	1.01	0.70	0.32	1.02	0.70	0.50	1.19
86	Shri Singaji STPS, Ph-2	1,156.17	0.00	1,156.17	1,314.19	7.57	1,321.76	1,314.19	191.97	1,506.16	1,314.19	413.01	1,727.20	1,314.19	705.21	2,019.40
87	NTPC IGPS I Jhajjar	2.05	0.00	2.05	2.05	0.00	2.05	2.05	0.00	2.05	2.05	0.14	2.19	2.05	0.15	2.20
88	<b>Total</b>	<b>11,562.43</b>	<b>19,379.14</b>	<b>30,941.56</b>	<b>11,665.86</b>	<b>21,802.25</b>	<b>33,468.11</b>	<b>11,682.84</b>	<b>23,839.37</b>	<b>35,522.21</b>	<b>11,684.02</b>	<b>26,041.89</b>	<b>37,725.91</b>	<b>12,054.13</b>	<b>28,572.40</b>	<b>40,626.53</b>

## Renewable Purchase Obligation (RPO)

### Petitioners' Submission

2.71 In view of the RPO target specified in MPERC (Co-generation and generation of electricity from Renewable sources of energy) (Revision-II) Regulations, 2021 vide notification dated 12<sup>th</sup> November, 2021 and Tariff Policy, 2016, the Petitioners have made arrangements under various PPA's for its compliance. As a result, surplus availability is projected from Solar till FY 2024-25 and deficit thereafter. However, for Non-solar sources, deficit in availability is projected during each year of the Control Period for complying with RPO targets.

2.72 Accordingly, the Petitioners have computed RPO requirement (which is already included in the power purchase cost) as shown in the following table:

**Table 46: Renewable Purchase Obligation and Cost as submitted by the Petitioners for Control Period**

Sr.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
<b>A</b>	<b>RPO Obligations (%)</b>	<b>18.50%</b>	<b>20.00%</b>	<b>21.50%</b>	<b>23.00%</b>	<b>24.50%</b>
1	Solar	9.00%	10.00%	11.00%	12.00%	13.00%
2	Other than Solar	9.50%	10.00%	10.50%	11.00%	11.50%
<b>B</b>	<b>Ex-Bus RPO Requirement based on MoD (MUs) excluding Hydro</b>	<b>14,249.10</b>	<b>16,734.71</b>	<b>19,374.12</b>	<b>22,220.80</b>	<b>25,169.76</b>
1	Solar	6,932.00	8,367.35	9,912.34	11,593.46	13,355.38
2	Other than Solar	7,317.11	8,367.35	9,461.78	10,627.34	11,814.38
<b>C</b>	<b>Energy Available from Existing Sources (MUs)</b>	<b>12,070.46</b>	<b>14,298.57</b>	<b>15,035.07</b>	<b>15,035.07</b>	<b>15,032.32</b>
1	Solar	7,554.97	9,764.47	10,500.97	10,500.97	10,500.97
2	Other than Solar	4,515.49	4,534.10	4,534.10	4,534.10	4,531.35
<b>D</b>	<b>Shortfall (MUs)</b>	<b>2,801.62</b>	<b>3,833.25</b>	<b>4,927.68</b>	<b>7,185.73</b>	<b>10,137.44</b>
1	Solar	-	-	-	1,092.49	2,854.42
2	Other than Solar	2,801.62	3,833.25	4,927.68	6,093.23	7,283.02
<b>E</b>	<b>Extra Power Available for Sale after meeting RPO obligations which needs to be sold (MUs)</b>	<b>622.97</b>	<b>1,397.11</b>	<b>588.63</b>	-	-
1	Solar	622.97	1,397.11	588.63	-	-
2	Other than Solar	-	-	-	-	-
<b>G</b>	<b>Renewable Energy Purchase Rate (Paisa/kWh)</b>					
1	Solar	345.85	322.15	316.47	316.47	316.47
2	Other than Solar	549.83	549.91	549.65	549.37	549.29
<b>H</b>	<b>Renewable Energy Purchase from Existing Source (Rs Crores)</b>	<b>5,095.67</b>	<b>5,638.96</b>	<b>5,815.37</b>	<b>5,814.11</b>	<b>5,812.24</b>
1	Solar	2,612.89	3,145.63	3,323.21	3,323.21	3,323.21
2	Other than Solar	2,482.77	2,493.33	2,492.16	2,490.90	2,489.03
<b>I</b>	<b>Renewable Energy Purchase for Shortage Power (Rs Crores)</b>	<b>1,540.43</b>	<b>2,107.93</b>	<b>2,708.48</b>	<b>3,693.18</b>	<b>4,903.83</b>
1	Solar	-	-	-	345.74	903.33
2	Other than Solar	1,540.43	2,107.93	2,708.48	3,347.44	4,000.50
<b>J</b>	<b>Total Renewable Energy Purchase to meet RPO (Rs Crores)</b>	<b>6,636.09</b>	<b>7,746.89</b>	<b>8,523.85</b>	<b>9,507.30</b>	<b>10,716.08</b>

Sr.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	Solar	2,612.89	3,145.63	3,323.21	3,668.95	4,226.54
2	Other than Solar	4,023.20	4,601.26	5,200.64	5,838.35	6,489.54
<b>K</b>	<b>Renewable Energy Sale Rate for Surplus Power (Paisa/kWh)</b>					
1	Solar	345.27	345.27	345.27	345.27	345.27
2	Other than Solar	345.27	345.27	345.27	345.27	345.27
<b>L</b>	<b>Revenue from sale of additional Renewable Energy (Rs Crores)</b>	<b>967.33</b>	<b>1,323.52</b>	<b>1,701.40</b>	<b>2,481.05</b>	<b>3,500.20</b>
1	Solar	-	-	-	377.21	985.56
2	Other than Solar	967.33	1,323.52	1,701.40	2,103.84	2,514.64
<b>M</b>	<b>Net additional cost to be borne due to shortage of RPO (Rs Crores)</b>	<b>573.10</b>	<b>784.40</b>	<b>1,007.08</b>	<b>1,212.13</b>	<b>1,403.63</b>
1	Solar	-	-	-	(31.47)	(82.23)
2	Other than Solar	573.10	784.40	1,007.08	1,243.61	1,485.86

## Commission's Analysis

2.73 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. In the said Regulations, the Commission has specified Renewable Purchase Obligation (RPO) for Solar and Non-Solar sources for the Period from FY 2022-23 to FY 2026-27.

2.74 Accordingly, the Commission has computed quantum of Solar and Non-Solar power purchase requirement for RPO compliance based on the total energy requirement admitted for the Control Period from FY 2022-23 to FY 2026-27 excluding requirement met through hydro sources of power, as shown in the table below:

**Table 47: Renewable Purchase Obligation and Cost as computed by the Commission for Control Period**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Solar (%)	9.00%	10.00%	11.00%	12.00%	13.00%
Other than Solar (%)	9.50%	10.00%	10.50%	11.00%	11.50%
<b>Total (%)</b>	<b>18.50%</b>	<b>20.00%</b>	<b>21.50%</b>	<b>23.00%</b>	<b>24.50%</b>
<b>Energy Requirement for Computation of RPO</b>					
Energy Requirement (MU)	85,696.18	91,666.86	97,663.42	1,04,035.97	1,11,862.75
Energy Procurement from Hydro Sources (MU)	6,639.86	6,744.25	7,053.49	7,220.25	7,246.89
<b>Energy Requirement excluding Hydro (MU)</b>	<b>79,056.32</b>	<b>84,922.62</b>	<b>90,609.93</b>	<b>96,815.72</b>	<b>1,04,615.87</b>
<b>Power purchase to fulfil RPO</b>					
Solar (MU)	7,115.07	8,492.26	9,967.09	11,617.89	13,600.06
Non-Solar (MU)	7,510.35	8,492.26	9,514.04	10,649.73	12,030.82
<b>Total (MU)</b>	<b>14,625.42</b>	<b>16,984.52</b>	<b>19,481.13</b>	<b>22,267.62</b>	<b>25,630.89</b>
<b>Energy available from existing RE Plants</b>					
Solar (MU)	7,554.97	9,764.47	10,500.97	10,500.97	10,500.97
Non-Solar (MU)*	5,416.00	7,478.00	7,478.00	7,478.00	7,478.00

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
<b>Total (MU)</b>	<b>12,970.97</b>	<b>17,242.47</b>	<b>17,978.97</b>	<b>17,978.97</b>	<b>17,978.97</b>
<b>Shortfall / (Surplus)</b>					
Solar (MU)	(439.90)	(1,272.21)	(533.87)	1,116.92	3,099.10
Non-Solar (MU)	2,094.35	1,014.26	2,036.04	3,171.73	4,552.82
<b>Total (MU)</b>	<b>1,654.45</b>	<b>(257.94)</b>	<b>1,502.17</b>	<b>4,288.65</b>	<b>7,651.92</b>

\* Revised availability form existing tied up sources submitted by the Petitioners in reply to data gaps

- 2.75 From above, it can be observed that the Petitioners will be having surplus solar power availability in FY 2022-23 to FY 2024-25, whereas in FY 2025-26 and FY 2026-27, there will be shortfall in availability for compliance of Solar RPO. Further, there will be shortfall in availability for compliance of Non Solar RPO during each year of the Control Period. The Commission through data gaps sought preparedness of the Petitioners to meet the RPO shortfall projected during the Control Period. In reply, the Petitioners have submitted that they signed agreement with Small Hydro power plants, Municipal Solid Waste based power plants, which are expected to be commissioned during FY 2022-23. Further, they are also considering the proposal to purchase 1200 MW of wind power from SECI and 750 MW from hybrid power station (Solar + Wind) from RUMS.
- 2.76 On the basis of above, the Commission has considered that the Petitioners shall be able to fulfil its RPO specified for the Control Period and accordingly, the Commission has also considered the cost of additional power purchase for compliance of RPO shortfall in the Power Purchase Cost. Further, as observed from above table, the Petitioner will be having surplus availability of power from solar sources and shortfall in availability from Non-Solar sources during FY 2022-23 to FY 2024-25. Accordingly, considering the Petitioner submission for compliance of Non-Solar RPO, the Commission considered that the Petitioners shall be able to at least achieve 85% of the Non-Solar RPO target. Accordingly, for fulfilment of Non-Solar RPO shortfall, the Commission has adjusted the surplus from Solar RPO with shortfall in Non-Solar procurement as per provision of Regulation 3.1 of the MPERC (Co-generation and generation of electricity from Renewable sources of energy) (Revision-II) Regulations, 2021, for FY 2022-23 to FY 2025-26.
- 2.77 After adjustment, shortfall if any, is considered to be purchased through additional procurements. For fulfilment of shortfall in Solar RPO, Solar power procurement has been considered at rate of Rs. 2.62/kWh i.e., Rate of latest signed PPA. For fulfilment of shortfall in Non- Solar RPO, Non-Solar power procurement has been considered at rate of Rs. 2.77/kWh, i.e., Rate discovered in SECI's latest competitive bidding from which MPPMCL has proposed to procure power.
- 2.78 Based on the above, the cost of renewable energy power purchase has been worked out for the compliance of RPO as shown in the table below:

**Table 48: RE power purchase cost for RPO compliance for FY 2022-23 to FY 2026-27**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
<b>Additional Power purchase requirement for fulfilment of RPO</b>					
Solar (MU)	0.00	0.00	0.00	1,116.92	3,099.10
Non-Solar (MU)	1,654.45	0.00	1,502.17	3,171.73	4,552.82
<b>Total (MU)</b>	<b>1,654.45</b>	<b>0.00</b>	<b>1,502.17</b>	<b>4,288.65</b>	<b>7,651.92</b>
<b>Renewable Energy purchase Rates for additional power procurement</b>					
Solar (for existing Renewable sources) (Rs./kWh)	0.00	0.00	0.00	2.62	2.62
Other than Solar (Rs./kWh)	2.77	2.77	2.77	2.77	2.77
<b>Power Purchase Cost for meeting shortfall in RPO</b>					
Solar (Rs. Crore)	0.00	0.00	0.00	292.63	811.96
Non-Solar (Rs. Crore)	458.28	0.00	416.10	878.57	1,261.13
<b>Total (Rs. Crore)</b>	<b>458.28</b>	<b>0.00</b>	<b>416.10</b>	<b>1,171.20</b>	<b>2,073.10</b>
<b>Renewable Energy purchase Rates for power procurement from existing stations</b>					
Solar (for existing Renewable sources) (Rs./kWh)	3.46	3.22	3.16	3.16	3.16
Other than Solar (Rs./kWh)	5.50	5.50	5.50	5.50	5.50
<b>Power Purchase Cost from existing stations</b>					
Solar (Rs. Crore)	2,614	3,144	3,318	3,318	3,318
Non-Solar (Rs. Crore)	2,979	4,113	4,113	4,113	4,113
<b>Total (Rs. Crore)</b>	<b>5,593</b>	<b>7,257</b>	<b>7,431</b>	<b>7,431</b>	<b>7,431</b>
<b>Total Power Purchase cost for RPO Compliance</b>					
Solar (Rs. Crore)	2,614	3,144	3,318	3,611	4,130
Non-Solar (Rs. Crore)	3,437	4,113	4,529	4,991	5,374
<b>Total (Rs. Crore)</b>	<b>6,051</b>	<b>7,257</b>	<b>7,847</b>	<b>8,602</b>	<b>9,504</b>
<b>Weighted Average Energy Purchase Rates for RE</b>					
Solar (for existing Renewable sources) (Rs./kWh)	3.46	3.22	3.16	3.11	3.04
Other than Solar (Rs./kWh)	4.86	5.50	5.04	4.69	4.47

2.79 The Cost of purchase from Solar and Non-Solar Sources has been considered in the power purchase cost shown in table 45 of this Order.

## Management of Surplus Energy

### Petitioners' Submission

2.80 As per the power supply position, the State is expected to have surplus energy in most of the months of the Control Period. Currently, MPPMCL sells surplus power through Power Exchange (IEX) at prevailing rates. MPPMCL tries to sell such surplus power at a cost which is determined by the market conditions prevailing at that time.

2.81 The average IEX rate for the past 36 months (From June 2019 to May-2021) is Rs 3.45 per unit. Hence, for the purpose of computation of revenue from surplus energy, the average rate has been considered as Rs. 3.45 per unit for FY 2022-23 to FY 2026-27.

2.82 The energy surplus for DISCOMs vis-à-vis overall energy availability and energy

requirement as well as the details of revenue from sales of energy are shown in the table below. This revenue has been subtracted from the variable power purchase costs, while computing the total power purchase costs of the DISCOMs. Further, the Petitioners have also considered the net benefit on account of variable cost based on surplus energy.

**Table 49: Management of Surplus Energy as submitted by Petitioners**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Ex-Bus Availability (MU)	110,368	114,066	114,944	115,821	119,570
Ex-Bus Energy Required by DISCOM (MU)	84,679	91,373	97,813	104,313	110,435
Backdown of Power including Surplus Sale of Power (MU)	25,689	22,693	17,132	11,508	9,134
Backdown (MU)	22,386	19,021	14,493	9,977	8,342
Surplus Units available for Sale (MU)	3,303	3,672	2,638	1,531	792
IEX Rate (Paisa/kWh)	345	345	345	345	345
Revenue from Sale of Surplus Power (Rs. Crore)	1,140	1,268	911	529	274
Purchase Cost of Surplus Power- Variable (Rs. Crore)	967	1,124	841	470	268
<b>Total saving in variable cost of surplus energy from sale of surplus energy (Rs. Crore)</b>	<b>174</b>	<b>144</b>	<b>70</b>	<b>59</b>	<b>6</b>

## Commission's Analysis

- 2.83 The Commission observed that after meeting the energy requirement and meeting demand of consumers, the availability from some of the generating stations would remain unutilized by the DISCOMs. Therefore, it is expected that various rebates given to consumers would encourage them to utilise some of the surplus power.
- 2.84 Further, the Commission has considered the actual rate discovered in IEX from February, 2021 to January, 2022 excluding abnormal months (August, September & October) as the reference rate i.e., Rs. 3.33/kWh for sale of surplus power through IEX/ PXIL /bilateral arrangements /bidding for the Control Period from FY 2022-23 to FY 2026-27.
- 2.85 As the sale of surplus energy has been considered at Rs 3.33 /kWh, stations having energy rate more than Rs. 3.33/kWh have been considered to be backed-down. Further, the Commission directs the Petitioners to sell this remaining surplus power through Power Exchanges, bilateral arrangements or through bidding in order to maximize the revenue.
- 2.86 Further, the Commission has observed that the MPPMCL has entered into Bulk Power Supply agreement with MPIDC (erstwhile MPAKVN) for supply of 60 MW power. Further, MPIDC has been purchasing the remaining requirement of energy from MPPMCL only. As the projected requirement of MPIDC is presently not admitted for FY 2022-23 to FY 2026-27 in view of the delayed filing of the Petition by MPIDC, the Commission has presently considered the energy requirement of 542 MUs for FY 2022-23, 577 MUs for FY 2023-24, 614 MUs for FY 2024-25, 653 MUs for FY 2025-26 and 695 MUs for FY 2026-27 as submitted by the MPIDC in petition for ARR and Tariff determination for FY 2022-23 to FY 2026-27 and average rate of power purchase of Rs. 3.78/kWh for MPIDC as admitted by the Commission in its Retail Tariff Order for FY 2021-22. Any under /over recovery shall be adjusted at the time of truing up of FY 2022-23 to FY 2026-27.



2.87 Accordingly, based on the above, the details of savings in the power purchase cost through sale of surplus power has been shown in the table below for the Control Period:

**Table 50 : Details of saving in power purchase cost through sale of Surplus energy**

Sr. No.	Particulars	Reference	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	Total Energy Availability including additional availability due to purchase of additional RE Power RPO Compliance (MU)	A	1,13,903.47	1,17,456.69	1,20,087.30	1,23,236.53	1,28,039.91
2	Total Energy Requirement (MU)	B	85,696.18	91,666.86	97,663.42	1,04,035.97	1,11,862.75
3	Total Energy surplus (MU)	C=A-B	28,207.29	25,789.83	22,423.88	19,200.56	16,177.16
4	Energy Backdown (MU)	D	8,208.84	10,605.14	10,442.48	12,639.08	10,208.97
5	Energy Available for surplus sale of power (MU)	E=C-D	19,998.45	15,184.69	11,981.40	6,561.48	5,968.19
7	Sale of power to MPIDC (MU)	F	541.70	576.50	613.70	653.20	695.30
8	Average Power Purchase Cost of MPIDC as per Tariff Order for FY 2021-22 (Rs. /kWh)	G	3.78	3.78	3.78	3.78	3.78
9	Revenue from sale of power MPIDC (Rs. Crore)	H=F*G/10	204.76	217.92	231.98	246.91	262.82
10	Net Surplus Energy available for sale in Power Exchange (MU)	I=E-F	19,456.75	14,608.19	11,367.70	5,908.28	5,272.89
11	Per unit cost of sale of power through energy exchange (Paisa/kWh)	J	3.33	3.33	3.33	3.33	3.33
12	Revenue from Sale of Power through Power Exchange (Rs Crore)	K=I*J/10	6,479.10	4,864.53	3,785.44	1,967.46	1,755.87
13	Total Revenue from sale of surplus power in IEX and MPIDC (Rs. Crore)	L=H+K	6,683.86	5,082.44	4,017.42	2,214.37	2,018.69
14	Energy Charge of Surplus Energy (Rs Crore)	M	6,085.09	4,683.51	3,775.79	2,100.42	1,993.53
15	<b>Total saving in Power Purchase Cost by sale of surplus Energy (Rs. Crore)</b>	<b>N=L-M</b>	<b>598.77</b>	<b>398.93</b>	<b>241.64</b>	<b>113.94</b>	<b>25.17</b>

2.88 Further, considering the Petitioner's submissions and stakeholders' views, the Commission has incorporated various rebates in the tariff design, which may lead to increase in sales of DISCOMs and reduce the quantum of surplus power.

## Inter-State Transmission Charges

### Petitioners' Submissions

- 2.89 The Petitioners have submitted that Inter-State transmission charges consist of the charges for transmission system of WR, NR and ER. The Petitioners have considered Inter-State Transmission Charges for FY 2020-21 as per actual figures from power purchase statement and the same has been increased annually by 4% for each year for FY 2022-23 to FY 2026-27.
- 2.90 The Petitioners have further submitted that the Inter-State transmission costs have then been allocated to DISCOMs based on energy allocation from Central Generating Stations and Ex-bus energy requirement, which is as follows:

**Table 51: Inter-State Transmission Charges claimed for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
State	2,627.36	2,732.45	2,841.75	2,955.42	3,073.64

### Commission's Analysis

- 2.91 Inter State transmission charges consist of charges to be paid for transmission systems of Western, Eastern and Northern Regions. The Commission observed that Inter-State transmission charges during FY 2014-15 to FY 2018-19 increased by a CAGR of 5.75%. However, the Inter-State transmission charges increased by 44.80% in FY 2019-20 with respect to FY 2018-19, which is not in line with the increase in previous years. Accordingly, considering that the Petitioner has claimed nominal increase of 4% in Inter-State transmission charges for each year of the Control Period, which is less than the increase observed in previous years, the Commission has considered the escalation rate of 4% for increase in Inter State Transmission Charges during each year of the Control Period. The actual Inter -State transmission charges of FY 2020-21 have been escalated by 4% twice to arrive at the Inter-State transmission charges for FY 2022-23. Thereafter, Inter-State Transmission charges for subsequent year of the Control Period has been arrived at by escalating the charges for FY 2022-23 by 4% each year.
- 2.92 Inter State Transmission charges admitted for the Control Period has been shown in the following table:

**Table 52: Inter-State Transmission Charges admitted for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
State	2,627.36	2,732.45	2,841.75	2,955.42	3,073.64

## Intra-State Transmission Charges and SLDC Charges

### Petitioners' Submission

- 2.93 The Petitioners have considered Intra-State Transmission Charges for FY 2022-23 and FY 2023-24 as per MPPTCL Transmission Tariff Order for the Control Period from FY 2019-20 to FY 2023-24. Further, from FY 2024-25 to FY 2026-27 has considered 4% increment in each year.
- 2.94 The Petitioners have considered actual SLDC Charges of FY 2020-21 and has considered 4% increment in each year for FY 2022-23 to FY 2026-27.
- 2.95 Further the Petitioners have allocated Intra-State transmission charges including SLDC charges as per Ex-bus Energy requirement. which is indicated in the table below:

**Table 53: Intra-State Transmission Charges and SLDC charges claimed for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Sr. No	Transmission Charges	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	East DISCOM	1,258.16	1,286.14	1,337.59	1,391.09	1,446.73
2	Central DISCOM	1,482.02	1,499.32	1,559.29	1,621.66	1,686.53
3	West DISCOM	1,502.08	1,538.56	1,600.10	1,664.11	1,730.67
4	<b>MP State</b>	<b>4,242.26</b>	<b>4,324.02</b>	<b>4,496.98</b>	<b>4,676.86</b>	<b>4,863.93</b>
Sr. No	SLDC Charges	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	East DISCOM	4.23	4.40	4.57	4.76	4.95
2	Central DISCOM	4.50	4.68	4.87	5.06	5.27
3	West DISCOM	5.42	5.63	5.86	6.09	6.34
4	<b>MP State</b>	<b>14.15</b>	<b>14.71</b>	<b>15.30</b>	<b>15.91</b>	<b>16.55</b>
Sr. No	Transmission Charges including SLDC Charges	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	East DISCOM	1,262.39	1,290.54	1,342.16	1,395.85	1,451.68
2	Central DISCOM	1,486.52	1,504.00	1,564.16	1,626.73	1,691.80
3	West DISCOM	1,507.50	1,544.19	1,605.96	1,670.20	1,737.01
4	<b>MP State</b>	<b>4,256.41</b>	<b>4,338.73</b>	<b>4,512.28</b>	<b>4,692.77</b>	<b>4,880.49</b>

### Commission's Analysis

- 2.96 The Commission has determined Intra –State Transmission Charges for the period from FY 2019-20 to FY 2023-24 in the MPPTCL MYT order dated 19<sup>th</sup> May, 2021 in Petition No. 45/2020. Accordingly, Commission has considered Intra-State transmission charges till FY 2023-24 as per aforesaid MYT Order. For FY 2024-25 to FY 2026-27, Commission has considered escalation of 1.92% of Intra-State transmission charges for FY 2023-24, which is the increase in approved transmission charges in FY 2023-24 as compared to transmission charges of FY 2022-23.
- 2.97 The Commission has admitted SLDC Charges for FY 2021-22 vide SLDC Tariff Order dated 23<sup>rd</sup> November, 2020 in Petition No. 46 of 2019. Accordingly, the same has been considered for the Control Period without any escalation, as reducing trend has been

observed in SLDC Charges in previous years.

2.98 Accordingly, Intra-State transmission charges including SLDC charges for FY 2022-23 to FY 2026-27 have been admitted as shown in the table below:

**Table 54 : Intra-State Transmission Charges including SLDC Charges admitted for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Sr. No	Intra-State Transmission Charges	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	East DISCOM	1,258.16	1,286.14	1,310.93	1,336.19	1,361.94
2	West DISCOM	1,502.08	1,538.56	1,568.21	1,598.44	1,629.24
3	Central DISCOM	1,482.02	1,499.32	1,528.22	1,557.67	1,587.69
4	<b>State</b>	<b>4,242.26</b>	<b>4,324.02</b>	<b>4,407.36</b>	<b>4,492.30</b>	<b>4,578.88</b>
Sr. No	SLDC Charges	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	East DISCOM	2.35	2.35	2.35	2.35	2.35
2	West DISCOM	2.82	2.82	2.82	2.82	2.82
3	Central DISCOM	2.80	2.80	2.80	2.80	2.80
4	<b>State</b>	<b>7.98</b>	<b>7.98</b>	<b>7.98</b>	<b>7.98</b>	<b>7.98</b>
Sr. No	Transmission Charges including SLDC Charges	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	East DISCOM	1,260.51	1,288.49	1,313.28	1,338.55	1,364.30
2	West DISCOM	1,504.90	1,541.38	1,571.04	1,601.26	1,632.07
3	Central DISCOM	1,484.82	1,502.12	1,531.02	1,560.47	1,590.49
4	<b>State</b>	<b>4,250.24</b>	<b>4,332.00</b>	<b>4,415.33</b>	<b>4,500.28</b>	<b>4,586.86</b>

2.99 The Commission has allowed the terminal benefits and pension expenses on “pay as you go” principle payable to MP Transco. The actual amount of terminal benefits shall be considered by the Commission in the true-up petition to be filed by MPPTCL after exercising prudence check.

## **MPPMCL Costs: Details and DISCOM-wise Allocation**

### **Petitioners’ Submission**

2.100 As per item No.8 (ii) of State Govt. Notification No.2260-F-3-24-2009-XIII dated 19<sup>th</sup> March, 2013 to meet its own expenses, M.P. Power Management Company Limited (MPPMCL) has been supplying power to the DISCOMs at the tariff determined/admitted by the Commission and its own expenses on actual basis in proportion to the energy drawl by respective DISCOMs.

2.101 Further, 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 are 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 for the Control Period from FY 2022-23 to FY 2026-27 are mentioned in the table below:

**Table 55: MPPMCL Cost claimed for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Sl. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
I.	Revenue from operations (including Revenue Subsidy)	-	-	-	-	-
II.	Other income	187.74	206.52	227.17	249.88	274.87
III.	Income from other business allocated to Licensed business					
<b>IV</b>	<b>Total Revenue (I + II+III)</b>	<b>187.74</b>	<b>206.52</b>	<b>227.17</b>	<b>249.88</b>	<b>274.87</b>
V	Expenses:					
	Purchase of Power from MP Genco	-	-	-	-	-
	Purchase of Power from Other Sources	36.60	35.26	33.78	32.16	30.38
	Inter-State Transmission charges	47.37	52.11	57.32	63.05	69.36
	Intra-State Transmission (MP Transco) Charges	-	-	-	-	-
	SLDC Charges	-	-	-	-	-
	Depreciation and amortization expenses	7.57	7.77	7.97	8.17	8.37
	Interest & Finance Charges	262.95	289.24	318.17	349.99	384.98
	Repairs and Maintenance	3.56	3.91	4.30	4.73	5.21
	Employee costs	70.31	72.41	74.59	76.82	79.13
	Administration and General expenses	28.25	31.07	34.18	37.60	41.36
	Net prior period credit charges	-	-	-	-	-
	Other Debits, Write-offs	4.78	5.26	5.78	6.36	7.00
	Lease Rental	-	-	-	-	-
	<b>Total Expenses</b>	<b>461.38</b>	<b>497.04</b>	<b>536.10</b>	<b>578.89</b>	<b>625.79</b>
VI	Profit before exceptional and extraordinary items and tax (IV-V)	(273.6)	(290.5)	(308.9)	(329.0)	(350.9)
VII	Exceptional items	-	-	-	-	-
<b>VIII</b>	<b>Profit before extraordinary items and tax (VI – VII)</b>	<b>(273.6)</b>	<b>(290.5)</b>	<b>(308.9)</b>	<b>(329.0)</b>	<b>(350.9)</b>

## Commission's Analysis

- 2.102 The Commission has observed that most of the expenses included in MPPMCL cost relates to power purchase. The Commission in previous Tariff Orders had directed the Petitioner to include power purchase expense booked towards MPPMCL cost under DISCOMs power purchase expense. The Petitioners have submitted that the major cost under power purchase is towards payment of bills, which could not be passed on to DISCOMs through monthly bills, open access charges paid for banking of power and short-term power purchase and sale. However, from FY 2021-22 onwards all the bills are likely to be passed through the monthly bills to the DISCOMs, hence, it will be considered in ARR of DISCOMs.
- 2.103 The Commission has observed that MPPMCL has been doing exchange/banking of energy with third parties outside the State of Madhya Pradesh whereby during the availability of surplus power in the State, electricity is supplied to the parties having requirement of power and in case 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 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 power purchase expense under MPPMCL cost.

- 2.104 Further, the Commission has admitted only the expenses of MPPMCL towards Operation and Maintenance Expenses and depreciation. The Interest and Finance charges shall be considered at the time of True up subject to Prudence check.
- 2.105 Further, the Commission has considered other income of MPPMCL for the Control Period as per average of actual income of last three years as the major components of other income are on account of rebate and interest received on timely payment of bills. Accordingly, the net MPPMCL cost admitted in this Order is surplus income for the Control Period. Further, the expenses related to power purchase, if any, incurred by MPPMCL would be appropriately considered at the time of truing up for FY 2022-23 to FY 2026-27, after prudence check.
- 2.106 MPPMCL Cost/ Income admitted by the Commission for the Control Period from FY 2022-23 to FY 2026-27 has been shown in the table below:

**Table 56: MPPMCL Costs/ Income admitted by the Commission for  
FY 2022-23 to FY 2026-27 (Rs. Crore)**

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	Depreciation and Amortization	7.57	7.77	7.97	8.17	8.37
2	Employee Expenses	70.31	72.41	74.59	76.82	79.13
3	R&M Expenses	3.56	3.91	4.30	4.73	5.21
4	A&G Expenses	28.25	31.07	34.18	37.60	41.36
5	<b>Total Expenses</b>	<b>109.68</b>	<b>115.17</b>	<b>121.04</b>	<b>127.33</b>	<b>134.07</b>
6	Other Income	568.84	568.84	568.84	568.84	568.84
7	<b>Net MPPMCL Cost/ (Income)</b>	<b>(459.15)</b>	<b>(453.66)</b>	<b>(447.79)</b>	<b>(441.51)</b>	<b>(434.77)</b>

## Summary of Power Purchase Cost

### Petitioners' Submission

2.107 Details of total power purchase cost as filed by the Petitioners are given in the table below:

**Table 57: Power Purchase Cost as filed by Petitioners for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Sr. No	Particulars	FY 2022-23			FY 2023-24			FY 2024-25			FY 2025-26			FY 2026-27		
		Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total	Fixed Charge	Energy Charge	Total
1	Gross Power Purchase Cost	11,427	19,032	30,459	11,656	21,150	32,806	12,060	23,508	35,568	12,384	25,946	38,330	12,884	28,305	41,190
2	Less: Saving in variable cost of surplus energy from sale of surplus energy		174	174		144	144		70	70		59	59		6	6
3	Gross Power Purchase Cost after Saving in Variable Cost	11,427	18,858	30,285	11,656	21,006	32,662	12,060	23,438	35,498	12,384	25,887	38,271	12,884	28,300	41,184
4	Add: MPPMCL Cost	274		274	291		291	309		309	329		329	351		351
5	Add: Cost due to RPO		573	573		784	784		1,007	1,007		1,212	1,212		1,404	1,404
6	<b>Net Power Purchase Cost</b>	<b>11,701</b>	<b>19,432</b>	<b>31,132</b>	<b>11,946</b>	<b>21,790</b>	<b>33,737</b>	<b>12,369</b>	<b>24,445</b>	<b>36,814</b>	<b>12,713</b>	<b>27,099</b>	<b>39,812</b>	<b>13,235</b>	<b>29,703</b>	<b>42,938</b>
7	Inter-state Transmission Charges	2,627		2,627	2,732		2,732	2,842		2,842	2,955		2,955	3,074		3,074
8	MPPTCL Charges including SLDC Charges	4,256		4,256	4,339		4,339	4,512		4,512	4,693		4,693	4,880		4,880
9	<b>Total Power Purchase Cost</b>	<b>18,584</b>	<b>19,432</b>	<b>38,016</b>	<b>19,017</b>	<b>21,790</b>	<b>40,808</b>	<b>19,723</b>	<b>24,445</b>	<b>44,168</b>	<b>20,361</b>	<b>27,099</b>	<b>47,461</b>	<b>21,189</b>	<b>29,703</b>	<b>50,892</b>

### Commission's Analysis

2.108 The total power purchase cost as admitted by the Commission for the Control Period from FY 2022-23 to FY 2026-27 is summarized in the following table:

**Table 58 : Total Power Purchase cost admitted for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Sr. No.	Particulars	UoM	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
A	Fixed Charges	Rs. Crore	11,562.43	11,665.86	11,682.84	11,684.02	12,054.13
B	Energy Charge including additional cost of RPO compliance	Rs. Crore	19,379.14	21,802.25	23,839.37	26,041.89	28,572.40
C	MPPMCL Cost/ (Income)	Rs. Crore	(459.15)	(453.66)	(447.79)	(441.51)	(434.77)
D	Less: Saving from Sale of Surplus Power	Rs. Crore	(598.77)	(398.93)	(241.64)	(113.94)	(25.17)
<b>E</b>	<b>Power Purchase Cost</b>	Rs. Crore	<b>29,883.64</b>	<b>32,615.52</b>	<b>34,832.78</b>	<b>37,170.46</b>	<b>40,166.59</b>
F	Inter State Transmission Charges (PGCIL)	Rs. Crore	2,627.36	2,732.45	2,841.75	2,955.42	3,073.64
G	Intra-State Transmission Charges including SLDC Charges	Rs. Crore	4,250.24	4,332.00	4,415.33	4,500.28	4,586.86
<b>H</b>	<b>Net Power Purchase Cost including Transmission Charges</b>	Rs. Crore	<b>36,761.23</b>	<b>39,679.97</b>	<b>42,089.86</b>	<b>44,626.16</b>	<b>47,827.08</b>
I	Ex-Bus Energy Requirement	MUs	85,696.18	91,666.86	97,663.42	1,04,035.97	1,11,862.75
<b>J</b>	<b>Power Purchase Rate at Ex-Bus (J = E/I*10)</b>	<b>Rs/Unit</b>	<b>3.49</b>	<b>3.56</b>	<b>3.57</b>	<b>3.57</b>	<b>3.59</b>
K	Input at G-T interface	MUs	83,800.53	89,393.81	95,312.44	1,01,636.37	1,08,396.99
<b>L</b>	<b>Power Purchase Rate at State Periphery (L=(E+F)/K*10)</b>	<b>Rs/Unit</b>	<b>3.88</b>	<b>3.95</b>	<b>3.95</b>	<b>3.95</b>	<b>3.99</b>
M	Input at T-D interface	MUs	81,604.96	87,051.69	92,815.25	98,973.50	1,05,556.99
<b>N</b>	<b>Power Purchase Rate at DISCOMs Periphery (N=H/M*10)</b>	<b>Rs/Unit</b>	<b>4.50</b>	<b>4.56</b>	<b>4.53</b>	<b>4.51</b>	<b>4.53</b>
O	Total Sales	MUs	68,801.64	73,613.25	78,719.78	84,190.20	90,052.95
<b>P</b>	<b>Power Purchase Per Unit Sales (P=H/O*10)</b>	<b>Rs/Unit</b>	<b>5.34</b>	<b>5.39</b>	<b>5.35</b>	<b>5.30</b>	<b>5.31</b>

## Pooled Power Purchase Cost

2.109 The Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 have stipulated the provision for determining the pooled cost of power purchase for the purpose of computing the Floor and Forbearance price of Renewable Energy Certificates. The relevant provision of the Regulation is reproduced below:

*“5. Eligibility and Registration for Certificates:*

(1)

:

*c. it sales the electricity generated either (i) to the distribution licensee of the area in which the eligible entity is located, at a price not exceeding the pooled cost of power purchase of such distribution licensee, or (ii) to any other licensee or to an open access consumer at a mutually agreed price, or*



through power exchange at market determined price.

**Explanation.-** for the purpose of these regulations ‘Pooled Cost of Purchase’ means the weighted average pooled price at which the distribution licensee has purchased the electricity including cost of self generation, if any, in the previous year from all the energy suppliers long-term and short-term, but excluding those based on renewable energy sources, as the case may be.”

2.110 Accordingly, the pooled power purchase cost has been computed considering ex-bus power purchase excluding Renewable Energy sources as mentioned in the table below:

**Table 59 : Pooled Power Purchase cost for FY 2022-23 to FY 2026-27**

Sr. No.	Particulars	UoM	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
A	Power Purchase Requirement excluding Renewable Energy Sources at Ex- Bus	MUs	71,070.76	74,682.34	78,182.29	81,768.35	86,231.87
B	Total Power Purchase Cost excluding Renewable Energy Sources	Rs. Crore	23,832.54	25,358.46	26,985.47	28,568.05	30,662.29
C	<b>Pooled Power Purchase Cost (C=B/A*10)</b>	<b>Rs/Unit</b>	<b>3.35</b>	<b>3.40</b>	<b>3.45</b>	<b>3.49</b>	<b>3.56</b>

## Capital Expenditure Plans/ Capitalization of Assets

### Petitioners Submission

#### Investments

- 2.111 DISCOMs are undertaking various projects in the forthcoming years for System Strengthening and reduction of distribution losses. The focus is on creation of new 33/11 kV sub-stations, bifurcation of overloaded 33 kV feeders, bifurcation of agricultural feeders at 11 kV level, Additional / Augmentation of PTRs, installation of DTRs, conversion of bare LT line into AB Cables, replacement of service lines, etc.
- 2.112 The overall distribution loss of the system is the sum of technical and commercial losses. The technical losses are mainly due to inadequate infrastructure, which needs Strengthening, Renovation and Upgradation of the capacity of lines, Sub-Stations and associated infrastructure. The commercial losses are mainly due to 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 dedicated efforts. DISCOMs are working on both the issues and the distribution losses have considerably reduced, though not up to the normative loss levels.
- 2.113 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. The Revamped Reforms-based and Results-linked, Distribution Sector Scheme seeks to improve the operational efficiencies and financial sustainability, by providing financial assistance to DISCOMs for strengthening of supply infrastructure. The assistance is conditional on the reforms being carried out. As per the guidelines issued, the Revamped Distribution Sector Scheme has the following parts:

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

- 2.114 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;
- 2.115 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:**

- 2.116 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.
- 2.117 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. In view of the reduction in distribution losses, 60% grant will be provided by the government for the proposed works and for the construction / development of basic infrastructure related to the strengthening and modernization of the distribution system. The balance amount will have to be arranged by the distribution companies themselves.
- 2.118 As per the guidelines of the scheme, the DISCOMs are required to submit the Action Plan and DPRs in consultation with the Nodal Agency / Ministry of Power. The Action Plan and DPRs shall be scrutinized by the Nodal Agency and approved by the Monitoring Committee (constituted by Ministry of power, GoI vide Office Memorandum No. 10/03/2021-UR&SI-II (E-258311) dated 20th July 2021) with such modifications, as may be necessary to achieve the objectives of the Scheme. The Action Plans have been prepared and submitted by the DISCOMs to the Nodal Agency on the recommendation of the Distribution Reforms Committee and with the approval of the State Cabinet within the timeline of 31<sup>st</sup> December, 2021. The Monitoring Committee meeting is scheduled to take place in February 2022 after which the final submission of proposals will be done after duly incorporating the modifications as suggested by the Monitoring Committee and with the approval of State Government. As the DISCOMs are taking part in the aforesaid scheme and hence, would incur capital expenditure in the future years. Therefore, it is very important to consider the capex against the aforesaid scheme in order to have true impact on ARR and Tariff for the control period.
- 2.119 Petitioners further submitted that they understand that the DISCOMs need to obtain appropriate approval for their capital expenditure in accordance with the guidelines for capital expenditure by licensees under the provisions of Regulation 10.3 of MPERC (The Conditions of Distribution License for Distribution Licensee (including Deemed Licensee), Regulations 2004. DISCOMs are required to submit a detailed capital investment plan, financing plan and physical targets indicating physical and financial achievement against various schemes. While the existing Capex has been approved by the Commission, the DISCOMs are in advance stage of proposal submission. In compliance with the guidelines issued by the Ministry of Power, Government of India, an inter-departmental Distribution Reforms Committee was constituted by the General Administration Department, GoMP, to review the progress of works under the scheme and to present the proposed action plan and detailed project report by the distribution companies before the state cabinet. The consolidated proposals were presented on 8<sup>th</sup> November, 2021 before the Distribution

Reforms Committee for approval at the State level, on which the committee has given its consent to further present the proposals before the State Cabinet. However, after issuance of revised operational guidelines for the scheme on 18<sup>th</sup> November, 2021, Petitioners were left with very limited time to revise the action plan as well as take prior approval from the Commission, as the Petitioners need to file the ARR by 30<sup>th</sup> November, 2021. Thus, it is impracticable for DISCOMs to take prior approval under these circumstances. Therefore, the Capital investment and Capitalization as projected in this Petition by the DISCOMs before Commission for the upcoming Control period for the projects are proposed to be undertaken by the DISCOMs under the scheme and which are yet to be submitted to and approved by the Ministry of Power, GoI.

- 2.120 Further, the purpose of introducing the Multi Year Tariff Regulatory Framework is to bring certainty and predictability amongst the stakeholders. The basic premise is that tariffs should not fluctuate beyond a certain bandwidth unless there are force majeure conditions. Under the MYT framework, the consumers would have an advance notice about the Tariff for future years and the DISCOMs would also be able to plan its business having known the likely retail tariff for the control period. Therefore, non-consideration of such a capital expenditure which is bound to incur in near future would result in substantial variation in ARR and Tariff for ensuing years. Thus, the very purpose of introducing the MYT framework would get defeated. Hence, the DISCOMs request the Commission to consider the capital expenditure against this scheme as proposed by the DISCOMs.
- 2.121 Further, Petitioners have provisionally estimated total outlay of Rs. 28,119 Crore to be incurred under Revamped Distribution Sector Scheme. Out of this, Rs. 14,886 Crore has been estimated towards Smart Meterization and Rs. 13,233 Crore towards Loss Reduction and SSTD & Modernization works. Circle wise/district wise surveys were conducted by the DISCOMs to identify the root causes of losses and to assess the need for infrastructure construction/development works related to distribution system strengthening and modernization. Works have been proposed to ensure the quality of power supply in those areas where the level of losses is low, and priority has been given to the works related to loss reduction in those areas where the level of losses is high. With a view to ensure uniformity in assessment by all the DISCOMs and the concerned circles, detailed guidelines were issued by the Energy Department, GoMP to the distribution companies on 19<sup>th</sup> November, 2021. Accordingly, proposals were sent by every circle to the respective Discom, which were consolidated at the DISCOM level. The consolidated proposals were presented to the Distribution Reforms Committee on 10<sup>th</sup> December, 2021. Subsequent to the consent of the Committee to present the Action Plans before the State Cabinet, State Government's gave its approval on 28<sup>th</sup> December, 2021 to submit the Action Plans to Nodal Agency. Accordingly, the Action Plans were submitted by DISCOMs to Nodal Agency. The Monitoring Committee meeting is scheduled to take place in February 2022 after which the final submission of proposals will be done after duly incorporating the modifications as suggested by the Monitoring Committee and with the approval of State Government.
- 2.122 The total CAPEX Outlay estimated towards the Revamped Scheme is shown in the table below:

**Table 60: Total outlay proposed under RDSS (Rs. Crore)**

Particular	East DISCOM	Central DISCOM	West DISCOM	Total
Smart Metering	5,737	4,686	4,463	14,886
Loss Reduction	2579	2326	1800	6,706
SSTD & Modernization	2710	2034	1784	6,527
<b>Total – Outlay</b>	<b>11,026</b>	<b>9,046</b>	<b>8,047</b>	<b>28,119</b>

2.123 Further, the funding pattern against the aforementioned CAPEX for the Revamped scheme has been considered by the petitioners in line with the revised operational guidelines issued by the Ministry of Power, Government of India as reproduced below:

Sr No.	Items Descriptions	GBS % (Max)
A-1	Prepaid Smart metering solution including at consumer, DT, and feeder level including integration of existing infrastructure	15% / 22.5% as the case may be (limited up to Rs.900 or Rs.1350 respectively per meter for Consumer metering)#
A-2	Other costs including encumbrance free standardized billing modules for all states, data management, data analytics, and support to implementation etc.	100%
A-3 to A-6	Distribution Infrastructure works including SCADA, DMS, AB cables, feeder segregation etc.	60% or 90% as the case may be
B1-B4	Part-B	100%

2.124 Petitioners submitted that they will strive hard towards improvement in quality and reliability of power supply as well as improvement in their operational efficiency and financial viability. Also, with the implementation of Prepaid Smart Meterization, the billing efficiency and collection efficiency will improve. With this aim, DISCOMs are positive that they will achieve the performance target, and hence, they will be eligible to avail grant of 60% under the said scheme. Hence, DISCOMs have considered 60% of total estimated CAPEX under loss reduction and SSTD & Modernisation to be funded through grants and thus passing the benefits to consumers through ARR. The remaining portion, i.e., 40% of CAPEX for loss reduction and system strengthening & modernisation related infrastructure works shall be funded through loan. As regard to Part A-Metering of the Revamped scheme, which is to be implemented in TOTEX mode, DISCOMs have considered CAPEX portion amounting to Rs. 8,448.47 Crore in their present capital expenditure plan. The remaining portion, i.e., OPEX portion has been claimed under O&M section over and above normative O&M expenses on yearly equated instalments.

2.125 Further, the capex phasing as submitted under Revamped Scheme are on provisional basis as per best judgement of DISCOMs. Petitioners requested the Commission that they should be given liberty to submit additional data after the approval of their DPRs by the Govt. of India and make subsequent changes in the submitted ARR based on the approved and sanctioned funds under the Revamped Distribution Sector Scheme. Any variation against the proposal may be adjusted at the time of final true-up of respective years.

2.126 Details of DISCOM-wise capital expenditure plans under various schemes for the Control

Period for FY 2022-23 to FY 2026-27 as filed are indicated below:

**Table 61 : Capital Investment Plan for FY 2022-23 to FY 2026-27 (Rs. Crore)**

DISCOM	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
East	2,493	2,391	4,244	558	0
West	1,579	2,200	2,409	1,012	935
Central	1,148	1,969	2,916	996	462
<b>State</b>	<b>5,220</b>	<b>6,560</b>	<b>9,569</b>	<b>2,566</b>	<b>1,397</b>

## Capitalization and CWIP

2.127 DISCOM-wise capitalization plan and the status of Capital Works in Progress (CWIP) as filed by the Petitioners for FY 2022-23 to FY 2026-27 are indicated below:

**Table 62 : DISCOM-wise proposed capitalization and bifurcation of CWIP (Rs. Crore)**

DISCOM	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
<b>East DISCOM</b>	Opening Balance of CWIP	1685.16	2592.22	2695.97	4399.44	3023.35
	Fresh Investment during the year	2493.45	2391.06	4243.60	557.71	0.00
	<b>Total Capitalisation during the year</b>	<b>1586.39</b>	<b>2287.30</b>	<b>2540.14</b>	<b>1933.79</b>	<b>1235.04</b>
	<b>Closing Balance of CWIP</b>	<b>2592.22</b>	<b>2695.97</b>	<b>4399.44</b>	<b>3023.35</b>	<b>1788.31</b>
<b>Central DISCOM</b>	Opening Balance of CWIP	1962.60	2028.68	2002.21	2469.88	1510.59
	Fresh Investment during the year	1147.74	1969.45	2915.67	995.59	462.23
	<b>Total Capitalisation during the year</b>	<b>1081.65</b>	<b>1995.92</b>	<b>2448.00</b>	<b>1954.88</b>	<b>863.03</b>
	<b>Closing Balance of CWIP</b>	<b>2028.68</b>	<b>2002.21</b>	<b>2469.88</b>	<b>1510.59</b>	<b>1109.79</b>
<b>West DISCOM</b>	Opening Balance of CWIP	2403.81	2677.31	2982.34	3091.48	2289.80
	Fresh Investment during the year	1579.09	2200.28	2408.59	1012.19	935.25
	<b>Total Capitalisation during the year</b>	<b>1305.59</b>	<b>1895.25</b>	<b>2299.46</b>	<b>1813.86</b>	<b>1578.44</b>
	<b>Closing Balance of CWIP</b>	<b>2677.31</b>	<b>2982.34</b>	<b>3091.48</b>	<b>2289.80</b>	<b>1646.61</b>

## Commission's Analysis on Asset Capitalization

2.128 The DISCOMs need to obtain appropriate approval for their capital expenditure in accordance with the guidelines for capital expenditure by licensees under the provisions of Regulation 10.3 of MPERC (The Conditions of Distribution License for Distribution Licensee (including Deemed Licensee)), Regulations 2004, by timely submitting a detailed capital investment plan, financing plan and physical targets against various schemes for meeting the requirement of load growth, reduction in distribution losses, improvement in quality and reliability of supply, metering, etc.

2.129 The capital investment plan should show separately, ongoing projects that will spill over in the year under review and new projects (along with justification) that would commence during the tariff Control Period and would be completed within or beyond the tariff Control period. The Commission realises importance of adequate capital expenditure for upkeep of the network in an efficient manner.

2.130 It is observed that the Petitioners' have projected capitalisation from existing and new schemes (RDSS) and it is also observed that Petitioners proposal under RDSS scheme is still under consideration for approval and because of which the Petitioners have not filed Capital Investment Plan for approval in accordance with aforementioned Regulations. In Multi Year Tariff framework, it is necessary to provide certainty to the consumers as well the DISCOMs of the upcoming tariff. The Commission has analysed the impact of proposed capitalisation on ARR for FY 2022-23, and it is observed that its impact on tariff for FY 2022-23 is marginal. Therefore, the Commission finds it appropriate to consider the capitalisation plan submitted by the Petitioners on provisional basis, which shall be subject to approval of Final Capital Investment Plan by the Commission and actual capitalisation at the time of true up subject to achievement of physical and financial of targets approved by the Commission in respective schemes. Accordingly, the capitalisation plan provisionally considered by the Commission for the Control Period is shown in the table below:

**Table 63: Projected Asset Capitalization considered by the Commission for FY 2022-22 to FY 2026-27 (Rs. Crore)**

DISCOM	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
East DISCOM	1,586.39	2,287.30	2,540.14	1,933.79	1,235.04
West DISCOM	1,305.59	1,895.25	2,299.46	1,813.86	1,578.44
Central DISCOM	1,081.65	1,995.92	2,448.00	1,954.88	863.03
<b>State</b>	<b>3,973.63</b>	<b>6,178.47</b>	<b>7,287.59</b>	<b>5,702.54</b>	<b>3,676.51</b>

## Operations and Maintenance Expenses

### Petitioners' Submission

- 2.131 Operation and Maintenance (O&M) expenses have been calculated for the Control Period on the basis of 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.
- 2.132 The year ending 31<sup>st</sup> March, 2022, has been considered as the base year for projecting the Employee expenses and A&G expenses for ensuing years of the Control Period. 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 2018-19 to FY 2020-21 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, 2020. Further, the average of such expenses is then escalated twice to arrive at the normative expenses for the base year ending 31<sup>st</sup> March, 2022. The base year expenses so calculated are then escalated to arrive at normative Employee expenses and A&G expenses for subsequent years of the control period.
- 2.133 Further, the escalation rate for projections has been considered in line with the methodology specified by the Commission in the Regulations. The escalation rate considered for

calculating the normative expenses of FY 2020-21 has been derived based on the average yearly inflation of past five years, i.e., from FY 2015-16 to FY 2019-20 with 30% and 70% weightage to WPI and CPI, respectively. However, Petitioners find that yearly WPI inflation mainly for FY 2015-16 comes out to be negative (3.65%) which is abnormal. Hence, the Petitioners have excluded the same in its calculation and accordingly have arrived at escalation rate of 4.41% for FY 2020-21. Similarly, the escalation rate for FY 2021-22 has been worked out as 4.24% as shown in the table below: -

**Table 64: Escalation Rate for Control Period (%)**

Year	Yearly WPI	WPI Inflation	Yearly CPI	CPI Inflation
FY 2015-16	109.72	-3.65%	265.00	5.65%
FY 2016-17	111.62	1.73%	275.92	4.12%
FY 2017-18	114.88	2.92%	284.42	3.08%
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%
Average from FY16 to FY20		2.65%*		0.0517
Average from FY17 to FY21		2.38%		5.04%
Weightage		30%		70%
<b>Escalation rate for FY 2020-21 (2.65%*30%+5.17%*70%)</b>				<b>4.41%</b>
<b>Escalation rate for FY 2021-22 (2.38%*30%+5.04%*70%)</b>				<b>4.24%</b>

## Employee Expenses

2.134 Various head under Employee cost have been escalated based on the aforementioned escalation rate except for Dearness Allowances (D.A.). Further, Petitioners have not considered any provisions made towards Terminal Benefit during the past three years in their normative Employee expenses calculations for ensuing years.

As regard to D.A., which is linked to basic salary of Employees, Petitioners have considered latest available actual rate for FY 2021-22 in line with the order and circular issued by the Finance Department, Government of Madhya Pradesh. From FY 2022-23 onwards, Petitioners have considered marginal quarterly addition of 3% over previous quarters' D.A. rate as shown in the table below:

**Table 65: Dearness Allowance Considered (%)**

Particulars (As per 7th Pay)	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
DA as percentage of Basic for first quarter - Apr to June	31%	37%	43%	49%	55%
DA as percentage of Basic for 2 <sup>nd</sup> and 3 <sup>rd</sup> quarter - July to Dec	34%	40%	46%	52%	58%
DA as percentage of Basic for 4 <sup>th</sup> quarter - Jan to March	37%	43%	49%	55%	61%

2.135 During past three financial years, i.e., from FY 2018-19 to FY 2020-21, Petitioners have paid actual 7<sup>th</sup> pay arrears to their employees which is not reflected in the respective years'



audited account since, the payment were made out of the provision accounted in FY 2017-18. Therefore, in order to reflect the impact of 7<sup>th</sup> pay revision in normative expenses of ensuing years, the Petitioners have considered the actual payment made against the 7<sup>th</sup> pay in its calculations.

- 2.136 Based on the above, the Employee expense for the ensuing years of the Control Period has been calculated. Further, 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 of respective year.

## **A&G Expenses**

- 2.137 The A&G expenses have been projected 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. Further, for MPERC fees under A&G expenses, the Petitioners have projected the same considering Rs. 200 for each one Million Units of energy input into the distribution system in line with the MPERC (Fees, Fines and Charges) (Revision-I) (First Amendment) Regulations, 2010.

## **R&M Expenses**

- 2.138 Petitioners have submitted that they have projected R&M expenses by applying the rate of 2.30% of the opening Gross Block Assets (GFA) of the respective year of control period. Further, the Regulation 36.4 of MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 stipulates that Petitioners are eligible for additional R&M expenses of 1% if they achieve specified targets as defined in the applicable Regulations. In this regard, it is pertinent to note that the Petitioners have projected all the components of ARR based on the performance targets specified by the Commission in its Regulations. Hence, the Petitioners are entitled to claim this additional R&M expenses of 1% in their ARR. Accordingly, the same has been considered by the Petitioners in their total R&M projections.

## **Additional Operational Expenditure (OPEX) Cost**

- 2.139 Under part A of Revamped Distribution Sector 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. 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.

2.140 Accordingly, Petitioners 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. Payment of OPEX will be funded by the enhanced revenue as a result of improvement in billing and collection. 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 have been considered under DISCOMs CAPEX plan. The remaining portion, i.e., OPEX portion of the total outlay for meterization is hence, claimed under O&M expenses on equated yearly instalment over the operation period of 10 years. Further, the expense on these schemes needs to be allowed under OPEX Scheme which would be over and above normative O&M expense.

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. Accordingly, the additional OPEX cost towards Part A Revamped scheme has been claimed by the Petitioners.

2.141 Summary of claims of the Petitioners with respect to O&M Expenses is shown in the table below:

**Table 66: O&M Expenses Claimed by East DISCOM for FY 2022-23 to FY 2026-27  
(Rs. Crore)**

Sr.no.	Particular	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	Employee Expenses (including arrears, DA and others)	1323.25	1455.80	1573.55	1698.62	1831.42
2	A&G Expenses	126.17	131.54	137.13	142.97	149.04
3	R&M Expenses	456.01	508.36	583.84	667.66	731.48
4	Additional OPEX Expenses	49.81	85.68	253.78	253.78	253.78
5	<b>Total O&amp;M Expenses</b>	<b>1955.23</b>	<b>2181.38</b>	<b>2548.30</b>	<b>2763.02</b>	<b>2965.71</b>

**Table 67: O&M Expenses Claimed by West DISCOM for FY 2022-23 to FY 2026-27  
(Rs. Crore)**

Sr.no.	Particular	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	Employee Expenses (including arrears, DA and others)	1224.98	1334.98	1452.11	1576.78	1709.43
2	A&G Expenses	138.87	144.79	150.95	157.37	164.06
3	R&M Expenses	328.99	372.07	434.62	510.50	570.36
4	Additional OPEX Expenses	29.98	79.70	198.49	198.49	198.49
5	<b>Total O&amp;M Expenses</b>	<b>1722.82</b>	<b>1931.54</b>	<b>2236.16</b>	<b>2443.14</b>	<b>2642.34</b>

**Table 68: O&M Expenses Claimed by Central DISCOM for FY 2022-23 to FY 2026-27  
(Rs. Crore)**

Sr.no.	Particular	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	Employee Expenses (including arrears, DA and others)	1204.87	1300.07	1401.13	1508.39	1622.17
2	A&G Expenses	120.14	125.25	130.58	136.13	141.92
3	R&M Expenses	464.32	500.01	565.88	646.66	711.18

Sr.no.	Particular	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
4	Additional OPEX Expenses	29.98	79.70	198.49	198.49	198.49
5	<b>Total O&amp;M Expenses</b>	<b>1819.30</b>	<b>2005.04</b>	<b>2296.08</b>	<b>2489.67</b>	<b>2673.76</b>

**Table 69: O&M Expenses Claimed by State DISCOMs for FY 2022-23 to FY 2026-27  
(Rs. Crore)**

Sr.no.	Particular	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	Employee Expenses (including arrears, DA and others)	3753.10	4090.85	4426.79	4783.79	5163.02
2	A&G Expenses	385.17	401.58	418.66	436.47	455.02
3	R&M Expenses	1249.32	1380.45	1584.34	1824.83	2013.01
4	Additional OPEX Expenses	109.76	245.09	650.75	650.75	650.75
5	<b>Total O&amp;M Expenses</b>	<b>5497.35</b>	<b>6117.96</b>	<b>7080.55</b>	<b>7695.84</b>	<b>8281.81</b>

## Commission's Analysis on O&M Expenses

2.142 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 specify the methodology for computation of O&M Expenses of the DISCOMs. These expenses comprise Employee expenses, Repair and Maintenance (R&M) expenses and Administrative & General (A&G) expenses. The relevant extract for the Regulation is 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% weight age 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% weight-age 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% weight-age 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 and 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. Further, the DISCOMs shall be eligible for additional R and M Expenses of 0.50%, if the Licensee is able to achieve the performance standards targets specified by the Commission in MPERC (Distribution Performance Standards) (Revision-II) Regulations, 2012 and its amendment thereof. Further, the DISCOMs shall also be eligible for additional R&M Expenses of 0.50%, if the Licensee is able to achieve Distribution Loss target specified in Regulation 26.1 of these Regulations or is also to achieve at least 3% reduction in losses as compared to previous year.”

2.143 The Commission has computed the O&M expenses considering the methodology specified in the aforesaid Regulation. For approval of Employee Expenses for the Control Period, following approach has been adopted:

- The average of past three years’ actual audited employee expenses from FY 2018-19 to FY 2020-21 has been considered for deriving normative Employee Expenses for FY 2019-20.
- The average of such expenses has been escalated twice to arrive at the normative expenses for the base year i.e FY 2021-22. The base year expenses so calculated are then escalated to arrive at normative Employee expenses for subsequent years of the control period.

2.144 Further, the escalation rate considered for calculating the normative expenses of FY 2020-21 has been derived based on the average yearly inflation of past five years, i.e., from FY 2015-16 to FY 2019-20 with 30% and 70% weightage to WPI and CPI, respectively. However, it is observed that yearly WPI inflation for FY 2015-16 is negative (i.e., -3.65%) which is abnormal. Therefore, instead of FY 2015-16, the Commission has considered WPI inflation for FY 2014-15 for computation. Accordingly, based on the same, the Commission have arrived at escalation rate of 4.33% for FY 2020-21. Similarly, the escalation rate for FY 2021-22 has been worked out as 4.24% as shown in the table below: -

**Table 70: Escalation Rate admitted for Control Period (%)**

Year	Yearly WPI	WPI Inflation	Yearly CPI	CPI Inflation
FY 2014-15	113.88	1.26%	-	-
FY 2015-16	109.72	(3.65%)	265.00	5.65%
FY 2016-17	111.62	1.73%	275.92	4.12%
FY 2017-18	114.88	2.92%	284.42	3.08%
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%
Average from FY15 to FY20 (excluding FY 2015-16 for WPI)		2.37%		5.17%
Average from FY17 to FY21		2.38%		5.04%

Year	Yearly WPI	WPI Inflation	Yearly CPI	CPI Inflation
Weightage		30%		70%
Escalation rate for FY 2020-21 (2.37%*30%+5.17%*70%)				4.33%
Escalation rate for FY 2021-22 (2.38%*30%+5.04%*70%)				4.24%

- 2.145 With regard to DA, it is observed that during Sixth pay Commission, average DA increased by 11% every year. Therefore, the Commission opines that the Petitioner projection of increase in DA by 6% every year is reasonable and accordingly, the same has been considered for projection of DA for the Control Period.
- 2.146 With regard to claim towards 7<sup>th</sup> pay commission arrears, the Commission considered it appropriate that the same shall be considered at the time of true up based on actuals.
- 2.147 It has been noted that various stakeholders have been demanding contribution towards fund for the Terminal Benefit (Pension, Gratuity and Leave Encashment) Trust as per 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), extract of the same is shown below:
- “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...”*
- 2.148 Considering the above, the Commission had allowed Rs. 960 Crore in Tariff Orders for FY 2017-18 to FY 2021-22 towards the Pension and Terminal Benefit Trust Fund (liabilities provision), which was to be contributed by the DISCOMs to the Registered Terminal Benefits Trust. Further, the Commission has observed that in a separate proceeding the Commission has directed the Petitioners to create an escrow account and deposit the amount allowed in the previous years towards terminal benefit trust fund. The Commission in this order in line with the approach followed in previous orders, has considered an amount of Rs. 210 Crore (Rs 70 Cr for each DISCOM) for the Pension and Terminal Benefit Trust Fund (liabilities provision), which is to be contributed by the DISCOMs for each year of the Control Period. The Commission has also directed MP Transco in the abovesaid order to carry out actuarial analysis and based on that contribution towards Pension and Terminal Benefit Trust Fund may vary in the Control Period.
- 2.149 Based on the methodology adopted for projection of Employee Expenses for the Control Period, A&G Expenses including other expenses has also been projected. With regard to MPERC Fees, the Commission has projected it as per the provision of MPERC (Fees, Fines and Charges) (Revision-I) (First Amendment) Regulations, 2010 and its amendments.
- 2.150 With regard to R&M Expenses, the Commission has considered 2.30% of opening GFA towards base R&M expenses for each year of Control Period in accordance with Regulation 36.4 of the MYT Regulations, 2021. Further, as per Regulation 36.4, the DISCOMs shall be eligible for additional R&M expenses of 0.50%, if the DISCOMs are able to achieve performance targets specified in MPERC (Distribution Performance Standards) (Revision-II) Regulations, 2012 and its amendment thereof. Further, the DISCOMs shall also be

eligible for additional 0.50% R&M Expenses, if the DISCOMs are able to achieve Distribution Loss target specified in Regulation 26.1 of these Regulations or is able to achieve at least 3% reduction in losses as compared to previous year. However, as the additional R&M expenses are allowable subject to achievement of specified targets by the DISCOMs, the Commission may consider additional R&M expenses of 1% at the time of true-up. The Petitioners are at liberty to submit their claims towards additional R&M expenses at the time of true up of respective years along with the supporting details to establish achievement of performance targets as per the Regulations.

- 2.151 Further, with regard to approval of additional O&M expense towards Part A of RDSS, the Commission opines that the O&M expenses allowable as per the Regulations is only towards existing assets and assets to be created during the Control Period. However, as the proposed expenditure under Part A of the RRDS is in TOTEX (CAPEX + OPEX) mode, OPEX portion of the expenditure will not be reflected as part of GFA of the DISCOMs. Therefore, the said expenditure towards O&M expenses is required to be allowed over and above the O&M expenses allowed as per the methodology specified in the Regulations. Therefore, the Commission has considered the Petitioners claim towards additional operational expenditure (OPEX) cost towards Part A of RDSS provisionally subject to its approval under Capital Investment Plan by the Commission and actuals at the time of true up of respective years.
- 2.152 Further the Commission has projected the O&M Expenses capitalisation for the Control Period considering the percentage of actual O&M expense capitalisation to actual O&M Expenses for FY 2020-21 for each DISCOMs for each year of the Control Period.
- 2.153 Based on above, the admitted Operation and Maintenance Expenses for the Control Period from FY 2022-23 to FY 2026-27 is shown in the table below:

**Table 71: East DISCOM Operation and Maintenance Expenses admitted for the Control Period (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Opening GFA	13,263.39	14,849.78	17,137.09	19,677.22	21,611.02
<b>Repair and Maintenance Expenses @ 2.30%</b>	<b>305.06</b>	<b>341.55</b>	<b>394.15</b>	<b>452.58</b>	<b>497.05</b>
Basic Salary	860.04	896.52	934.56	974.20	1,015.53
Dearness Allowance	292.41	358.61	429.90	506.59	589.01
Terminal Benefits	54.34	56.65	59.05	61.55	64.17
<b>Employee Expenses</b>	<b>1,206.79</b>	<b>1,311.78</b>	<b>1,423.50</b>	<b>1,542.34</b>	<b>1,668.70</b>
<b>Administrative and General Expenses</b>	<b>197.86</b>	<b>206.26</b>	<b>215.01</b>	<b>224.13</b>	<b>233.64</b>
Other Expenses (Rates & Taxes...etc.)	1.99	2.07	2.16	2.25	2.35
MPERC fees	0.49	0.52	0.56	0.59	0.64
Provision for Terminal Benefit Trust Fund	70.00	70.00	70.00	70.00	70.00
O&M Expenses Capitalised	(46.67)	(49.45)	(52.85)	(56.52)	(59.79)
Additional Operational Expenditure (RRDS)	49.81	85.68	253.78	253.78	253.78
<b>Total O&amp;M Expenses</b>	<b>1,785.33</b>	<b>1,968.40</b>	<b>2,306.30</b>	<b>2,489.15</b>	<b>2,666.37</b>

**Table 72: West DISCOM Operation and Maintenance Expenses admitted for the Control Period (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Opening GFA	9,500.21	10,805.79	12,701.05	15,000.50	16,814.37
<b>Repair and Maintenance Expenses @ 2.30%</b>	<b>218.50</b>	<b>248.53</b>	<b>292.12</b>	<b>345.01</b>	<b>386.73</b>
Basic Salary	831.37	866.64	903.41	941.73	981.68
Dearness Allowance	282.67	346.66	415.57	489.70	569.38
Terminal Benefits	57.92	60.38	62.94	65.61	68.39
<b>Employee Expenses</b>	<b>1,171.96</b>	<b>1,273.68</b>	<b>1,381.91</b>	<b>1,497.04</b>	<b>1,619.45</b>
<b>Administrative and General Expenses</b>	<b>137.44</b>	<b>143.27</b>	<b>149.35</b>	<b>155.69</b>	<b>162.29</b>
Other Expenses (Rates & Taxes...etc.)	9.78	10.20	10.63	11.08	11.55
MPERC fees	0.67	0.71	0.76	0.81	0.87
Provision for Terminal Benefit Trust Fund	70.00	70.00	70.00	70.00	70.00
O&M Expenses Capitalised	(38.88)	(41.20)	(44.03)	(47.23)	(50.12)
Additional Operational Expenditure (RRDS)	29.98	79.70	198.49	198.49	198.49
<b>Total O&amp;M Expenses</b>	<b>1,599.46</b>	<b>1,784.89</b>	<b>2,059.23</b>	<b>2,230.89</b>	<b>2,399.26</b>

**Table 73: Central DISCOM Operation and Maintenance Expenses admitted for the Control Period (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Opening GFA	14,359.01	15,440.66	17,436.58	19,884.57	21,839.45
<b>Repair and Maintenance Expenses @ 2.30%</b>	<b>330.26</b>	<b>355.14</b>	<b>401.04</b>	<b>457.35</b>	<b>502.31</b>
Basic Salary	756.90	789.01	822.48	857.37	893.74
Dearness Allowance	257.35	315.60	378.34	445.83	518.37
Terminal Benefits	65.48	68.26	71.16	74.18	77.32
<b>Employee Expenses</b>	<b>1,079.73</b>	<b>1,172.87</b>	<b>1,271.98</b>	<b>1,377.38</b>	<b>1,489.43</b>
<b>Administrative and General Expenses</b>	<b>272.61</b>	<b>284.17</b>	<b>296.23</b>	<b>308.79</b>	<b>321.89</b>
Other Expenses (Rates & Taxes...etc.)	1.29	1.34	1.40	1.46	1.52
MPERC fees	0.56	0.60	0.64	0.68	0.73
Provision for Terminal Benefit Trust Fund	70.00	70.00	70.00	70.00	70.00
O&M Expenses Capitalised	(37.42)	(39.30)	(41.82)	(44.67)	(47.27)
Additional Operational Expenditure (RRDS)	29.98	79.70	198.49	198.49	198.49
<b>Total O&amp;M Expenses</b>	<b>1,747.01</b>	<b>1,924.52</b>	<b>2,197.95</b>	<b>2,369.47</b>	<b>2,537.10</b>

**Table 74: Operation and Maintenance Expenses admitted for the Control Period for the State (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
<b>Repair and Maintenance Expenses</b>	<b>853.82</b>	<b>945.21</b>	<b>1,087.32</b>	<b>1,254.93</b>	<b>1,386.09</b>
Basic Salary	2,448.31	2,552.17	2,660.44	2,773.30	2,890.95
Dearness Allowance	832.43	1,020.87	1,223.80	1,442.12	1,676.75
Terminal Benefits	177.74	185.28	193.14	201.34	209.88
<b>Employee Expenses</b>	<b>3,458.48</b>	<b>3,758.33</b>	<b>4,077.39</b>	<b>4,416.76</b>	<b>4,777.59</b>
<b>Administrative and General Expenses</b>	<b>607.91</b>	<b>633.70</b>	<b>660.58</b>	<b>688.61</b>	<b>717.82</b>
Other Expenses (Rates & Taxes...etc.)	13.06	13.61	14.19	14.79	15.42

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
MPERC fees	1.71	1.83	1.95	2.08	2.24
Provision for Terminal Benefit Trust Fund	210.00	210.00	210.00	210.00	210.00
O&M Expenses Capitalised	(122.96)	(129.96)	(138.71)	(148.42)	(157.18)
Additional Operational Expenditure (RRDS)	109.77	245.08	650.76	650.76	650.76
<b>Total O&amp;M Expenses</b>	<b>5,131.80</b>	<b>5,677.81</b>	<b>6,563.49</b>	<b>7,089.51</b>	<b>7,602.73</b>

## Depreciation

### Petitioners' Submission

- 2.154 Depreciation has been computed as per 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. Further, petitioners have considered rate of depreciation as specified in MYT Regulations, 2021.
- 2.155 The Petitioners have claimed depreciation on the Gross Block of Assets including consumer contribution and grants, since the Petitioners have also considered income booked towards the depreciation for assets created through consumer contribution and grants under their Non-Tariff Income. Hence, in order to avoid double accounting, petitioners requested the Commission to allow depreciation on the Gross Block of Assets. Further, if the Commission decides to allow depreciation on the Net-Block of Assets, then in such case the claim of DISCOMs towards Non-Tariff Income/Other Income is to be reduced by equivalent amount of depreciation applicable over the assets created through consumer contribution and grants during the respective period.
- 2.156 Accordingly, the DISCOM wise depreciation claimed for the ensuing years of the Control Period is as shown in the table below:

**Table 75: Depreciation claimed by East DISCOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Building	2.02	2.21	2.44	2.66	2.81
Hydraulic Works	0.00	0.00	0.00	0.00	0.00
Other Civil Works	2.99	3.81	4.83	5.77	6.44
Plant & Machinery	252.00	269.73	278.78	281.00	281.00
Line Cable Networks etc.	411.19	431.51	441.52	450.26	455.59
Vehicles	0.00	0.00	0.00	0.00	
Furniture & fixtures	0.00	0.00	0.00	0.00	0.00
Office Equipment	23.85	7.10	7.22	7.28	7.31
Asset not belonging to Company (RGGVY, IPDS, Soubhagya, DDUGJY, RRRDS)	11.75	69.93	173.81	277.42	353.51
Amortization of Intangible Assets	11.62	1.35	1.36	1.36	1.36
Supervision assets	0.00	0.00	0.00	0.00	0.00
Capital Stores & Spares	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>715.41</b>	<b>785.65</b>	<b>909.95</b>	<b>1025.76</b>	<b>1108.02</b>



**Table 76: Depreciation claimed by West DISCOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Building	5.72	6.12	6.65	7.16	7.59
Hydraulic Works	0.00	0.00	0.00	0.00	0.00
Other Civil Works	0.87	0.87	0.87	0.87	0.87
Plant & Machinery	145.54	160.08	179.14	197.82	213.23
Line Cable Networks etc.	295.30	316.78	324.19	331.22	336.24
Vehicles	0.00	0.00	0.00	0.00	0.00
Furniture & fixtures	0.29	0.30	0.32	0.34	0.36
Office Equipment	16.70	21.50	27.80	33.97	39.06
Asset not belonging to Company (RGGVY, IPDS, Soubhagya, DDUGJY)	8.38	48.54	122.16	194.58	255.09
Amortization of Intangible Assets	0.63	0.63	0.64	0.64	0.64
Supervision assets			0.00	0.00	0.00
Capital Stores & Spares	24.24	30.99	39.84	48.51	55.67
<b>Total</b>	<b>497.67</b>	<b>585.83</b>	<b>701.59</b>	<b>815.12</b>	<b>908.75</b>

**Table 77: Depreciation claimed by Central DISCOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Building	9.85	11.92	14.92	17.88	19.78
Hydraulic Works	0.58	0.58	0.58	0.58	0.58
Other Civil Works	0.22	0.22	0.22	0.22	0.22
Plant & Machinery	158.47	161.23	165.23	169.18	171.72
Line Cable Networks etc.	276.45	303.71	322.01	330.02	337.34
Vehicles	0.00	0.00	0.00	0.00	0.00
Furniture & fixtures	0.17	0.18	0.20	0.23	0.24
Office Equipment	16.45	17.40	18.79	20.16	7.24
Asset not belonging to Company (RGGVY, IPDS, Soubhagya, DDUGJY)	176.38	212.50	292.36	383.62	437.47
Amortization of Intangible Assets	0.29	0.29	0.29	0.29	0.29
Supervision assets	41.43	45.57	49.71	53.85	57.98
Capital Stores & Spares	27.67	29.91	32.16	34.40	5.87
<b>Total</b>	<b>707.95</b>	<b>783.52</b>	<b>896.45</b>	<b>1010.41</b>	<b>1038.73</b>

**Table 78: Depreciation claimed by Petitioners for State for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Building	17.60	20.26	24.00	27.70	30.17
Hydraulic Works	0.58	0.58	0.58	0.58	0.58
Other Civil Works	4.07	4.89	5.91	6.86	7.53
Plant & Machinery	556.01	591.05	623.15	648.01	665.95
Line Cable Networks etc.	982.94	1052.01	1087.72	1111.50	1129.17
Vehicles	0.00	0.00	0.00	0.00	0.00
Furniture & fixtures	0.45	0.48	0.53	0.57	0.60
Office Equipment	56.99	46.01	53.80	61.41	53.62
Asset not belonging to Company (RGGVY, IPDS, Soubhagya, DDUGJY)	196.51	330.97	588.32	855.61	1046.07
Amortization of Intangible Assets	12.54	2.28	2.28	2.28	2.28
Supervision assets	41.43	45.57	49.71	53.85	57.98

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Capital Stores & Spares	51.91	60.91	71.99	82.91	61.54
<b>Total</b>	<b>1921.03</b>	<b>2154.99</b>	<b>2508.00</b>	<b>2851.28</b>	<b>3055.49</b>

## Commission's Analysis of Depreciation

2.157 MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 specify the methodology for deriving depreciation. The relevant extract of the Regulations has been reproduced below: -

### **“33. Depreciation.-**

*For the purpose of Tariff, depreciation shall be computed in the following manner:*

*(a) The value base for the purpose of depreciation shall be the capital cost of the assets as admitted by the Commission.*

*(b) The approved/accepted cost shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed.*

*(c) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.*

*(d) Land other than land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.*

*(e) Depreciation shall be calculated annually based on 'straight line method' and at rates specified in Annexure II to these Regulations for the assets of the Distribution System declared in commercial operation after 31 March, 2022:*

*Provided that the remaining depreciable value as on 31st March of the Year closing after a period of 15 Years from Date of Commercial Operation shall be spread over the balance useful life of the assets:*

*Provided further that the Consumer contribution or capital subsidy/grant, etc., for asset creation shall be treated as may be notified by the Commission from time to time.*

*(f) In case of the existing Projects, the balance depreciable value as on 01 April, 2022 shall be worked out by deducting the cumulative depreciation including Advance against Depreciation as admitted by the Commission up to 31 March, 2022 from the gross depreciable value of the assets. The rate of Depreciation shall be continued to be charged at the rate specified in Annexure-II till cumulative depreciation reaches 70%. Thereafter, the remaining depreciable value shall be spread over the remaining life of the asset such that the maximum depreciation does not exceed 90 %.*

(g) Depreciation shall be chargeable from the first Year of commercial operation. In case of commercial operation of the asset for part of the Year, depreciation shall be charged on pro-rata basis.

**34. Consumer Contribution, Deposit Work, Grant and Capital Subsidy.-**

34.1. The expenses of the following categories of works carried out by the Distribution Licensee shall be treated as specified in Regulation 34.2:

(a) Works undertaken from funds, partly or fully, provided by the users, which are in nature of deposit works or consumer contribution works;

(b) Capital works undertaken with grants or capital subsidy received from the State and Central Governments;

(c) Other works undertaken with funding received without any obligation of repayment and with no interest costs;

34.2. The expenses on such capital works shall be treated as follows:

.....

(e) Provisions related to depreciation, as specified in Regulation 33, shall not be applicable to the extent of such financial support received.”

- 2.158 Accordingly, the Commission has considered the asset addition for the Control Period as admitted in previous section. Further, consumer contributions, grants and subsidies towards Capital Assets have been considered as per petitioner submission and reduced the same from the GFA for arriving at net GFA for each year of the Control Period. Depreciation has been worked out on the basis of the projected average net GFA computed considering the opening and closing net GFA of each year of the Control Period. In accordance to the provision of the Regulations, the Commission has not allowed depreciation towards assets created through consumer contribution and grants.
- 2.159 Further, the Commission has observed that the Petitioners have submitted Fixed Assets Registers up to FY 2020-21. However, the same is not completely in accordance to the format specified by the Commission. On analysis it is observed that the Petitioners have not been able to link the individual assets details with its cost in years prior to FY 2020-21 in Fixed Asset Registers. The Petitioners have provided the quantity against the assets in cumulative manner, separately.
- 2.160 During Technical Validation Session, the Petitioners informed the Commission that from FY 2021-22 onwards, they are keeping record of the individual assets separately and accordingly, the Petitioners shall be submitting the Fixed Assets Register in the desired format in true-up petitions. The Commission has taken note of the Petitioner submission. Further, the Commission directs the Petitioners to submit the Fixed Assets Register as per format specified by the Commission in next Tariff Petition for FY 2023-24 and true-up petition for FY 2021-22. The Commission recognised the positive intent shown by

Petitioners in preparation of Fixed Assets Register and therefore, allows 60% of depreciation amount in this Order and remaining 40% shall be considered at the time of True-up Petition for FY 2022-23 on submission of Fixed Assets Register in the specified formats.

2.161 Further, depreciation rates specified in the MYT Regulations, 2021, differs from rates specified in the MYT Regulations, 2015, accordingly, the depreciation for FY 2022-23 to FY 2026-27 is required to be computed in accordance to rate specified in MYT Regulations, 2021. However, for computation of depreciation as per the rates specified in the MYT Regulations, 2021 requires class wise GFA admitted for the Control Period. As the GFA for the Control Period has been admitted on provisional basis on consolidated basis, the weighted average depreciation rate (i.e., 4.95%, 3.78% and 4.65% for East, West and Central DISCOMs, respectively) derived based on Fixed Asset Register submitted by the DISCOMs for FY 2020-21, has been considered for computation of depreciation for the Control Period.

2.162 The depreciation admitted for FY 2022-23 to FY 2026-27 is given in the following table:

**Table 79: Depreciation admitted for East DISCOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Opening GFA as on 1 <sup>st</sup> April	9,240.07	10,308.92	11,666.06	13,265.76	14,406.20
Add: Addition during Financial Year	1,586.39	2,287.30	2,540.14	1,933.79	1,235.04
Less: Consumer Contribution/Grants in Financial Year	517.55	930.16	940.44	793.36	551.94
Closing GFA as on 31 <sup>st</sup> March	10,308.92	11,666.06	13,265.76	14,406.20	15,089.29
Average GFA	9,774.50	10,987.49	12,465.91	13,835.98	14,747.74
<b>Rate of Depreciation</b>	4.95%	4.95%	4.95%	4.95%	4.95%
<b>Depreciation</b>	483.84	543.88	617.06	684.88	730.01
Depreciation withheld (40%)	193.54	217.55	246.82	273.95	292.01
<b>Depreciation Admitted</b>	<b>290.30</b>	<b>326.33</b>	<b>370.24</b>	<b>410.93</b>	<b>438.01</b>

**Table 80: Depreciation admitted for West DISCOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Opening GFA as on 1 <sup>st</sup> April	5,066.70	6,024.39	7,329.54	8,910.46	9,780.77
Add: Addition during Financial Year	1,305.59	1,895.25	2,299.46	1,813.86	1,578.44
Less: Consumer Contribution/Grants in Financial Year	347.90	590.11	718.54	943.55	915.31
Closing GFA as on 31 <sup>st</sup> March	6,024.39	7,329.54	8,910.46	9,780.77	10,443.91
Average GFA	5,545.55	6,676.97	8,120.00	9,345.62	10,112.34
<b>Rate of Depreciation</b>	3.78%	3.78%	3.78%	3.78%	3.78%
<b>Depreciation</b>	209.62	252.39	306.94	353.26	382.25
Depreciation withheld (40%)	83.85	100.96	122.77	141.31	152.90
<b>Depreciation Admitted</b>	<b>125.77</b>	<b>151.43</b>	<b>184.16</b>	<b>211.96</b>	<b>229.35</b>

**Table 81: Depreciation admitted for Central DISCOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Opening GFA as on 1 <sup>st</sup> April	10,736.59	11,577.58	13,011.38	14,614.73	15,240.80
Add: Addition during Financial Year	1,081.65	1,995.92	2,448.00	1,954.88	863.03
Less: Consumer Contribution/Grants in Financial Year	240.66	562.11	844.65	1,328.81	373.26
Closing GFA as on 31 <sup>st</sup> March	11,577.58	13,011.38	14,614.73	15,240.80	15,730.57
Average GFA	11,157.08	12,294.48	13,813.06	14,927.77	15,485.69
<b>Rate of Depreciation</b>	4.65%	4.65%	4.65%	4.65%	4.65%
<b>Depreciation</b>	518.80	571.69	642.31	694.14	720.08
Depreciation withheld (40%)	207.52	228.68	256.92	277.66	288.03
<b>Depreciation Admitted</b>	<b>311.28</b>	<b>343.02</b>	<b>385.38</b>	<b>416.48</b>	<b>432.05</b>

**Table 82: Depreciation admitted for State for FY 2022-23 to FY 2026-27 (Rs. Crore)**

DISCOM	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
East DISCOM	290.30	326.33	370.24	410.93	438.01
West DISCOM	125.77	151.43	184.16	211.96	229.35
Central DISCOM	311.28	343.02	385.38	416.48	432.05
<b>State</b>	<b>727.36</b>	<b>820.78</b>	<b>939.78</b>	<b>1,039.37</b>	<b>1,099.41</b>

## Interest and Finance Charges

### Petitioners' submission

- 2.163 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 methodology for calculation of interest and finance charges on loan capital.
- 2.164 Interest and finance charges on loan capital has been computed in line with the methodology adopted by the Commission in its previous Tariff/True-up Orders. The opening debt associated with GFA has been considered in line with the closing debt as admitted by the Commission in its True-up Order of FY 2019-20. The assets addition to GFA, consumer deposit & grant and actual equity contribution has been considered in line with the capitalization as proposed in this Petition. The repayment of loan for each financial year has been considered equal to depreciation as projected for the respective financial year. The closing debt has been arrived by adding the net GFA considered as funded through debt and subtracting debt repayment of the respective year. The interest on loan for each year of the control period has been calculated on the normative average loan of the respective year by applying the weighted average rate of interest. Further, the weighted average rate of interest for each DISCOMs has been calculated based on the actual loan portfolio of DISCOMs in line with the Regulations.
- 2.165 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 FY as per audited accounts.

2.166 The DISCOM-wise summary of interest and finance charges is mentioned in the table below:

**Table 83: Interest on Project Loan claimed by East DISCOM (Rs. Crore)**

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	Opening Debt associated with GFA (as per True-up Order)	3582.47	3780.93	4204.28	4784.79	4843.97
2	GFA Addition during the year	1586.39	2287.30	2540.14	1933.79	1235.04
3	Consumer Deposit and Grants utilized during the year	517.55	930.16	940.44	793.36	551.94
4	Net GFA Addition during the year	1068.85	1357.14	1599.70	1140.44	683.09
5	Addition of Equity	154.98	148.14	109.24	55.51	30.56
6	Net GFA considered as funded through debt	913.87	1209.00	1490.46	1084.93	652.53
7	Debt repayment during the year	715.41	785.65	909.95	1025.76	1108.02
8	Closing debt associated with GFA	3780.93	4204.28	4784.79	4843.97	4388.48
9	Average debt associated with Loan	3681.70	3992.61	4494.54	4814.38	4616.22
10	Weighted average rate of interest (%) on all loans	7.72%	7.98%	8.12%	8.17%	8.17%
11	<b>Interest on Project Loans</b>	<b>284.26</b>	<b>318.77</b>	<b>364.85</b>	<b>393.53</b>	<b>376.95</b>
12	<b>Other Finance cost</b>	<b>14.10</b>	<b>13.04</b>	<b>13.57</b>	<b>13.30</b>	<b>13.43</b>
13	<i>Bank Charges</i>	0.11	0.12	0.11	0.11	0.11
14	<i>Commitment Charges</i>	3.31	2.97	3.14	3.05	3.09
15	<i>Guarantee/Lc Charges</i>	10.68	9.96	10.32	10.14	10.23
16	<b>Interest Cost Claimed in Petition</b>	<b>298.35</b>	<b>331.81</b>	<b>378.42</b>	<b>406.83</b>	<b>390.39</b>

**Table 84: Interest on Project Loan claimed by West DISCOM (Rs. Crore)**

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	Opening Debt associated with GFA (as per True-up Order)	3313.72	3700.26	4340.41	5134.38	5106.01
2	GFA Addition during the year	1305.59	1895.25	2299.46	1813.86	1578.44
3	Consumer Deposit and Grants utilized during the year	347.90	590.11	718.54	943.55	915.31
4	Net GFA Addition during the year	957.69	1305.15	1580.92	870.31	663.14
5	Addition of Equity	73.47	79.18	85.35	83.57	82.00
6	Net GFA considered as funded through debt	884.22	1225.97	1495.57	786.74	581.14
7	Debt repayment during the year	497.67	585.83	701.59	815.12	908.75
8	Closing debt associated with GFA	3700.26	4340.41	5134.38	5106.01	4778.40
9	Average debt associated with Loan	3506.99	4020.34	4737.40	5120.20	4942.20
10	Weighted average rate of interest (%) on all loans	7.50%	7.61%	7.68%	7.70%	7.69%
11	<b>Interest on Project Loans</b>	<b>262.95</b>	<b>305.91</b>	<b>363.85</b>	<b>394.49</b>	<b>380.11</b>
12	<b>Other Finance cost</b>	<b>11.20</b>	<b>11.06</b>	<b>11.13</b>	<b>11.09</b>	<b>11.11</b>
13	<i>Bank Charges</i>	0.20	0.26	0.23	0.24	0.23
14	<i>Commitment Charges</i>	11.00	10.80	10.90	10.85	10.88
15	<i>Guarantee/Lc Charges</i>	0.00	0.00	0.00	0.00	0.00
16	<b>Interest Cost Claimed in Petition</b>	<b>274.15</b>	<b>316.97</b>	<b>374.98</b>	<b>405.58</b>	<b>391.22</b>

**Table 85: Interest on Project Loan claimed by Central DISCOM (Rs. Crore)**

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	Opening Debt associated with GFA (as per True-up Order)	4816.79	4793.56	5308.63	5921.71	5440.38
2	GFA Addition during the year	1081.65	1995.92	2448.00	1954.88	863.03
3	Consumer Deposit and Grants utilized during the year	240.66	562.11	844.65	1328.81	373.26
4	Net GFA Addition during the year	840.99	1433.81	1603.35	626.07	489.77
5	Addition of Equity	156.27	135.21	93.82	96.99	90.62
6	Net GFA considered as funded through debt	684.72	1298.60	1509.53	529.08	399.15
7	Debt repayment during the year	707.95	783.52	896.45	1010.41	1038.73
8	Closing debt associated with GFA	4793.56	5308.63	5921.71	5440.38	4800.81
9	Average debt associated with Loan	4805.17	5051.09	5615.17	5681.04	5120.59
10	Weighted average rate of interest (%) on all loans	7.14%	7.13%	7.09%	7.01%	6.89%
11	<b>Interest on Project Loans</b>	<b>342.99</b>	<b>360.34</b>	<b>397.94</b>	<b>398.11</b>	<b>352.93</b>
12	<b>Other Finance cost</b>	<b>33.33</b>	<b>33.37</b>	<b>33.35</b>	<b>33.36</b>	<b>33.35</b>
13	<i>Bank Charges</i>	1.03	1.06	1.04	1.05	1.05
14	<i>Commitment Charges</i>	0.10	0.11	0.10	0.11	0.11
15	<i>Guarantee/Lc Charges</i>	32.20	32.20	32.20	32.20	32.20
16	<b>Interest Cost Claimed in Petition</b>	<b>376.31</b>	<b>393.70</b>	<b>431.29</b>	<b>431.47</b>	<b>386.28</b>

**Table 86: Interest on Project Loan claimed for State (Rs. Crore)**

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	Opening Debt associated with GFA (as per True-up Order)	11712.97	12274.75	13853.32	15840.88	15390.36
2	GFA Addition during the year	3973.63	6178.47	7287.59	5702.54	3676.51
3	Consumer Deposit and Grants utilized during the year	1106.11	2082.38	2503.62	3065.72	1840.51
4	Net GFA Addition during the year	2867.52	4096.09	4783.97	2636.82	1836.00
5	Addition of Equity	384.71	362.53	288.41	236.07	203.18
6	Net GFA considered as funded through debt	2482.81	3733.57	4495.55	2400.75	1632.82
7	Debt repayment during the year	1921.03	2154.99	2508.00	2851.28	3055.49
8	Closing debt associated with GFA	12274.75	13853.32	15840.88	15390.36	13967.68
9	Average debt associated with Loan	11993.86	13064.04	14847.10	15615.62	14679.02
10	Weighted average rate of interest (%) on all loans	NA	NA	NA	NA	NA
11	<b>Interest on Project Loans</b>	<b>890.20</b>	<b>985.02</b>	<b>1126.65</b>	<b>1186.13</b>	<b>1110.00</b>
12	<b>Other Finance cost</b>	<b>58.62</b>	<b>57.46</b>	<b>58.04</b>	<b>57.75</b>	<b>57.90</b>
13	<i>Bank Charges</i>	1.33	1.43	1.38	1.41	1.39
14	<i>Commitment Charges</i>	14.41	13.88	14.14	14.01	14.08
15	<i>Guarantee/Lc Charges</i>	42.88	42.16	42.52	42.34	42.43
16	<b>Interest Cost Claimed in Petition</b>	<b>948.82</b>	<b>1042.48</b>	<b>1184.69</b>	<b>1243.88</b>	<b>1167.89</b>

### Commission's Analysis of Interest and Finance Charges

2.167 Regulation 22 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 specifies methodology for computation of debt and equity towards the

existing and admitted capitalisation. The relevant extract of the Regulation is reproduced below:

**“22. Debt-equity ratio.-**

22.1. For the purpose of determination of tariff, the normative debt-equity ratio of the total capital employed, after deducting the funding from Consumer Contributions, Deposit Work, Grant and Capital Subsidy, in completed assets shall be 70:30 subject to Regulation.

22.2. The debt-equity amount arrived in accordance with this Regulation shall be used for calculation of interest on loan, return on equity, depreciation and foreign exchange rate variation.

22.2. For a Project declared under commercial operation on or after 01 April, 2022, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of Tariff:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

...

22.3. In case of the Distribution System declared under commercial operation prior to 01 April, 2022, debt-equity ratio allowed by the Commission for determination of Tariff for the period ending 31 March, 2022 shall be considered.”

2.168 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 specifies methodology for computation of Interest and finance charges on loan. The relevant extract of the Regulation is reproduced below:

**“32. Interest and finance charges on loan capital.-**

32.1. The loans arrived at in the manner indicated in Regulation 22 shall be considered as gross normative loan for calculation of interest on loan.

32.2. The normative loan outstanding as on 01 April, 2022 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31 March, 2022 from the gross normative loan.

32.3. Notwithstanding any moratorium period availed by the Distribution Licensee, the repayment of loan shall be considered from the first Year of commercial operation of the Project and shall be equal to the annual depreciation allowed.

32.4. The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Project:



*Provided that at the time of true-up, the weighted average rate of interest calculated on the basis of the actual loan portfolio during the concerned year shall be considered as the rate of interest:*

*Provided further that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:*

*Provided also that if the Distribution System does not have actual loan, then the weighted average rate of interest of the Distribution Licensee as a whole shall be considered.*

*Provided also that if the Distribution Licensee as a whole does not have actual long-term loan, then the Base Rate as on 1st April of the respective year shall be considered as the rate of interest for the purpose of allowing the interest on the normative loan.*

*32.5. The interest on loan shall be calculated on the normative average loan of the Year by applying the weighted average rate of interest.*

*32.6. The Distribution Licensee shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the consumers and the net savings shall be shared between consumers and Distribution Licensee in ratio 2:1.*

*32.7. The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.*

*32.8. Interest charges on security deposits with the Licensee shall be considered at the rate specified by the Commission from time to time.”*

- 2.169 Based on the above, the Commission has considered interest and finance charges as pass through in the ARR only for the loans for which the associated capital works have been completed and assets have been put to use.
- 2.170 Interest on loan for works in progress is considered as interest during construction (IDC), which shall be capitalized and added to the project cost at the time of asset capitalization. Therefore, such interest cost has not been considered as pass through in the ARR. The underlying principle for considering the capitalization instead of capital expenditure incurred during the year is that the consumer should bear the interest cost related to only those assets, which are put to use. The asset under construction is not being used by the consumers. Interest cost incurred during the course of construction of assets becomes a part of CWIP and therefore, is not admitted as pass through.
- 2.171 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.
- 2.172 Further, Regulation 31 of the MYT Regulations, 2021 provides that only such paid up share

capital is to be reckoned for computation of Return on Equity, which has been actually utilised for meeting capital expenditure and forms a part of the approved financial package. The approach adopted by the Commission for computation of interest cost for the Control Period from FY 2022-23 to FY 2026-27 is as follows:

- a) Opening loan for FY 2021-22 has been considered as the closing loan admitted in true up of FY 2020-21. Thereafter addition in FY 2021-22 has been considered as per the Tariff Order for FY 2021-22. The closing loan thus arrived for FY 2021-22 has been considered opening loan for FY 2022-23.
- b) Net asset addition to GFA during the year is arrived by subtracting the consumer contribution/Grants received from total asset addition to GFA.
- c) 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.
- d) Debt repayments have then been subtracted from the total debt identified with completed assets as computed from the above. The repayment for the year has been considered equal to the depreciation allowed for that year.
- e) As per the MYT Regulations, 2021, the Commission has considered the weighted average rate of interest computed based on the actual outstanding and new loan to be taken during the Control Period in line with the Petitioners submission.
- f) Other Finance costs for the Control Period have been admitted considering the actual percentage of actual finance cost to average loan in FY 2020-21 (I.e., 0.27%, 0.91% and 0.11% for East, West and Central DISCOM, respectively).

2.173 Based on the above, the Interest and Finance charges admitted for the Control Period are as shown in the table below:

**Table 87: Interest and finance charges admitted for East DISCOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Opening Debt associated with GFA as on 1 <sup>st</sup> April	4,598.49	5,222.06	6,104.73	7,224.95	7,898.96
Addition to GFA during the year	1,068.85	1,357.14	1,599.70	1,140.44	683.09
Addition to net GFA considered as funded through Loan net of Consumer Contribution	913.87	1,209.00	1,490.46	1,084.93	652.53
Debt repayment during the year	290.30	326.33	370.24	410.93	438.01
Closing debt associated with GFA as on 31 <sup>st</sup> March	5,222.06	6,104.73	7,224.95	7,898.96	8,113.48
Average debt	4,910.28	5,663.40	6,664.84	7,561.95	8,006.22
Weighted average rate of interest (%) on all loans as per Petitioner	7.53%	7.44%	7.50%	7.57%	7.60%
Interest on Project Loans	369.74	421.36	499.86	572.44	608.47
Other Finance cost	13.34	15.38	18.10	20.54	21.74

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Interest cost admitted on project loans	383.08	436.74	517.96	592.98	630.22

**Table 88: Interest and finance charges admitted for West DISCOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Opening Debt associated with GFA as on 1 <sup>st</sup> April	1,488.40	2,239.06	3,310.88	4,619.20	5,191.51
Addition to GFA during the year	957.69	1,305.15	1,580.92	870.31	663.14
Addition to net GFA considered as funded through Loan net of Consumer Contribution	876.44	1,223.25	1,492.48	784.27	579.16
Debt repayment during the year	125.77	151.43	184.16	211.96	229.35
Closing debt associated with GFA as on 31 <sup>st</sup> March	2,239.06	3,310.88	4,619.20	5,191.51	5,541.33
Average debt	1,863.73	2,774.97	3,965.04	4,905.36	5,366.42
Weighted average rate of interest (%) on all loans as per Petitioner	7.50%	7.61%	7.68%	7.70%	7.69%
Interest on Project Loans	139.78	211.18	304.52	377.71	412.68
Other Finance cost	16.91	25.18	35.97	44.50	48.69
<b>Interest cost admitted on project loans</b>	<b>156.69</b>	<b>236.35</b>	<b>340.49</b>	<b>422.22</b>	<b>461.36</b>

**Table 89: Interest and finance charges admitted for Central DISCOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Opening Debt associated with GFA as on 1 <sup>st</sup> April	5,726.68	6,100.11	7,055.69	8,179.83	8,292.43
Addition to GFA during the year	840.99	1,433.81	1,603.35	626.07	489.77
Addition to net GFA considered as funded through Loan net of Consumer Contribution	684.72	1,298.60	1,509.53	529.08	399.15
Debt repayment during the year	311.28	343.02	385.38	416.48	432.05
Closing debt associated with GFA as on 31 <sup>st</sup> March	6,100.11	7,055.69	8,179.83	8,292.43	8,259.53
Average debt	5,913.39	6,577.90	7,617.76	8,236.13	8,275.98
Weighted average rate of interest (%) on all loans as per Petitioner	7.14%	7.13%	7.09%	7.01%	6.89%
Interest on Project Loans	422.22	469.00	540.10	577.35	570.22
Other Finance cost	6.33	7.04	8.15	8.81	8.86
<b>Interest cost admitted on project loans</b>	<b>428.54</b>	<b>476.04</b>	<b>548.25</b>	<b>586.17</b>	<b>579.07</b>

**Table 90: Interest and finance charges admitted for State for FY 2022-23 to FY 2026-27 (Rs. Crore)**

DISCOM	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
East DISCOM	383.08	436.74	517.96	592.98	630.22
West DISCOM	156.69	236.35	340.49	422.22	461.36
Central DISCOM	428.54	476.04	548.25	586.17	579.07
<b>State</b>	<b>968.31</b>	<b>1,149.13</b>	<b>1,406.70</b>	<b>1,601.36</b>	<b>1,670.65</b>

## Interest on Working Capital

### Petitioners' Submission

- 2.174 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.
- 2.175 Further, 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, 2021 is 7%. Accordingly, the Petitioners have considered the interest rate on working capital as 10.50% (SBI-MCLR 7% plus 350 bps).
- 2.176 The summary of DISCOMs Wise Interest on Working Capital is mentioned in the table below:

**Table 91: Interest on Working Capital claimed by East DISCOM for 2022-23 to FY 2026-27 (Rs Crore)**

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
<b>I</b>	<b>Wheeling</b>					
<b>A)</b>	1/6th of annual requirement of inventory for 1% GFA of previous year	18.42	20.54	23.59	26.98	29.55
<b>B)</b>	O&M expenses					
	R&M expenses	456.01	508.36	583.84	667.66	731.48
	A&G expense	126.17	131.54	137.13	142.97	149.04
	Employee expenses	1323.25	1455.80	1573.55	1698.62	1831.42
<b>B) i)</b>	Total of O&M expenses	1905.43	2095.70	2294.52	2509.25	2711.94
<b>B) ii)</b>	1/12th of total	158.79	174.64	191.21	209.10	225.99
<b>C)</b>	Receivables	0.00	0.00	0.00	0.00	0.00
<b>C) i)</b>	Annual Revenue from wheeling charges	0.00	0.00	0.00	0.00	0.00
<b>C) ii)</b>	Receivables equivalent to 2 months average billing of wheeling charges	0.00	0.00	0.00	0.00	0.00
<b>D)</b>	Total Working capital [ A) + B) ii) - C) ii)]	177.21	195.18	214.80	236.08	255.55
<b>E)</b>	Rate of Interest	11%	11%	11%	11%	11%
<b>F)</b>	<b>Interest on Working capital (Wheeling)</b>	<b>18.61</b>	<b>20.49</b>	<b>22.55</b>	<b>24.79</b>	<b>26.83</b>
<b>II</b>	<b>Retail Supply</b>					
<b>A)</b>	1/6th of annual requirement of inventory for previous year	4.61	5.13	5.90	6.74	7.39
<b>B)</b>	Receivables					
<b>B) i)</b>	Annual Revenue from Tariff and charges	13065.70	14120.25	15241.71	16128.41	17219.30

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
B) ii)	Receivables equivalent to 2 months average billing	2177.62	2353.38	2540.28	2688.07	2869.88
C)	Power Purchase expenses	8598.09	10657.53	11409.18	12167.36	12881.85
C) i)	1/12th of power purchase expenses	716.51	888.13	950.77	1013.95	1073.49
D)	Consumer Security Deposit	987.71	1040.35	1096.57	1156.62	1220.79
E)	Total Working capital (A+B ii) - C i) - D)	<b>478.01</b>	<b>430.03</b>	<b>498.85</b>	<b>524.25</b>	<b>582.99</b>
F)	Rate of Interest	10.50%	10.50%	10.50%	10.50%	10.50%
G)	<b>Interest on Working capital (Retail Supply)</b>	<b>50.19</b>	<b>45.15</b>	<b>52.38</b>	<b>55.05</b>	<b>61.21</b>
	<b>Total Interest on Working Capital (Wheeling + Retail Supply)</b>	<b>68.80</b>	<b>65.65</b>	<b>74.93</b>	<b>79.83</b>	<b>88.05</b>

**Table 92: Interest on Working Capital as claimed by West DISCOM for 2022-23 to FY 2026-27 (Rs Crore)**

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
<b>I</b>	<b>Wheeling</b>					
A)	1/6th of annual requirement of inventory for 1% GFA of previous year	13.29	15.03	17.56	20.63	23.04
B)	O&M expenses					
	R&M expenses	328.99	372.07	434.62	510.50	570.36
	A&G expense	138.87	144.79	150.95	157.37	164.06
	Employee expenses	1224.98	1334.98	1452.11	1576.78	1709.43
B) i)	Total of O&M expenses	1692.84	1851.84	2037.68	2244.65	2443.85
B) ii)	1/12th of total	141.07	154.32	169.81	187.05	203.65
C)	Receivables					
C) i)	Annual Revenue from wheeling charges	6.45	6.87	6.66	6.77	6.71
C) ii)	Receivables equivalent to 2 months average billing of wheeling charges	1.07	1.15	1.11	1.13	1.12
D)	Total Working capital [ (A) + B) ii) - C) ii)]	155.44	170.50	188.48	208.81	227.82
E)	Rate of Interest	10.50%	10.50%	10.50%	10.50%	10.50%
F)	<b>Interest on Working capital (Wheeling)</b>	<b>16.32</b>	<b>17.90</b>	<b>19.79</b>	<b>21.92</b>	<b>23.92</b>
<b>II</b>	<b>Retail Supply</b>					
A)	1/6th of annual requirement of inventory for previous year	3.32	3.76	4.39	5.16	5.76
B)	Receivables					
B) i)	Annual Revenue from Tariff and charges	17865.65	19455.80	20915.95	22373.65	23682.65
B) ii)	Receivables equivalent to 2 months average billing	2977.61	3242.63	3485.99	3728.94	3947.11
C)	Power Purchase expenses	15735.32	14426.97	15443.10	16469.61	17436.16
C) i)	1/12th of power purchase expenses	1311.28	1202.25	1286.92	1372.47	1453.01
D)	Consumer Security Deposit	1950.24	2198.28	2456.85	2726.39	3007.36
E)	Total Working capital (A+B ii) - C i) - D)	<b>(280.58)</b>	<b>(154.14)</b>	<b>(253.40)</b>	<b>(364.76)</b>	<b>(507.51)</b>
F)	Rate of Interest	10.50%	10.50%	10.50%	10.50%	10.50%

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
G)	Interest on Working capital (Retail Supply)	0.00	0.00	0.00	0.00	0.00
	<b>Total Interest on Working Capital (Wheeling + Retail Supply)</b>	<b>16.32</b>	<b>17.90</b>	<b>19.79</b>	<b>21.92</b>	<b>23.92</b>

**Table 93: Interest on Working Capital as claimed by Central DISCOM for 2022-23 to FY 2026-27 (Rs Crore)**

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
<b>I</b>	<b>Wheeling</b>					
A)	1/6th of annual requirement of inventory for 1% GFA of previous year	18.76	20.20	22.86	26.13	28.73
B)	O&M expenses					
	R&M expenses	464.32	500.01	565.88	646.66	711.18
	A&G expense	120.14	125.25	130.58	136.13	141.92
	Employee expenses	1204.87	1300.07	1401.13	1508.39	1622.17
B) i)	Total of O&M expenses	1789.33	1925.34	2097.59	2291.19	2475.27
B) ii)	1/12th of total	149.11	160.44	174.80	190.93	206.27
C)	Receivables					
C) i)	Annual Revenue from wheeling charges					
C) ii)	Receivables equivalent to 2 months average billing of wheeling charges					
D)	Total Working capital [A) + B) ii) - C) ii)]	167.87	180.65	197.66	217.06	235.01
E)	Rate of Interest	10.50%	10.50%	10.50%	10.50%	10.50%
F)	<b>Interest on Working capital (Wheeling)</b>	<b>17.63</b>	<b>18.97</b>	<b>20.75</b>	<b>22.79</b>	<b>24.68</b>
<b>II</b>	<b>Retail Supply</b>					
A)	1/6th of annual requirement of inventory for previous year	4.69	5.05	5.72	6.53	7.18
B)	Receivables					
B) i)	Annual Revenue from Tariff and charges	14026.09	15230.18	16455.99	17657.77	18782.13
B) ii)	Receivables equivalent to 2 months average billing	2337.68	2538.36	2742.67	2942.96	3130.35
C)	Power Purchase expenses	9426.17	11384.47	12186.86	12996.51	13759.08
C) i)	1/12th of power purchase expenses	785.51	948.71	1015.57	1083.04	1146.59
D)	Consumer Security Deposit	1215.69	1320.22	1429.19	1542.79	1661.20
E)	Total Working capital (A+B ii) - C i) - D)	<b>341.17</b>	<b>274.49</b>	<b>303.62</b>	<b>323.67</b>	<b>329.75</b>
F)	Rate of Interest	10.50%	10.50%	10.50%	10.50%	10.50%
G)	<b>Interest on Working capital (Retail Supply)</b>	<b>35.82</b>	<b>28.82</b>	<b>31.88</b>	<b>33.98</b>	<b>34.62</b>
	<b>Total Interest on Working Capital (Wheeling + Retail Supply)</b>	<b>53.45</b>	<b>47.79</b>	<b>52.63</b>	<b>56.78</b>	<b>59.30</b>

## Commission's Analysis of Interest on Working Capital

- 2.177 Regulations 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 specifies methodology for computation of Interest on Working Capital. The relevant extract for the provision has been reproduced below:-

### ***“23. Working capital.-***

*23.1. Working capital for supply activity of the Licensee shall consist of:*

*(i) Receivables of two months of average billing reduced by power purchase cost of one month, consumer security deposit, and any amount paid by the prepaid consumers,*

*(ii) O&M expenses for one month, and*

*(iii) Inventory (meters, metering equipment, testing equipment are particularly relevant in case of supply activity) for 2 months based on annual requirement considered at 1% of the Gross Fixed Assets for previous year.*

*23.2. Working capital for wheeling activity of the Licensee shall consist of:*

*(i) O and M expenses for one month, and*

*(ii) Inventory (excluding meters, etc., which are considered part of supply activity) for 2 months based on annual requirement considered at 1% of the gross fixed assets for previous year.*

*23.3. The norms described above shall be applicable for each year of the Control Period.*

### ***38. Interest charges on working capital.-***

*Working capital shall be computed as provided in these Regulations and Rate of interest on working capital shall be equal to the Base Rate as on 1 April of the relevant Year plus 350 basis points. The interest on working capital shall be payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has borrowed in excess of the working capital loan computed on normative basis.”*

- 2.178 Accordingly, the Commission has considered the opening Gross Fixed Asset of each year of Control Period for computation of Interest on Working Capital for East, West and Central DISCOMs. One percent of opening Gross Fixed Asset has been pro-rated to two months to work-out the inventory requirement for wheeling activity and retail activity. This has been further divided into wheeling and retail inventory in the ratio of 80:20 as per the practice adopted in previous Tariff Orders. The consumer security deposit has been considered as discussed in the section on interest on consumer security deposit. Values of other elements

of working capital have been recomputed for the expenses admitted by the Commission in the relevant sections of this order. Further, annual revenue from wheeling charges has been considered based on average of the actual values as per audited accounts of FY 2018-19 to FY 2020-21 and kept same for the Control Period.

- 2.179 Further, the SBI Advance Rate on 1<sup>st</sup> of April, 2021 (MCLR-7% plus 350 basis) stands at 10.50%. Accordingly, the normative interest rate for working capital loans to DISCOMs would be limited to 10.50% for the Control Period. The interest on working capital admitted by the Commission for wheeling and retail sales activity combined together is shown in the table below:



Table 94: Interest on Working Capital admitted by the Commission (Rs. Crore)

Sr. No	Particulars	Months	FY 2022-23			FY 2023-24			FY 2024-25			FY 2025-26			FY 2026-27		
			East	West	Central	East	West	Central	East	West	Central	East	West	Central	East	West	Central
<b>For wheeling Activity</b>																	
A)	1/6th of annual requirement of inventory for previous year	6	15.19	11.66	16.57	17.68	12.67	19.15	19.80	14.41	20.59	22.85	16.93	23.25	26.24	20.00	26.51
B) i)	Total of O&M Expenses		1,785.33	1,599.46	1,747.01	1,968.40	1,784.89	1,924.52	2,306.30	2,059.23	2,197.95	2,489.15	2,230.89	2,369.47	2,666.37	2,399.26	2,537.10
B) ii)	1/12th (1 Months) of total O&M Expenses		148.78	133.29	145.58	164.03	148.74	160.38	192.19	171.60	183.16	207.43	185.91	197.46	222.20	199.94	211.43
C)	Receivables																
C) i)	Annual Revenue from wheeling charges		0.65	8.48	1.09	0.65	8.48	1.09	0.65	8.48	1.09	0.65	8.48	1.09	0.65	8.48	1.09
C) ii)	Receivables equivalent to 2 months average billing of wheeling charges	6	0.11	1.41	0.18	0.11	1.41	0.18	0.11	1.41	0.18	0.11	1.41	0.18	0.11	1.41	0.18
D)	Total Working capital (A+B(ii)+C(ii))		164.08	146.36	162.34	181.83	162.82	179.70	212.10	187.42	203.93	230.39	204.26	220.89	248.54	221.35	238.12
E)	Rate of Interest		10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%
F)	<b>Interest on Working Capital for Wheeling Activity</b>		17.23	15.37	17.05	19.09	17.10	18.87	22.27	19.68	21.41	24.19	21.45	23.19	26.10	23.24	25.00
<b>For Retail Sale Activity</b>																	
A)	1/6th of annual requirement of inventory for previous year	6.00	3.80	2.92	4.14	4.42	3.17	4.79	4.95	3.60	5.15	5.71	4.23	5.81	6.56	5.00	6.63
B)	Receivables																
B) i)	Annual Revenue from Tariff and charges		12,991.83	17,872.43	15,106.68	14,293.77	17,606.63	16,025.09	15,498.73	18,977.60	17,202.64	16,565.07	20,254.94	18,280.99	17,769.54	21,706.06	19,529.87
B) ii)	Receivables equivalent to 2 months average billing (B(i)/6)		2,165.30	2,978.74	2,517.78	2,382.29	2,934.44	2,670.85	2,583.12	3,162.93	2,867.11	2,760.84	3,375.82	3,046.83	2,961.59	3,617.68	3,254.98
C)	Power Purchase expenses		7,852.92	14,918.28	9,739.79	10,034.38	13,768.50	11,545.09	10,718.76	14,675.91	12,279.85	11,439.23	15,618.41	13,068.24	12,359.46	16,790.22	14,090.56
C) i)	1/12th (1 Months) of power purchase expenses (C/12)		654.41	1,243.19	811.65	836.20	1,147.37	962.09	893.23	1,222.99	1,023.32	953.27	1,301.53	1,089.02	1,029.95	1,399.18	1,174.21
D)	Consumer Security Deposit		1,050.71	1,771.97	1,169.58	1,103.36	2,020.01	1,274.11	1,159.57	2,278.58	1,383.08	1,219.62	2,548.12	1,496.67	1,283.79	2,829.09	1,615.09
E)	Total Working capital (A+B (ii) - C (i) - D)		463.98	(33.50)	540.70	447.16	(229.78)	439.43	535.27	(335.04)	465.85	593.67	(469.60)	466.95	654.40	(605.60)	472.31
F)	Rate of Interest		10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%
G)	<b>Interest on Working capital for Retail Sale Activity</b>		48.72	(3.52)	56.77	46.95	(24.13)	46.14	56.20	(35.18)	48.91	62.34	(49.31)	49.03	68.71	(63.59)	49.59
<b>Summary</b>																	

Sr. No	Particulars	Months	FY 2022-23			FY 2023-24			FY 2024-25			FY 2025-26			FY 2026-27		
			East	West	Central	East	West	Central	East	West	Central	East	West	Central	East	West	Central
	For wheeling Activity																
	For wheeling Activity		17.23	15.37	17.05	19.09	17.10	18.87	22.27	19.68	21.41	24.19	21.45	23.19	26.10	23.24	25.00
	For Retail Sale Activity		48.72	(3.52)	56.77	46.95	(24.13)	46.14	56.20	(35.18)	48.91	62.34	(49.31)	49.03	68.71	(63.59)	49.59
	Total Interest on working Capital		65.95	11.85	73.82	66.04	(7.03)	65.01	78.47	-15.50	70.33	86.53	(27.86)	72.22	94.81	(40.35)	74.59
	Total Interest on working Capital Admitted		65.95	11.85	73.82	66.04	0.00	65.01	78.47	0.00	70.33	86.53	0.00	72.22	94.81	0.00	74.59

**Table 95: Interest on Working Capital admitted by the Commission for State (Rs. Crore)**

DISCOM	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
East DISCOM	65.95	66.04	78.47	86.53	94.81
West DISCOM	11.85	0.00	0.00	0.00	0.00
Central DISCOM	73.82	65.01	70.33	72.22	74.59
<b>State</b>	<b>151.61</b>	<b>131.05</b>	<b>148.80</b>	<b>158.75</b>	<b>169.40</b>

## Interest on Consumer Security Deposit

### Petitioners Submission

2.180 Interest on Consumer Security Deposit is payable 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. Further, the petitioner have provisionally considered rate on Consumer Security Deposit rate in line with the actual rate arrived based on the audited accounts.

2.181 The DISCOM-Wise summary of interest on Consumer Security Deposit is mentioned in the table below:

**Table 96: Interest on Consumer Security Deposit for DISCOMs for FY 2022-2026-27 (Rs. Crore)**

DISCOM	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
East DISCOM	50.14	52.79	55.63	58.65	61.89
West DISCOM	90.06	102.01	114.47	127.45	140.99
Central DISCOM	71.45	77.60	84.00	90.68	97.64
<b>State</b>	<b>211.65</b>	<b>232.40</b>	<b>254.09</b>	<b>276.78</b>	<b>300.51</b>

### Commission's Analysis of Consumer Security Deposit

2.182 The Commission has computed the interest on consumer security deposit as per the norms of the MYT Regulations, 2021 at RBI latest Bank Rate of 4.25% and admitted the same as shown in the table below:

**Table 97: Interest on Consumer Security Deposit (CSD) admitted for DISCOMs for FY 2022-23 to FY 2026-27 (Rs. Crore)**

DISCOM	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
East DISCOM	43.61	45.77	48.09	50.56	53.20
West DISCOM	70.25	80.58	91.35	102.57	114.27
Central DISCOM	47.58	51.93	56.47	61.19	66.12
<b>State</b>	<b>161.44</b>	<b>178.28</b>	<b>195.90</b>	<b>214.32</b>	<b>233.59</b>

### Return on Equity (RoE)

#### Petitioners' submission

2.183 MYT Regulations, 2021 specifies 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 additional Return of 2% has been linked to

performance which is to be allowed at the time of True-up.

- 2.184 Further, Petitioners requested the Commission to allow base RoE at 16%. However, in this Petition the Petitioners have considered base RoE at 14% in line with the MYT Regulations, 2021. The opening balance of Equity for FY 2022-23 has been considered in line with the closing balance of equity as admitted by the Commission in its True-up Order. The addition to equity has been considered as per the capitalization proposed in this Petition for each year of the Control Period. The closing balance of equity has been arrived by adding the equity infusion to the opening balance of equity of respective year. Accordingly, the Return on Equity has been calculated on the average equity balance of the respective year as shown in the table below:

**Table 98: Return on Equity Claimed by East DSICOM for FY 2022-23 to FY 2026-27  
(Rs. Crore)**

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
A	<b>Gross Fixed Assets at the beginning of year (net of consumer contributions)</b>	<b>9,250.88</b>	<b>10,319.73</b>	<b>11,676.87</b>	<b>13,276.57</b>	<b>14,417.01</b>
A1	Opening balance of GFA identified as funded through equity	1,999.15	2,154.12	2,302.27	2,411.51	2,467.01
B	<b>Proposed capitalisation of assets as per the investment plan (net of consumer contribution and grant)</b>	<b>1,068.85</b>	<b>1,357.14</b>	<b>1,599.70</b>	<b>1,140.44</b>	<b>683.09</b>
B1	Proportion of capitalised assets funded out of equity, internal reserves	154.98	148.14	109.24	55.51	30.56
B2	Balance Proportion of capitalised assets funded out of project loans (B - B1)	913.87	1,209.00	1,490.46	1,084.93	652.53
C1	Normative additional equity (30% of B)	320.65	407.14	479.91	342.13	204.93
C2	Normative additional debt (70% of B)	748.19	950.00	1,119.79	798.31	478.17
D1	Excess / shortfall of additional equity over normative (B1-C1)	(165.68)	(259.00)	(370.67)	(286.63)	(174.37)
D2	Excess / shortfall of additional debt over normative (B2-C2)	165.68	259.00	370.67	286.63	174.37
E	<b>Equity eligible for Return (A1+(C1/2)) OR (A1+(B1/2)), whichever is lower</b>	<b>2,076.64</b>	<b>2,228.19</b>	<b>2,356.89</b>	<b>2,439.26</b>	<b>2,482.29</b>
F	<b>Rate of Return in Equity</b>	<b>14.00%</b>	<b>14.00%</b>	<b>14.00%</b>	<b>14.00%</b>	<b>14.00%</b>
G	<b>Return on Equity (14% on E)</b>	<b>290.73</b>	<b>311.95</b>	<b>329.96</b>	<b>341.50</b>	<b>347.52</b>

**Table 99: Return on Equity Claimed by West DSICOM for FY 2022-23 to FY 2026-27  
(Rs. Crore)**

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
A	<b>Gross Fixed Assets at the beginning of year (net of consumer contributions)</b>	<b>9,224.32</b>	<b>10,182.01</b>	<b>11,487.16</b>	<b>13,068.08</b>	<b>13,938.39</b>
A1	Opening balance of GFA identified as funded through equity	1,593.10	1,666.57	1,745.74	1,831.10	1,914.67
B	<b>Proposed capitalisation of assets as per the investment plan (net of consumer contribution and grant)</b>	<b>957.69</b>	<b>1,305.15</b>	<b>1,580.92</b>	<b>870.31</b>	<b>663.14</b>
B1	Proportion of capitalised assets funded out of equity, internal reserves	73.47	79.18	85.35	83.57	82.00
B2	Balance Proportion of capitalised assets funded out of project loans (B - B1)	884.22	1,225.97	1,495.57	786.74	581.14

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
C1	Normative additional equity (30% of B)	287.31	391.54	474.28	261.09	198.94
C2	Normative additional debt (70% of B)	670.38	913.60	1,106.64	609.22	464.20
D1	Excess / shortfall of additional equity over normative (B1-C1)	(213.84)	(312.37)	(388.92)	(177.52)	(116.94)
D2	Excess / shortfall of additional debt over normative (B2-C2)	213.84	312.37	388.92	177.52	116.94
E	<b>Equity eligible for Return (A1+(C1/2)) OR (A1+(B1/2)), whichever is lower</b>	<b>1,629.83</b>	<b>1,706.15</b>	<b>1,788.42</b>	<b>1,872.88</b>	<b>1,955.67</b>
F	<b>Rate of Return in Equity</b>	<b>14.00%</b>	<b>14.00%</b>	<b>14.00%</b>	<b>14.00%</b>	<b>14.00%</b>
G	<b>Return on Equity (14% on E)</b>	<b>228.18</b>	<b>238.86</b>	<b>250.38</b>	<b>262.20</b>	<b>273.79</b>

**Table 100: Return on Equity Claimed by Central DSICOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
A	<b>Gross Fixed Assets at the beginning of year (net of consumer contributions)</b>	<b>10,184.43</b>	<b>11,025.41</b>	<b>12,459.22</b>	<b>14,062.57</b>	<b>14,688.64</b>
A1	Opening balance of GFA identified as funded through equity	1,884.03	2,040.30	2,175.51	2,269.33	2,366.32
B	<b>Proposed capitalisation of assets as per the investment plan (net of consumer contribution and grant)</b>	<b>840.99</b>	<b>1,433.81</b>	<b>1,603.35</b>	<b>626.07</b>	<b>489.77</b>
B1	Proportion of capitalised assets funded out of equity, internal reserves	156.27	135.21	93.82	96.99	90.62
B2	Balance Proportion of capitalised assets funded out of project loans (B - B1)	684.72	1,298.60	1,509.53	529.08	399.15
C1	Normative additional equity (30% of B)	252.30	430.14	481.00	187.82	146.93
C2	Normative additional debt (70% of B)	588.69	1,003.66	1,122.34	438.25	342.84
D1	Excess / shortfall of additional equity over normative (B1-C1)	(96.03)	(294.93)	(387.18)	(90.83)	(56.31)
D2	Excess / shortfall of additional debt over normative (B2-C2)	96.03	294.93	387.18	90.83	56.31
E	<b>Equity eligible for Return (A1+(C1/2)) OR (A1+(B1/2)), whichever is lower</b>	<b>1,962.16</b>	<b>2,107.90</b>	<b>2,222.42</b>	<b>2,317.82</b>	<b>2,411.63</b>
F	<b>Rate of Return in Equity</b>	<b>14.00%</b>	<b>14.00%</b>	<b>14.00%</b>	<b>14.00%</b>	<b>14.00%</b>
G	<b>Return on Equity (14% on E)</b>	<b>274.70</b>	<b>295.11</b>	<b>311.14</b>	<b>324.50</b>	<b>337.63</b>

## Commission's Analysis of Return on Equity

2.185 Regulation 31 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 specifies methodology for computation of Return on Equity (RoE). The relevant extract for the provision has been reproduced below:-

### **“31. Return on Equity.-**

*31.1. Return on equity shall be computed in rupee terms, on the paid-up equity capital determined in accordance with Regulation 22.*

*31.2. Return on Equity shall be allowed in two parts, i.e., Base Return on Equity and*

*Additional Return on Equity linked to actual performance.*

*31.3. Base Return on Equity shall be allowed at the rate of 14%.*

*31.4. The Additional Return on Equity shall be allowed at the time of true-up subject to the following:*

*(a) If the status of metering of rural consumers under the domestic categories is achieved at the levels specified below, the Additional Return on Equity of 0.75% shall be allowed:*

<b>Year</b>	<b>Metering completed as % of total connections</b>		
	<b>East</b>	<b>West</b>	<b>Central</b>
<i>FY 2022-23</i>	<i>92%</i>	<i>100%</i>	<i>84%</i>
<i>FY 2023-24</i>	<i>94%</i>	<i>100%</i>	<i>88%</i>
<i>FY 2024-25</i>	<i>96%</i>	<i>100%</i>	<i>92%</i>
<i>FY 2025-26</i>	<i>98%</i>	<i>100%</i>	<i>96%</i>
<i>FY 2026-27</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>

*(b) If the total value of capital investment works capitalized in a year is more than 95% of the total approved capitalisation towards approved works for that year, the Additional Return on Equity of 0.75% shall be allowed;*

*(c) If the actual Repairs and Maintenance expenses in a year is more than 95% of the approved Repairs and Maintenance expenses for that year, the Additional Return on Equity of 0.50% shall be allowed.*

*31.5. Any expenses on payment of Income Tax paid shall be allowed extra on actual basis on the licensed business of the Distribution Licensee.*

*31.6. The premium raised by the Licensee while issuing share capital and investment of internal resources created out of free reserve, if any, shall also be reckoned as paid-up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting capital expenditure and forms part of the approved financial package. For the purposes of calculation of computation of return, the portion of free reserves utilized for meeting the capital expenditure shall be considered from the date the asset created is productively deployed in the distribution business.”*

2.186 As per MYT Regulations, 2021, Return on Equity is allowable in two parts, i.e., Base Return on Equity of 14% and Additional Return on Equity of 2% subjected to achievement of target / performance, which is to be allowed at the time of true-up after prudence check. Therefore, Commission in this order has considered base rate of 14% for computation for Return of Equity for the Control Period.

2.187 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.

2.188 Further, Regulation 31 of the MYT Regulations, 2021 provides that only such paid up share capital is to be reckoned for computation of Return on Equity, which has been actually utilised for meeting capital expenditure and forms a part of the approved financial package. Accordingly, based on the above, the approach adopted by the Commission for computation of Return of Equity for the Control Period from FY 2022-23 to FY 2026-27 is as follows:

- a) Opening Equity for FY 2021-22 has been considered as the closing equity admitted in true up of FY 2020-21. Thereafter addition in equity for FY 2021-22 has been considered as per the Tariff Order for FY 2021-22. The closing equity thus arrived for FY 2021-22 has been considered as opening equity for FY 2022-23.
- b) Net asset addition to GFA during each year of the Control Period is arrived by subtracting the consumer contribution/Grants received from total asset addition to GFA.
- c) 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.
- d) RoE for each year has been computed considering the average equity for the year and Rate of RoE of 14% as per Regulation 31.

2.189 The total equity identified along with RoE as admitted for FY 2022-23 to FY 2026-27 is shown in the tables below:

**Table 101: Return on Equity admitted for East DISCOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Opening Equity identified with GFA as on 1 <sup>st</sup> April	2,109.94	2,264.91	2,413.06	2,522.30	2,577.80
GFA Addition	1,586.39	2,287.30	2,540.14	1,933.79	1,235.04
Consumer Deposit and Grants received	517.55	930.16	940.44	793.36	551.94
Net GFA Addition	1,068.85	1,357.14	1,599.70	1,140.44	683.09
30% of addition to net GFA considered as funded through equity net of consumer contribution	320.65	407.14	479.91	342.13	204.93
Proposed Equity addition during the Year	154.98	148.14	109.24	55.51	30.56
Equity addition admitted during the Year	154.98	148.14	109.24	55.51	30.56
Closing Equity as on 31 <sup>st</sup> March	2,264.91	2,413.06	2,522.30	2,577.80	2,608.36
Average Equity	2,187.43	2,338.98	2,467.68	2,550.05	2,593.08
<b>RoE @ 14% Admitted</b>	<b>306.24</b>	<b>327.46</b>	<b>345.47</b>	<b>357.01</b>	<b>363.03</b>

**Table 102: Return on Equity admitted for West DISCOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Opening Equity identified with GFA as on 1 <sup>st</sup> April	1,267.93	1,349.18	1,431.08	1,519.52	1,605.56
GFA Addition	1,305.59	1,895.25	2,299.46	1,813.86	1,578.44
Consumer Deposit and Grants received	347.90	590.11	718.54	943.55	915.31

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Net GFA Addition	957.69	1,305.15	1,580.92	870.31	663.14
30% of addition to net GFA considered as funded through equity net of consumer contribution	287.31	391.54	474.28	261.09	198.94
Proposed Equity addition during the Year	81.25	81.90	88.44	86.04	83.98
Equity addition admitted during the Year	81.25	81.90	88.44	86.04	83.98
Closing Equity as on 31 <sup>st</sup> March	1,349.18	1,431.08	1,519.52	1,605.56	1,689.53
Average Equity	1,308.56	1,390.13	1,475.30	1,562.54	1,647.55
<b>RoE @ 14% Admitted</b>	<b>183.20</b>	<b>194.62</b>	<b>206.54</b>	<b>218.76</b>	<b>230.66</b>

**Table 103: Return on Equity admitted for Central DISCOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Opening Equity identified with GFA as on 1 <sup>st</sup> April	2,291.06	2,447.32	2,582.53	2,676.36	2,773.34
GFA Addition	1,081.65	1,995.92	2,448.00	1,954.88	863.03
Consumer Deposit and Grants received	240.66	562.11	844.65	1,328.81	373.26
Net GFA Addition	840.99	1,433.81	1,603.35	626.07	489.77
30% of addition to net GFA considered as funded through equity net of consumer contribution	252.30	430.14	481.00	187.82	146.93
Proposed Equity addition during the Year	156.27	135.21	93.82	96.99	90.62
Equity addition admitted during the Year	156.27	135.21	93.82	96.99	90.62
Closing Equity as on 31 <sup>st</sup> March	2,447.32	2,582.53	2,676.36	2,773.34	2,863.96
Average Equity	2,369.19	2,514.93	2,629.44	2,724.85	2,818.65
<b>RoE @ 14% Admitted</b>	<b>331.69</b>	<b>352.09</b>	<b>368.12</b>	<b>381.48</b>	<b>394.61</b>

**Table 104: Return on Equity admitted for State DISCOM for FY 2022-23 to FY 2026-27 (Rs. Crore)**

DISCOM	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
East DISCOM	306.24	327.46	345.47	357.01	363.03
West DISCOM	183.20	194.62	206.54	218.76	230.66
Central DISCOM	331.69	352.09	368.12	381.48	394.61
<b>State</b>	<b>821.12</b>	<b>874.17</b>	<b>920.14</b>	<b>957.24</b>	<b>988.30</b>

## Other Items of ARR

2.190 Apart from the expense components discussed above, there are certain other items, which form part of the ARR of the DISCOMs. These include provision for bad debts, and other (Non-Tariff) Income. These are detailed below:

### Bad and doubtful debts

### Petitioners' submission

2.191 The MYT Regulations, 2021 provides methodology for computation of Provision for Bad and Doubtful Debts, wherein it is allowed to the maximum of 1% of revenue. The Bad &



doubtful debts claimed by the Petitioner for FY 2022-23 to FY 2026-27 is as follows:

**Table 105: Provision for Bad and Doubtful Debts for FY 2022-23 to FY 2026-27 (Rs Crore)**

DISCOM	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
East DISCOM	130.66	141.20	152.42	161.28	172.19
West DISCOM	179.41	195.21	209.70	224.20	237.21
Central DISCOM	140.26	152.30	164.56	176.58	187.82

## Commission's Analysis on Bad and Doubtful debts

2.192 Regulation 37 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 specifies methodology for computation of Bad and Doubtful Debts. The relevant extract of the Regulations is reproduced below:-

***“37. Bad and doubtful debts.-***

*The Licensee shall submit the Draft policy and procedure for identification of bad debts and writing off the same for the approval of the Commission within three months from the date of notification of these Regulations. Bad and Doubtful Debts shall be allowed based on bad debts actually written off in the past (in accordance to the procedure approved by the Commission) as per the available latest audited Financial Statement to the extent Commission considers it appropriate and shall be true up during the true up exercise for the relevant year subject to a limit of 1% of the yearly revenue”*

- 2.193 The Commission has not considered any provision for Bad and doubtful debt for the Control Period as Commission is of the view that any expenses against the bad and doubtful debts should be considered only at time of true-up after prudence check.
- 2.194 Further, the Petitioners are directed to submit draft policy and procedure for identification of bad debts and writing off the same for the approval of the Commission.

## Other Income

### Petitioners' submission

- 2.195 The main components of Non-Tariff Income are wheeling charges, supervision charges, sale of scrap and miscellaneous charges from consumers. The Petitioner have projected their Other Income & Non-Tariff Income for FY 2022-23 to FY 2026-26 based on averaging method over various components of other income.
- 2.196 Further, Petitioners have considered deferred income, i.e., income booked towards the depreciation for assets created through consumer contribution and grants under their claim of Other Income since, the Petitioners have claimed depreciation on gross block of assets. Further, in line with the methodology adopted by the Commission in its previous True-up Order of FY 2019-20, Petitioners have not considered the waived off amount by MPPTCL towards liability of wheeling charges on DISCOMs in other income.

2.197 Accordingly, the Other Income and Non-Tariff Income as filed by the Petitioners are shown in tables below:

**Table 106: Other Income and Non-Tariff Income for East DISCOM for FY 2022-23 to FY 2026-27 (Rs Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Income from Investment, Fixed & Call Deposits	8.01	7.53	7.77	7.65	7.71
Interest on loans and Advances to staff	0.00	0.00	0.00	0.00	0.00
Other Income from Trading/Sale of scrap	11.69	11.70	11.70	11.70	11.70
Interest on Advances to Suppliers / Contractors	0.00	0.00	0.00	0.00	0.00
Income/Fee/Collection against staff welfare activities	0.00	0.00	0.00	0.00	0.00
Miscellaneous receipts	84.88	81.34	83.11	82.23	82.67
Wheeling charges	0.84	0.81	0.83	0.82	0.82
Supervision charges	17.03	17.41	17.22	17.32	17.27
Recovery from theft	4.43	4.51	4.47	4.49	4.48
Meter Rent	39.81	40.78	40.30	40.54	40.42
Other Charges from Consumers	30.24	34.69	32.47	33.58	33.02
Deferred Income	226.36	233.44	280.77	325.24	360.03
<b>Total</b>	<b>423.29</b>	<b>432.22</b>	<b>478.62</b>	<b>523.56</b>	<b>558.11</b>

**Table 107: Other Income and Non-Tariff Income for West DISCOM for FY 2022-23 to FY 2026-27 (Rs Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Income from Investment, Fixed & Call Deposits	33.92	36.47	35.19	35.83	35.51
Interest on loans and Advances to staff	0.10	0.11	0.11	0.11	0.11
Other Income from Trading/Sale of scrap	0.00	0.00	0.00	0.00	0.00
Interest on Advances to Suppliers / Contractors	0.23	0.33	0.28	0.31	0.29
Income/Fee/Collection against staff welfare activities	0.00	0.00	0.00	0.00	0.00
Miscellaneous receipts	53.20	51.34	52.27	51.81	52.04
Wheeling charges	6.45	6.87	6.66	6.77	6.71
Supervision charges	19.37	19.95	19.66	19.80	19.73
Recovery from theft	0.00	0.00	0.00	0.00	0.00
Meter Rent	1.77	1.87	1.82	1.84	1.83
Net gain/(loss) on disposal of stores item	6.85	6.99	6.92	6.95	6.94
Income from renting	0.00	0.00	0.00	0.00	0.00
Other miscellaneous income	59.45	61.44	60.44	60.94	60.69
Deferred Income	160.38	209.21	274.81	345.73	412.71
<b>Total</b>	<b>341.72</b>	<b>394.57</b>	<b>458.16</b>	<b>530.09</b>	<b>596.57</b>

**Table 108: Other Income and Non-Tariff Income for Central DISCOM for FY 2022-23 to FY 2026-27 (Rs Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Miscellaneous receipts	40.74	41.57	41.16	41.36	41.26
Wheeling charges	0.54	0.76	0.65	0.70	0.67
Supervision charges	18.55	18.28	18.42	18.35	18.38
Recovery from theft	0.00	0.00	0.00	0.00	0.00
Meter Rent	36.43	37.52	36.98	37.25	37.11

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Other Charges from Consumers	0.00	0.00	0.00	0.00	0.00
Utility Charges	0.62	0.89	0.75	0.82	0.79
Net gain/(loss) on disposal of stores item	8.36	8.43	8.40	8.42	8.41
Income from renting	0.00	0.00	0.00	0.00	0.00
Other miscellaneous income	5.81	5.91	5.86	5.88	5.87
Deferred Income	258.57	285.95	334.53	401.25	405.93
<b>Total</b>	<b>369.61</b>	<b>399.31</b>	<b>446.73</b>	<b>514.03</b>	<b>518.42</b>

## Commission's Analysis on Other Income

2.198 The Commission has issued MPERC (Recovery of expenses and other charges for providing electric line or plant used for the purpose of giving supply) Regulations, (Revision-I) 2009 (Seventh Amendment) on 7<sup>th</sup> September 2020, vide which the Commission has notified metering and other charges. As per the Regulation, metering charges only be levied upto the effective period of the Retail Supply Tariff Order for FY 2019-20 and thereafter, metering charges shall be applicable in accordance with the provisions under respective Retail Supply Tariff Order issued by the Commission from time to time. The relevant extract of the Regulation is as follows:

### ***“5.0 Other Charges to be recovered from consumers: -***

*5.1.1 As provided for in section 45(3)(b) of the Electricity Act, 2003 (No. 36 of 2003), the Distribution Licensee may charge from the consumers a rent or other charge in respect of any electric Meter or Electrical Plant provided by the distribution Licensee. Accordingly, the Commission notifies schedule of metering charges and other charges as mentioned in Annexure I appended to this Regulation. However, metering charges prescribed in the Annexure I appended to this regulation shall be levied up to the effective period of the retail supply tariff order for FY 2019-20. Thereafter, metering charges (if any) shall be applicable in accordance with the respective retail supply tariff order issued by the Commission from time to time.”*

2.199 In this Tariff Order, the Commission has decided not to levy any metering charges on the consumers.

2.200 Further, since the Commission has not allowed Depreciation of GFA created through consumer contribution and grants, corresponding income under the head of Deferred income has not been considered under the head of Other Income. The actual other income of the Distribution Licensees excluding meter rent as per true-up orders issued by the Commission for previous years is as shown in the table below:

**Table 109: Total actual other income as per true-up orders (Rs Crore)**

DISCOM	FY 2018-19	FY 2019-20	FY 2020-21
East DISCOM	291.53	156.92	151.11
West DISCOM	201.46	134.07	117.83
Central DISCOM	286.41	315.38	102.41

- 2.201 Based on the above actual other income admitted by the Commission in true-up orders for FY 2018-19, FY 2019-20 and FY 2020-21, the Commission has admitted Other Income for the Control period as the average of actual other income during FY 2018-19 to FY 2020-21, which includes interest on deposits, sale of scrap, other miscellaneous receipts, etc., but excludes meter rent. The admitted Other Income for the Control Period from FY 2022-23 to FY 2026-27 by the Commission excluding metering charges is as tabulated below, which shall be subjected to true up on the basis of actuals:

**Table 110: Other Income admitted for FY 2022-23 to FY 2026-27 (Rs. Crore)**

DISCOM	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
East DISCOM	199.85	199.85	199.85	199.85	199.85
West DISCOM	151.12	151.12	151.12	151.12	151.12
Central DISCOM	234.73	234.73	234.73	234.73	234.73
<b>State</b>	<b>585.70</b>	<b>585.70</b>	<b>585.70</b>	<b>585.70</b>	<b>585.70</b>

## Differential Bulk Supply Tariff (DBST)

### Petitioners' Submission

- 2.202 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 Differential Bulk Supply Tariff (DBST) methodology.
- 2.203 With the Implementation of Differential 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.
- 2.204 The Power Purchase cost allocated to DISCOMs based on DBST methodology for FY 2022-23 as provided in the table below:

**Table 111: DBST submitted by the Petitioners for FY 2022-23 (Rs Crore)**

S.no	Particulars	Unit	East DISCOM	West DISCOM	Central DISCOM	State
<b>A</b>	<b>Revenue from Existing Tariff</b>	<b>Rs. Cr</b>	<b>13,066</b>	<b>17,866</b>	<b>14,026</b>	<b>44,957</b>
<b>B</b>	<b>Other costs of DISCOMs (Expenditure other than power purchase cost)</b>	<b>Rs. Cr</b>	<b>4,341</b>	<b>2,160</b>	<b>4,327</b>	<b>10,828</b>
<b>1</b>	R&M Expense	Rs. Cr	506	359	494	1,359
<b>2</b>	Employee Expenses	Rs. Cr	1,323	1,225	1,205	3,753
<b>3</b>	A&G Expense	Rs. Cr	126	139	120	385
<b>4</b>	Depreciation and Related debits	Rs. Cr	715	498	708	1,921
<b>5</b>	Interest & Finance Charges	Rs. Cr	417	381	501	1,299
<b>6</b>	Other Debits, Write-offs (Prior period and bad debts)	Rs. Cr	131	179	140	450
<b>7</b>	Return on Equity	Rs. Cr	90	90	275	455
<b>8</b>	Less: Other income	Rs. Cr	228	228	370	826
<b>9</b>	True up for FY 2019-20	Rs. Cr	1,260	(482)	1,253	2,031
<b>C</b>	<b>Intra- state transmission Charges including SLDC Charges</b>	<b>Rs. Cr</b>	<b>1,262</b>	<b>1,507</b>	<b>1,487</b>	<b>4,256</b>
<b>D</b>	<b>Aggregated Amount available with DISCOMs for Power purchase (A-B-C)</b>	<b>Rs. Cr</b>	<b>7,462</b>	<b>14,198</b>	<b>8,213</b>	<b>29,874</b>
<b>E</b>	<b>Total Power Purchase Cost</b>	<b>Rs. Cr</b>				<b>33,760</b>
<b>F</b>	<b>Surplus/Gap (E-D)</b>	<b>Rs. Cr</b>				<b>3,886</b>
<b>G</b>	Ex-Bus Energy Requirement	MU	24,746	33,498	26,435	84,679
<b>H</b>	Ex-Bus Energy Requirement	%	29%	40%	31%	100%
<b>I</b>	<b>Allocation of surplus/Gap as per the Energy Requirement</b>	<b>Rs. Cr</b>	<b>1,136</b>	<b>1,537</b>	<b>1,213</b>	<b>3,886</b>
<b>J</b>	<b>Power Purchase Cost for DISCOM (D+I)</b>	<b>Rs. Cr</b>	<b>8,598</b>	<b>15,735</b>	<b>9,426</b>	<b>33,760</b>
<b>K</b>	<b>Bulk Supply Tariff</b>	<b>Rs./kWh</b>	<b>3.47</b>	<b>4.70</b>	<b>3.57</b>	<b>3.99</b>

## Commission Analysis

- 2.205 The Commission in previous Retail Tariffs Orders has been approving uniform tariff for the State considering the revenue gap at the State level. For achieving the same, the Commission has been allocating the power purchase cost among the DISCOMs in proportion to the revenue availability with each DISCOMs. However, it is observed that the Government of Madhya Pradesh vide gazette notification dated 21<sup>st</sup> March, 2016, had allocated all the stations to MPPMCL for further allocation of power purchase cost among all the three DISCOMs. Accordingly, MPPMCL implemented DBST methodology from January, 2020. Under DBST overall Power Purchase Cost of all the three DISCOMs are being distributed on the basis of Revenue available with DISCOMs for power purchase and in-proportion of their energy requirement.
- 2.206 As the power purchase for all three DISCOMs is being managed by MPPMCL, it is necessary to approve power purchase cost in equitable way to approve uniform tariff across the DISCOMs in the State. Accordingly, the Commission has allocated power purchase cost among the three DISCOMs based on DBST methodology as proposed by the Petitioner for ARR of FY 2022-23 as shown in the table below:

**Table 112: Differential Bulk Supply Tariff Admitted by the Commission for FY 2022-23 (Rs Crore)**

Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	State
<b>Revenue from Admitted Tariff (Rs. Crore)</b>	<b>A</b>	<b>12,992.03</b>	<b>17,872.71</b>	<b>15,106.91</b>	<b>45,971.64</b>
<b>Other Costs of ARR of DISCOMs (Expenses other than Power Purchase Cost) (Rs. Crore)</b>	<b>B</b>	<b>3,878.40</b>	<b>1,449.25</b>	<b>3,882.06</b>	<b>9,209.70</b>
O&M Expenses		1,785.33	1,599.46	1,747.01	5,131.80
Depreciation		290.30	125.77	311.28	727.36
Interest & Finance Charges					
<i>On Project Loans</i>		383.08	156.69	428.54	968.31
<i>On Working Capital Loans</i>		65.95	11.85	73.82	151.61
<i>On Consumer Security Deposit</i>		43.61	70.25	47.58	161.44
Return on Equity		306.24	183.20	331.69	821.12
Bad & Doubtful Debts		0.00	0.00	0.00	0.00
Less: Other Non-Tariff Income		199.85	151.12	234.73	585.70
Revenue Gap of MP DISCOMs and MP Transco True-up		1,203.74	(546.86)	1,176.88	1,833.76

Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	State
Intra-State Transmission Charges including SLDC	C	1,260.51	1,504.90	1,484.82	4,250.24
Aggregated Amount available with DISCOMs for Power purchase (Rs. Crore)	D=A-B-C	7,853.12	14,918.56	9,740.03	32,511.70
Total Power Purchase Cost (Rs. Crore)	E				32,510.99
Revenue Gap/(Surplus) (Rs. Crore)	F=E-D				(0.71)
Ex-Bus Energy Requirement (MU)	G	24,302.18	33,302.46	28,091.54	85,696.18
% Allocation as per Ex-Bus Energy Requirement		28%	39%	33%	100%
Allocation of Revenue Gap/(Surplus) as per Ex-Bus Energy Requirement (Rs. Crore)	H	(0.20)	(0.28)	(0.23)	(0.71)
Power Purchase Cost for DISCOMs (Rs. Crore)	I=H+D	7,852.92	14,918.28	9,739.79	32,510.99
Bulk Supply Tariff for FY 2022-23		3.23	4.48	3.47	3.79

2.207 Based on the above, the ARR as admitted for the Control Period is shown in the following table:

**Table 113: Aggregate Revenue Requirement (ARR) admitted for East DISCOM for Control Period (Rs Crore)**

Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Power Purchase Cost including Inter State Transmission Charges	8,598.09	7,852.92	10,657.53	10,034.38	11,409.18	10,718.76	12,167.36	11,439.23	12,881.85	12,359.46
Intra-State Transmission Charges including SLDC Charges	1,262.39	1,260.51	1,290.54	1,288.49	1,342.16	1,313.28	1,395.85	1,338.55	1,451.68	1,364.30
O&M Expenses	1,955.23	1,785.33	2,181.38	1,968.40	2,548.30	2,306.30	2,763.02	2,489.15	2,965.71	2,666.37
Depreciation	715.41	290.30	785.65	326.33	909.95	370.24	1,025.76	410.93	1,108.02	438.01
Interest & Finance Charges										
<i>On Project Loans</i>	298.35	383.08	331.81	436.74	378.42	517.96	406.83	592.98	390.39	630.22
<i>On Working Capital Loans</i>	68.80	65.95	65.65	66.04	74.93	78.47	79.83	86.53	88.05	94.81
<i>On Consumer Security Deposit</i>	50.14	43.61	52.79	45.77	55.63	48.09	58.65	50.56	61.89	53.20
Return on Equity	290.73	306.24	311.95	327.46	329.96	345.47	341.50	357.01	347.52	363.03
Bad & Doubtful Debts	130.66	0.00	141.20	0.00	152.42	0.00	161.28	0.00	172.19	0.00

Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
<b>Total Expenses Admitted</b>	<b>13,369.79</b>	<b>11,987.94</b>	<b>15,818.50</b>	<b>14,493.62</b>	<b>17,200.96</b>	<b>15,698.59</b>	<b>18,400.08</b>	<b>16,764.92</b>	<b>19,467.29</b>	<b>17,969.39</b>
Less: Other income and Non -Tariff Income	423.29	199.85	432.22	199.85	478.62	199.85	523.56	199.85	558.11	199.85
<b>Total ARR Admitted</b>	<b>12,946.51</b>	<b>11,788.09</b>	<b>15,386.28</b>	<b>14,293.77</b>	<b>16,722.33</b>	<b>15,498.73</b>	<b>17,876.53</b>	<b>16,565.07</b>	<b>18,909.18</b>	<b>17,769.54</b>
Revenue Gap of MP Transco True-up of FY 2019-20	-	10.05	-	-	-	-	-	-	-	-
Revenue Gap of MP DISCOMs True-up of FY 2019-20	1,260.38	1,260.38	-	-	-	-	-	-	-	-
Revenue Gap of MP DISCOMs True-up of FY 2020-21	-	63.91	-	-	-	-	-	-	-	-
Revenue Surplus of MP Genco True-up of FY 2019-20	-	(130.60)	-	-	-	-	-	-	-	-
<b>Total ARR (including True-up)</b>	<b>14,206.89</b>	<b>12,991.83</b>	<b>15,386.28</b>	<b>14,293.77</b>	<b>16,722.33</b>	<b>15,498.73</b>	<b>17,876.53</b>	<b>16,565.07</b>	<b>18,909.18</b>	<b>17,769.54</b>

**Table 114: Aggregate Revenue Requirement (ARR) admitted for West DISCOM for Control Period (Rs Crore)**

Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Power Purchase Cost including Inter State Transmission Charges	15,735.32	14,918.28	14,426.97	13,768.50	15,443.10	14,675.91	16,469.61	15,618.41	17,436.16	16,790.22
Intra-State Transmission Charges including SLDC Charges	1,507.50	1,504.90	1,544.19	1,541.38	1,605.96	1,571.04	1,670.20	1,601.26	1,737.01	1,632.07
O&M Expenses	1,722.82	1,599.46	1,931.54	1,784.89	2,236.16	2,059.23	2,443.14	2,230.89	2,642.34	2,399.26
Depreciation	497.67	125.77	585.83	151.43	701.59	184.16	815.12	211.96	908.75	229.35
Interest & Finance Charges										
<i>On Project Loans</i>	274.15	156.69	316.97	236.35	374.98	340.49	405.58	422.22	391.22	461.36
<i>On Working Capital Loans</i>	16.32	11.85	17.90	0.00	19.79	0.00	21.92	0.00	23.92	0.00
<i>On Consumer Security Deposit</i>	90.06	70.25	102.01	80.58	114.47	91.35	127.45	102.57	140.99	114.27
Return on Equity	228.18	183.20	238.86	194.62	250.38	206.54	262.20	218.76	273.79	230.66
Bad & Doubtful Debts	179.41	0.00	195.21	0.00	209.70	0.00	224.20	0.00	237.21	0.00
<b>Total Expenses Admitted</b>	<b>20,251.42</b>	<b>18,570.41</b>	<b>19,359.48</b>	<b>17,757.75</b>	<b>20,956.13</b>	<b>19,128.72</b>	<b>22,439.43</b>	<b>20,406.06</b>	<b>23,791.39</b>	<b>21,857.18</b>
Less: Other income and Non -Tariff Income	341.73	151.12	394.59	151.12	458.18	151.12	530.11	151.12	596.58	151.12
<b>Total ARR Admitted</b>	<b>19,909.68</b>	<b>18,419.29</b>	<b>18,964.89</b>	<b>17,606.63</b>	<b>20,497.95</b>	<b>18,977.60</b>	<b>21,909.33</b>	<b>20,254.94</b>	<b>23,194.80</b>	<b>21,706.06</b>



Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Revenue Gap of MP Transco True-up of FY 2019-20	-	12.34	-	-	-	-	-	-	-	-
Revenue Gap of MP DISCOMs True-up of FY 2019-20	(482.17)	(482.17)	-	-	-	-	-	-	-	-
Revenue Gap of MP DISCOMs True-up of FY 2020-21	-	87.45	-	-	-	-	-	-	-	-
Revenue Surplus of MP Genco True-up of FY 2019-20	-	(164.47)	-	-	-	-	-	-	-	-
<b>Total ARR (including True-up)</b>	<b>19,427.51</b>	<b>17,872.43</b>	<b>18,964.89</b>	<b>17,606.63</b>	<b>20,497.95</b>	<b>18,977.60</b>	<b>21,909.33</b>	<b>20,254.94</b>	<b>23,194.80</b>	<b>21,706.06</b>

Table 115: Aggregate Revenue Requirement (ARR) admitted for Central DISCOM for Control Period (Rs Crore)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Power Purchase Cost including Inter State Transmission Charges	9,426.17	9,739.79	11,384.47	11,545.09	12,186.86	12,279.85	12,996.51	13,068.24	13,759.08	14,090.56
Intra-State Transmission Charges including SLDC Charges	1,486.52	1,484.82	1,504.00	1,502.12	1,564.16	1,531.02	1,626.73	1,560.47	1,691.80	1,590.49
O&M Expenses	1,819.30	1,747.01	2,005.04	1,924.52	2,296.08	2,197.95	2,489.67	2,369.47	2,673.76	2,537.10
Depreciation	707.95	311.28	783.52	343.02	896.45	385.38	1,010.41	416.48	1,038.73	432.05
Interest & Finance Charges										
<i>On Project Loans</i>	376.31	428.54	393.70	476.04	431.29	548.25	431.47	586.17	386.28	579.07
<i>On Working Capital Loans</i>	53.45	73.82	47.79	65.01	52.63	70.33	56.78	72.22	59.30	74.59
<i>On Consumer Security Deposit</i>	71.45	47.58	77.60	51.93	84.00	56.47	90.68	61.19	97.64	66.12
Return on Equity	274.70	331.69	295.11	352.09	311.14	368.12	324.50	381.48	337.63	394.61
Bad & Doubtful Debts	140.26	0.00	152.30	0.00	164.56	0.00	176.58	0.00	187.82	0.00
<b>Total Expenses Admitted</b>	<b>14,356.12</b>	<b>14,164.53</b>	<b>16,643.52</b>	<b>16,259.82</b>	<b>17,987.17</b>	<b>17,437.37</b>	<b>19,203.32</b>	<b>18,515.72</b>	<b>20,232.03</b>	<b>19,764.60</b>
Less: Other income and Non -Tariff Income	369.61	234.73	399.31	234.73	446.73	234.73	514.03	234.73	518.42	234.73
<b>Total ARR Admitted</b>	<b>13,986.51</b>	<b>13,929.80</b>	<b>16,244.21</b>	<b>16,025.09</b>	<b>17,540.44</b>	<b>17,202.64</b>	<b>18,689.28</b>	<b>18,280.99</b>	<b>19,713.61</b>	<b>19,529.87</b>
Revenue Gap of MP Transco True-up of FY 2019-20	-	11.82	-	-	-	-	-	-	-	-
Revenue Gap of MP DISCOMs True-up	1,252.72	1,252.72	-	-	-	-	-	-	-	-

Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
of FY 2019-20										
Revenue Gap of MP DISCOMs True-up of FY 2020-21	-	74.39	-	-	-	-	-	-	-	-
Revenue Surplus of MP Genco True-up of FY 2019-20	-	(162.05)	-	-	-	-	-	-	-	-
<b>Total ARR (including True-up)</b>	<b>15,239.23</b>	<b>15,106.68</b>	<b>16,244.21</b>	<b>16,025.09</b>	<b>17,540.44</b>	<b>17,202.64</b>	<b>18,689.28</b>	<b>18,280.99</b>	<b>19,713.61</b>	<b>19,529.87</b>

**Table 116: Aggregate Revenue Requirement (ARR) admitted for State for Control Period (Rs Crore)**

Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Power Purchase Cost including Inter State Transmission Charges	33,759.57	32,510.99	36,468.97	35,347.97	39,039.14	37,674.53	41,633.49	40,125.88	44,077.09	43,240.23
Intra-State Transmission Charges including SLDC Charges	4,256.41	4,250.24	4,338.73	4,332.00	4,512.28	4,415.33	4,692.77	4,500.28	4,880.49	4,586.86
O&M Expenses	5,497.35	5,131.80	6,117.96	5,677.81	7,080.55	6,563.49	7,695.84	7,089.51	8,281.81	7,602.73
Depreciation	1,921.03	727.36	2,154.99	820.78	2,508.00	939.78	2,851.28	1,039.37	3,055.49	1,099.41
Interest & Finance Charges										
<i>On Project Loans</i>	948.82	968.31	1,042.48	1,149.13	1,184.69	1,406.70	1,243.88	1,601.36	1,167.89	1,670.65
<i>On Working Capital Loans</i>	138.57	151.61	131.34	131.05	147.36	148.80	158.54	158.75	171.27	169.40
<i>On Consumer Security Deposit</i>	211.65	161.44	232.40	178.28	254.09	195.90	276.78	214.32	300.51	233.59
Return on Equity	793.61	821.12	845.92	874.17	891.48	920.14	928.19	957.24	958.94	988.30
Bad & Doubtful Debts	450.33	0.00	488.71	0.00	526.68	0.00	562.06	0.00	597.23	0.00
<b>Total Expenses Admitted</b>	<b>47,977.33</b>	<b>44,722.88</b>	<b>51,821.50</b>	<b>48,511.19</b>	<b>56,144.26</b>	<b>52,264.67</b>	<b>60,042.83</b>	<b>55,686.70</b>	<b>63,490.71</b>	<b>59,591.17</b>
Less: Other income and Non -Tariff Income	1,134.63	585.70	1,226.12	585.70	1,383.53	585.70	1,567.69	585.70	1,673.11	585.70
<b>Total ARR Admitted</b>	<b>46,842.70</b>	<b>44,137.17</b>	<b>50,595.38</b>	<b>47,925.49</b>	<b>54,760.72</b>	<b>51,678.97</b>	<b>58,475.14</b>	<b>55,101.00</b>	<b>61,817.60</b>	<b>59,005.46</b>
Revenue Gap of MP Transco True-up of FY 2019-20	-	34.21	-	-	-	-	-	-	-	-
Revenue Gap of MP DISCOMs True-up of FY 2019-20	2,030.93	2,030.92	-	-	-	-	-	-	-	-
Revenue Gap of MP DISCOMs True-up of FY 2020-21	-	225.75	-	-	-	-	-	-	-	-

Particulars	FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Revenue Surplus of MP Genco True-up of FY 2019-20	-	(457.12)	-	-	-	-	-	-	-	-
<b>Total ARR (including True-up)</b>	<b>48,873.63</b>	<b>45,970.94</b>	<b>50,595.38</b>	<b>47,925.49</b>	<b>54,760.72</b>	<b>51,678.97</b>	<b>58,475.14</b>	<b>55,101.00</b>	<b>61,817.60</b>	<b>59,005.46</b>

2.208 MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 specifies that the till time there is complete accounting segregation between Wheeling and Supply Businesses of the Distribution Licensee being done, the expenses of the Distribution Licensee shall be apportioned between the Wheeling and Supply Businesses in accordance with the allocation matrix. The relevant extract for the provision has been reproduced below: -

*“8.11. Till such time the complete accounting segregation has not been done between Wheeling and Supply Businesses of the Distribution Licensee, the expenses of the Distribution Licensee shall be apportioned between the Wheeling and Supply Businesses in accordance with the following Allocation Matrix:*

<i>Particulars</i>	<i>Wheeling Business</i>	<i>Supply Business</i>
<i>Operation and Maintenance expenses</i>	<i>70%</i>	<i>30%</i>
<i>Depreciation</i>	<i>95%</i>	<i>5%</i>
<i>Interest on loan</i>	<i>95%</i>	<i>5%</i>
<i>Interest on working capital</i>	<i>10%</i>	<i>90%</i>
<i>Return on Equity</i>	<i>90%</i>	<i>10%</i>
<i>Power purchase cost including transmission and SLDC charges</i>	<i>0%</i>	<i>100%</i>

”

2.209 The purpose of segregating the total distribution expenses into wheeling and Supply activities is to establish the wheeling charges that are to be recovered from open access customers.

2.210 Accordingly, the Commission has allocated the cost related to Wheeling and Supply activities as per allocation matrix. In the basis of the same, the ARR for FY 2022-23 for all the three DISCOMs is segregated as under:

**Table 117: Admitted ARR for Wheeling Business for FY 2022-23 (Rs. Crore)**

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Operation and Maintenance expenses	1,785.33	1,599.46	1,747.01	5,131.80
70% of Operation and Maintenance expenses for Wheeling Business	1,249.73	1,119.62	1,222.90	3,592.26
Depreciation	290.30	125.77	311.28	727.36
95% of Depreciation for Wheeling Business	275.79	119.48	295.72	690.99
Interest on Project Loans	383.08	156.69	428.54	968.31
95% of Interest on Project Loans for Wheeling Business	363.93	148.85	407.12	919.90
Interest on Working Capital for Wheeling Business	17.23	15.37	17.05	49.64
Return on Equity	306.24	183.20	331.69	821.12
90% of Return on Equity for Wheeling Business	275.62	164.88	298.52	739.01
Less: Other income and Non-Tariff Income	199.85	151.12	234.73	585.70
10% of other income and Non-Tariff Income for Wheeling Business	19.99	15.11	23.47	58.57
Impact of True-Ups of Past Years of MP Transco and DISCOMs for Wheeling Business	1,203.74	(546.86)	1,176.88	1,833.76
10% of Impact of True-Ups of Past Years of MP Transco and DISCOMs	120.37	(54.69)	117.69	183.38
<b>Total for Wheeling Business</b>	<b>2,282.68</b>	<b>1,498.41</b>	<b>2,335.52</b>	<b>6,116.61</b>

**Table 118: Admitted ARR for Supply Business for FY 2022-23 (Rs. Crore)**

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Power Purchase Cost including transmission and SLDC charges	9,113.43	16,423.19	11,224.62	36,761.23
100% of Power Purchase Cost including transmission and SLDC charges for Supply Business	9,113.43	16,423.19	11,224.62	36,761.23
Operation and Maintenance expenses	1,785.33	1,599.46	1,747.01	5,131.80
30% of Operation and Maintenance expenses for Supply Business	535.60	479.84	524.10	1,539.54
Depreciation	290.30	125.77	311.28	727.36
5% of Depreciation for Supply Business	14.52	6.29	15.56	36.37
Interest on Project Loans	383.08	156.69	428.54	968.31
5% of Interest on Project Loans for Supply Business	19.15	7.83	21.43	48.42
Interest on Working Capital for Supply Business	48.72	(3.52)	56.77	101.97
Return on Equity	306.24	183.20	331.69	821.12
10% of Return on Equity for Supply Business	30.62	18.32	33.17	82.11

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Interest on Consumer Security Deposit	43.61	70.25	47.58	161.44
100% of Interest on Consumer Security Deposit for Supply Business	43.61	70.25	47.58	161.44
Less: Other income and Non-Tariff Income	199.85	151.12	234.73	585.70
90% of other income and Non-Tariff Income for Supply Business	179.87	136.01	211.26	527.13
Impact of True-Ups of Past Years of MP Transco and DISCOMs	1,203.74	(546.86)	1,176.88	1,833.76
90% of Impact of True-Ups of Past Years of MP Transco and DISCOMs for Supply Business	1,083.37	(492.17)	1,059.19	1,650.39
<b>Total for Supply Business</b>	<b>10,709.15</b>	<b>16,374.02</b>	<b>12,771.16</b>	<b>39,854.33</b>

## Revenue from Existing and Admitted Tariffs and Gap/Surplus

### Petitioners' Submission

- 2.211 The Petitioners have submitted that there has been no substantial hike for FY 2014-15 and FY 2015-16 which have severely affected the financial health of the DISCOMs. For FY 2016-17 to FY 2020-21, the Commission has admitted tariff hike of 8.40%, 9.48%, 0%, 7.00% and 2% respectively. Whereas in FY 2021-22 there was a marginal tariff hike of 0.63% only. The DISCOMs are finding it very difficult to sustain their 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 Commission, and obligations to be met under the policy objectives of the State and Central Governments. Accordingly, 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 the petition.
- 2.212 Petitioners have proposed a hike of 8.71% for FY 2022-23 as without it DISCOMs will not be able to maintain its operational viability.
- 2.213 The revenue from existing and proposed tariff for FY 2022-23 is as follows:

**Table 119: Revenue at Existing and proposed Tariff submitted by Petitioner for FY 2022-23 (Rs. Crore)**

Tariff Category / Sub-category		East DISCOM		West DISCOM		Central DISCOM		Total for the State	
		Revenue at existing Tariff	Revenue at proposed Tariff	Revenue at existing Tariff	Revenue at proposed Tariff	Revenue at existing Tariff	Revenue at proposed Tariff	Revenue at existing Tariff	Revenue at proposed Tariff
LV-1	Domestic	4,116	4,529	4,543	4,995	4,000	4,398	12,659	13,921
LV-2	Non-Domestic	1,218	1,272	1,241	1,297	962	1,005	3,421	3,573
LV-3	Public Waterworks & Street Light	270	297	408	449	290	320	968	1,066
LV-4	LT Industry	444	467	675	708	294	310	1,413	1,485
LV-5	Agriculture	4,025	4,448	6,624	7,329	5,484	6,067	16,133	17,844
LV-6	EV Charging	0	0	1	1	1	1	2	2
<b>TOTAL – LT</b>		<b>10,073</b>	<b>11,013</b>	<b>13,492</b>	<b>14,778</b>	<b>11,031</b>	<b>12,101</b>	<b>34,596</b>	<b>37,891</b>
HV-1	Railway Traction	41	41	0	0	39	39	80	80
HV-2	HV 2: Coal Mines	455	479	0	0	27	29	482	507
HV-3.1	Industrial Use	1,443	1,478	2,427	2,437	1,472	1,470	5,342	5,385
HV-3.2	Non-Industrial	78	118	385	398	318	328	780	844
HV-3.3	Shopping Mall	27	28	44	46	39	41	111	115
HV-3.4	Power Intensive Industries	656	731	760	872	763	868	2,179	2,471
HV-4	Seasonal & Non-Seasonal	8	9	10	10	2	2	20	21
HV-5	PWW Works & Other Agri.	102	110	708	846	223	239	1,034	1,195
HV-6	Bulk Residential Users	180	198	20	22	105	115	306	335
HV-7	RECs/Synchro of power for Generator connected to Grid	1	1	18	18	6	6	24	25
HV-8	EV Charging	1	1	1	1	2	2	4	4
<b>TOTAL – HT</b>		<b>2,993</b>	<b>3,194</b>	<b>4,373</b>	<b>4,649</b>	<b>2,996</b>	<b>3,138</b>	<b>10,362</b>	<b>10,982</b>
<b>TOTAL (LT+HT)</b>		<b>13,066</b>	<b>14,207</b>	<b>17,866</b>	<b>19,427</b>	<b>14,026</b>	<b>15,239</b>	<b>44,957</b>	<b>48,873</b>

2.214 On the basis of the above, the projected Revenue Gap/(Surplus) submitted by the Petitioner is as follows:

**Table 120: Gap/Surplus for FY 2022-23 as submitted by the Petitioner**

Particulars	Unit	East DISCOM	West DISCOM	Central DISCOM	State
Total ARR	Rs Crore	14,207	19,427	15,239	48,873
Revenue at Current Tariffs	Rs Crore	13,066	17,866	14,026	44,957
Total Revenue Gap/(Surplus)	Rs Crore	1,141	1,562	1,213	3,915
Average Cost of Supply	Rs./Unit	7.12	7.20	7.25	7.19

**Commission Analysis**

2.215 The consumer category-wise revenue including rebate/incentives at existing and admitted tariff for FY 2022-23 is presented in the table below:

**Table 121: Revenue including Rebate/ Incentives at Existing and Admitted Tariffs for FY 2022-23 (Rs. Crore)**

DISCOM		East DISCOM		West DISCOM		Central DISCOM		State	
Tariff Category / Sub-category		Revenue at Existing Tariff	Revenue at Admitted Tariff	Revenue at Existing Tariff	Revenue at Admitted Tariff	Revenue at Existing Tariff	Revenue at Admitted Tariff	Revenue at Existing Tariff	Revenue at Admitted Tariff
LV-1	Domestic	3,562.06	3,686.80	4,093.15	4,227.76	4,181.31	4,320.05	11,836.52	12,234.60
LV-2	Non-Domestic	1,156.27	1,160.08	1,322.38	1,323.52	1,064.82	1,066.37	3,543.47	3,549.97
LV-3	Public Water Works & Street Light	261.01	268.18	365.97	379.07	289.34	297.97	916.31	945.23
LV-4	LT Industries	449.72	449.72	706.17	706.17	353.19	353.19	1,509.08	1,509.08
LV-5	Agriculture and Allied Activities	4,082.34	4,204.93	6,524.63	6,712.84	5,693.24	5,852.62	16,300.20	16,770.40
LV-6	E-Vehicle/ E-Rickshaws Charging Stations	0.03	0.03	0.57	0.57	0.98	0.98	1.58	1.58
	<b>LT Total</b>	<b>9,511.43</b>	<b>9,769.74</b>	<b>13,012.86</b>	<b>13,349.93</b>	<b>11,582.88</b>	<b>11,891.19</b>	<b>34,107.16</b>	<b>35,010.85</b>
HV-1	Railway Traction	30.28	30.28	0.00	0.00	27.59	27.59	57.87	57.87
HV-2	Coal Mines	451.71	460.16	0.00	0.00	25.74	26.27	477.45	486.42
HV-3	HT Industrial, Non-Industrial and shopping malls	2,369.02	2,427.01	3,585.74	3,680.86	2,724.68	2,792.46	8,679.44	8,900.34
	HV-3.1: Industrial	2,057.64	2,108.28	2,405.00	2,468.13	2,127.38	2,179.96	6,590.02	6,756.37
	HV-3.2: non-Industrial	194.47	198.54	360.87	368.71	268.74	274.99	824.09	842.24
	HV-3.3: shopping malls	11.26	11.57	43.76	44.56	39.39	40.14	94.40	96.26
	HV-3.4: Power Intensive Industries	105.65	108.63	776.12	799.46	289.17	297.37	1,170.94	1,205.46
HV-4	Seasonal & Non-Seasonal	7.50	7.73	8.19	8.43	1.73	1.78	17.43	17.95
HV-5	Irrigation, Public Water Works and Other than Agricultural	120.49	125.50	769.34	793.98	243.54	251.75	1,133.38	1,171.23

DISCOM		East DISCOM		West DISCOM		Central DISCOM		State	
Tariff Category / Sub-category		Revenue at Existing Tariff	Revenue at Admitted Tariff	Revenue at Existing Tariff	Revenue at Admitted Tariff	Revenue at Existing Tariff	Revenue at Admitted Tariff	Revenue at Existing Tariff	Revenue at Admitted Tariff
HV-6	Bulk Residential Users	164.44	169.32	19.49	20.18	103.78	106.92	287.71	296.43
HV-7	Synchronization / Start-Up Power	0.94	0.99	17.67	18.45	6.83	7.06	25.44	26.50
HV 8	E-Vehicle/ E-Rickshaws Charging Stations	1.30	1.30	0.87	0.87	1.88	1.88	4.05	4.05
<b>HT Total</b>		<b>3,145.67</b>	<b>3,222.28</b>	<b>4,401.30</b>	<b>4,522.78</b>	<b>3,135.79</b>	<b>3,215.72</b>	<b>10,682.76</b>	<b>10,960.79</b>
<b>Grand Total (LT + HT)</b>		<b>12,657.10</b>	<b>12,992.03</b>	<b>17,414.16</b>	<b>17,872.71</b>	<b>14,718.66</b>	<b>15,106.91</b>	<b>44,789.92</b>	<b>45,971.64</b>

2.216 On the basis of the above, details of total ARR as admitted by the Commission and the revenue income including rebate/incentives at existing and admitted tariff for FY 2022-23 is as shown in the table below:

**Table 122: Final ARR and Revenue from existing tariffs for FY 2022-23 (Rs Crore)**

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Total ARR admitted including True-up (A)	12,991.83	17,872.43	15,106.68	45,970.94
Revenue at existing Tariffs (B)	12,657.10	17,414.16	14,718.66	44,789.92
<b>Uncovered Gap/(Surplus) (C=A-B)</b>	<b>334.73</b>	<b>458.27</b>	<b>388.01</b>	<b>1,181.01</b>

2.217 To meet the aforesaid Revenue Gap of Rs. 1,181.01 Crore, the Commission has increased the tariff by 2.64%, which has been detailed in Tariff design chapter of this order. The total ARR admitted by the Commission and revenue at admitted tariff is shown in table below:

**Table 123: Final ARR and Revenue from admitted tariffs for FY 2022-23 (Rs Crore)**

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Total ARR admitted including True-up (A)	12,991.83	17,872.43	15,106.68	45,970.94
Revenue at admitted Tariffs (B)	12,992.03	17,872.71	15,106.91	45,971.64
<b>Uncovered Gap/(Surplus) (C=A-B)</b>	<b>(0.20)</b>	<b>(0.28)</b>	<b>(0.23)</b>	<b>(0.71)</b>



### **A3: WHEELING CHARGES, CROSS SUBSIDY SURCHARGE AND ADDITIONAL SURCHARGE**

#### **Determination of Wheeling Cost**

- 3.1 Regulation 8.11 of the MYT Regulations, 2021 provides allocation matrix for apportioning expenses of DISCOMs into wheeling and supply businesses, which is as follows:

<b>Particulars</b>	<b>Wheeling Business</b>	<b>Supply Business</b>
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%

- 3.2 On the basis of the above allocation matrix and admitted ARR for FY 2022-23, the expenditure towards wheeling business for all the DISCOMs works out to be Rs. 6,116.61 Crore.

#### **Segregation of costs among voltage levels**

- 3.3 The costs of distribution attributable to wheeling activity may further be distributed among the two voltage levels of distribution, i.e., 33 kV and below 33 kV. 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. At this juncture, the Commission is not inclined to get into those details, primarily on account of data unavailability.
- 3.4 The Distribution Licensees in the State presently do not maintain accounts of their costs on voltage-wise basis. Similar is the case with other Government-owned Distribution Licensees operating in most of the States in India.
- 3.5 It is observed that the present accounting practices followed by DISCOMs do not permit segregation of GFA among the voltage levels directly. The Commission, therefore, considers it appropriate to adopt the approach to use the transformation capacity in MVA at interfaces of 33/11 kV and 11/0.4 kV.
- 3.6 The data used for this exercise for the value of the asset base is as follows:

**Table 124 : Voltage-wise Cost Break-up of Sub transmission & Distribution Lines**

Voltage level of Lines	East DISCOM	West DISCOM	Central DISCOM	Cumulative length of lines (ckt-kms)	Per unit cost (Lakh Rs./ckt-km)	Total Cost of lines (Rs. Crore.)
33KV	20,494.00	17,959.00	19,701.43	58,154.43	14.10	8,197.38
<b>Below 33 KV</b>						
(a) 11 KV	1,65,121.00	1,37,628.00	1,62,561.55	4,65,310.55	14.03	65,286.05
(b) LT	1,45,800.00	1,74,113.00	1,27,849.33	4,47,762.33	7.39	33,104.01
Sub-Total	3,10,921.00	3,11,741.00	2,90,410.88	9,13,072.88		98,390.06
<b>Total</b>	<b>3,31,415.00</b>	<b>3,29,700.00</b>	<b>3,10,112.31</b>	<b>9,71,227.31</b>		<b>1,06,587.44</b>

**Table 125 : Total voltage level-wise cost of Transformer**

Transformer Voltage Level	East DISCOM (MVA)	West DISCOM (MVA)	Central DISCOM (MVA)	State (MVA)	Per unit cost (Lakh Rs./MVA)	Total Cost (Rs. Crore)
33/11 kV Transformer	11,091.00	13,408.05	12,986.00	37,485.05	43.83	16,431.13
11/0.4 kV Transformer	11,114.00	20,166.00	16,510.55	47,790.55	3.24 per 100 kVA	15,498.81
<b>Total</b>	<b>22,205.00</b>	<b>33,574.05</b>	<b>29,496.55</b>	<b>85,275.60</b>		<b>31,929.94</b>

3.7 Data for length of lines and transformation capacity expected to be added during FY 2022-23 has been considered as provided in the Petition.

3.8 In order to identify the asset values at different voltage levels, it is necessary to “assign” the interface transformers to either of the voltage levels. For this exercise, the Commission considers it appropriate to include 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 work out to:

**Table 126 : Identification of value of network at each voltage level (Rs. Crore)**

Voltage level	Cost of Lines (Rs. Crore)	Cost of Transformation (Rs. Crore)	Total Cost (Rs. Crore)
33KV	8,197.38	16,431.13	24,628.51
Below 33 KV	98,390.06	15,498.81	1,13,888.87
<b>Total</b>	<b>1,06,587.44</b>	<b>31,929.94</b>	<b>1,38,517.38</b>

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

**Table 127 : Identification of network expenses (wheeling cost) at different voltage levels**

Voltage level	Assets value (Rs. Crore)	Assets value Ratio (%)	Total wheeling cost (Rs Crore)	Wheeling Cost (Rs Crore)
33 kV	24,628.51	17.78%	6,116.61	1,087.54
Below 33 kV	1,13,888.87	82.22%		5,029.07
<b>Total</b>	<b>1,38,517.38</b>	<b>100.00%</b>		<b>6,116.61</b>

## Sharing of Wheeling costs

3.10 The cost of wheeling is again required to be allocated to the users appropriately, since 33 kV network is used by the consumers at 33 kV and below 33 kV (those at 11 kV and LT).

- 3.11 This allocation of wheeling cost is done based on the usage of the network at different voltage level by consumers. The Commission has chosen to adopt “Units to be Sold” at different voltage levels as the measure of network usage to allocate the costs as detailed below:

**Table 128 : Allocation of wheeling cost over Distribution System Users at 33 kV**

Particulars	Reference	Units	Amount
Wheeling Cost at 33 kV	A	Rs. Crore	1,087.54
Sales at 33 kV (MU)	B	MU	8,021.98
Total Sales {excluding sales at 132 kV} (MU)	C	MU	63,217.88
Proportion of 33 kV sales to total sales	D=B/C*100	%	12.69%
<b>Cost allocation</b>			
<b>Wheeling cost of 33 kV allocated to 33 kV users only</b>	<b>E=A*D</b>	<b>Rs. Crore</b>	<b>138.00</b>

- 3.12 Based on this allocation and considering the consumption at 33 kV, the wheeling charges in Rupees per unit are determined as follows:

**Table 129 : Wheeling Charges**

Voltage	Wheeling Cost allocated (Rs. Crore)	Sales (MU)	Wheeling charges (Rs. /kWh)
EHT	-	-	-
33 kV	138.00	8,021.98	0.17

- 3.13 Applicability of wheeling charges for the open access consumers depending on their connectivity shall be governed in accordance to the MPERC Open Access Regulations, 2021.

## Determination of Cross-Subsidy Surcharge

- 3.14 The Tariff Policy notified by GOI on dated 28<sup>th</sup> January, 2016 prescribes the following formulae 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.”*

3.15 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 meeting the Renewable Purchase Obligation (C), applicable transmission and distribution losses (L), Cost of transmission and distribution of electricity (D). The Commission in subsequent section has determined these components of Cost of Supply. Depending on the applicability of various charges for each consumer, as specified in Open Access Regulations, 2021, the Licensee shall compute the Cross Subsidy surcharge.

3.16 The weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation (C) works out as shown in table below:

**Table 130 : Weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation**

Generating Stations	Requirement (MU)	Total cost (Rs. Crore)	Wt. Average rate of power purchase (Rs./unit)
Dispatched	85,696.18	29,883.64	3.49

3.17 The Tariff Policy specifies that the Loss level (term ‘L’) should be worked out for each voltage level separately. Losses at each voltage levels are assumed as below for this

purpose because of non-availability of required reliable data with the DISCOMs:

**Table 131 : Voltage-wise losses**

Voltage Level	Loss level (L)
EHT (transmission system) including External losses	4.46%
33 kV (only 33 kV system)	5.06%

3.18 The cost of transmission shall be uniformly spread over all consumers at every voltage level, as the transmission network is utilized by all the consumers. Therefore, similar to wheeling costs, the admitted transmission charges for FY 2022-23 are worked out as under:

**Table 132 : Transmission Charges**

Particulars	Unit	Quantity
PGCIL Charges	Rs. Crore	2,627.36
MPPTCL Charges including SLDC Charges	Rs. Crore	4,250.24
<b>Total Charges</b>	<b>Rs. Crore</b>	<b>6,877.60</b>
Units to be handled	MU	85,696.18
<b>Transmission Charges per unit</b>	<b>Rs/kWh</b>	<b>0.80</b>

3.19 Wheeling charges has been determined for consumers connected at 33 kV and below 33 kV as shown in Table 129 : Wheeling Charges, above.

3.20 Finally, the term in the Tariff Policy formula 'T', Average Tariff for each category, is derived from their expected revenue for FY 2022-23, which is shown in the following table:

**Table 133: Average Billing Rate (ABR) for FY 2022-23 at approved tariff (Rs./kWh)**

Category of consumers	Average Tariff 'T' (Rs Per Unit)
LV-1: Domestic	6.36
LV-2: Non Domestic	9.14
LV-3: PWW	6.94
LV-4: LT Industries	9.65
LV-5: Agriculture & allied activities	5.91
LV-6: E-Vehicle/ E-Rickshaws Charging Stations	6.02
HV-1: Railway Traction	5.23
HV-2: Coal Mines	8.77
HV-3: HT Industrial, Non-Industrial and Shopping Malls	7.66
<i>HV-3.1: Industrial</i>	7.91
<i>HV-3.2: Non Industrial</i>	9.28
<i>HV-3.3: Shopping Malls</i>	9.08
<i>HV-3.4: Power Intensive Industries</i>	5.84
HV-4: Seasonal & Non Seasonal	7.28
HV-5: Irrigation, Public Water Works and Other than Agricultural	7.29
HV-6: Bulk Residential Users	6.95
HV-7: Synchronization and Start-Up Power	11.98
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	6.48

3.21 As per the MPERC (Open Access) Regulations, 2021, the consumers 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, as amended from time to time.

- 3.22 Further, Renewable Energy Generators and users are eligible for Open Access irrespective of their capacity subject to no operational constraint in the Licensee System.
- 3.23 In accordance with the above, the total cost (Rs/unit) i.e.  $[C / (1-L/100) + D + R]$  for various categories of LT & HT categories shall be computed by DISCOMs as per applicable cost and having eligibility as per the MPERC (Open Access) Regulations, 2021. The Cross-Subsidy Surcharge shall be the difference of average tariff (T) as specified in Table:133, above and the total cost (Rs/unit) for the particular category at particular voltage level to be computed based on cost component determined above depending of its applicability as per MPERC (Open Access) Regulations, 2021. However, Cross-Subsidy surcharge shall not exceed 20% of the average tariff applicable to the category of the consumers seeking open access. 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.

### Illustration for computation of Cross Subsidy Surcharge

Illustration: Generator is connected to Transmission network (EHT voltages), while the consumer is connected to the distribution network at 33 kV of Distribution Licensee.

**Table 134 : Computation of Cost as above Illustration (Rs. per unit)**

Sr. No.	Wt. Average rate of power purchase (Rs./unit)	Cost of Power grossed up for transmission losses (4.46%)	Cost of Power grossed up for distribution losses (5.06%)	Transmission charges (Rs. per unit)	Wheeling charges (Rs. per unit)	Total Charges
						$[C/(1-L/100) + D+R]$
1	3.49	3.65	3.84	0.80	0.17	4.82

**Table 135: Category wise Cross Subsidy Surcharge as per above Illustration (Rs. per unit)**

Category of HT/EHT consumers	Average Tariff 'T' (Rs Per Unit)	Ceiling 20% (Rs/Unit)	CSS (Rs/Unit)	Applicable CSS (Rs/Unit)
HV-2: Coal Mines	8.77	1.75	3.95	1.75
HV-3: HT Industrial, Non-Industrial and Shopping Malls	7.66	1.53	2.84	1.53
<i>HV-3.1: Industrial</i>	7.91	1.58	3.09	1.58
<i>HV-3.2: Non Industrial</i>	9.28	1.86	4.46	1.86
<i>HV-3.3: Shopping Malls</i>	9.08	1.82	4.26	1.82
<i>HV-3.4: Power Intensive Industries</i>	5.84	1.17	1.02	1.02
HV-4: Seasonal & Non Seasonal	7.28	1.46	2.46	1.46
HV-5: Irrigation, Public Water Works and Other than Agricultural	7.29	1.46	2.48	1.46
HV-6: Bulk Residential Users	6.95	1.39	2.13	1.39
HV-7: Synchronization and Start-Up Power	11.98	2.40	7.17	2.40
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	6.48	1.30	1.66	1.30

Note:

1. Cross-Subsidy surcharge shall not exceed 20% of the average tariff applicable to the category of the consumers seeking open access.
2. Based on the applicability of charges specified in the MPERC (Open Access) Regulations, 2021, the DISCOMs shall compute applicable CSS for other consumers categories.

## Determination of Additional Surcharge

### Petitioners' submission

- 3.24 The Petitioners submitted that the Tariff Policy, 2016 provides for the determination of additional surcharge to be levied from consumers who are permitted open access.
- 3.25 The financial position of the DISCOMs is getting constrained due to eligible consumers opting for open access. There has been an increase in quantum and number of consumers opting for open access over the last few years. With this shift of consumers to open access, the power remains stranded and the DISCOMs have to bear the additional burden of capacity charges of stranded power to comply with their Universal Supply Obligation.
- 3.26 In other States also, separate orders for levy of Additional Surcharges have been passed by respective Commissions after considering the impact of shift by open access consumers and based on other data with due prudence check.
- 3.27 In light of the provisions specified in Clause 5.8.3 of the National Electricity Policy, Section 42(4) of the Electricity Act 2003, besides relevant clause 13.1 of MPERC (Terms & Conditions for Open Access in MP) Regulations, 2005, the Petitioners determined Additional Surcharge on a yearly basis for Open Access consumers of the State in addition to levy of Cross Subsidy Surcharge specified in Tariff Policy, 2016 on the basis of latest data for previous 12 months commencing from September 2020 to August 2021.
- 3.28 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 Petitioners computed Additional Surcharge as shown in the table below:

**Table 136 : Computation of Additional Surcharge Submitted by the Petitioners for FY 2022-23**

Sr. No.	Months	Energy entitlement (MU)	Energy Scheduled (MU)	Energy Surrendered (MU)	Effective Fixed Cost Applied (Rs/Unit)	OA Units (MU)	Cost of Back Energy Surrendered due to Open Access (Rs. Crore)
1	2	3	4	5=3-4	6	7	8=(7*6)
1	Sep-20	5,736.50	4,624.32	1,112.19	1.31	44.53	5.81
2	Oct-20	6,366.91	5,552.34	814.57	1.41	46.57	6.56
3	Nov-20	6,851.43	5,948.10	903.32	1.72	45.32	7.78
4	Dec-20	6,986.84	5,936.68	1,050.17	1.58	66.54	10.36
5	Jan-21	7,377.39	6,269.30	1,108.09	1.81	47.98	8.67
6	Feb-21	6,027.31	5,501.57	525.74	1.66	33.49	5.57
7	Mar-21	7,085.87	6,418.67	667.21	1.52	43.26	6.58
8	Apr-21	6,818.41	6,147.33	671.08	1.64	34.03	5.56
9	May-21	6,025.22	4,982.92	1,042.30	1.23	32.74	4.03
10	Jun-21	5,216.93	4,497.27	719.66	1.38	40.37	5.58
11	Jul-21	5,952.45	5,420.50	531.95	1.61	41.52	6.68
12	Aug-21	5,364.43	4,991.98	372.44	1.54	38.06	5.84
<b>Total</b>		<b>75,809</b>	<b>66,290</b>	<b>9,518.72</b>		<b>514.40</b>	<b>79.04</b>
<b>Additional Surcharge on OA Consumers (Rs./Unit) = (8/7)</b>							<b>1.54</b>

3.29 The Petitioners have thus claimed the Additional Surcharge of Rs. 1.54 per unit on the power drawn by the Open Access consumers from the date of issuance or applicability of this Retail Supply Tariff Order by the Commission.

### Commission's Analysis

3.30 The Commission has considered the submission made by the Petitioners and stakeholders in light of the provisions specified in Clause 5.8.3 of the National Electricity Policy, Clause 8.5 of the Tariff Policy, 2016, Section 42(4) of the Electricity Act, 2003, and determined Additional Surcharge. The Additional Surcharge determined by the Commission shall be levied in addition to Cross Subsidy Surcharge determined by the Commission in accordance with the Tariff Policy, 2016.

3.31 The Commission has observed that as per the present methodology being adopted for determination of additional surcharge, the charges may vary substantially over the years and hence the Open Access consumers may not be able to plan their procurement optimally. Therefore, in order to bring regulatory certainty in terms of Additional Surcharge being determined, the Commission has adopted a simpler approach.

3.32 As per the new approach the Commission has computed the Additional Surcharge by considering the average per unit fixed charge of the Thermal power plants. Computation of the Additional Surcharge is shown in the table below:

**Table 137 : Determination of Additional Surcharge for FY 2022-23**

Sr. No.	Particulars	Reference	Unit	Amount
1	Fixed Cost of Thermal Generating Sources for FY 2022-23	A	Rs. Crore	10,879.41
2	Total Available MU from Thermal Generating Stations for FY 2022-23	B	MUs	90,278.96
3	<b>Wt. Avg. Per Unit FC of Thermal Generating Stations for FY 2022-23</b>	<b>C=A/B</b>	<b>Rs./kWh</b>	<b>1.21</b>
4	Total Projected Backdown/RSD Volume for FY 2022-23	D	MUs	8,208.84
5	Projected Open Access Volume for year for FY 2022-23 based on actual of previous year	E	MUs	514.40
6	Fixed Cost pertaining to Backdown/RSD capacity for FY 2022-23	F=E*C/10	Rs. Crore	61.99
7	<b>Per Unit Additional Surcharge (to be applicable on OA Consumers)</b>	<b>G=F/E</b>	<b>Rs./kWh</b>	<b>1.21</b>

3.33 The Commission has thus determined the Additional Surcharge of Rs. 1.21 per unit in accordance with the applicable Regulations from the date of applicability of this Retail Supply Tariff Order.



## A4: GREEN ENERGY TARIFF

### Petitioners' submission

- 4.1 There is a growing demand from consumers for a rapid transition to a zero-carbon economy. Over 175 of the world's most influential companies have already made this commitment through the global corporate leadership initiative, RE100. This is driving up demand for renewable electricity and creating a shift in demand patterns away from fossil fuels across the global power system. Google & Autodesk are just a few of the companies that have already achieved their goal and are now powered by 100% renewable energy. They are demonstrating to their stakeholders including investors, customers and policymakers — that they see a future in which businesses are powered by renewables.
- 4.2 Government of India is also promoting renewable energy in a big way and has kept an aggressive target of 175 GW of renewable energy by 2022. Indian corporates are also playing key role in achieving the aggressive target of the Government as corporate citizens and other resultant advantage of being zero carbon companies.
- 4.3 The corporate consumers have already initiated the process by opting to receive RE under Open Access mechanism as approved by the Commission. However, many corporates do not wish to go through this process of sourcing Renewable Energy because either they are not eligible to avail open access under the current Regulatory framework or they do not have the resources, expertise and the bandwidth required for carrying out this activity.
- 4.4 Considering the above practices available in other state like Maharashtra and Karnataka, the petitioners submitted a proposal for the approval of the Commission to enable supply of 100% Green Power to consumers opting for meeting its 100% power requirement through Green Power should also be introduced in state of Madhya Pradesh.
- 4.5 In order to meet the energy demand of its consumers, the Petitioners have tied up power on long term as well as short term basis with various generators which include conventional fuel-based generators, hydro generators and renewable sources like solar and wind. Considering the current tie ups for FY 2020-21 around 9% of power procured by Petitioners is through Renewable generating sources (Excluding Hydro).
- 4.6 Hence, to meet the requirement of the consumers seeking 100% green energy, Petitioner proposes the following:
  - a) Permission to supply renewable power to meet the demand of consumers subject to availability of Renewable Energy with the Petitioner.
  - b) The 100% renewable energy under Green Energy Tariff Category will be provided to consumers on first cum first service basis subject to availability of Renewable Energy with Petitioner.
  - c) Petitioners will issue a monthly certificate to the consumer stating that 100% of their power requirement has been met through green energy, this can't be treated for

fulfilment of RPO target.

- d) The above proposal would be voluntary in nature and will provide a choice to the consumer to opt for green energy.
- e) For the efforts required to enable this requirement of 100% green energy, Petitioner proposes levy of “Green Energy Tariff” from such consumers in addition to the Tariff applicability of concerned category.
- f) The additional revenue on account of Green Energy Tariff shall be accounted as Tariff Income of Supply Business and thereby be fully accounted for reduction in ARR of supply business.

4.7 Further it is stated that 'Green Energy Tariff will have the following advantages:

- i) Green Energy Tariff being totally voluntary in nature, will give choice to the Consumers to opt for green energy.
- ii) This will lead to growth in power generation from renewable sources.

4.8 Further, it is also pertinent to state that provision of such type of service provided by a distribution licensee is already in place in the state of Karnataka, where Karnataka Electricity Regulatory Commission ["KERC"] has already approved Green Power Tariff for the distribution licensee (BESCOM) since FY 2011-12 in the respective tariff orders. Relevant extract of BESCOM tariff order for FY 2011-12 for approval of green power tariff is as follows:

*“1) Tariff for Green Power:*

....

*Commission’s Analysis & Decision:*

*The Commission welcomes the new initiative of BESCOM to promote Green Energy and hence, decides to introduce Green Tariff for HT industries & HT Commercial Consumers with Contract Demand of 1 MVA & above in all the ESCOMs. The above Tariff is optional.*

*The Commission is of the view that, the Consumers who opt for Green Energy should bear the additional power purchase cost of Renewable Energy sources over and above the normal tariff.*

*Based on the power purchase cost approved for FY-11, the additional average cost for RE source in the State as a whole is worked out as under:*

...

*As per the existing Tariff schedule, there is no separate category for EHT & HT supply. As such the HT distribution loss has been considered in addition to transmission loss. Accordingly, the Commission determines Green Tariff at Re.1.00 per unit as the additional*

tariff over and above the normal tariff to be paid by HT-consumers, who opt for Green Tariff.”

4.9 In view of the above, Tata Power Company Limited (Distribution) has filed a petition before Maharashtra Electricity Regulatory Commission (MERC) seeking approval for levying “Green Energy Tariff” to supply Renewable Energy to consumers opting for 100% green energy for meeting their entire demand. In the petition, MERC has issued an order in Case No. 134 of 2020 dated 22<sup>nd</sup> March 2021 and has determined Green Energy Tariff of Rs 0.66/kWh which is over and above the normal tariff of the respective category as per Tariff Orders, be levied to the consumers opting for meeting their demand by 100% green energy. Following order was passed by MERC:

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

4.10 In the view of the above, proposal for approval of levy of Green Energy Tariff as a separate tariff for the period from FY 2022-23 is submitted in this petition. Based on the computation methodology finalized by MERC in their order dated 22<sup>nd</sup> March 2021, Petitioners have computed the Green Energy Tariff to be paid by such consumers based on the basis of projected power purchase cost for FY 2021 -22 as indicated below:

**Table 138: Green Energy Tariff claimed by the Petitioner for FY 2022-23**

RE Power Procurement for the Period FY 2022-23			Non-RE Power Procurement (Only Variable) for the Period FY 2022-23			Difference between RE & Non-RE Power
MU	Rs. Crore	Rs/Unit	MU	Rs. Crore	Rs/Unit	Rs/Unit
A	B	C	D	E	F	G = (C – F)
12,070	5,096	4.22	72,608	13,936	1.92	2.30

4.11 The Green Energy Tariff recovered from these consumers for supply of 100% renewable energy in addition to Tariff applicability of consumers, will increase the tariff income of the distribution business and thereby be fully accounted for reduction in ARR. Further, these initiatives will also promote the Government of India pledge towards green energy, clean environment and sustainable development Goals.

4.12 In the above backdrop and in furtherance of above, the Petitioners have approached this Commission in its jurisdiction under Section 86 (1) (k) of the Act read with Regulation 45(1) and 45(3) of Madhya Pradesh Electricity Regulatory Commission (Conduct of Business) (Revision -I) Regulations, 2016 and all the enabling powers including the inherent

powers and regulatory authority vested unto the Commission seeking in-principle approval for Green Energy Tariff to the consumers opting for 100% RE power.

### **Commission's analysis**

- 4.13 The Commission has observed that during the meeting of State Advisory Committee as well during the Public Hearings some of the stakeholders have requested green energy tariff for consumers who are willing to purchase 100% Renewable Energy from the Distribution Licensee. These consumers are either not eligible for taking 100% RE through Open Access or they do not have the resources, expertise and the bandwidth required for carrying out this activity. Given the proposed arrangement is completely voluntary in nature, the Commission is inclined to consider it. Further, such arrangement may promote RE in MP, which is also one of the mandates under the Electricity Act, 2003.
- 4.14 Considering above, the Commission has analysed the proposal submitted by the Petitioners. It is noted that the Petitioners have proposed to supply 100% RE to consumers on first come first serve basis till the availability of RE with the Petitioner. Further, the Petitioner has proposed a tariff of Rs. 2.30/kWh in addition to applicable tariff of the consumer. Also, the Petitioner has proposed that RE purchased by the consumer shall not be considered towards the RPO compliance of the consumer. Accordingly, following issues need to be dealt in the proposed arrangement:
- i) 100% Energy procurement through renewable by consumers to be allowed till availability of power from RE sources with the Licensee
  - ii) Treatment of Renewable Energy procured by the consumers
  - iii) Determination of Green Energy Tariff
- 4.15 The Commission has dealt with the above issues in the following section.

### **Renewable Energy procurement by consumers to be allowed till availability of power from RE sources with the Licensee**

- 4.16 It is observed that the Petitioners have proposed that the consumers shall be provided 100% RE on first come first serve basis and shall only be made available till RE is available with the Petitioners. However, the Petitioners in reply to data gaps submission and submitted that it will be arranging additional RE power, if the existing tied up capacity is not sufficient to supply such power. This is a departure from original stand taken by the Petitioners.
- 4.17 The Petitioners based on request of the consumer has proposed to supply 100% RE at a premium. Since, this is a new proposal with no past experience in MP, it is not possible to make assumption regarding likely demand for procurement of power at a premium. Therefore, it is also not possible at this stage to quantify the requirement of additional power beyond availability. Hence, it is prudent at this stage to restrict computation for FY 2022-23 to the extent of availability of RE with the Licensees.

## Treatment of Renewable Energy procured by the consumers

4.18 The Commission has observed that the Petitioners have proposed that the 100% RE power supplied shall not be considered towards RPO compliance of the consumer. RE procured by the Petitioners cannot be considered for fulfilment of RPO for obligated entities. Distribution Licensee are mandated to procure RE on behalf of its consumers. Also, it may not be necessary that all the consumer seeking 100% RE be obligated entities. Therefore, the Commission is of the view that the RE supplied by the Petitioners to its consumer shall only be considered towards the RPO compliance of the Petitioners. Further, if the consumer is also an obligated entity, then he may make its own arrangement towards fulfilment of its RPO, separately.

### Determination of Green Energy Tariff

4.19 As shown in para 4.10, the Petitioners have proposed to levy a Green Energy Tariff of Rs. 2.30/kWh, which is basically the difference of weighted average rate of RE procurement and weighted average energy charge rate of non RE procurement. It is observed that the Petitioner proposal is also in line with the approach adopted by other State Electricity Regulatory Commission as well.

4.20 In view of the special request from consumer for availing 100% RE from Licensee, it seems appropriate that some premium be levied as suggested by the Licensee. It is also noted that additional revenue that is liable to accrue on account of this regime would be passed onto the consumers of the Licensee through tariff.

4.21 Further, in accordance with the Section 86(1)(e) of the Electricity Act, 2003, the Commission is mandated to promote adoption of RE. Therefore, the Commission has fixed Green Energy Tariff for FY 2022-23 as 50% of the difference in weighted average charge of RE and weighted average rate of Energy charge of Non RE sources as shown in following Table:

**Table 139: Green Energy Tariff approved by the Commission for FY 2022-23**

RE Power Procurement for the Period FY 2022-23			Non-RE Power Procurement (Only Variable) for the Period FY 2022-23			Difference between RE & Non-RE Power	Approved Green Energy Tariff
MU	Rs. Crore	Rs/Unit	MU	Rs. Crore	Rs/Unit	Rs/Unit	Rs/Unit
A	B	C	D	E	F	G = (C – F)	H=G*50%
14,625.42	6,051.10	4.14	71,070.76	13,328.04	1.88	2.26	1.13

4.22 Further, the revenue earned by the Petitioners from such sale of power shall be considered as Tariff Income at the time of truing up. Such treatment of revenue shall also ensure that the benefit of same is passed on to other consumers of the State in terms of reduced cost.

4.23 It is to be noted that above arrangement is optional / voluntary and shall only be provided on the request of the Consumer. The Green Energy Tariff shall only be applicable if Consumer wishes to avail power under this arrangement. In order to operationalise the scheme uniformly across the State, necessary modalities including guidelines, if any shall be worked out / prepared by the Licensees & information in this regard shall be made available to the Commission within period of one month from the date of this Order.

## **A5: FUEL COST ADJUSTMENT CHARGE**

### **Petitioners' submission**

- 5.1 The existing Fuel Cost Adjustment (FCA) recovery mechanism is a quarterly based mechanism wherein MPPMCL works out the FCA charges on quarterly basis and submits the detailed calculation before the Commission for its approval. The Commission subsequently approves the FCA charges which is then allowed to levy on the retail consumers of the Licensees. The Petitioner wishes to submit that the existing FCA recovery mechanism involving prior approval of the Commission is delaying the recovery of legitimate costs incurred towards purchase of power which results in substantial higher working capital requirements by the DISCOMs.
- 5.2 Further, for the ensuing years of next Control Period, the recovery of FCA charges is governed by Regulation 9 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. The provisions of the said Regulation are similar to existing FCA recovery mechanism due which the FCA charges of say 'n' month is allowed to get levied on 'n+4' month.
- 5.3 Further, Petitioners submitted that the generating companies have been raising bills on monthly basis and as per the governing provision of respective PPAs, DISCOMs are obligated to pay the generators or transmission companies within stipulated time. However, the recovery of the same from retail consumers of DISCOMs happened generally after 4 to 5 months. As against this DISCOMs were allowed only 2 months of normative working capital requirements in its Aggregate Revenue Requirement (ARR). This results in additional interest cost on account of additional working capital requirements due to delay in recovery of the same beyond the normative time period which is ultimately resulting in increased power purchase cost for end consumers.
- 5.4 Further, the formula specified for computation of the FCA does not capture the total power purchase cost. It covers only variable charge component of the total power purchase costs. The DISCOMs therefore deprived the opportunity to recover the variation in total power purchase cost through the levy of a FCA every quarter and they have been accumulating the variations on account of power purchase costs till the end of the respective year, till the accounts are finalized, audited and certified which is causing a financial burden to the DISCOMs. Further, at the time of True-up of respective cost, DISCOMs were also not allowed to claim carrying cost against this unrecovered cost since there is no provision of carrying cost provided in the existing MYT Regulations, 2021.
- 5.5 In addition, the prevailing FCA formula does not cover the recovery of incremental power purchase cost wherein power purchase has been made due to factors beyond their control. This includes shortage in supply from the identified power supply

sources in the Tariff Order requiring them to purchase power at a higher price from the power market or other sources to meet the demand. DISCOMs in their Tariff Petition have been regularly requesting the Commission to address the aforesaid issues by providing suitable amendments to FCA formula. Further, Commission in its ruling in Tariff Order for FY 2021-22 has also acknowledged that the regulations do have provisions for allowing incremental power purchase costs in addition to the levy of FCA. However, the Commission has decided not to pass through any additional burden giving rationale that a substantial portion on account of increase/decrease in power purchase costs is taken care of by levy of FCA as allowed by the Commission.

- 5.6 Since, the existing mechanism is not an automatic pass through and there remains need for approval of the Commission, MOP has issued a recommendation letter No. 23/23/2021-R&R dated 9<sup>th</sup> November, 2021 wherein; it has requested the respective State Commission to formulate a mechanism for automatic pass through of the fuel and power purchase cost in tariff for ensuring the viability of the power sector. The relevant extract from the said letter is as reproduced below:

“ .....

*7. Some of the states already have formula for fuel surcharge adjustment which is being used for this purpose. A state wise list of the status of fuel surcharge formula prescribed by the State Commission is enclosed. This is as per the information submitted by the SERCs to Forum of Regulators in compliance of the APTEL order. However, this is not an automatic pass through and there remains need for approval of the State Commission. The present mechanism leads to delays. It may be changed to provide for automatic pass through in tariff change in costs on account of change in law/power purchase costs in accordance with a formula laid down by the State Regulatory Commissions. The Discoms will pass through the change in costs according to the said formula whenever the change in costs due to change in law/power purchase costs occur. Till a suitable formula is prescribed by the State Commissions the formula given in the Electricity (Timely Recovery of Costs due to Change in Law) Rules, 2021 may be adopted. After giving effect to the pass through the Discoms will send the relevant papers/ calculation sheets to the commissions which shall verify and confirm the Pass through within 60 days. This will result in less working capital requirements by the Discoms, leading to less costs of power for the consumers.*

.....

*9. The State Commissions are requested to place the above mechanism in operation with immediate effect. {Emphasis Added}”*

- 5.7 In the backdrop of above, Petitioners submitted that they will be filing a separate petition proposing the desired changes to be done in the existing FCA recovery

mechanism. Further, till the time the desired changes are proposed and finalized, Petitioners request the Commission that the Petitioners shall be allowed to recover FCA charges as per the prevailing Regulations.

### Commission’s analysis

- 5.8 The Commission has considered the submissions made by the Petitioners. The relevant Regulations have provision for allowing incremental power purchase costs in addition to the levy of FCA. However, at this juncture, the Commission is of the opinion that only FCA can be allowed to be recovered / adjusted and any further additional burden on the consumers during the Tariff period may not be warranted. Any additional costs on this account would be considered after due prudence check at the time of true up. Moreover, a substantial portion on account of increase/decrease in power purchase costs is taken care of by levy of FCA. The Commission therefore decides to continue with levy of FCA charge to be mandatorily filed by the Petitioners on quarterly basis.
- 5.9 In view of Regulation 9 of the MYT Regulations, 2021 the Commission hereby decides to continue with the FCA formula along with its associated mechanism/modalities as specified in the MYT Regulations, 2021.
- 5.10 Further, Petitioners shall show the rate and amount of FCA charge separately in the consumer bills.

Following illustration is given for the purpose of understanding:

If the “billing quarter” is say “July to Sept”, then the “preceding quarter” shall mean the period “Feb to April” and the period of May and June months is allowed to collect the data/ details and finalization of FCA charge.

- 5.11 The details of the normative Losses for PGCIL System and MPPTCL System and normative distribution losses as per the Tariff Orders of the Commission are indicated in the table below:

**Table 140: Normative Losses - for PGCIL System, MPPTCL System and distribution losses**

Month/Year	Inter-State Transmission Losses* (%)	Intra-State Transmission Losses** (%)	Distribution Losses*** (%)
April-2021	3.28%	2.62%	15.69%
May-2021	3.49%	2.62%	15.69%
June-2021	3.16%	2.62%	15.69%
July-2021	3.03%	2.62%	15.69%
August-2021	3.28%	2.62%	15.69%
September-2021	3.15%	2.62%	15.69%
October-2021	3.24%	2.62%	15.69%



<b>Month/Year</b>	<b>Inter-State Transmission Losses* (%)</b>	<b>Intra-State Transmission Losses** (%)</b>	<b>Distribution Losses*** (%)</b>
November-2021	3.40%	2.62%	15.69%
December-2021	3.84%	2.62%	15.69%
January-2022	4.06%	2.62%	15.69%
February-2022	3.55%	2.62%	15.69%
March-2022	3.49%	2.62%	15.69%
* As per clause (10) of CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 on 04th May,2020; w.e.f. 1st November,2020, transmission losses for ISTS shall be calculated on all India average basis for each week, from Monday to Sunday.			
** Intra -State Transmission Losses are based on input at State Periphery			
***Distribution Losses are based on Input at DISCOMs Periphery			

## **A6: RETAIL TARIFF DESIGN**

### **Legal Position**

- 5.1 In exercise of the powers vested under Section 61 and Section 62 of the Electricity Act, 2003, and all other powers enabling in this behalf, the Commission has determined the Aggregate Revenue Requirement for the Control Period for FY 2022-23 to FY 2026-27 and Tariff for FY 2022-23 for the Petitioners. Due consideration was given to the submissions made by Petitioners, Stakeholders, suggestions made by State Advisory Committee and all other relevant material. While determining tariff for various consumer categories, the Commission has given due consideration to the relevant provisions of the Electricity Act, 2003, Tariff Policy, 2016, and relevant Regulations.

### **Commission's Approach to Tariff Determination**

- 5.2 ARR for the Control Period from FY 2022-23 to FY 2026-27 is determined on the basis of distribution loss level trajectory specified in the MYT Regulations, 2021 and uniform tariff has been determined for all the three DISCOMs.

### **Linkage to Average Cost of Supply**

- 5.3 The Commission directed DISCOMs to determine the voltage-wise cost of supply in compliance to the directives given in the Judgment passed by Hon'ble Appellate Tribunal for Electricity (APTEL) in Appeal No. 103 of 2010 and IA Nos. 137 & 138 of 2010. In this regard, Petitioners have submitted that aforesaid Judgment of the APTEL has been challenged in the Hon'ble Supreme Court of India. However, as per directive of the Commission, Petitioners have submitted the details of calculation of the voltage-wise cost of supply as per the methodology provided by the APTEL.
- 5.4 Petitioners have submitted that the MYT Regulations, 2021 do not provide segregation of normative losses for the Distribution Licensees into voltage-wise normative losses in respect of technical and commercial losses. Petitioners have further submitted that determination of voltage-wise losses would require detailed technical studies of the Distribution network. Therefore, for the purposes of illustrative computation of voltage-wise cost of supply, the Petitioners have assumed voltage-wise losses; the data therein is not duly verified and so, should not be relied upon.
- 5.5 In view of the above, the Commission has endeavoured to work out indicative category-wise cross subsidy based on voltage-wise cost of supply in spite of constraints in segregation of voltage-wise losses and capital expenditure related costs. As can be seen from the foregoing, Hon'ble APTEL has 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 enable the Commission to evaluate cross subsidies prevalent at various voltages. The

Commission would thus, be guided by the voltage-wise cost of supply in seeking to gradually reduce cross subsidies at various voltage levels.

In the absence of requisite data, Hon'ble APTEL has 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.

5.6 The Commission agrees with the Petitioners' submission that determination of voltage-wise losses would require detailed technical studies of the distribution network. As a first step in the direction of working out category-wise cross subsidy based on voltage-wise cost of supply, the Commission has attempted to determine the same based on the methodology proposed by the Petitioners. 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. The Commission has adopted the following methodology for determination of voltage-wise cost of supply:

- (i) Voltage-wise cost of supply has been computed for above 33 kV and 33 kV and 11 kV (inclusive of LT) categories only.
- (ii) Sales as admitted by the Commission for above 33 kV and 33 kV and 11 kV (inclusive of LT) categories have been considered.
- (iii) Losses as specified in the MYT Regulations, 2021 for FY 2022-23 have been considered for the Petitioners.
- (iv) Total losses as admitted by the Commission have been segregated voltage-wise for above 33 kV, 33 kV and 11 kV (inclusive of LT) in the same proportion of losses as submitted by the Petitioners.
- (v) 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.
- (vi) Voltage-wise total cost derived has been divided by voltage-wise sales for working out the voltage-wise cost of supply.

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

**Table 141: Computation of voltage-wise cost of supply for the State for FY 2022-23**

State	Units	EHT System (400 kV, 220 kV, 132 kV & 66 kV)	33 KV System	11 KV + LT System	Total
Sales admitted	MU	5,583.76	8,021.98	55,195.91	68,801.64
Technical and Commercial losses submitted by Petitioners	%	4.46%	5.06%	8.92%	19.71%
Energy input admitted	MU	5,844.42	8,843.96	71,007.79	85,696.18
Energy lost admitted (Technical up to 33kV and 11 kV + LT- technical and commercial)	MU	260.66	821.99	15,811.88	16,894.53
Commercial loss assumed as 50% of 11kV and LT overall losses	MU			7,905.94	
Commercial losses apportioned for all voltage in proportion to voltage wise sales admitted	MU	641.63	921.80	6,342.52	7,905.94
Net Energy Loss admitted	MU	902.29	1,743.79	14,248.46	16,894.53
Net energy input for Computing VCoS	MU	6,486.05	9,765.76	69,444.37	85,696.18
Power Purchase Costs - allocated based on voltage-wise losses net energy input	Rs. Crore	2,782.33	4,189.24	29,789.67	36,761.23
Other costs - allocated based on voltage-wise sales	Rs. Crore	602.59	907.29	6,451.76	7,961.64
Less: Other income - allocated based on voltage-wise sales	Rs. Crore	44.33	66.75	474.63	585.70
Recoveries of Past Years	Rs. Crore	138.79	208.97	1,486.00	1,833.76
<b>Total Costs (ARR requirement) for FY 2022-23</b>	<b>Rs. Crore</b>	<b>3,479.38</b>	<b>5,238.75</b>	<b>37,252.80</b>	<b>45,970.94</b>
<b>VCoS</b>	<b>Rs. /Unit</b>	<b>6.23</b>	<b>6.53</b>	<b>6.75</b>	<b>6.68</b>

5.8 Consumer category-wise approximate cross-subsidy, computed based on voltage-wise cost of supply for FY 2022-23 is shown in the table below:

**Table 142: Cross-subsidy based on voltage-wise cost of supply for FY 2022-23 for the 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	6.75	6.36	94%
LV-2: Non-Domestic	6.75	9.14	135%
LV-3: Public Water Works & Street Light	6.75	6.94	103%
LV-4 LT Industries	6.75	9.65	143%
LV 5: Agriculture and Allied Activities	6.75	5.91	88%
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	6.75	6.02	89%
HV-1: Railway Traction	6.23	5.23	84%
HV-2: Coal Mines	6.39	8.77	137%
HV-3.1: Industrial	6.42	7.91	123%
HV-3.2: Non Industrial	6.56	9.28	141%
HV-3.3: Shopping Malls	6.54	9.08	139%
HV-3.4: Power Intensive Industries	6.39	5.84	91%
HV-4: Seasonal & Non Seasonal	6.58	7.28	111%
HV-5: Irrigation, Public Water Works and Other than Agricultural	6.39	7.29	114%

Tariff Categories	VCoS (Rs. /Unit)	Average Billing Rate (Rs. /unit)	Ratio of Average Billing Rate to Voltage-Wise Cost of Supply (%)
HV-6: Bulk Residential Users	6.55	6.95	106%
HV-7: Synchronization and Start-Up Power	6.48	11.98	185%
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	6.53	6.48	99%
<b>Total</b>	<b>6.68</b>	<b>6.68</b>	<b>100%</b>

5.9 While determining the tariffs for FY 2022-23, the Commission has given due consideration to the requirement of the Electricity Act, 2003 that consumer tariffs should reflect the cost of supply. The average cost of supply for FY 2022-23 works out to Rs. 6.68 per unit as against Rs. 6.60 per unit for FY 2021-22. The table below shows the cost coverage (Average realization as percentage of Average cost of supply) on account of tariff for FY 2022-23, as compared to the cost coverage in the Tariff Order for FY 2021-22:

**Table 143: Comparison of tariff v/s overall average cost of supply**

Category/ Sub-category	Average Realisation as % of Average CoS		Average Billing Rate (ABR) (Rs. /Unit)	Average Cost of Supply (ACoS) (Rs. /Unit)
	FY 2021-22	FY 2022-23		
	(as per Tariff Order)	(Achieved as per this Tariff Order)		
<b>LV- Categories</b>				<b>6.68</b>
LV-1: Domestic	97%	95%	6.36	
LV-2: Non-Domestic	139%	137%	9.14	
LV-3: Public Water Works & Street Light	101%	104%	6.94	
LV-4 LT Industries	139%	144%	9.65	
LV 5: Agriculture and Allied Activities	87%	88%	5.91	
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	91%	90%	6.02	
<b>Total LT</b>	<b>96%</b>	<b>96%</b>	<b>6.43</b>	
<b>HV- Categories</b>				
HV-1: Railway Traction	83%	78%	5.23	
HV-2: Coal Mines	126%	131%	8.77	
HV-3.1: Industrial and Industrial and HV-3.4: Power Intensive Industries	111%	112%	7.51	
HV-3.2: Non Industrial and HV-3.3: Shopping Malls	133%	139%	9.26	
HV-4: Seasonal & Non Seasonal	124%	109%	7.28	
HV-5: Irrigation, Public Water Works and Other than Agricultural	105%	109%	7.29	
HV-6: Bulk Residential Users	111%	104%	6.95	
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	99%	97%	6.48	
<b>Total HT</b>	<b>113%</b>	<b>114%</b>	<b>7.63</b>	
<b>Total (LT + HT)</b>	<b>100%</b>	<b>100%</b>	<b>6.68</b>	

5.10 The cost structure has undergone a change during the year as explained in previous sections of this Order. Further, in compliance to the Hon'ble APTEL Judgment dated 9<sup>th</sup> January, 2017 in the matter of Appeal No.134 of 2015 wherein it has been observed that the State Commissions while issuing the Retail Supply Tariff Orders and for purpose of avoiding tariff shocks to the consumers, should also identify the roadmap for reduction of cross-subsidies. The Commission has been consciously making efforts over the past several years to reduce the cross-subsidy levels across all consumer categories.

5.11 After giving due consideration to the suggestions/ comments of the Stakeholders and the proposals submitted by the DISCOMs, the Commission has made some changes in the tariff design for FY 2022-23. Main features of the tariff design are detailed in following paragraphs:

- i. **Green Energy Tariff:** Green Energy Tariff of Rs. 1.13/ kWh, which is over and above the normal tariff of respective category as per this Tariff Order, be levied to the consumers opting for meeting their demand by 100% Renewable Energy from Distribution Licensee.
- ii. **Tariff for E-vehicles/E-Rickshaw charging stations:** The tariff for E-vehicles / E-rickshaw charging stations have been kept same to encourage adoption of e-vehicles.
- iii. **Incentive for prompt payment:** Incentive for prompt payment for LT Consumer category has been retained at 0.5% of the billed amount for that month.
- iv. **Online Payment Rebate:** LV-1: Domestic, shall be eligible for rebate of 0.50%, without any ceiling on maximum rebate amount. The Consumers bill paid through RTGS/NEFT transaction shall also be eligible for the online bill payment rebate.
- v. **Metering Charges:** No metering charges are levied.
- vi. **Pro-rating of consumption for Domestic Consumers:** The Commission has retained the provision of pro-rating the consumption for days when consumption recorded is for the duration other than the respective days of the month, so as to safeguard against the disadvantages due to slab-wise billing.
- vii. **Tariff for LV-4 (LT Industrial), LV-6 (E-vehicles/E-Rickshaw charging stations), Tariff for HV-1 (Railway Traction) and HV-8 (E-vehicles/E-Rickshaw charging stations)** has not been changed.
- viii. **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 retained at Rs. 1 per unit for the incremental consumption.
- ix. **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 2022-23.

## **A7: COMPLIANCE OF DIRECTIVES ISSUED IN TARIFF ORDER FOR FY 2021-22**

The response submitted by DISCOMs on the directives issued by the Commission in the Retail Supply Tariff Order for FY 2021-22 and the Commission's observations/directions thereon are given below:

### **6.1 Meterisation of Unmetered Connections**

#### **Commission's Directives:**

*The Commission has noted the submission of DISCOMs and has obtained the latest reports from them. The Commission has observed that the progress of the DISCOMs regarding DTR meterisation is not satisfactory. The Commission further directs the DISCOMs to expedite DTR meterisation. The Commission has observed that simply providing meters is not the total solution but the DISCOMs need to have a complete energy auditing solution in order to monitor the energy pilferage. The DISCOMs shall continue submitting the quarterly progress reports on DTR meterisation along with the energy Audit. The DISCOMs are directed to submit an action plan by 30<sup>th</sup> June, 2021.*

#### **East DISCOM Submission:**

The Petitioner submitted that the availability of fund is major constrained in this exercise. At present 11,849 meters are installed out of 1,05,489 no. on Agricultural. DTRs of the DISCOM area. The Quarterly reports of Ag. DTR meterisation regularly being submitted to the Commission.

#### **Central DISCOM Submission:**

The Petitioner submitted that DTRs and associated consumers of urban area having loss level above 40% are planned to cover in RRRDS Scheme for smart meter installation and Energy Audit thereof. DTR meterisation progress up to June '2021 has been submitted vide L.no1607 dated 29.10.2021

#### **West DISCOM Submission:**

The Petitioner submitted that meterisation of predominately agriculture DTRs has already been incorporated in the capex plan of the DISCOM for the FY 2020-21 to FY 2024-25. The said work for DTR meterisation shall be executed depending upon the availability of the funds.

#### **Commission's Observations/ Directions:**

The Commission has noted the submission of DISCOMs and has obtained the latest reports from them. The Commission has observed that the progress of the DISCOMs regarding DTR meterisation is not satisfactory. The Commission further directs the DISCOMs to expedite DTR meterisation. The Commission has observed that simply providing meters is not the total solution but the DISCOMs need to have a complete energy auditing solution in order to monitor the energy pilferage. The DISCOMs shall

continue submitting the quarterly progress reports on DTR meterisation along with the energy Audit. With regards to submission of action plan Commission observed that Petitioners have not submitted the Action Plan. Therefore, Petitioners are directed to submit an action plan within 6 months of issuance of this Order.

## 6.2 Accounting of Rebates/Incentives/Surcharges

### Commission's Directives:

The Commission has noted the submissions of DISCOMs and directs DISCOMs to expedite the process of development of a report and submit the same on quarterly basis.

### East DISCOM Submission:

The quarter wise report on rebate on incentive & surcharge is being submitted separately.

### Central DISCOM Submission:

The Petitioner hereby submits the quarter wise rebate on incentive & surcharge as below:

Particular/Year		2019-20				2020-21		
		April-19 to June-19	July-19 to Sept-19	Oct-19 to Dec-19	Jan-20 to March-20	April-20 to June-20	July-20 to Sept-20	Oct-20 to Dec-20
Additional charge/surcharge recovered from HT Consumer (Rs. Crore.)	Power Factor Surcharge	3.47	3.56	3.97	3.96	3.82	3.48	3.64
	Late Payment Surcharge	4.00	4.95	6.13	7.39	8.57	9.22	11.54
	Total Additional charge/surcharge Recovered							
Rebate/Incentive provide to HT consumer (Rs. Crore .)	Power Factor Incentive	(33.04)	(32.61)	(33.67)	(32.37)	(21.05)	(31.90)	(32.63)
	Time of Day Incentive	(39.73)	(38.95)	(40.79)	(40.96)	(26.57)	(38.77)	(39.59)
	Prompt Payment Incentive	(0.25)	(0.00)	(0.00)	(0.48)	(0.21)	(0.30)	(0.40)
	Captive Incentive	(2.21)	(7.51)	(10.80)	(9.24)	(7.14)	(5.03)	(5.37)
	Open Access Rebate	-	-	-	-	-	-	-
	Green Field/NSC Rebate	(0.73)	(1.00)	(1.77)	(2.76)	(1.95)	(3.55)	(4.47)
	Advance Payment Incentive	(0.03)	(0.01)	(0.02)	(0.01)	(0.06)	(0.06)	(0.01)
	Incremental Rebate	(16.07)	(14.00)	(16.47)	(16.61)	(8.63)	(18.90)	(18.41)
	Online Payment Rebate	(0.10)	(0.17)	(0.40)	(0.43)	(0.33)	(0.38)	(0.41)
<b>Total Rebate</b>	<b>(92.15)</b>	<b>(94.25)</b>	<b>(103.91)</b>	<b>(102.87)</b>	<b>(65.94)</b>	<b>(98.89)</b>	<b>(101.29)</b>	

### West DISCOM Submission:

The Summary of incentive/surcharge for HT consumers given during the FY 2020-21 and FY 2021-22 up to (August, 2021) is as under: -

Particular / Year		2020-21	2021-22 (up to Aug.-21)
Additional charge/surcharge recovered from HT consumer (Rs. Crore)	Power Factor Surcharge	20.27	7.91
	Late Payment Surcharge	51.15	25.62
	<b>Total Additional charge/surcharge Recovered</b>	71.42	33.54
Rebate/Incentive provided to HT consumer (Rs. Crore)	Power Factor Incentive	(157.90)	(72.16)
	Time of Day Incentive	(207.54)	(79.49)
	Prompt Payment Incentive	(1.63)	(0.79)
	Captive Incentive	(40.85)	0.00
	Open Access Rebate	0.00	0.00



Particular / Year		2020-21	2021-22 (up to Aug.-21)
	Green Field/NSC Rebate	(96.85)	(46.14)
	Advance Payment Incentive	(0.09)	(0.07)
	Incremental Rebate	(77.89)	(38.40)
	Online Payment Rebate	(2.43)	(0.99)
	<b>Total Rebate</b>	<b>(585.17)</b>	<b>(238.04)</b>
<b>Net Impact (Rs. Crore)</b>		<b>(513.75)</b>	<b>(205.51)</b>

Further as directed by the Commission, IT section of DISCOM developed monthly detailed R-15 report comprising Tariff category wise details of various incentive/surcharges. The copy of the said R-15 reports for the month of September, 2021 having tariff category wise details of incentive/ surcharge has been separately submitted in soft copy to the Commission

**Commission’s Observations/ Directions:**

The Commission has noted the submissions of DISCOMs and directs DISCOMs to expedite the process of development of a report and submit the same on quarterly basis. Further, the Commission has extended applicability of various rebates in this Order. Accordingly, the Petitioner is directed to undertake study with analysis to ascertain the impact of various incentive/rebate/surcharge being allowed by the Commission in tariff order. Further, the analysis should cover scenarios for Rabi & Non-Rabi Seasons, separately and also scenario where no incentive/rebate are provided in tariff. Petitioners are directed to submit the above study by next petition filling.

**6.3 Technical studies of the Distribution network to ascertain voltage-wise cost of supply**

**Commission’s Directives:**

*The Commission has observed that the sample size and the sample selected by the DISCOMs is not the representative sample of the State or the respective DISCOMs. The Commission therefore directs that a comprehensive study with large representative sample covering all consumer categories, climate zone, water level status, crop patterns be conducted through an outsource independent agency of repute to arrive at a meaningful conclusion. The outcome be shared with the Commission within six months of issue of this Tariff Order.*

**East DISCOM Submission:**

The Petitioner carried out a technical analysis through CYMDIST software for segregation of technical and Commercial losses and submitted a report to the Commission in which average technical losses calculated for the EZ network were 18.7%. The same has been noted by the Commission in the Tariff order for FY2019-20. The Commission has directed to submit the study report with wide sample data.

In view of above the report on technical losses study is under progress and the study will be submitted before the Commission in short period.

**Central DISCOM Submission:**

The Petitioner submits that desired study shall be carried out with increased sample size and considering the various other factors i.e. climate zone, water level status, crop patterns, etc. The outcome of the said study shall be shared with the Commission as per the timeline given by the Commission

**West DISCOM Submission:**

The petitioner submits that consulting agency PWC has been directed to conduct a study on segregation of Technical and Commercial losses to ascertain voltage wise cost of supply. Report will be submitted to the Commission soon.

**Commission's Observations/ Directions:**

The Commission has been continuously directing Petitioners to submit the study reports. However, in every year petition, Petitioners are submitting same response that it will be submitting shortly. This lackadaisical approach of the Petitioners is not acceptable and amounts to non-compliance of directives. Further, Regulation 26.7 of the MYT Regulations, 2021, specifies as follows:

*“26.7. The Distribution Licensee shall also propose voltage wise losses for each year of the Control Period for the determination of Voltage-wise Cost of Supply. The Distribution Licensee shall be required to conduct the energy audit on representative sampling basis to segregate technical (i.e., Ohmic/Core losses in the lines, substations and equipment) and Commercial Loss (i.e., unaccounted energy due to metering inaccuracies/inadequacies, pilferage of electricity etc.). The Distribution Licensee(s) shall submit the first report on segregation of technical and commercial losses within one year from the date of notification of these Regulations. From FY 2023-24 onwards, the Distribution Licensee shall be required to submit detailed information for each year on Voltage-wise Distribution Losses segregating them into technical loss and Commercial Loss to the Commission.”*

In view of above, Commission directs the Petitioners to submit the comprehensive study as per above Regulations along with the next tariff petition. Non submission of report will tantamount to non-compliance of the Commission's direction and the Commission may take appropriate action against DISCOMs.

**6.4 Transfer of Funds to Pension & Terminal Benefit Trust Fund**

**Commission's Directives:**

*The Commission has noted the submission of the Petitioners. As separate proceeding is under progress, the matter would be appropriately dealt through the Petition. However, the Commission directs the Petitioners to deposit the amount against the Terminal Benefit Trust Fund allocated in this Tariff Order on monthly basis.*

**East DISCOM Submission:**

On compliance of order passed by the Commission the amount is being deposited into

TBT trust on monthly basis.

**Central DISCOM Submission:**

The Petitioner submits that Petitioners have transferred following amounts to contribution to TBT by MPCZ.

Year	Contribution to TBT by MPCZ
2019-20	Rs. 5 Crore
2020-21	Rs. 20 Crore
2021-22	Rs. 76 Crore
<b>till Aug2021</b>	<b>Total: Rs. 101 Crore</b>

Recently, on monthly basis, since Jun 2021, MPPMCL is providing Rs. 22 Crore for contribution to Terminal Benefit Trust fund and the same is transferred to Terminal Benefit trust on immediate basis by MPMKVVCL.

**West DISCOM Submission:**

The Company is transferring funds to Pension & Terminal Benefits trust Fund on regular basis. Whenever the company received fund from MP Power Management Company to deposit in Pension & Terminal Benefit Trust Fund as per Cash Flow Management of Company, the same shall be deposited. The Company has deposited an amount of Rs. 57 Crore from 12.07.2019 to 24.06.2021 in Pension & Terminal Benefit Trust Fund. In future also whenever the Company has received fund from MP Power Management Company to deposit in Pension & Terminal Benefit Trust Fund, the same shall be deposited in time. The date on which Amount has been transferred to Pension & Terminal Benefit Trust Fund are given below: -

Sr. No.	Date of Amount Transfer	Transferred Amount (In Cr.)
1.	12/07/2019	5.00
2.	24/12/2020	5.00
3.	20/01/2021	5.00
4.	06/02/2021	5.00
5.	06/03/2021	5.00
6.	26/03/2021	5.00
7.	11/05/2021	5.00
8.	24/06/2021	22.00
<b>Total</b>		<b>57.00</b>

**Commission's Observations/ Directions:**

The Commission has noted the submission of the Petitioners and directs the Petitioners to continue with deposit of the amount against the Terminal Benefit Trust Fund allocated in this Tariff Order on monthly basis as per Commission order dated 11<sup>th</sup> May, 2021. Further, the Petitioners are also directed to deposit the amount which has been allowed in the previous orders.

## 6.5 Replacement of Stopped and Defective Meters

### Commission's Directives:

The Commission has noted the submission of the Petitioner. It is observed that the Petitioners have been submitting the quarterly progress report to the Commission. However, the Petitioners have failed to submit the comprehensive plan to replace all the stopped and defective meters. Accordingly, in view of the higher distribution loss of the DISCOMs, the Commission directs the Petitioners to submit the comprehensive replacement plan of the defective/ stopped meters by 30th September, 2021.

### East DISCOM Submission:

The Petitioner has given its presentation in the meeting held with the Commission on dated 29.09.2021 for replacement stopped defective meters and meterization of balance consumers.

Plan of 100% meterization in MPPKVVCL, Jabalpur

Total Stop-Defective + Unmetered Connections	Plan of Meterization subject to availability of fund					
	FY 2021-22		FY 2022-23			
	Q3	Q4	Q1	Q2	Q3	Q4
1025895	100000	100000	200000	100000	300000	225895

- 9.71 lakh smart meters tender is in progress, which is funded by KFW.
- Balance urban consumers will be meterized with smart meters under RDSS scheme phase-2.
- Installation of 15,000 smart meters is in progress, 3200 nos. meters installed for LT high value consumers.
- Smart meter installation in rural area is commercially not viable, need to be discussed.

### Central DISCOM Submission:

The petitioner submitted that the replacement of stopped/defective meters is a continuous process. The status of defectives meters are shown as per Annexure –III.

In RRRDS Scheme, smart meter will be installed in phase manner as below:

- 918429 meters in KFW funded scheme-Dec'23
- Balance 912756 Urban Area consumers -Up to Dec'24
- 2096028 Rural Area consumers -Up to Dec'25

### West DISCOM Submission:

The petitioners submit the comprehensive replacement plans of the defective/ stopped meters, the summary of replacement plan of stopped /defective meters in West Discom area is as follows: -

Status of Defective Meters FY 2020-21		Replacement Plan					
Nos. of Consumer at end of Year (nos.)	Nos. of Consumers with defective meters at the end of the Year (nos.)	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
5644160	1902495	211450	442636	416136	416136	416136	0

Further detailed comprehensive plan for replacement of stop/defective meters has been submitted to the Commission separately in prescribed MYT ARR petition FY 2022-23 format P-2.

**Commission’s Observations/ Directions:**

The Commission has noted the submission of the Petitioner and directs the Petitioners to submit the quarterly progress report to the Commission.

**6.6 Alignment of R-15 strictly with the categories, subcategories and slabs of the Tariff Schedule as per the new Tariff Structure**

**Commission’s Directives:**

*The Commission has been repeatedly directing the Petitioners to submit the R-15 reports as per the tariff schedule approved by the Commission, which is necessary to project sales accurately. However, the Petitioners have been following lackadaisical approach and not complying with the direction of the Commission. This approach of the Petitioner is not acceptable. The Commission directs the Petitioner to submit the R-15 reports aligned with the tariff schedule approved by the Commission with the tariff Petition for next financial year filling which the Commission may take an appropriate view considering the non-compliance of the Commission’s direction.*

**East DISCOM Submission:**

The Petitioner submits that tariff wise R-15 is available on R-15 portal/website of the Discom. The reconciliation with conventional R-15 along with fine tuning of reports is in progress.

**Central DISCOM Submission:**

The Petitioner submits that East DISCOM is acting as nodal company for modification of R-15 statement on behalf of all the three DISCOMs.

**West DISCOM Submission:**

The Petitioner submits that R-15 report from the month of September, 2021 onward has been aligned with the Tariff order. The Copy of R-15 for the Month of September, 2021 has been separately submitted in soft copy to the Commission.

**Commission's Observations/ Directions:**

The Commission has taken note of the Petitioners submission. The Commission directs the Petitioners to keep submitting the R15 statement aligned with rate schedule on quarterly, half yearly and annual basis. Further, the Petitioners should also submit the reconciliation of sales, connected load and number of consumers as per the old and new R15 statement.

**6.7 Capital Expenditure and Capitalisation details**

**Commission's Directives:**

*The Commission expresses its displeasure over casual approach of the DISCOMs in complying the directives provided by this Commission. In order to reprimand the Petitioners, the Commission is not allowing the depreciation as per the rates prescribed in the MPERC MYT Regulations, 2015 and its amendments thereof, which is subject to submission of Fixed Asset Registers along with the true up petition of FY 2021-22. Further, the Commission directs the Petitioner to submit the Fixed Asset Register upto FY 2020-21 along with the Tariff Petition for FY 2022-23 in the format prescribed by the Commission.*

**East DISCOM Submission:**

The Petitioner submits that Assets Register generated from ERP System of the Company containing full details of class wise Assets duly tallied with Audited Account has been submitted to the Commission at the time of submission of ARR & True up petitions. The Commission vide email dated 09.11.2021 has emailed prescribed format for Asset register. The format prescribed by the Commission is under Analysis for preparation of data.

**Central DISCOM Submission:**

The Petitioner submits that Fixed Asset register as per the formats given by the Commission via e-mail dated. 09.11.21 is under process and will be submitted soon as the format prescribed is under analysis and it requires some more time to compile.

**West DISCOM Submission:**

The Petitioner submits that company is generating Asset Register via ERP System, which is also showing full details of the Assets as per Asset class wise which matched with the audited accounts of the Company. Further as per the directives of the Commission to submit the Fixed Asset Register up to FY 2020-21 along with the ARR-Tariff Petition FY 2022-23. The Company is in a process to made Asset Register in a format prescribed by the Commission and made efforts to follow the directive of the Commission

**Commission's Observations/ Directions:**

The Commission has observed that the Petitioners have submitted Fixed Assets Registers upto FY 2020-21. Although, the Petitioners have submitted the Fixed Asset Registers,

however, the same is not completely in accordance to the format specified by the Commission and observed that the Petitioners have not been able to link the individual assets details with its cost in years prior to FY 2020-21 in Fixed Asset Registers. The Petitioners have provided the quantity against the assets in cumulative manner, separately.

Further, During Technical Validation Session, the Petitioners informed the Commission that from FY 2020-21 onwards, they are keeping record of the individual assets separately and accordingly, the Petitioner shall be submitting the Fixed Asset Register in the desired format during the next tariff and true up petitions. The Commission has taken note of the Petitioner submission. The Commission directs the Petitioners to submit the Fixed Asset Register as per format specified by the Commission in next tariff petition.

### 6.8 Submission of report to ascertain the Consumption of irrigation pumps

#### Commission's Directives:

*It is observed that the Petitioners have submitted details of consumption of sample agricultural feeder. However, the Petitioners have not submitted the detailed report detailing the methodology adopted for selection of sample feeders, energy audit report of the selected feeders etc. as per the direction of the Commission. Therefore, the Commission once again directs the Petitioners to submit report to ascertain the consumption of irrigation pumps based on detailed report for the representative sample agriculture feeders along with sample energy audit on predominantly agricultural DTRs in all the three DISCOMs justifying their claim in the next tariff filing/ true-up to the satisfaction of the Commission.*

#### East DISCOM Submission:

The Petitioner submitted that M/s RECPDCL has been awarded the work of analysis of Agriculture consumption in Narsinghpur circle of East DISCOM. The report of M/S RECPDCL has been submitted before the Commission vide letter no. EZ/CGM/Comml/1716 dated. 12.11.2021.

#### Central DISCOM Submission:

The Petitioner submitted that a study on 4 feeders of Hoshangabadad Circle has been done where 3 crops are cultivated. Report is placed as followed from which it may be seen that input units are higher in comparison to sold units allowed by the Commission.

<i>Study Report to Ascertain the consumption of Irrigation Pumps</i>					
<b>M.P.M.K.V.V.C.L,O&amp;M CIRCLE HOSHANGABAD</b>					
Month- Mar.20 to June.20					
Name of 11kV Feeder	Energy Input (LU)	No. of Pump Connection	Load in HP	Per Month/Pump	Per Month/HP
11KV BUDHANI (N.BUDHANI)	11.17	255	1275	1095.29	219.06
11KV DANGIWADA (NAS'BAD)	12.09	221	1552	1367.72	194.76

<b>Study Report to Ascertain the consumption of Irrigation Pumps</b>					
<b>M.P.M.K.V.V.C.L,O&amp;M CIRCLE HOSHANGABAD</b>					
Banwari	9.11	180	908	1265.78	250.93
DHONDAY	7.85	203	1015	967.03	193.41
Pachhua	7.8	340	764	573.53	255.24
Month- Jul.20 to Sept.20					
Name of 11kV Feeder	Energy Input (LU)	No. of Pump Connection	Load in HP	Per Month/Pump	Per Month/HP
11KV BUDHANI (N.BUDHANI)	9.02	248	1254	1212.37	239.77
11KV DANGIWADA (NAS'BAD)	8.32	218	1537	1272.17	180.44
Banwari	6.59	172	884	1277.13	248.49
DHONDAY	5.64	195	995	964.1	188.94
Pachhua	5.02	312	666	536.32	251.25
Month- Oct.20 to Feb.21					
Name of 11kV Feeder	Energy Input (LU)	No.of Pump Connection	Load in HP	Per Month/Pump	Per Month/HP
11KV BUDHANI (N.BUDHANI)	13.34	251	1263	1062.95	211.24
11KV DANGIWADA (NAS'BAD)	14.61	220	1547	1328.18	188.88
Banwari	10.64	177	899	1202.26	236.71
DHONDAY	10.07	199	1005	1012.06	200.4
Pachhua	9.7	328	722	591.46	268.7

**West DISCOM Submission:**

The Petitioner submits that consulting agency M/s. PWC of Discom has been directed to conduct a study with increased sample size to ascertain the consumption of irrigation pump connections as desired by the Commission. Report will be submitted to Commission soon.

**Commission’s Observations/ Directions:**

It is observed that the Petitioners have submitted details of consumption of sample agricultural feeder. However, the Petitioners have not submitted the detailed report detailing the methodology adopted for selection of sample feeders, energy audit report of the selected feeders etc. as per the direction of the Commission. Therefore, the Commission once again directs the Petitioners to submit report to ascertain the consumption of irrigation pumps based on detailed report for the representative sample agriculture feeders along with sample energy audit on predominantly agricultural DTRs in all the three DISCOMs justifying their claim in the next tariff filing/ true-up to the satisfaction of the Commission.

**6.9 Action Plan for Line Loss reduction**

**Commission’s Directives:**

*The Commission appreciates the efforts made by the West DISCOM, however, it has been observed that the distribution losses submitted by other two DISCOMs are above loss*



level specified by the Commission. East and Central DISCOMs progress is far from satisfactory. There is a huge gap between the targeted losses and actual losses. These DISCOMs are losing huge amounts against these losses as the Commission has been allowing only the normative losses to be passed on to the consumers. The Commission opines that it is very necessary and expedient to go into the details of suboptimal performance of the DISCOMs. The Commission directs DISCOMs to arrange a separate exercise to perform Circle wise Energy Audits through an independent agency and submit an action plan to reduce the losses based on this Energy Audit Report to the Commission. The Commission also directs the DISCOMs to submit quarterly progress reports in this matter.

**East DISCOM Submission:**

An accredited energy auditor M/s A-Z Energy Engineers, New Delhi has been awarded by MPPKVCL to conduct the PAT Monitoring and Verification (M&V) Audit and under the Perform Achieve & Trade (PAT) Scheme for target year i.e. FY 2018-19, in accordance with the Bureau of Energy Efficiency (manner and intervals of time for conduct of Energy Audit) Regulation 2010.

**Following Energy Conservation Measures (ECMs) is adopted for line loss reduction.**

1. Installation of Smart Meters.
2. Installation of Automatic Power Factor Controller (Capacitor banks).
3. System improvement and automation.
4. Improvement in metering system.
5. Replacing of conventional/Non star transformers with energy efficient/star rated transformers.
6. Replacement of all conventional mechanical energy meters with static digital electronic meters having less power consumption and more accuracy.
7. Laying of AB cable in theft prone area where loss are on higher side.
8. HVD System to reduce low tension line losses.
9. Replacing worn out /under sized conductors.
10. Increase in HT/LT ratio.
11. Preventive and Periodic maintenance of line and transformer.
12. Load Balancing of distribution transformers.
13. MIS based periodic reporting of unit wise business parameters.
14. Installation of solar generation plants & solar pumps.
15. Strengthening of Energy accounting infrastructure-100% consumer metering.

**Central DISCOM Submission:**

The Petitioner submits that line loss is reducing from last year and efforts are being made to reduce it to 23 % by the end of FY 21-22. line loss (%) in last 5 years is shown as below:

FY	Line Loss (%)
FY 2016-17	36.15

<b>FY</b>	<b>Line Loss (%)</b>
FY 2017-18	37.51
FY 2018-19	36.67
FY 2019-20	27.59
FY 2020-21	28.69
FY 20-21 up to Aug'20	29.99
FY 21-22 up to Aug'21	27.24

Circle wise Energy Audit is being done by Discom.

Action plan to reduce losses is attached as Annexure-V.

<b>Particulars</b>	<b>Units</b>	<b>Old Years</b>	<b>PY-21</b>	<b>CY</b>	<b>MYT 2022-23 To 2026-27</b>				
		<b>FY-20</b>	<b>FY-21</b>	<b>FY-22</b>	<b>FY-23</b>	<b>FY-24</b>	<b>FY-25</b>	<b>FY-26</b>	<b>FY-27</b>
Energy input received by the Discom at all voltage levels	MU	24008	26876	28220	28344	29386	30825	32875	33155
Energy sold by the Discom for all categories of consumers	MU	17384	19165	20405	21308	23286	24863	27544	27932
Actual Distribution losses in %	%	27.59	28.69	27.69	24.82	20.76	19.34	16.22	15.75

**West DISCOM Submission:**

It is submitted that West DISCOM has achieved the distribution loss level of 12.71% in the FY 2020-21 against the normative distribution loss of 15.00% prescribed in Tariff Regulation. DISCOM is making continuous efforts to reduce the losses.

**Commission’s Observations/ Directions:**

The Commission appreciates the efforts made by the West DISCOM, however, it has been observed that the distribution losses submitted by other two DISCOMs are above loss level specified by the Commission. East and Central DISCOMs progress is far from satisfactory. There is a huge gap between the targeted losses and actual losses. These DISCOMs are losing huge amounts against these losses as the Commission has been allowing only the normative losses to be passed on to the consumers. The Commission opines that it is very necessary and expedient to go into the details of suboptimal performance of the DISCOMs. Further, Commission observed that Petitioners have not submitted the detailed action plan detailing the methodology that Petitioners will be adopting for reduction in losses. Therefore, Commission directs DISCOMs to submit a detailed action plan to reduce the losses. The Commission also directs the DISCOMs to submit quarterly progress reports in this matter.

Further, the DISCOMs should note that as per MPERC MYT Regulations, 2021, DISCOMs are eligible for additional R&M expenses of 0.50%, on achievement of targets specified in the Regulations or reduction of actual losses by 3%. Therefore, the DISCOMs are encouraged to take benefit of additional R&M expenses as per Regulations.

## 6.10 Meterisation of unmetered agricultural and domestic consumers

### Commission's Directives:

The Commission has taken note of the submission of the DISCOMs. It has been observed that West DISCOM has achieved meterisation of Domestic consumers but not DTR metering. Progress of East and Central DISCOMs is unsatisfactory. The DISCOMs are directed to complete this work within 1st July, 2021 and report compliance to the Commission by 31st July, 2021.

### East DISCOM Submission:

- In East DISCOM meters have been provided on all unmetered domestic connections of urban area.
- For meterization of irrigation urban pumps East DISCOM has submitted the Action plan vide letter no. CGM/Comm1./ EZ/TRAC/Jbp/794 dtd. 14.06.2021.

### Central DISCOM Submission:

PROGRESS OF METERISATION FOR DOMESTIC CATEGORY OF CONSUMERS FOR THE QUARTER ENDING JUNE'21 - CENTRAL DISCOM														
Name of Discom	Total no. of domestic connections (at the end of previous qtr.)		Total No. of unmetered connections at the end of previous qtr.		New connections served during the quarter without meter		Total No. of unmetered connections(including unmetered new connections served during the quarter		Total no. of meters provided to unmetered connections		Balance unmetered connections at the end of quarter		% Unmetered connections	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
2	3	4	5	6	7 (=9-5)	8 (=10-6)	9	10	11	12	13 (=9-11)	14 (=10-12)	15 (=13/3 x 100)	16 (=14/(4+6) x 100)
Bhopal	886030	1025586	0	103423	0	0	0	103423	0	1312	0	102111	0.00	9.96
Gwalior	608482	1030894	0	219201	0	2071	0	221272	0	7905	0	213367	0.00	20.70
Central Discom	1494512	2056480	0	322624	0	2071	0	324695	0	9217	0	315478	0.00	15.34

### West DISCOM Submission:

With regard to domestic consumers, it is submitted that in West DISCOM area out of the total 2298654 nos. rural domestic consumers, meters are installed on 2261764 nos. of consumers and 36890 nos. of consumers are unmetered. The plan for meterization of 36890 nos. rural unmetered domestic connections is as below: -

Status of Meterization up to Aug'21			Action Plan for 100% Meterization						
Nos. of Rural Domestic Consumers	Nos. of Rural Domestic Metered Consumers	Nos. of Rural Unmetered Consumers	Sept.21	Oct.21	Nov.21	Dec.21	Jan22	Feb22	March22
2298654	2261764	36890	5270	5270	5270	5270	5270	5270	5270

With regard to agriculture consumers necessary instructions regarding identification and meterisation of urban flat rate agriculture consumers has already been issued to the field offices. The Commission is requested to extend the timeline to next tariff period.

**Commission’s Observations/ Directions:**

The Commission has taken note of the submission of the DISCOMs. It has been observed that all three DISCOMs have achieved meterisation of Domestic urban consumers but not for rural domestic consumers and agriculture DTR meterisation. The DISCOMs are directed to complete these works within 6 months of issuance of this order and report the status of compliance to the Commission after 1 month of deadline.

**6.11 Consumer category wise study of hourly consumption pattern**

**Commission’s Directives:**

*The Commission reiterates its directions given to the Petitioners to undertake a detailed study of hourly consumption patterns of various consumer categories, based on ABT metering data, to identify which category is contributing how much to the peak consumption, which category can shift its consumption to off-peak hours, seasonal variation in the peak and off-peak consumption levels. Based on this study, the Petitioners should submit a comprehensive proposal to modify/upgrade the ToD tariff dispensation, along with its next Tariff Petition.*

*Further, the Petitioners are required to provide details with regards to existing ToD tariff in the formats appended to this order as Annexure-2.*

**East DISCOM Submission:**

The Petitioner submitted that the Commission has directed to study the consumption pattern of ToD based consumers through ABT metering data for FY 2018-19, FY 2019-20 & 2020-21. Since almost 90-95% consumers fall under ToD rebate. Consumer wise study of Load pattern for an older period data is tedious task. However, East Discom from the month of October 2020 has developed a Meter Data Management System (MDM) for all the meter data being collected by the MBC (Metering Billing & Collection systems) and other AMR systems and the Smart Metering Systems.

The information of average hourly demand (KVA) for tariff category HV-2, HV 3.1, HV 3.3, HV-3.4, HV-4 & HV-5 is enclosed as Annexure-2. The Consumption pattern data of ToD consumers for the period of FY 2018-19 & 2019-20 is enclosed as Annexure-3.

**Central DISCOM Submission:**

The Petitioner submit that consumption pattern of 2 feeders is attached as Annexure VI. Analysis on consumption pattern is as below:

Name of feeder	Name	No. of Consumers
DL Feeder	Bhopal (Town)	4306
NDL Feeder	Jyoti Complex	901
Period	Per Consumer Consumption Per Month	
	DL	NDL
6 AM to 10 AM	37.39	35.46
11 AM to 5 PM	58.18	171.47

Name of feeder	Name	No. of Consumers
6 PM to 10 PM	37.86	107.13
11 PM to 5 AM	53.67	51.96

Feeder	Month	Highest recorded at Hr	Lowest recorded at Hr
DL	July'21	12 AM to 1 AM	5 PM to 6 PM
	Aug'21	3 PM to 4 PM	5 AM to 6 AM
NDL	July'21	4 PM to 5 PM	3 AM to 4 AM
	Aug'21	4 PM to 5 PM	3 AM to 4 AM

***West DISCOM Submission:***

It is submitted that information desired in the Table-A Table-B is available for current Financial Year. The desired information is being submitted separately in soft copy to the Commission

**Commission's Observations/ Directions:**

The Commission observed that the Petitioners have not submitted any study report to modify / upgrade the ToD Tariff as per Commission's direction. Therefore, Commission reiterates its directions given to the Petitioners to undertake a detailed study of hourly consumption patterns of various consumer categories, based on ABT metering data, to identify which category is contributing how much to the peak consumption, which category can shift its consumption to off-peak hours, seasonal variation in the peak and off-peak consumption levels. Based on this study, the Petitioners should submit a comprehensive proposal to modify/upgrade the ToD tariff dispensation, along with its next Tariff Petition.

Further, the Petitioners have also not submitted the data in accordance with format specified by the Commission. Therefore, Commission once again directs petitioners to submit the requisite data as per the format specified by the Commission in next tariff petition.

**6.12 Policy and procedure for identification of bad debts and writing off the same**

**Commission's Directives:**

Regulation 37 of the MPERC MYT Regulations, 2021, specifies as follows:

***“Bad and doubtful debts***

*The Licensee shall submit the Draft policy and procedure for identification of bad debts and writing off the same for the approval of the Commission within three months from the date of notification of these Regulations.”*

Accordingly, the Petitioners are directed to submit draft policy and procedure for identification of bad debts and writing off the same for the approval of the Commission within three months from the date of issuance of this tariff order.

### **6.13 Format for Electricity Bill**

#### **Commission's Directives:**

The Commission has observed that many stakeholders have raised issue of having very complex bill format and having difficulty in understanding their electricity bills. The Commission is of the view that the Electricity Bill issued by the DISCOMs for Domestic Consumers should be easy to understand. Therefore, the Commission directs the DISCOMs to prepare a simplified format of Electricity Bill and submit to the Commission within 3 months from the issuance of this tariff order.

### **6.14 Minimum Charges**

#### **Commission's Directives:**

In the present tariff structure, recovery of fixed cost incurred by Distribution Licensees is partially recovered through fixed charges and remaining is recovered through energy charges. For the consumers in the event of zero or minimal consumption by a consumer, it is likely that such a consumer would only be required to pay fixed charges which would meet only about 20% of fixed cost in the system. This is certainly not a desirable situation and in order to avoid such a scenario, the concept to minimum charges was brought in, which was in the nature of meeting a part of the fixed cost. Notwithstanding the current scenario, the Commission is of the view that tariff structure needs further simplification and therefore, minimum charges which are in the nature of fixed charges, could be subsumed at a later stage in the category of fixed charges. However, in order to achieve this objective, it is necessary to understand implications of such a measure so that there is no tariff shock for any particular category of Consumer. Therefore, Distribution Licensees/Petitioners are directed to provide following information in details along with implications for taking considered view in this regard.

- i. Category / Sub-category wise applicable Minimum charges, recovery against the Minimum Charges and number of consumers who have been billed Minimum Charges during last five years.
- ii. Category / Sub-category wise actual consumption for which billing has been done as per Minimum Charges for last five years.
- iii. Category / Sub-category wise billed revenue from Fixed and Energy Charges during last five years

## A8: PUBLIC SUGGESTIONS AND COMMENTS ON LICENSEES' PETITIONS

- 7.1 After admission of the ARR for FY 2022-23 to FY 2026-27 and Tariff proposals for FY 2022-23 filed by MPPMCL and three DISCOMs, public notice was published in the prominent newspapers of the State to invite comments/objections/suggestions from the stakeholders. The Tariff Petition filed by the Petitioners, along with a gist of the Petition was uploaded on the Commission's and the Petitioners' websites. The Commission has considered all the comments received up to the last date to file suggestions/comments/objections. Names of the Stakeholders who had filed the suggestions/comments/objections on the ARRs for FY 2022-23 to FY 2026-27 /Tariff Proposals for FY 2022-23 are given in Annexure-I.
- 7.2 Public Notice, comprising the gist of the ARR and Tariff proposals were published by Petitioners on 11<sup>th</sup> February, 2022, in the following Hindi and English newspapers, seeking stakeholders' objections/ comments/ suggestions latest by 4<sup>th</sup> March, 2022.

**Table 144 : List of Newspapers- Public Notice published by Petitioner**

Newspaper	Language
Free Press, Indore	English
Naidunia, Indore	Hindi
The Hitavada, Jabalpur	English
Dainik Bhaskar, Jabalpur	Hindi
Dainik Bhaskar, Sagar	Hindi
Jabalpur Express, Chhindwara	Hindi
Desh Bandhu, Satna	Hindi
Pradesh, Rewa	Hindi
Navbharat, Bhopal	Hindi
Central Chronicle, Bhopal	English
Peoples Samachar, Gwalior	Hindi

- 7.3 The Commission scheduled the public hearing on 8<sup>th</sup> March, 2022 for East DISCOM, 9<sup>th</sup> March, 2022 for West DISCOM and 10<sup>th</sup> March, 2022 for Central DISCOM through video conferencing and heard the objections/ comments/ suggestions of the stakeholders.
- 7.4 Number of comments received on ARRs/Tariff proposals are shown in the table below:

**Table 145 : Numbers of Objections / Suggestions/Comments received**

Sr. No.	Name of DISCOM	Number
1.	East DISCOM, Jabalpur	17
2.	West DISCOM, Indore	37
3.	Central DISCOM, Bhopal	19
	<b>Total</b>	<b>73</b>

- 7.5 As a part of the tariff exercise, a meeting of the State Advisory Committee (SAC) was convened on 17<sup>th</sup> February, 2022, through video conferencing to seek suggestions on the Petition. The issues raised and suggestions made by the members of SAC have been appropriately considered herein.
- 7.6 The suggestions/comments/objections received from various stakeholders have been given due consideration by the Commission, however, salient suggestions/comments / objections related to the Tariff Petition have been grouped together according to the nature of the suggestions/comments/objections and are summarized in this Section. Some of the issues raised by the stakeholders, which do not relate to ARR and tariff are not discussed in this Chapter.

### **Tariff Design**

#### ***ISSUE No. 1: Tariff Minimum Charges***

#### **Issue Raised by Stakeholder**

TMM for all HT/LT consumers category should be removed and actual consumption should be considered, as the actual consumption in 90% of industries is very high and more than the TMM. Removal of TMM, will be helpful for small industrial/non-industrial consumers and will encourage these consumers to adopt use of more Renewable Energy.

There is no mention of Tariff Minimum in MYT Regulations, 2021. Provision for Tariff Minimum in MYT Regulations, 2015 has been replaced with the provision of Section 45(3)(a) of the Electricity Act, 2003 in the revised Regulations. Therefore, TMM should be abolished.

Distribution Licensees are recovering fixed charges separately, therefore, there is no need to recover minimum charges also. Further, MYT Regulations, 2021 and Electricity Act, 2003 do not recognizes tariff minimum charges.

Minimum charges clause should be added as fixed charges based on contract demand and Minimum charges should be payable per month whether energy is consumed or not.

The Commission may consider gradual increase in the fixed charges to meet fixed cost of the DISCOMs and abolish TMM/guaranteed annual consumption of all categories from the tariff schedule.

#### **Petitioner's Response**

As per the principles of two-part tariff, fixed charges are meant for the recovery of fixed cost and energy charges are meant for the recovery of variable cost. At present fixed charges is not sufficient to recover the fixed cost of the licensee. Therefore, unless the fixed charges are increased to a level, so as to sufficiently recover the fixed cost of supply, TMM should not be abolished.



Further, Regulation 41 of MYT Regulations, 2021 clearly state that Tariff income shall include minimum charges as may be determined by the Commission for different category consumer. Beside this, Section 61 (g) of Electricity Act, 2003 specifically mandates that the tariff paid by the consumer should progressively reflect the cost of supply of electricity and that cross-subsidies are reduced. Therefore, if the Guaranteed Minimum Consumption Charges are omitted then the fixed charges have to be increased to the extent it reflects the cost of supply or otherwise it will defeat the very purpose of Section 61 (g) of the Electricity Act, 2003.

Further. Minimum Charges are levied only when consumption of any consumer falls below guaranteed minimum consumption for a month. Therefore, the claim of the Petitioners neither violate Electricity Act nor MYT Regulations, 2021.

### **Commission's View**

The Commission examined the above issue raised by some of the Stakeholders. It is observed that the Power Sector in the country is governed by the Electricity Act 2003. Section 45 of the Electricity Act deals with power to recover charges by a Distribution Licensee for supply of electricity in pursuance of its universal supply obligation under Section 43. This is a universal service obligation on the Distribution Licensee to provide an electric connection within a specified time period on request of a person. Sub-section 2(a) of Section 45 provides that the charges for electricity supplied by distribution licensees shall be fixed in accordance with methods and the principles as may be specified by the concerned State Commission. Sub-section (3)(a) of Section 45 further provides that the charges for electricity supplied by a distribution Licensee may include a fixed charge in addition to the charge for the actual electricity supplied. Section 181 (2)(zd) empowers the State Commission to make Regulations specifying terms and conditions for determination of tariff under Section 61, which elaborates the guiding factors/principles while specifying terms and conditions for determination of tariff through MYT Regulations, 2021. As per Section 61(d) of the Electricity Act, 2003, while specifying the MYT Regulations, 2021, the Commission shall safeguard consumers interest and at the same time ensure recovery of the cost of electricity in a reasonable manner. MYT Regulations, 2021, have been notified in accordance with Section 61 of the Electricity Act and Regulation 41 of the MYT Regulations, 2021 recognises "Minimum charges" as one of the components of Tariff income. Therefore, it is perfectly legal to allow recovery of a part of cost of supply of electricity through minimum charges.

As per Tariff Order for FY 2021-22, total ARR (Annual Revenue Requirement) of Rs. 41080 Crore, comprises of around Rs. 24,785 Crore of fixed Cost and Rs. 16,290 Crore of Variable Cost. Fixed Cost component is about 60% of total ARR, which includes fixed cost payable to the generators, transmission service providers and O&M expenses, Depreciation, Interest and finance charges & Return on equity. It is a well accepted economic principle that the fixed costs of the utility should be recovered to a certain extent through fixed charges to ensure revenue stability. Even though fixed cost component is about 60% of total cost incurred by the Distribution licensee in its supply and distribution business, however, due to historically followed tariff structure, recovery of fixed cost through fixed charges from the consumer is only about 20%. Remaining portion of fixed cost is being recovered through energy charges on the units consumed by the consumers. Therefore, in the event of zero or minimal

consumption by a consumer, it is likely that such a consumer would only be required to pay fixed charges which would meet only about 20% of fixed cost in the system. Consequently, the burden of meeting balanced fixed cost which is nearly 80% would have to be shifted to other consumers. Thereby causing avoidable hardship to other categories of consumers. This is certainly not a desirable situation and in order to avoid such a scenario, the concept to minimum charges was brought in, which was in the nature of meeting a part of the fixed cost and was introduced with the intent to distribute the burden of sharing fixed cost across all categories of consumers. In any case, there would be a very limited number of consumers who will be required to pay minimum charges as most of the consumers would be consuming as per the contract demand or sanctioned load. Notwithstanding, the above stated position, the Commission is of the view that tariff structure needs further simplification and therefore, minimum charges which are in the nature of fixed charges, could be subsumed at a later stage in the category of fixed charges. However, in order to achieve this objective, it is necessary to understand implications of such a merger so that there is no tariff shock for any particular category of Consumer, Therefore, in light of suggestions made by stakeholders, details provided by the Distribution Licensees/Petitioners have gone through by the Commission and it is felt that the current set of information is not adequate to decide the issue at hand. Therefore, Distribution Licensees/Petitioners are directed to provide requisite information in details along with implications so that considered view in this regard may be taken.

### ***ISSUE No. 2: Rebate / Incentive / Surcharge***

#### **Issue Raised by Stakeholder**

Considering that the Petitioners have projected energy surplus scenario for each year of the control period and adverse financial condition of industries due to COVID-19 outbreak, incremental Rebate for new and existing consumers (HV-3 category) may be extended for the whole Control Period without changing the base year.

The Incremental rebate of Rs 2 per unit on energy charges for Captive Power Consumers, should be extended for 5-10 years instead of one year considering the huge investment made for developing such facility.

Rebate of Rs. 2 per unit on incremental consumption of Captive Power Plants consumers of HV-3 category should be increased to Rs. 3 per unit.

Green Field/ New Connection Rebate for HV-3 consumers should be extended for additional 3 years considering the effect of Covid-19.

For West DISCOM, the Commission is requested to issue separate tariff and if separate tariff is not possible, following alternatives may be adopted, which will increase power consumption and utilization of surplus power.

- Power intensive industries are bulk consumer of power. Their consumption per KVA is much more than that of other industrial consumers. Bulk consumer incentive can be introduced 4%-5% like that of Maharashtra.

- Load factor of power intensive industry is ranging from 76%-90%. Scheme for load factor incentive should be introduced for consumers having load factor above 70%.
- Power factor incentive which is at present at 7%, may be increased to 9%.

ToD rebate of 20% for night hours should be increased to 25-30%. Further, off peak Hours Rebate of 20% during the period April-October should be restored.

The industries in rural areas are facing problems like un-skilled labor, transportation etc. Therefore, rebate on supply through feeders to predominantly rural area should be continued.

Maximum power factor surcharges on account of low power factor should not exceed 10 % for HT Consumers in line with the provision for LT consumers.

Rebates and incentive as suggested in petition are needed to be reviewed. Commission should extend the relief only after making it rationale subjected to realization of average cost of supply.

Surcharge for late payment has been proposed at 1.25% per month (15% p.a.), whereas DISCOMs pay interest at the Bank Rate only on consumers Security Deposit. The rate of late payment Surcharge should be aligned with present Bank Rate.

Clause 1.10 of General Terms and Conditions of Tariff Order applicable for HT Consumers, provided rebate of 1% per month on advance payment. In this regard, stakeholders need further clarification in case if consumers who want to deposit advance payment for one year and want incentive on monthly basis on balance amount at the end of billing date of month. Rebate on advance payment should be increased from 1% to 1.5%.

Rebate for online bill payment by HT consumers must be withdrawn as most of consumer are already making payment through online. Therefore, this rebate has no logic or rational and will create a burden of Rs. 80 lacs on other consumers.

Load Factor should be calculated as per retail supply tariff order of FY 2010-11 because proposed LF formula reduces LF %, if PF is improved. Therefore, requested the Commission to change the formula.

The Commission is requested to grant load factor incentive above 50% to utilize more power, in view of surplus power available with the State.

Load Factor rebate at 0.10% for every 1% increase in load factor above 75% on the energy charges for incremental consumption should be provided as per tariff order for FY 2016-17.

Power factor incentive shall be provided on total consumption including consumption through DISCOM, Open Access and CPP power under Open Access.

It is to be clarified in the Order that consumers having load upto 10 kW are also eligible for

Power Factor Incentive.

Due to lack of maintenance in electric lines, it is difficult to maintain the power factor above 0.9. Therefore, the Commission is requested to reduce the PF limit from 0.9 to 0.8 for the PF penalty.

### **Petitioner's Response**

In line with the previous tariff order, rebate for new HT connections has been proposed to be extended for one year in instant petition. The Commission is requested to take suitable view on this issue.

Petitioners have been receiving various request from Industrial Associations (including steel industries) or Industries to continue rebate for future years considering the impact of COVID-19. Considering the request from the consumers, Petitioners have proposed to continue rebate for one more year, i.e., up to FY 2022-23. Further, rebates are not only proposed for new connections but also for existing connection. Therefore, by this way the Petitioners have proposed to protect the interest of new as well as existing consumers.

Rebate for open access consumers/Captive power consumer in line with the previous tariff order has been proposed to be extended for one year.

Further, the Petitioners have observed that with the introduction of rebate, the consumptions of electricity in the industries have increased which has contributed to flattening of load curve for the DISCOMs. Further, the rebate also attracts the new investment in the State resulting in various employment opportunities for the State. Therefore, the Petitioners have proposed to continue the rebate for one more year.

The Petitioners have proposed that various rebates are being provided to the consumers including Railway to increase the consumption from the DISCOM. This off-peak power rebate is nothing but a special night Tariff. At present ToD rebate is made applicable to the HT Consumer on the ground that the consumption in such industries happens round the clock, on the other hand LT Industries are small industries and generally operates in daytime.

As per the section 62(3) of Electricity Act 2003, the Commission is fully empowered to make differential Tariff to be charged on consumption of electricity during any specified period.

Further, it is proposed that no surcharge is being levied for consumption during peak hours. In addition to these various other rebates/incentives have been provisioned in Tariff order to the HT consumers and the consumers are availing the same.

The Commission has changed the ToD rebate incentive with its own purview in FY 2021-22. DISCOMs have not proposed any levy of surcharge on consumption in peak period. Thus, suggestion of the stakeholder regarding further increase of ToD rebate is not appropriate. Moreover, incentive as such is the prerogative of the Licensee to promote its business and create goodwill amongst the consumer and general public and may not be construed as a matter of right.

With regard to rebate for supply through feeders to predominantly rural area, Petitioners submitted that all HT consumers are receiving supply through Industrial feeders, which are having supply 24x7. Therefore, rebate on supply through feeders to predominantly rural area should be abolished. Further other rebates to promote consumption from DISCOMs are being provided to consumers.

With regard to reduction of Power Factor (PF) Surcharge for HT industries, the Petitioners submitted that any reduction in the limit of PF surcharge for HT consumer would result into burdening of other consumer who are maintaining their power factor. Further, looking to the nature of load being used in the HT industries comparison with LT consumer is not appropriate.

Delay payment by the consumer results into borrowings by the DISCOM or late payment to its supplier. Thus, there is no rational behind stakeholder proposal for comparison of surcharge for late payment with interest on consumer security deposit as both are governed by different Regulation.

In ideal situation consumers are expected to maintain unity power factor. Thus, proposal of any further increase of incentive for PF lacks merit.

The provision in the Tariff Order is clear in the matter of rebate of advance payment.

The LF calculation formula as provided in Tariff order FY 2011-12 & FY 2012-13 gives undue benefits to such consumers whose maximum recorded demand is less than the contracted demand. Such consumers get double benefit i.e., by way of PF incentive and by way of reduction in energy charges for the energy corresponding to more than 50% LF. This anomaly was rectified in the tariff order for FY 2014-15.

Further, it is expected from the consumer to utilize its asset at optimum level within grid discipline. Therefore, existing formula for calculating the load factor based on contracted demand and PF is reasonable and logical.

Petitioners have proposed that the tariff is designed in such a way that there will be reduction in tariff with the increase in LF of the consumer. Incentive proposed by Petitioners is quite reasonable and fair.

As per provision of Tariff order, power factor incentive is payable on billed energy charges. The Energy charges is being billed only towards the energy consume from the licensee. Thus, submission of stakeholder that incentive shall be provided on total consumption including consumption through DISCOM, Open Access and CPP power under Open Access lack merit.

It is the obligation of the consumer, having inductive load of 3 BHP or above, to maintain the power factor by installing the capacitor of appropriate rating is arises from the MP Supply Code 2021. Accordingly, the Petitioners is of the view that only consumer having inductive load of 3 BHP or above should be eligible for power factor incentive.

The Petitioners have proposed that by improving power factor consumers themselves gets the

benefits. The PF is related to the equipment used by the consumer, due to which reactive power flows in the power lines of the DISCOMs and this reduce the capacity of the lines which result in loss to the DISCOMs. Therefore, the consumers are expected to maintain a PF of 0.95 by installing shunt capacitor bank to compensate for the reactive power.

### **Commission's View**

The Commission has noted the submission of stakeholders and its reply submitted by the Petitioners. The Commission in this order has continued various rebates which have been detailed in tariff schedule chapter of this order.

With regards to ToD tariff, it is to be noted that purpose of ToD tariff is to flatten the load curve, thereby encouraging the consumers to shift their load from peak period to off peak period. Therefore, the Commission in last tariff order had introduced seasonal ToD tariff, which was aligned with the load pattern observed in previous years. The Commission has included a directive in this order to submit the actual demand data for FY 2021-22 during the next tariff filing. Based on the review of the actual data, the Commission will take appropriate view during the subsequent tariff filing.

With regard to rebate on advance payment, the Commission clarifies that the consumers can pay bill for a period more than 1 month in advance for availing rebate on advance payment.

### ***ISSUE No. 3: Green Energy Tariff***

#### **Issue Raised by Stakeholder**

Green tariff provision in the State shall be introduced similar to Maharashtra and Karnataka so that the consumers have the option to buy Green Energy from the DISCOMs.

#### **Petitioner's Response**

The Petitioners have already proposed for Green Energy Tariff in its proposal for consideration of the Commission.

#### **Commission's View**

Considering the demand of the stakeholders, the Commission has made provision for Green Energy Tariff for FY 2022-23, which has been detailed in Chapter A4 of this order.

### ***ISSUE No. 4: Tariff for HV-3: Industrial, Non-Industrial & Shopping Malls, Consumers***

#### **Issue Raised by Stakeholder**

The petitioner has proposed a tariff hike for HV-3.4 category based on the fictitious data without any determination of actual voltage wise cost of supply through independent and fair energy audit agency.

The APPC of Petitioners and that of MPIDC (SEZ) is Rs 4.05 /unit and Rs 3.74 per unit (as

per clause 2.85 of MPIDC ARR). Further, the Commission has observed that the MPPMCL has entered into Bulk Power Supply agreement with MPIDC for supply of 55 MW power.

However, SEZ 33kV HT tariff for general Industry itself is Rs 228 /kVA (fixed charges) and Rs 3.79 per unit (they do not have power intensive tariff) as against existing tariff of Petitioner for power intensive units is Rs 580 per kVA and Rs 5.40 per unit and now proposed to be raised to Rs 605 per kVA and Rs 6.00 per unit. Therefore, the Commission is requested that Tariff for 33 kV Power intensive units should be reduced to Rs 274 per kVA (Fixed charges) and Rs 4.55 per unit (energy charge).

The Commission is further requested that the 132 kV Tariff for HV-3.4 category should not be increased as existing tariff is already high.

The Petitioners have proposed a massive hike of 13.38% in tariff charges for HV-3.4, which is the highest among all HT categories and highest tariff hike ever proposed by petitioners in the past history of tariff proposals.

The Tariff charges for 132 kV has been proposed as Fixed charge – Rs. 740 and energy charge – Rs. 5.95 per unit whereas for 33 kV category the proposed Fixed charge are Rs. 605 and Energy charge are Rs. 6.00 per unit, which creates a major gap between the two category and place 132 kV almost unviable and will discourage the potential consumers. Therefore, requested the Commission not to allow the same.

Petitioners have proposed lower Energy Charge rate for HV-3.1 (above 50% load factor) compared to HV-3.4

Tariff for HV-3.1 shall not be increased by 1.55 % as claimed by the Petitioners considering prevailing situation of industry and market due to COVID-19 Pandemic. The Commission to continue the special tariff for HV 3.1 category approved in the retail supply tariff order for FY 2016-17.

### **Petitioners' response**

The petitioners submitted that Commission has already addressed the issue of stakeholder by provisioning the separate cheaper tariff for HV-3.4 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. Further, Billing issue/dispute of any particular consumer is not the subject matter of instant petition. Therefore, consumer may raise his grievance at appropriate forum in accordance with the provision of the Electricity Act read with Regulations issued by the Commission.

The Petitioners have filed ARR and Tariff Petition for FY 2022-23 in accordance with the tariff principles laid down in MYT Regulations, 2021 and as provided in the Section 61 read with section 62 of the Electricity Act, 2003. Further, tariff for different categories is proposed

in accordance with the principle of cost of supply.

As per Retail Supply Tariff Order for FY 2021-22 ABR for HV 3.4 tariff category is Rs. 5.58/kWh as against Rs. 6.60/kWh overall ABR. Accordingly, at present power intensive consumers are being billed to the extent of 85% of average billing. In other words, power intensive consumers are not even contributing towards the average cost of supply and getting cross subsidy from other consumers. Further, as per provision of the Act read with the national tariff policy, tariff is required to determine considering the average cost of supply and not the voltage wise cost of supply. Therefore, proposed tariff hike is wholly justified by the Petitioners.

Overall hike proposed for HV 3.1(Industrial) is just 0.81%, which is negligible.

### **Commission's View**

The Commission has noted the stakeholder's submission and Petitioners' response. The Commission has determined the tariff for all category of consumers considering the sales mix, revenue contribution and present level of cross subsidy for respective categories / sub-categories in order to meet the approved revenue requirement of the petitioners which is in accordance with the principles laid down under the Regulations and the prudent practices followed by the Commission in its Tariff Orders.

### ***ISSUE No. 5: Tariff for HV-4: Seasonal Consumers***

#### **Issue Raised by Stakeholder**

The condition of 180 days should be replaced with six billing month and the word current financial year should be deleted as proposed by the petitioner.

Ginning & Pressing Industries are not able to consume even TMM units due to the change in Govt policy, cropping pattern due to monsoon. Therefore, requested that off-season period for seasonal consumer should be kept for minimum period of 4 months in place of 6 months.

The billing of energy charges during off season is done at 120% of the normal Energy Charges as specified for Season for normal units as well as TMM units. However, at the time of giving credit of TMM units, the same is done at normal energy charges, thereby leading to loss of 20% to the consumers. Therefore, it is requested that it may be clarified that at the time of giving TMM credit, the same rate be considered as it was billed.

#### **Petitioner's Response**

The Petitioners appreciate the support of the stakeholder on the proposal. The Commission is requested to take suitable view in this regard.

With regard to seasonal consumers that the period of the off season is very less than in that case there would be no need of separate cheaper tariff for the seasonal consumer.



In accordance with the provision of the tariff order billing of minimum consumption is being done in terms of units and credit of the same in any subsequent period is also being done in terms of units only. Rate of billing has no relevance as far as billing of minimum consumption is concerned. Thus, proposal of the stakeholder in this regard lacks merit.

### **Commission's View**

The Commission has taken note of the stakeholders submission and Petitioners reply and accordingly has made changes in the rate schedule for HV-4 seasonal category.

### ***ISSUE No. 6: General Terms and Conditions of Tariff***

#### **Issue Raised by Stakeholder**

Petitioners proposal to billed at 1.5 times the Tariff Minimum Charges should not be allowed if the consumer is paying panel charges on the excess demand as permitted by the Commission.

For the conversion from LT to 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. Stakeholders has proposed amendment to which as follows:

*“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. LT agreement ceased to be terminated irrespective of agreement period.”*

Under LV-4 category, the rebate of 30% on Energy Charge be extended for contract demand upto 25 HP, presently which is upto 20 HP.

Additional other terms and conditions of temporary supply for LT should be amendmended as follows:

*“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 112 KW/150 HP.”*

Petitioners' proposal for additional energy charges for excess Connected load beyond 120% of Contract Demand at the rate of 1.3 times and 1.15 times the normal energy charges for LT Consumers should not be considered as the State has surplus power and less than 1% consumer overshoot their contract demand above 120%.

10% sanctioned load should be allowed for expansion/renovation/modification from the existing HT connection for temporary purpose in HT consumers premises on the same tariff applicable for permanent connection.

For Larger LT Consumers, demand-based tariff has already been introduced as an option. However, the term “connected load” cannot be altogether omitted for LT Tariff until all the consumers are provided with meters to record maximum demand of their installations.

### **Petitioner's Response**

The Petitioners have proposed that in ideal condition consumer should restrict its drawl up to the contract demand and provision of additional billing provided in Tariff order does not discharge the consumer from its obligation to regularize such excess drawl.

As regards to amendment is condition for temporary supply at LT, the stakeholder has supported the amendment proposed by the DISCOM. The Commission is requested to take suitable view on this issue.

The Commission is requested to issue suitable guideline/clarification on the issue of billing upon conversion from LT to HT as raised by stakeholder.

As per provision of the Tariff Order FY 2021-22, existing HT consumers who requires temporary supply for the purpose of addition and/or alteration allowed to avail such power from the existing permanent connection up to the contract demand. Additional demand if any shall be billed as per the provision of the Additional charges for Excess Demand.

For LV-4 category, special relief provided by the Commission to consumers having contract demand less than 20 HP, to protect the interest of the small consumer is sufficient and no further increase is desirable.

The Petitioners proposed for consumption corresponding to the excess load or demand in excess to the Sanctioned load or Contract Demand of consumers as the case may be, the licensee has to procure costlier power from generators hence some portion of such burden is to be shared by those Consumers who exceed the load or maximum demand over and above 120% of Sanctioned load or Contract Demand as the case may be. Therefore, the Petitioners have proposed for additional. Energy Charges as mentioned in the Petition.

Further, Petitioners have expected surplus power scenario based on the cumulative generation and demand for the year. Though, the State is in surplus, there are many occasions specially during the rabi seasons and during the peak demand seasons of Distribution licensee during which the tied-up capacity is not sufficient to meet the demand of the consumers and the licensee are required to procure costlier power from generators or through exchange. Hence, the Petitioners have proposed for additional Energy Charges as mentioned in the Petition.

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. Based on the same, the Commission has made appropriate changes in the tariff schedule.

### ***ISSUE No. 7: Lower Tariff in Other States***

#### **Issue Raised by Stakeholder**

The fixed charges in Madhya Pradesh are very high compared to other states like

Maharashtra has only Rs 112, Karnataka has Rs 85 only on first KW connection and Rs 95 per KW on every KW load increase after that etc. Whereas in M.P it is Rs 25 per 15 units of consumption which is approximately Rs 0.65 per unit, that too on 15 units or part thereof and it doesn't matter if the consumer has consumed that much unit or not.

Another stakeholder stated that fixed charges should be abolished for domestic consumers as use of household appliances is only 25% and for LT consumers fixed charges should be reduced.

The Industries generating solar energy at their own expenses should be exempted from fixed charges.

For rural and urban domestic consumers, the current tariff for electricity consumption is at Rs 8.61 per unit and Rs 8.73 per unit respectively in the state. These rates are second highest in the country after Maharashtra and almost 8 times the tariff rate of Union Territories of Daman & Diu. Therefore, the commission is requested to not allow enhancement the tariff rates in a mechanical manner without considering the objections of public in general and only in accordance with provision of law.

### **Petitioner's Response**

The Petitioners have proposed that the electricity rate of a particular State should be compared with the average power supply per unit and not just with fixed charges. In comparison to other State the MP average electricity supply per unit is low.

<b>Sr. No.</b>	<b>State</b>	<b>Average Electricity Supply per unit (Rs/unit)</b>
1	Rajasthan	7.66
2	Delhi	7.64
3	Bihar	7.38
4	Maharashtra	7.34
5	Madhya Pradesh	6.60

The billing of fixed charge should be done as per the demand of the connected load by the consumers but to avoid the inconvenience caused to the consumers due to inspection of each household, the provision has been made by the Commission for billing.

With regard to determination of tariff for retail supply of electricity, it is noteworthy to mention that as per provision of the Electricity Act 2003 function of determination of electricity tariff in each state is entrusted to an independent statutory body namely Electricity Regulatory Commission. Accordingly, in the State of Madhya Pradesh, Tariff is being determined by the MPERC. State Commission determines tariff for distribution licensees as per provisions of the Part VII of the Electricity Act 2003 based on the principle of cost of supply. Therefore, electricity charges/Tariff in the different states may be varied depending on the prevailing cost of supply in that state. Thus, reliance by the stakeholder on the prevailing tariff in other states or countries is misplaced.

### **Commission's View**

The Commission taken note of the stakeholders submission and its reply by the Petitioners. The Commission has determined the tariff in accordance to the provision of Electricity, Act, 2003, Tariff Policy, 2016 and MYT Regulations, 2021.

### ***ISSUE No. 8: Tariff Structure for LV category***

#### **Issue Raised by Stakeholder**

For LV-1.1 consumers, direct subsidy be provided by the State Government to BPL consumers. These consumers should not be cross subsidised by other consumers, which is against the provision of Tariff Policy.

Fixed Charges for LV-1.2 be specified in Rs. per connection.

Slabs in LV-2 consumer category be specified in KVA instead of kW, connected load of a consumer has no relevance.

The Commission is requested to reduce the rates at a reasonable limit instead of increasing it.

It is submitted that industries upto 150 HP consumption should be under the same categories. So, that the difference in power rates between 20HP and more than 20HP can be eliminated. The industries having less than 20HP consumption should be made a separate category similar to Chhattisgarh as to provide them the power at lower cost.

The stakeholder stated that the tariff, existing as well as proposed for the categories LV 5.1 and 5.2 is same. It therefore makes no sense in keeping separate categories, and they should be clubbed in one.

#### **Petitioner's Response**

For LV 1.1 consumers, tariff for consumption not more than 30 units/month is proposed as Rs. 45 per month only which is in light of the national tariff policy. This is far less than the 50% of the average cost of supply.

For LV 1.2 consumers, to protect the interest of domestic consumer the Commission prescribed the formula of calculation of load considering every 15 units of consumption per month or part thereof equal to 0.1 KW. Further, slab wise fixed charges also prescribed by the Commission to protect the interest of consumer having very less consumption.

For LV 2 consumers, for the connected load upto 10 KW option of connected load-based tariff is made available to protect interest of the small consumers. Above 10 KW demand-based tariff is mandatory. For the demand-based tariff charges are prescribed by the Commission both in terms of KW & kVA.

Proposal for amendment in LV 5.2 category is submitted by the Petitioners.

### **Commission's View**

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has decided to retain the existing provisions.

### ***ISSUE No. 9: Classification of Telecom towers***

#### **Issue Raised by Stakeholder**

As per MSME guidelines under MSME industries, telecom is also considered as MSME and thus all these connections given under non-domestic category need to convert into category of Industries. This has already been considered by Maharashtra Regularity commission.

The Commission is requested to clarify the applicability of the use of supply for Telecommunication tower in the ancillary facilities such as Banks, General purpose shops, Water supply, Sewage pumps, Police Stations etc. so that interpretation of prevailing tariff order is to be clarify.

#### **Petitioner's Response**

Since no activity of manufacturing is being carried out in the telecom towers thus present classification in the non-domestic category is appropriate and same should be continue.

The Petitioners have proposed inclusion of telecom tower under HV-3 Category.

### **Commission's View**

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has decided to retain the existing provisions. Further, it is clarified that only those telecom towers shall be considered under the industrial category which has been established within the industrial premise and serve specifically to the industrial township as ancillary.

### ***ISSUE No. 10: FCA Charges***

#### **Issue Raised by Stakeholder**

The proposed increase in energy charges seems to be not in order as the power cost is review every three months by way of FCA charges as the power purchase cost is more than 80 % of the total ARR.

FCA being an adjustment, can either be positive or negative depending upon the actual fuel prices and will impact the effective tariff of the consumers that procure power from the DISCOMs. As also provided by the MYT Regulations, 2021 the impact of FCA (increase or decrease) is to be borne by the consumers that procure power from the DISCOMs. Therefore, FCA cannot be said to have a direct bearing on the Open Access consumers as Open Access consumers do not get benefit of reduced fuel cost in the DISCOMs power purchase.

The stakeholder stated that the MYT Regulation, 2021 does not provide for incremental cost in power purchase and any change in the FVA formula being used and therefore the Petitioner's proposal of PPCA formula does not deserve any consideration by the Commission.

### **Petitioner's Response**

The Petitioners have proposed that FCA is being levied in accordance with the Section 42(4) of the Act and the Power purchase cost has been considered as per provisions of the Regulations.

The Petitioners have proposed that the very purpose of allowing fuel and power purchase cost adjustment is to compensate the Distribution Licensee for the increase in power purchase costs during the year in order to keep its financial liquidity intact. Fuel prices are generally uncontrollable in nature which varies frequently due to various factor such as change in policy, taxes, cess, market demand and supply position etc. The generators who procure fuel need to be compensated for any increase in fuel prices else the generator would not be in a position to procure enough fuel to satisfy the demand of electricity. Therefore, the DISCOMs who procures power from the generators, are liable to pay the generators the increased costs. If they are not compensated for such an increase cost during the period, their liquidity would be affected.

Therefore, the DISCOMs should be allowed to recover full legitimate power purchase cost including fixed and variable charges as quickly and as practically possible. However, the existing formula as specified in MYT Regulations, 2021 for computation of the FCA does not capture the total power purchase cost. It covers only variable charge component of the total power purchase costs. The DISCOMs therefore deprived the opportunity to recover the variation in total power purchase cost through the levy of a FCA every quarter and they have been accumulating the variations on account of power purchase costs till the end of the respective year, till the accounts are finalized, audited and certified which is causing a financial burden to the DISCOMs.

As regards to calculation of addition of FCA, the Commission may provide suitable dispensation in this regard.

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The Commission has observed that the Petitioner has submitted in the Petition that it will approach the Commission for amendment in the FCA formula as provided in the MYT Regulations, 2021 through a separate Petition. Therefore, the Commission has retained the existing provision in this order which is as per the provision of the MYT Regulations, 2021. Any change in formula may be considered by the Commission upon prudence check on representation by the Petitioner through a separate petition.

***ISSUE No. 11: Inclusion of Textile & Plastic Industry in HV 3.4 Power Intensive category***

**Issue Raised by Stakeholder**

The stakeholder stated that as per provisions of Energy Conservation Act, Textile Industry is a Power Intensive Industry and therefore, the Commission is requested that a separate tariff should be provided for the Textile Industry under Power Intensive Tariff Category.

Cost of Electricity for Plastic Industries is around 45% to 50% of the total cost of production, despite of that they have not been included in the Category of power intensive industry. Therefore, requested the Commission to include the Plastic Industry under Power Intensive Industries category.

**Petitioner's Response**

The Petitioners have proposed that the present tariff classification is sufficient and any further categorization would only result into complication.

**Commission's View**

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has decided to retain the existing provisions.

***ISSUE No. 12: Voltage Wise Cost of Supply***

**Issue Raised by Stakeholder**

The Commission in its previous tariff order has directed the petitioner to determine the voltage wise cost of supply.

The Stakeholder stated that until 100% DTR Meterization is complete, the computation of losses for 11 KV and LT system separately is a cumbersome task. However, for the determination of voltage wise cost of supply, the judgment passed by APTEL in Appeal No. 103 of 2010 and IA Nos. 137&138 of 2010 should be perused.

The Commission has issued directive regarding voltage wise cost of supply, "For the determination of voltage wise cost of supply, the judgement passed by the Appellate Tribunal for electricity in Appeal No. 103 of 2010 & IA Nos. 137 & 138 of 2010 may please be pursued."

The APTEL order regarding voltage wise cost of supply was challenged in the Hon'ble Supreme Court of India by the respondent in the case. The petitioner has stated that as per the directives of the Commission, the details of calculation of the voltage wise cost of supply as per the methodology provided by the APTEL. It is further submitted that Hon'ble Supreme court has not granted any stay to the Petitioners hence Hon'ble APTEL's order shall be complied.

The stakeholder stated that loss of 3.98% in 33 KV category are much lower than the

proposed loss in ARR. It should be at 1.45% similar to SEZ 33 KV system losses and also distribution losses proposed under 11 KV and LT category are much higher than 8.92%. Therefore, the Commission is requested to verify these data through independent agency.

It is stated that with smart meters installed at 132KV and 33KV consumers the commercial losses proposed by the Petitioners are impossible and also the Petitioners haven't provided any details about how many cases under Section 126 and 135 are booked by them for 132 KV and 33 KV category.

### **Petitioner's Response**

The Petitioners have calculated the voltage wise cost of supply as per the direction of the Hon'ble APTEL in the appeal no 103 of 2010 & IA no 137 & 138 of 2010. Here it is noteworthy to mention 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. Here it is proposed to mention that as per provision of the Act read with Tariff policy, Tariff is required to determine based on the average cost of supply instead of voltage wise cost of supply.

### **Commission's View**

The Commission has computed Voltage wise cost of supply based on the methodology prescribed by Hon'ble APTEL as per the details submitted by the Petitioners in their submissions. The approach and methodology adopted for computation of voltage wise cost of supply is detailed in Tariff Design Chapter of this order.

## ***ISSUE No. 13: Reduction in Minimum Demand Charges from 100KVA to 50 KVA FOR 33 KV Consumer in HV3.1 Category***

### **Issue Raised by Stakeholder**

The stakeholder stated that in this category, majority of consumers are MSME' s who are in the activities wherein they & their processes require an uninterrupted power supply (Like: Plastic processing Industries) with good & stable voltage in modern Electronic Controls system, which is not available at the 11 KV feeders (Quality and consistency of Power is same as in LT Consumer & they do not get anything extra even after investing cost of Sub-station) and their requirement in not 100 KVA.

There are many instances where due to technical reasons in General Terms and conditions of H.T. Tariff, the Commission has permitted many consumers for lower Minimum Contract Demand in the 11KV and 33 KV Supply voltage. Hence, without affecting the DISCOM' s, the customer can be benefited.

As there are no financial burden on the DISCOM's as the cost of the sub-station is borne by the consumer himself, therefore the Commission is requested to review this requirement of the HT (Industrial Consumer) and reduce the requirement on Minimum Contract Demand



from 100 KVA to 50 KVA for HT Consumer HV-3.1.

The stakeholder stated that as the 300KVA electricity connection is given through 11 KV HT line. The Commission is requested to increase this limit upto 450 KVA as the consumers expenses increases a lot when the connection is taken from 33 KV line.

### **Petitioner's Response**

The Petitioners have proposed that as per the clause 34 of MPERC Supply Code Regulations, 2021, it is to be noted that for 33 kV voltage supply the minimum contract demand is 100 kVA to Max. 1000 kVA. The objector stated that uninterrupted & quality power supply is not available at 11 kV voltage supply. The Petitioners disagree with the suggestion to reduce the minimum load to 50 KV FOR 33 KV voltage supply in HV-3 Category, which further have financial implications over the DISCOMs.

### **Commission's View**

The matter raised by the stakeholder pertains to the provision under the MPERC Supply Code, 2021 and be dealt in accordance to the provision of the said Regulations.

### ***Power Purchase Quantum and Cost***

#### ***ISSUE No. 14: Sales estimates***

### **Issue Raised by Stakeholder**

Petitioners have inflated sales forecast to conceal actual cost of supply, as differential between forecast and actual consumption is termed as uncontrolled parameter and the financial impact arising due to this is claimed through True up. Therefore, Commission is requested to analysis current audited balance sheet, which will indicates the difference in submission, proposed and actual sales. Further, comparative chart of minimum five years and the proposed figures in ARR submitted should be made compulsory for deriving Tariff revision.

Further, inflated sales projections have resulted in extra tie-up capacity, which has resulted in extra financial burden on consumers. In addition to this, tariff structure has been distorted to accommodate true up cost of past years.

The projections are high in case of Industries/commercial units but are lower in case of Agricultural and domestic consumers as more than 10 Lakhs unmetered and defective meters are in East DISCOM.

### **Petitioner's Response**

Petitioners have estimated the sales for each category, sub-category based on the analysis of the CAGR of the last 4 Years' actual data. Further, Petitioners have worked out CAGRs of 3 years and 2-years and year on year growth rate for each category and its sub-categories in respect of urban & rural consumers separately. After analysis of the data appropriate

reasonable growth rates have been assumed for future year's forecasts of sales by Petitioners.

Accordingly, the sales for FY 2022-23, FY 2023-24, FY 2024-25, FY 2025-26 and FY 2026-27 have been projected on the basis of actual data of Number of Consumers, Connected load and Consumption during the last 4 years and on the basis of revised estimate for FY 2021-22.

Further, detailed basis of the projections of the sales has been duly provided in the petition and the stakeholders are requested to refer the Chapter A3 to the petition.

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The Commission has carried out thorough prudence of the Petitioner submission and has admitted the sales based on the actuals of last five year sales. The methodology adopted for projection of sales has been detailed in ARR chapter of this Order.

### ***ISSUE No. 15: T&D Losses***

#### **Issue Raised by Stakeholder**

The actual distribution losses reported by the DISCOMs for FY 2021-22 are on higher side with respect to normative distribution loss levels specified by the Commission. Therefore, the inefficiencies of the East and Central DISCOM should not be passed to the consumers. Further, Petitioners should be directed to provide separate details regarding the losses from unmetered consumers and losses due to power theft. Further, the Petitioners should also provide separate figures of technical & Commercial losses, as domestic consumers without meters or faulty meters are billed on average billing, which results in low revenue collection of the Licensees.

The voltage wise cost of supply considering T&D losses should be worked out for all DISCOMS separately.

Despite the lower levelized cost the tariff charges for public consumers remains too high. The main reason being the inefficiency of DISCOMs due to which the consumers have to pay 4 times the generation cost.

#### **Petitioner's Response**

Quantum of power purchase has been computed considering the normative distribution loss approved in the MYT Regulations, 2021. Further, power purchase cost disallowed on account of normative losses are borne by the petitioners only. Therefore, consumers are not being burdened with any additional losses.

The Commission has already directed the petitioners for "Technical studies of the Distribution network to ascertain voltage-wise cost of supply" in Tariff Order FY 2021-22. In Compliance with the Commission's directive, the petitioners have submitted that the desired study shall be carried out with increased sample size and considering the various other factors

i.e., climate zone, water level status, crop patterns, etc. The outcome of the said study shall be shared with the Commission as per the timeline given by the Commission.

The Petitioner have been striving hard to reduce the losses. They are also taking part in various loss reduction schemes. However, the loss reduction is a gradual process. The Petitioner

### **Commission's View**

The Commission has taken note of the Stakeholders submission and Petitioners reply. The Commission has allowed power purchase cost for the DISCOMs considering the normative losses and accordingly, has not allowed pass through of any inefficiency of DISCOMs on the consumer of the State. Further, with regard to segregation of technical and commercial losses and determination of cost of supply, the Commission has issued a directive in this regard, which is specified in the Compliance to Directive chapter of this Order.

### ***ISSUE No. 16: Power Purchase Cost***

#### **Issue Raised by Stakeholder**

The Commission has considered the cost of power through Fuel Cost Adjustment. Therefore, the power purchase cost has already been recovered and there shouldn't be any additional burden towards power purchase cost as it is almost 80% cost of total ARR.

The power purchase cost has doubled from FY 2011-12 i.e., Rs 2.60 to FY 2022-23 i.e., Rs 4.69 and any increase in power purchase cost gets reflected in consumer's tariff. Therefore, the Commission is requested to review the increase in the power purchase cost of the DISCOMs.

The Commission is requested to assign a third-party expert in the field of power generation and power trading to monitor and evaluate the power purchase costs and also short-term power purchase by the petitioner needs to be reviewed by the Commission.

The Commission is further requested to review the following points regarding power purchase cost:

- The availability of power is much more against the requirement of power in spite of additional capacity created by the DISCOMs.
- Total backdown of power to the extent of 22,386 MUs needs to be properly scrutinize. Whether such backing down is in the State interest or whether such surplus power can be used in other state without any financial losses.
- Consumers are paying fixed charges to some power companies without the DISCOMs purchasing single unit as per the agreement. Therefore, such agreement should be properly examined and terminated accordingly.
- The power purchase requirement has been worked out by the Petitioners without any study and base. It is evident from the fact that the petitioner is in the position of

backing down of power and still has surplus power of 33.03 MUs which will also increase during true-up.

The power purchased from the IPP has been given priority over the other cheaper power and sometimes even additional power has been purchased from these power stations which is costliest among all others.

Commission is not allowing the amount being paid by the petitioner on account of liability of technical minimum requirement as per Fourth Amendment to CERC IEGC Regulation, 2016, on account of which the petitioner is required to schedule power upto the level of technical minimum even though it is higher in merit order dispatch table. Therefore, the Commission is requested to allow the same being a regulatory provision.

Petitioners have shown expenditure of Rs. 450 Crore for purchase of power from new generating Stations which haven't been installed and nor have any possibility of further installation without any consultation with the NTPC and NHPC.

Additional procurement of Solar and Non-solar power should be considered as per latest rate discovered in competitive bidding.

MYT Regulations, 2021 does not provided any provision for MPPMCL Cost therefore, petitioners claim of Rs 273.6 Crores in the ARR should not be allowed. Further, Petitioners have not taken prior approval of power purchase cost, transmission and banking etc. therefore cost pertaining to the same should not be allowed.

Stranded cost of Rs. 3000 Crore towards surplus power should not be allowed.

Petitioners in the petition has submitted purchase of power from Lanco Amarkantak is as per Section 62 of Electricity Act 2003. However, Rs 11 crores has been given to PTC as trading margin.

Petitioners have submitted that PPAs with DVC for 400 MW (MTPS & CTPS) have been foreclosed by the MPPMCL wef 1<sup>st</sup> January 2018 and 15<sup>th</sup> May 2017, respectively. Further, costs of such plants have not been considered while calculating the power purchase cost for FY 2022-23 to 2026-27. However, MPPMCL has submitted that that in case PPAs with DVC remains in force in FY 2022- 23 to 2026-27, MPPMCL, will be obligated to pay fixed charges for these stations. Therefore, there is contracting contentions by the Petitioners which may cause heavy burden ultimately on the consumers. Hence, requested the Commission to review this matter.

Petitioners have not filed any review or appeal before Hon'ble APTEL against Commission's order on disallowance of availability and cost of power for BLA Unit 1&2, Essar and Torrent Stations in Retail Supply Tariff Order for FY 2021-22. Therefore, Commission is requested to not allow the same for retail supply tariff order for FY 2022-23.

Clause 4.3.3 and 4.3.4 of the JP Nigri PPA mandates that in case the petitioner fails to schedule power from the IPP, the IPP can sell power to a third party and in that situation

excess amount received over the electricity duty shall be shared between the IPP and the petitioner on 50-50 basis. In the FY 2017-18 (up to December) JP Nigri Power Plant sold 1,600 MUs and the petitioner had Scheduled only 700 Mus, However, JP Nigri Power Plant did not provide any details about revenue earned under revenue projection which is a considerable amount and needs to be adjusted against the ARR. Therefore, Commission is requested to verify the present scenario and take necessary actions to safeguard the interest of consumers.

Petitioners have filed a petition before the Commission for approval of tariff from 1<sup>st</sup> April 2013 to 31<sup>st</sup> March 2019 for procurement of power from Lanco Amarkantak, which was dismissed by the Commission on account of lack of jurisdiction. Therefore, the availability and cost from Lanco Amarkantak should also be disallowed from the ARR.

Petitioners to be directed to compute fixed charges of CGS on the basis of CERC order. Further, Petitioner has entered in to PPA with Generating stations of Northern and Eastern Regions resulting in an increase in cost of power due to levy of interstate transmission charges.

The Commission has not complied with the provisions of Power Purchase and Procurement Regulations, 2006 and its amendments thereof and simply endorsed the PPAs submitted by the petitioner, resulting in to PPAs of around 27,000 MW, whereas the maximum demand recorded in the State during Rabi Season has been around only 15000 MW. Therefore, the consumers have been burdened with the cost which could have been avoided if provisions of Regulations could have been enforced by the Commission. Further, Commission has not taken any action against the Petitioners for violation of the Regulations and excess PPAs allocation by the Petitioners.

Commission is requested to examine all PPAs of long-term procurement and based on efficiency, compliance of the Regulations and if any violation of the PPA. Therefore, if any violation found appropriate action should be taken for termination of these PPAs.

Further, all power from NR and ER Stations entails interstate transmission charges. Therefore, extra power purchase cost is incurred. Hence, appropriate action should be taken for termination of these PPAs

The the tariff structure needs to be modified to attract the consumers of all categories to consume more power which will lessen the surplus availability on one hand reduce the burden of fixed charges on the consumers.

### **Petitioner's Response**

Availability is assessed on the basis of the performance of the previous years and the standards of the relevant Regulation for all power generators with whom the PPA has been signed. The power availability from new plants is estimated on the basis of SCOD for M/s NTPC Lara, D.B. Power and NHPC Subansiri. Further, on the basis of SCOD, the demand for its cost according to the estimated power availability from the plant has been proposed in

the petition. Further, additional details sought by the Commission has been provided to provided and Commission may the proposed demand on the basis of its merit. Beside this, the purchase of power from this plant is less than the actual COD and the payment has been made accordingly, which is subject to verification by the Commission.

As per Energy Department Gazette notification dated 21<sup>st</sup> March 2016, all the power capacity of State has been allotted to MPPMCL and expenses of MPPMCL has been ordered to be billed to the Distribution Licensees in proportion to their energy drawl.

The Distribution licensees have to meet the power demand of consumers 24x7, under universal service obligations as per the provisions of the Electricity Act, 2003. Further, MPPMCL purchases power from the generators as per the MoD principle. Accordingly, when the demand is high during peak season, costlier power is scheduled and procured in the real time to meet out the day-to-day demand of the State.

The Petitioners seek permission from the Commission in the ARR & Tariff Petition for purchasing the power from the Generators. Further, MPPMCL purchases power from Generators with whom PPA has been executed and approved by the Commission.

The total tied up capacity of RE is about 3,981 MW, which is a significant contributor to the power mix of MPPMCL. However, the nature of renewable energy is intermittent and further, it has Must Run status. Accordingly, in case of excess availability of power as compared to demand, MPPMCL has to back down Thermal Power Plants and RE generators are kept running owing to its Must Run status. Even if, the electricity from that thermal generator is cheaper, then also these plants have to backed down. Thus, on the one hand, the MPPMCL has to schedule the thermal plant running at low load factor or at technical minimum level with the advent of wind or solar generators, while on the other hand, it is burdened with idle fixed cost to run it, which puts additional burden on the DISCOMs.

Further, Petitioners have to meet the RPO Target specified by the Commission. Thus, the shortfall in RPO target achievement is met by signing more solar and wind generator PPAs. Therefore, procuring more power from "must-run" solar and wind generators. This results in further back-down of thermal generators and burden of payment of idle fixed charges.

In the above circumstances, MPPMCL is left with no option but to pay idle fixed charges to thermal plants, unless the Madhya Pradesh share from these plants is reallocated to another beneficiary. GoMP and MPPMCL are continuously making efforts with Ministry of Power to de-allocate MP's share of power from costly NTPC plants so that idle fix charges being paid to NTPC are minimized.

Banking is a mechanism through which petitioners manages situation of surplus/deficit power availability, which is due to seasonal variations. Further, petitioner submitted that banking is a cashless transaction under which no charges are paid for power received or supplied.

The Commission in petition no. 78/2012 has approved settlement agreements between M/s Lanco PTC and MPPMCL. Further, the indicative annual fixed charge and nominal energy

charge for the year 2012-2013 were fixed as per the MYT Regulation of the CERC and regulation does not set any limit on the maximum rate of electricity. Also, there is no provision of tariff capping under the provision of Electricity Act, 2003. Beside this, the Commission has also determined in paragraph 11 of the order in petition no 78/2012 for removal of capping. Therefore, the power purchased from M/s Lanco Amarkantak FY 2018-19 has been done as per the MYT Regulations 2014-2019 of the CERC and as per the provisions contained in the agreement signed between M/s Lanco Amarkantak, PTC and MPPMCL on 16.10.2012. Further, the payment made provisionally will be adjusted as per the order and the trading margin is paid to PTC as per the provision of the contract.

The actual energy procurement and power purchase cost will deal appropriately while filing the True up petition for FY 2021-22 for Essar Power.

The Commission in Retail Supply Tariff Order for FY 2016-17 has not considered the availability and the cost for the Torrent Generating Station on the basis that it was never scheduled during the year and stated that the issue of fixed cost (if any) will be dealt appropriately at the time of True-up. Consequently, the Commission in its True up order of ARR for FY 2016-17, has disallowed the cost pertains to power station by stating in view of the True up order FY 2013-14 i.e., power purchase availability and cost shall be considered when the petitioner would file the information to the satisfaction of the Commission.

Petitioners are in process to file Appeal before the Hon'ble APTEL for claiming cost pertaining to Torrent Power Station. Accordingly, the power purchase cost from Torrent power station for FY 2021-22, will be dealt appropriately. As regards the power purchase quantum and it's cost from BLA Power station, the Petitioners submits that payment of fixed charges and variable charges are being made in view of the directives of APTEL / Hon'ble Supreme Court in IA 1659/2019 in civil appeal no 5733/2019 passed order dated 11<sup>th</sup> January 2019.

Further, the Petitioners submits that an appeal for disallowed power purchase cost of BLA power stations is in process for submission before the Hon'ble APTEL. As the PPA for the BLA is effective. Hence, the Petitioners have proposed to procure the power purchase from BLA power station in Tariff Petition for FY 2023.

With regards to JP Nigri Station, Suggestion raised by stakeholder pertains to FY 2017-18, which is irrelevant and does not have any implications on this MYT Petition for FY 2022-23 to FY 2026-27.

The Commission vide order dated 23.08.2017 in petition no.35 of 2016 declined to determine the tariff for the control period 2014-19, holding that it is beyond its jurisdiction. An appeal challenging the above order is pending before Hon'ble APTEL and the power is procured as per the existing PPA with Lanco Amarkantak power station. Therefore, Petitioners have claimed the fixed charges.

Further, Petitioners have claimed fixed charges based on the Weighted Average of past 12 months Bills (Sep-20 to Aug-21) and Energy charge as per Weighted Average of past 12

months Bills (Sep-20 to Aug-21), Further, disallowance of such legitimate power purchase cost will result into revenue gap in true up orders. Beside this, Power purchase bills raised to MPPMCL are on the basis of the applicable orders issued by the CERC and State Commissions and monthly bills represent the cost of the power purchase to be borne by MPPMCL based on power purchase allocated to Madhya Pradesh, while the CERC Orders represents power purchase cost of the Centre generating station. which will be recovered from several other states based on their allocation ratios.

The power purchase agreements and other information related to cost and efficiency etc. is been submitted to the Commission for prior approval in accordance with provisions of the MPERC Power Purchase and Procurement Regulation, 2006 and its amendments thereof. Upon approval of the Commission, the power purchase from the stations is carried out and claimed by the Petitioners in ARR and Tariff /True up petitions.

Further, Commission approves the power purchase cost of the stations after due diligence of power purchase bills and other information requirements. Hence, the stakeholder should not have any concern in this regard.

As regard to power purchase from NR & ER stations, the power is procured on the basis of allocation ratio orders issued by the NRPC and ERPC and existing PPAs. The inter-state transmission charges are applicable based on the CERC Sharing of Inter-State Transmission Charges and Losses Regulations, 2020. DISCOMs procures power from these Stations to cater the demand of the consumers.

As regard to compliance of the Regulations, Petitioners submitted that the ARR Petition for FY 2023 to FY 2027 and Tariff Petition for FY 2023 has been prepared in line with MYT Regulations, 2021.

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The approach adopted by the Commission for approval of power purchase cost has been detailed in ARR chapter of this order.

### ***ISSUE No. 17: Management of Surplus Power***

#### **Issue Raised by Stakeholder**

Instead of sale of power through IEX other alternatives needs to be explored to consume this excess power within the State. Further, following alternatives can be looked into:

- a) Night rebate for use of excess power by HT /EHT industries should be increased to 20% throughout the year.
- b) Reverse telescopic tariff should be considered to encourage domestic consumers to use more power.



- c) All penalties and additional charges for excess demand be withdrawn giving liberty to the consumers to consume more power will reduce surplus availability and increase revenue for DISCOMs.
- d) Surplus power should be offered to Railway on attractive rates.
- e) ToD tariff for LT consumers should be introduced so that LT consumers can shift to night hours.

Further the PPA earlier entered into should be reviewed and possibility should be explored to cancel some of the PPAs signed earlier. Beside this, no new PPA should be allowed to be executed in order to safeguard the interest of the consumer.

### **Petitioner's Response**

ToD rebate of 10 % of Normal rate of Energy Charge is applicable for the off-peak load hours (10 PM to 6 AM next day) for April to October and ToD rebate of 20% of Normal rate of Energy Charge is applicable for the off-peak load hours (10 PM to 6 AM next day) for November to March. The Petitioners opines that the existing rebates are suffice for the industries.

With regards to proposing night tariff, applicability of ToD rebate is proposed for night hours only. Further, proposing night tariff may complicate the existing tariff structure. Therefore, suggestion should be rejected outrightly.

As regard to proposal for reverse telescopic rates, the Commission is requested to continue the existing telescopic tariff.

With regard to withdrawal of the penalties and additional charges for excess demand, it is submitted that penalties and additional charges are required to ensure safety and health of network operations. If penalties and additional charges are withdrawn, it may impact the grid discipline which may lead to network failures.

During Rabi season the power demand of the licensee is usually much higher than that during non-Rabi season, hence in actual operating conditions it is not necessary that there will be a surplus power uniformly throughout the year.

The Distribution licensee has to meet the power demand of all the consumers as per the relevant provisions of the Electricity Act, 2003 under the obligation to supply. During Rabi season there may be times when the Petitioners need to purchase power from open market i.e., through Energy exchange.

Further, the surplus scenario envisaged by the petitioner is subjected to the truing-up exercise based on the actual operation during the year and in accordance with MYT Regulations, 2021.

As regard to sale of power to railway, it is proposed that various rebate is being offer to railway in the tariff order for taking supply from the licensees.

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The Commission has detailed the approach for management of surplus power in ARR chapter of this Order. Beside this the Commission has retained various rebates offered to promote incremental consumption by Industries.

### ***ISSUE No. 18: Renewable Purchase Obligation***

#### **Issue Raised by Stakeholder**

Stakeholder submitted that the distribution licensee or the Investor/developer should be allowed to approach the Commission for approval of additional procurement of RE power if petitioners fulfil its minimum purchase obligation and still have power offers from renewable generators including cogeneration from renewable sources.

As the procurement of solar and non-solar power had not been done in accordance with the provisions of Regulations. Therefore, Commission is requested that minimum purchase of Renewable source of energy be allowed so as to safeguard consumers interest.

Distribution Licensees now have the option to fulfil their existing RPO obligations as well as future RPO targets by procuring RE power from short term market through Green-DAM and Green-TAM products available at IEX platform to meet their shortfall in Non-Solar RPO

#### **Petitioner's Response**

Petitioners have made appropriate arrangement under various PPA for compliance of RPO RPO targets as per Tariff Policy, 2016 and Regulations, 2021. As a result there is a surplus situation of availability from Solar till FY 2024-25 and deficit situation of availability of non-solar sources during the control period from FY 2022- 23 to FY 2026-27 and there will be a deficit situation in solar during FY 2025-26 and FY 2026-27 for complying with RPO targets.

Further, for meeting the RPO targets an additional power is to be procured from the existing renewable plants for which rates were already decided. Thus, Petitioners have considered actual rate at which renewable purchase is done currently and has also factored in the impact of upcoming stations. Beside this, rates considered by the Petitioners are in reducing trend during the MYT Period.

Petitioners have noted the suggestion of stakeholder for meeting the RPO requirement from GDAM & GTAM in positive spirit and the Petitioners always endeavours to optimize power purchase cost in overall interest of its consumers

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The approach for approval of cost towards Renewable Purchase Obligation has been detailed in ARR chapter of this Order.

## **Other Components of ARR**

### ***ISSUE No. 19: Capital Investment plan and Additional Operational Expenditure Cost***

#### **Issue Raised by Stakeholder**

Petitioners have claimed additional O&M expense of Rs. 109.76 Crore under OPEX expenses on the basis that petitioners are taking part in RDSS. Further, there is no provision MYT Regulations, 2021. Therefore, requested the Commission to disallow same.

Further, Petitioners are not meeting the condition of Regulation 10.3 of MPERC (Terms and conditions of for distribution licensee including deemed licensee) Regulation 2004. Therefore, OPEX cost and capital investment plan should not be included in O&M expenses and ARR.

Petitioner scheme wise capitalization claim of Rs. 1,586.39 Crores for FY 2022-23 is misconceived as all schemes were funded by the State/Central Govt by way of grant etc. Therefore, requested the Commission not to include the same in the ARR of FY 2022-23.

Petitioners have claimed additional R&M Expenses of Rs. 378.58 Crore for FY 2022-23 without mentioning specific improvement that DISCOMs are going to do for improvement of Standard of performance and for reduction in distribution losses. Therefore, same should be allowed.

#### **Petitioner's Response**

Petitioners have already elaborated RDSS in the Petition. Further, funding shall be available to Petitioners if the scheme is being implemented in TOTEX mode, which include both capital and operational expenditure. Petitioners have considered Capital expenditure related part in its CAPEX portion. Therefore, the other expenditure related part of the scheme which is of operational in nature has been considered in O&M section.

Further, as per MYT Regulations, 2021 O&M expenses are to be calculated on normative basis based on the actual audited O&M expenditure of past three years, Since, the O&M expenses of past years does not include any such expenditure, therefore, the same has been claimed over and above the normative.

DISCOMs are traversing through a precarious financial condition. participation in Revamped Scheme is very important in order to curb losses and provide reliable supply to the consumers. Further. the stakeholders should understand that none of the Regulations speaks about any capex scheme to be launched by the Government, rather the very purpose of the MYT Regulations, 2021 is to stipulates principles along with terms and conditions for determination of Tariff.

Further, Petitioner fully understand that as per Regulation 24 of MYT Regulations, 2021 read with Regulations 10.3 of MPERC (Terms and conditions of licence for distribution licensee

including deemed licensee) Regulation 2004, the Petitioners are required to take prior approval and also to submit detailed capital investment plant. However, as the DISCOM proposal under the revamped scheme was under scrutiny & approval of the Government and considering the strict timelines to file a Tariff Petition, it was not possible for the Petitioners to take prior approval from the Commission. Further, Petitioners have already communicated the same to the Commission and also submitted the additional information as a part of data gap reply to the Commission.

Further, Regulation 51, 52 as well as 53 of the MYT Regulations, 2021 empowers the Commission to deal with any special circumstances as it deems fits.

Petitioners have submitted that they will be taking post facto approval of the scheme once the said scheme is finalized and approved by the Government. Further, as such expenditures are bound to incur in the upcoming years. non-consideration of which during the Tariff determination exercise of FY 2022-23 will result in unrecovered revenue gap at the time of Truing-up of FY 2022-23. Such a revenue gap along with the carrying cost as per Regulation 8.3 of MYT Regulations, 2021 will unnecessarily result in tariff hike and more burden on the consumers in upcoming years. Further, unnecessary delay the recovery of legitimate cost of the licensee and extra burden on the consumers by way of additional carrying cost on unrecovered amount.

Most of the schemes claimed in the ARR are partially funded by the Government and any grant that has been received or expected to receive under the government funded scheme has been considered for reduction of the gross capitalisation. Accordingly, Petitioners have only considered net capitalisation in its ARR which has been either funded through equity or loan.

Petitioners have claimed additional R&M expenses as per Regulations 36.4 of MYT Regulations, 2021.

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The Commission detailed the approach adopted for admittance of Capitalisation and approval of corresponding funding in the ARR Chapter of this Order. Further, the approach for approval of O&M Expenses has also been detailed in ARR chapter of this Order which has been computed in accordance to the provision of the Regulations.

### ***ISSUE No. 20: Interest on finance charges***

#### **Issue Raised by Stakeholder**

Regulation 32 of the MYT Regulation 2021 provides stipulation for calculation of Interest and finance charges on loan capital.

Further, the Petitioners have calculated interest and finance charges in line with the methodology adopted by the Commission in its previous tariff/true up orders. Therefore, the amount claimed by the Petitioners under this head should not be allowed in the ARR.

### **Petitioner's Response**

The methodology for calculation of interest on project loan for ensuing years in the MYT Regulations, 2021 is similar to the methodology as stipulated in the MYT Regulations, 2015. Further, stating in the Petition that interest and finance charges has been calculated in line with the methodology adopted by the Commission in its previous tariff/true up orders, does not mean that the Petitioners have violated the provisions of MYT Regulations 2021.

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The Commission has detailed the approach for approval of Interest & Finance Charges in ARR chapter of this Order.

## ***ISSUE No. 21: True-up cost of previous years not to be considered in Retail Tariff***

### **Issue Raised by Stakeholder**

The claimed of true up cost of Rs. 2,031 Crores pertains to FY 2019-20 should not be allowed as same was not included in the subsequent years tariff order of FY 2020-21 & FY 2021-22. also.

Further, Petitioners have not filed the petition of true-up in the stipulated time and the Commission has also not taken SMP in this regard, as directed by Hon'ble APTEL in its vide order dated 11<sup>th</sup> November, 2011 against OP No. 1 of 2011 (Para 65 of Order). Further, true-up revenue gap should have been included in the tariff order of FY 2021-22 as per section 64 of the Electricity Act, 2003 read with clause 8.1 (7) of the Tariff Policy. Therefore, as per Section 56 (2) of Electricity Act, 2003, the true-up cost can't be included in the ARR as it is time barred. Therefore, requested the Commission to not allow the true-up revenue gap under ARR.

### **Petitioner's Response**

As per Section 8.4 of the MYT Regulations 2015, the Tariff and True-up Petitions have to be filed by 31<sup>st</sup> October every year. The MPPMCL being the holding company of the DISCOMs is authorized to file Petitions for determination of ARR and retail supply tariff on behalf of all DISCOMs. Petitioners have filled the True up petition of FY 2019-20 on 7<sup>th</sup> December, 2021. Further, as per provision of the Electricity Act 2003 read with Regulations issued there under, the Commission is empowered to condone any delay. Accordingly, the Commission being judicial authority after satisfying itself has admitted the petitions condoning delay. Hence, the argument of the stakeholders that the Commission should have initiated SMP does not hold any merit.

The Commission issued the True-up Order of FY 2019-20 on 12<sup>th</sup> October, 2021. By the time the True-up Order of FY 2019-20 issued, the Tariff Order for FY 2021-22 was already in force. Therefore, it was not possible to claim the True-up impact of Rs 2,031 Crores in FY 2021-22. Further, the Commission in the True-up Order of FY 2019-20 after approving the said amount has stated that the revenue gap of Rs. 2,030.92 Crore shall be considered in retail supply tariff to be determined by the Commission for the subsequent years. Since, FY 2022-23 being a subsequent year for which the retail tariff is to be determined, the petitioner has claimed the same in its petition.

Further, if the approved revenue gap of Rs 2030.92 not considered in the tariff determination of FY 2022-23 then the same will remain unrecovered leading to creation of regulatory assets which is not desirable as per National Tariff Policy. This will result in substantial financial loss to the DISCOMs. The Hon'ble High Court of Bombay in its Judgement in Maharashtra State Electricity Board Vs Maharashtra State Electricity Regulatory Commission reported in AIR 2004 Bombay 294, wherein the court has pointed out that denial of tariff revision leaves a revenue gap in the revenues of DISCOMs and tariff should be so fixed as to leave no tariff gap. Hence, it is imperative to consider the approved revenue gap in the tariff determination of subsequent year.

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. Projections made by the Commission at the time of determination of tariff is dependent on many controllable and uncontrollable parameters, which are expected to undergo change on actuals. Therefore, the Commission at the time of trueing up admits the revenue gap after prudence check in accordance to provision of the MYT Regulations. The Commission had admitted the true up gap for FY 2019-20 after thorough prudence check. The admitted revenue gap in true up of previous years needs to be considered while determining tariff for the subsequent year. As the True Up order for FY 2019-20 was issued on 12<sup>th</sup> October, 2021, the Commission has considered it appropriate to consider the same while determining the tariff for FY 2022-23.

### ***ISSUE No. 22: Other / Non-Tariff Income***

#### **Issue Raised by Stakeholder**

The Petitioner has not provided details of other / Non-Tariff income under various head in the Petition.

Petitioners have considered the deferred income i.e., income booked towards the depreciation for assets created through consumer contribution and grants under their claim of other income since, the Petitioners have claimed depreciation on the gross block of assets. Further, in line with the methodology adopted by the Commission in its previous true up order of FY 2019-20, Petitioners have not considered the waived off amount by MPPTCL towards liability of wheeling charges on DISCOM in other income. In view of the above, requested the

Commission that the details of non-tariff incomes should be treated as tariff income as per Regulations 42 of MYT Regulations, 2021.

### **Petitioner's Response**

The Petitioner has proposed the income and expenditure in accordance with the MYT Regulations, 2021 and no income has been concealed by the petitioner. The details of income and expenditure are given in the attached format. Therefore, suggestions of the stakeholder are false and misleading. Further, petition is filed before the Commission based on audited financial statement of previous years.

As per the Accounting Standard 12 of Institute of Chartered Accountants of India, it provides for two methods for treatment of the grant identifiable to the asset. The Petitioners have adopted 2<sup>nd</sup> method wherein the amount equal to the depreciation on the specific assets related to grant has been shown as income in the respective year in the profit and loss account of the Petitioner. This income has been claimed by the Petitioner as part of non-tariff income.

The Petitioners have proposed that though treatment of grant for the purpose of depreciation is different in both the alternatives but the net impact on tariff on account of depreciation is same. Under first alternative, the gross block is reduced by the amount of grant and the depreciation is provided on reduced gross block. Under second alternative, depreciation is provided on the total gross block but the amount equal to the depreciation on the specific assets related to grant is shown as income in the respective year in the Profit and Loss Account and would be deductible from the tariff.

### **Commission's View**

The Commission has admitted the other / Non-Tariff income for the Control Period based on the average of previous three years actuals, which has been detailed in the relevant section of this Order.

Further with regard to consideration of deferred income booked in the audited account, as the Commission in this Order has not allowed Depreciation on assets created through consumer contribution and grants, deferred income has not been considered as part of Other Income.

### ***ISSUE No. 23:Bad and Doubtful debts***

#### **Issue Raised by Stakeholder**

The provisions for bad and doubtful debts should be allowed at the time of true-up petition and only after prudence check. Further, benefit from any scheme should not be allowed under bad and doubtful debts.

Petitioners have not submitted any draft policy and procedure for identification of Bad debts as per MYT Regulations, 2021.

### **Petitioner's Response**

The Petitioners have claimed provision for Bad & Doubtful Debts as per MYT Regulations, 2021, wherein it has been mentioned that it is to be allowed to the maximum of 1% of yearly revenue, which is well within aforesaid limit prescribed in the Regulation.

Further, Petitioners submitted that bad debts usually refer to accounts receivable (or trade accounts receivable) that will not be collected. Bad debts are inseparable incidences of the business of electricity distribution. Non consideration of Bad debts will be tantamount to 100% collection efficiency, which is not practicable for the electricity distribution business. Substantial amount revenue pertains to Agriculture, Rural, Public Water Works and Street Light categories of consumers which have lower probability of collection for obvious reasons. These categories of consumers are mainly located in the rural areas and their paying capacity is very low. Hence, these categories require provisions for bad and doubtful debts reflecting the actual scenario of lower collection compared to other categories of consumers.

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The Commission has not considered any bad and doubtful debt in this order. However, the same may be considered by the Commission on the basis of the actuals at the time of truing up as per the provision of the MYT Regulations, 2021. Further, directive regarding submission of draft policy and procedure for identification of Bad debts has been included in the Compliance to Directive chapter of this Order.

### ***ISSUE No. 24: Depreciation***

#### **Issue Raised by Stakeholder**

Depreciation on the assets handed over by the consumers as well as by the developer should not be allowed. Further, Commission should create the fund of depreciation amount for the purchase of the equipment etc.

The Commission in retail tariff order for FY 2021-22 had directed the petitioner to provide proper asset register, which was not compiled by the petitioner. Therefore, the Commission is requested to accept only 50% of the depreciated amount in the net fixed asset. Further, petitioners have claimed depreciation on assets created through consumers contribution and grants.

The Petitioners have not calculated the depreciation as per the Regulation 33 of MYT Regulation, 2021 as Petitioners haven't provided information regarding the cost of assets where 70% and 90% depreciation have already been recovered. Further, the cost of new distribution/power transformers replaced in place of failed transformers have not been stated and corresponding reduction in the cost of fixed asset in service have not been intimated.



Depreciation of Rs. 1,300 Crores is part of the balance sheet, which hasn't made any difference in the cash flow. Therefore, the Commission is requested to not consider it as shortfall.

### **Petitioner's response**

Depreciation has been claimed by the Petitioners as per Regulation 33 of the MYT Regulations, 2021 and the rate of depreciation has been considered in accordance with rate specified by the Commission in MYT Regulations, 2021.

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%.

The Petitioners have given detailed calculation of depreciation in its MYT Regulations, 2021 formats. Further, the additional information related to asset register have also been provided to the Commission for its scrutiny.

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The approach for approval of Depreciation has been detailed in ARR chapter of this Order.

## ***ISSUE No. 25: Return on Equity***

### **Issue Raised by Stakeholder**

The Petitioners have claimed RoE of Rs 794 Crores for FY 2022-23. Further, it is responsibility of shareholders of these companies to keep the book value of these Companies at par or above to claim any RoE from consumers to get dividend.

Beside this, any regulation framed by the Commission to allow RoE to pay dividend to these-loss making Companies will be in violation of Section 123 of Companies Act 2013. Further, RoE collected by these companies cannot be retained / adjusted against profit & loss. Hon'ble APTEL in Appeal Nos.196 of 2014 and 326 of 2013 dated 18<sup>th</sup> September, 2015, has upheld that, RoE collected is only for the payment of dividend to shareholders and cannot be retained. Therefore, amount collected from consumers as RoE to pay dividend (which is not being paid), is illegal and shouldn't be allowed by the Commission.

The Commission has also allowed RoE to several power generator while these power generators have negative Book Value and are not paying the dividend to their shareholders and Income tax on RoE collected, which results in an increase in Power Purchase Cost for the Petitioners.

Commission is requested to not allow the RoE during this year considering the effect of Covid-19.

Further, Commission is requested to allow base rate of 14% for RoE.

### **Petitioner's Response**

RoE has been claimed in accordance with the Regulation 31 of MYT Regulations, 2021. which allows the Petitioner to claim 14% of base RoE on equity capital of the respective year. Further, Regulations were notified by the Commission in exercise of power conferred under Section 181(2) (zd) read with Section 45 and 61 of the Electricity Act, 2003 after due public/shareholder consultation process. Therefore, the claim of the Petitioner does not violate any provisions of EA 2003 and MYT Regulations, 2021.

Further, utilization of RoE is at the discretion of DISCOMs. DISCOMs may invest the RoE in creation of assets or in any other purpose or may declare dividends in accordance with relevant provisions of Companies Act, 2013 if it meets the criterion for dividend declaration. Further, the MYT Regulations, 2021 also allows the Petitioner to retain any earnings made on investments made out of the allowed RoE. Therefore, the claim of RoE by the Petitioner is legally valid.

As regard to aforesaid APTEL Judgement, Petitioners have proposed that the same deals with restriction of RoE by State Commission (namely Haryana Electricity Regulatory Commission) as per provision of HERC MYT Regulations. In the said Judgement, APTEL has withheld the Order of State Commission who has restricted the RoE to 10% against the Appellant claim of 14%, since the Regulations provided RoE of 14% as ceiling. Therefore, Regulations has provided discretion power to the State Commission to allow RoE till the ceiling of 14%. However, the same is not applicable for MP State as the provisions of MYT Regulations, 2021 are different as that of HERC MYT Regulations. Further, in the said Judgement nowhere it is mentioned that the RoE is for payment of dividend and cannot be retained as contented by the stakeholder. Therefore, the contention of the stakeholder in this regard is entirely misplaced and not tenable.

Further, the Petitioner have requested the Commission to enhance the base rate of return of equity from 14% to 16% may allow the additional return of 2% over and above the proposed base rate of 16%.

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The Commission has allowed Return on Equity at base rate of 14% as per provision of MYT Regulations, 2021, 2021. Claim of Additional RoE of 2% has not been considered at this stage, which is allowable on achievement of performance targets at the time of truing up. Methodology adopted for approval of Return on Equity has been detailed in ARR chapter of this Order.

***ISSUE No. 26: Pension Terminal Benefit Fund***

**Issue Raised by Stakeholder**

The Petitioners have not considered any provisions towards Terminal benefit liabilities for FY 2022-23 and also have not provided any reason for not making any provision despite the directives of the Commission and State Government. Further, Petitioners have not taken any action to open the escrow account. Therefore, Commission is requested to take stern actions against the DISCOMs for non-compliance of directive of the Commission.

**Petitioner's Response**

Out of Rs. 750 Cr. (Rs.120+210+210+210=750 Crore) as approved by the Commission for FY 2017-18 to FY 2020-21, Petitioners have already contributed Rs.730.50 Cr in TBT Fund till date. Remaining amount shall be deposited in TBT Fund shortly.

With regard to contribution of Rs.210 Crore in TBT Fund, for FY 21-22, MPPMCL on behalf of all the Petitioners have already prayed to the Commission vide letter no.854 dated 03.03.2022, to allow the contribution of Rs. 210 Cr (Rs. 70 Crore per month) in the three months starting from April-2022 to June-2022.

Further, Transmission Company has already appointed M/s K.A. Pandit-Consultants & Actuaries Mumbai, vide order no 2324 dated 13.08.2021 for carrying out the actuarial analysis for assessing the liability of terminal benefits of working employees, Pensioners & Family Pensioners of all six successor companies of erstwhile MPSEB. The same is under process.

**Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The Commission has allowed expense towards contribution to Terminal Benefit Trust Fund for each year of the Control Period which is detailed in ARR chapter of this Order.

**Miscellaneous**

***ISSUE No. 27: Billing Cycle of H.T. Consumers***

**Issue Raised by Stakeholder**

As per present practice of DISCOMs billing cycle of HT Industrial Consumers starts on 23<sup>rd</sup> day of every month instead it should be 1<sup>st</sup> day of every month as this will help the consumers in accounting.

**Petitioner's Response**

The Petitioner has noted the suggestion of the Objector. The Commission may give proper dispensation in this regard.

### **Commission's View**

The DISCOMs may explore avenues to align the billing month with the calendar month to address the concern of the stakeholder.

### ***ISSUE No. 28: Impact of Pandemic on CPP***

#### **Issue Raised by Stakeholder**

The Captive power plant consumer who has surrendered their captive generation in financial year 2021-22, the base year for them is FY 2020-21. But due to pandemic all industries were closed in the month of April & May, as the consumption during this period was nil. Therefore, requested to develop a mechanism for averaging out the consumption for April and May month for FY 2020-21.

#### **Petitioner's Response**

The Petitioner has noted the suggestion of the Objector. The Commission may give proper dispensation in this regard.

#### **Commission's View**

The Commission has noted the stakeholder's submission and Petitioners response. The Commission has decided to retain existing provision on this issue.

### ***ISSUE No. 29: Government Subsidy***

#### **Issue Raised by Stakeholder**

Section 65 of Electricity Act, 2003 and Regulations of the Commission mandates that State Govt shall pay subsidy amount in advance to the licensee. However, State Govt, has not provided the subsidy amount to the DISCOMs neither in advance nor on regular basis. Presently, Rs 22,000 Crore in subsidy has not been paid by the State Govt, which is causing financial woes for the DISCOMs. Therefore, requested the Commission to direct the State Govt, to make payment of balance amount of subsidy immediately and also ensure payment of subsidy in advance in future.

Shri Mahesh Garg, submitted that the losses incurred by the distribution companies are not due to deficit in profits but due to the implementation of various subsidy schemes or relaxation in bills provided to certain section of consumers. However, when the state government doesn't reimburse the subsidized amount in time, the companies demand tariff hike by showing the cause as loss in their balance sheets to recover the cost of electricity from the consumers.

This results in an increase in the cost of electricity (an essential commodity) for domestic and commercial consumers which in turns increases cost of production, consequently raising price of other commodities.

He further contended that continued due non payment of subsidy, the burden of losses suffered by DISCOMs is passes onto the Consumers as tariff hike.

increase in tariff he has made several representations to the Commission in the past regarding increase in electricity tariff upon which Commission took cognizance and sought a reply from respondent no. 4, however no action was taken by the commission in this matter. Also, the petitioner attempt to represent his detailed views prior to filling of the writ petition in front of the commission was unsuccessful as the commission didn't assign any hearing without giving any specific reason.

### **Petitioners' response**

When the revenue from existing tariff is not sufficient to recover the ARR, DISCOM proposes tariff hike to recover the cost of supply. The proposed tariff hike is in accordance with the provision of law and any contrary submission in this regard is denied. It is noteworthy to mention that while issuing the Tariff Order Commission considers the aggregate revenue requirement /cost of supply only on normative basis as per provision of the MYT Regulations, 2021. As per the provision of the Electricity act 2003 State Government may provide subsidy to any class of consumer out of the tariff determined by the Commission. As far as determination of Tariff under section 62 read with section 61 of the Act is concerned same is determined by the Commission based on the principle of cost of supply.

Further, MPPMCL is continuously corresponding with the State Government for release of advance payment of subsidy as per MYT Regulations, 2021 and Section 65 of the Electricity Act 2003.

### **Commission's View**

With regard to subsidy, the Commission is taking up this matter with the State Government and the Petitioners through a separate Petition.

Further, the State Electricity Regulatory Commission is a statutory body vested with the responsibility as stipulated in the Electricity Act, 2003. The Commission determines the tariff as per the provision of the Electricity Act, 2003, Tariff Policy issued from time to time and principles laid down in its MYT Regulations, 2021.

### ***ISSUE No. 30: Cross Subsidy Surcharge and Additional Surcharge***

#### **Issue Raised by Stakeholder**

The Petitioners proposal to increase Cross Subsidy Surcharge and Additional Surcharge should not be considered, which is very high and will make power purchase from Open Access unviable. In addition to this, STOA, STU charges also increased from Rs. 0.05 to Rs. 0.52 per kWh, which will make open access further unviable. Therefore, requested the Commission to reduce and eliminate the CSS as per the Section 39(2d) of Electricity Act,

2003 and calculate CSS for relevant category as per the formula prescribed under Tariff Policy, 2016.

Commission is requested to calculate CSS, Additional Surcharge and STU charges separately on purchasing RE power from third party, as currently there is no difference in calculation of CSS and Additional surcharge for purchasing RE power.

Petitioners should be directed to show the computation of Wheeling charge and CSS in ARR Petition so appropriate suggestion can be given.

The Commission may invoke provisions under section 42(2) sub para 4 of Electricity Act, 2003 and abolish the Cross Subsidy Surcharge and Additional Charge.

No Additional Surcharge should be levied on Captive Power Plants and Renewable Power Plants.

Another stakeholder stated that Additional Surcharge under Section 42(4) is only towards meeting the fixed cost of the distribution licensee out of its obligation to supply electricity. This fixed cost is the stranded power purchase commitments of the licensees on account of the open access consumers. The surcharge being compensatory in nature, is applicable only if there is stranded power purchase cost on account of the open access consumers and for no other reason.

The methodology adopted by the Petitioners is not in line with the methodology adopted by the Commission in its Retail Supply Tariff Order FY 2020-21 dated 17th December, 2020, where the Commission considered the average monthly fixed rate arrived based on daily least fixed rate of generating stations whose energy was surrendered due to open access consumers. Therefore, it is requested that the daily least fixed rate of generating station should be considered instead of proposed daily weighted fixed rate while determining Additional Surcharge.

### **Petitioner's Response**

The Commission has been consciously making efforts over the past several years to reduce the cross-subsidy levels across all consumer categories. However, while doing so, Commission has to consider the effect of tariff shock to any consumer category. Thus, tariff orders being issued by the Commission is fully compliant with the National Tariff Policy & Electricity Act, 2003.

Further, Cross subsidy surcharge and additional surcharge is proposed considering the provision of section 42 of the Electricity Act 2003 read with Regulations issued by the Commission. Beside this, their no provisions in the Electricity Act, 2003 which mandates elimination of cross subsidy surcharge and additional surcharge.

As regards to calculation of CSS as per Tariff policy, the Commission may provide suitable dispensation in this regard.

As regard to showing the computation of Wheeling charge and CSS in ARR petition. the Petitioners welcome the suggestion of stakeholder and would try to include the same from next tariff proceedings.

The Petitioners have proposed that the charges applicable for Open Access in accordance with MPERC Open Access Regulations and its amendments from time to time. Further, CSS needs to be recovered from the Open Access consumers for their Open Access consumption. Otherwise, not levying CSS will burden the other consumers by way of unattended recovery of cross subsidy provided to cross subsidized consumers. Therefore, the suggestion of the stakeholder should be rejected by the Commission.

As regards to proposed increase in long term tie ups in upcoming years, the stranded capacity will burden the consumers by way of increased additional surcharge. The additional surcharge determined by Petitioners represents for open access energy consumption against the surrendered energy during sept-20 to Aug-21. The Hon'ble Commission may take the appropriate view in this regard.

The Petitioner has 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 stations that surrendered power due to open access energy. In real time, the power surrender due to open access is not based on least fixed charges of stations but surrendered based on SLDC orders irrespective of fixed charges. Thus, the commissions approach determination of Additional surcharge based on the 'average monthly fixed rate arrived based on daily least fixed rate of generating stations' does not take care of the daily actual weighted average rate of the stations. Hence, the Petitioners hereby request the Hon'ble Commission to consider the methodology and approach adopted in Tariff petition for FY 2022-23.

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The Commission has modified the methodology for computation of Additional Surcharge which has been detailed in relevant section of this order.

Further, with regard to Cross Subsidy Surcharge, the Commission has computed the same in accordance to the formula specified in the Tariff Policy, 2016 which has been detailed in Tariff Design Chapter of this Order.

### ***ISSUE No. 31: Metering***

#### **Issue Raised by Stakeholder**

East DISCOM hasn't worked on DTR metering connections and more than 10 Lakhs unmetered and stop/defective meters need to be replaced in the State. In such circumstances computation of distribution loss while computing energy requirement becomes misleading.

Domestic consumers meter reading should be done strictly after the completion of one month as the consumers are being deprived of the exemption given to them as per the unit-wise slab.

Therefore, the Commission is requested to ensure that the bill given to consumer should be of one month only.

### **Petitioner's Response**

Energy sales to unmetered domestic connections and unmetered agricultural connections are projected in accordance with norms specified for the category in the Tariff Order for FY 2021-22. Further, the normative distribution losses (%) has been considered for projection in line with MYT Regulation, 2021.

Further, Petitioners have proposed that if the consumer's reading is taken after 30 days and there was electricity consumption for said month than, the reading is done proportionately. This provision is presently for the domestic category LV-1 and has not been removed.

### **Commission's View**

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The Commission has retained the existing provision on this issue.

### ***ISSUE No. 32: Applicability of Open Access charges as per Scenario 4 as per Tariff Order for FY 2021-22***

#### **Issue Raised by Stakeholder**

The stakeholder stated that the applicability of wheeling and transmission charges in different scenarios of location of Open Access generators and their consumers and consequent applicability of transmission and wheeling charges has been approved by the Commission at Para-3.13 of Retail Supply Tariff Order for FY 2021-22.

Open Access Scenario 4:

“Both generator and consumer are connected to the distribution system of any of the Distribution Licensee at 33 kV”

The power generated by the open access generator will be consumed within the DISCOMs under the conditions of uniform retail tariff throughout the State of Madhya Pradesh and hence, it will contribute to meeting the demand of the open access consumer. Therefore, there is no additional usage of transmission network in this transaction. Hence, such transactions shall attract only the wheeling charges.

The transmission charges are applicable in scenario-1, 2 & 3 while in scenario-4, only wheeling charges are applicable.

It is submitted here that in such case where Open Access Regulations, 2021 stipulates for applicability of Transmission Charges where injection and drawl both are at 33KV level (Distribution System) in areas of different Distribution Licensees within State is not in line with the scenario-4 as aforesaid mentioned in the Retail Supply Tariff Order for FY 2021-22.



Therefore, the Commission is requested to consider the following suggestions:

- The scenario-4 as aforesaid may kindly be incorporated in Retail Supply Tariff Order to be issued under Petition No. 04/2022 with applicability of transmission / wheeling charges where consumer is connected to Distribution System (at 33KV level) and injection / drawl lies in the areas of different Distribution Licensee within the State consistent with the Open Access Regulations notified on 17<sup>th</sup> Dec, 2021.
- The aforesaid applicability of transmission / wheeling charges will be for Long Term / Medium Term / Short Term Open Access customers seeking Open Access through MPPTCL / SLDC as the case may be.
- The Commission may kindly consider issue of directions for applicability in consonance with the Open Access Regulations, 2021 for enabling commencement of billing of transmission charges by the MPPTCL as per MYT order dated 19.05.2021 in respect of Long Term / Medium Term Open Access Customers and by SLDC for Short Term Open Access Customers as per stipulations in Open Access Regulations, 2021 read with MYT order dated 19.05.2021.
- Any other relief as the Commission may consider necessary for applicability of transmission charges in respect of Open Access Customers connected to Distribution System (33KV level) where injection and drawl of power is within the jurisdiction of same Distribution Licensee as in this case also the usage of transmission system is involved.

### **Commission's View**

The Commission has noted the suggestion of the stakeholder and appropriately dealt the issue in Chapter A3 of this Order.

### ***ISSUE No. 33: Public Hearing***

#### **Issue Raised by Stakeholder**

DISCOMs reply should be received before Public Hearing, so that the stakeholders can make representation on the same before the Commission.

Considering the presentations of the stakeholders and the replies given by the DISCOM' on the Stakeholders submission the Commission used to pass their Final justified Orders.

Another stakeholder stated that the information of Tariff petition 61/2021 has not been published in the State level newspaper/ Danik Bhaskar in the District Niwari and Tikamgarh due to which public hearing couldn't be held on 8<sup>th</sup> February 2022. The East DISCOM published the information in Danik Bhaskar Jabalpur edition while Danik Bhaskar Chhatarpur and Sagar edition was broadcasted in Niwari and Tikampur District.

The Petitioners have proposed an average increase of 8.71% for the FY 2022-23 which is not too high as the inflation is more than the average increase in Tariff rates. Therefore, the

Commission is requested that without making a spectacle after conducting public hearing, the Commission should approve the Petitioner's demand so that time and money can be saved.

Therefore, it is further requested that as public hearing should be dismissed and Petition should be accepted due to lack of Video Conferencing rules.

### **Petitioner's Response**

The Hon'ble Commission may give suitable dispensation in this regard. As regards to Tariff Petition No 61/2021 information, it is state that the public information has been published in the local newspaper as per the regulations of the Hon'ble Commission. Public information of the Petition No 6/2021 was broadcasted on 31<sup>st</sup> December 2021 in the Sugar edition of Danik Bhaskar. Apart from this, public information was also circulated in the English newspaper "The Hitvada" Jabalpur on the same date which was also spread in other districts of East Zone DISCOM.

It is further stated that public information is also available in the company's website.

### **Commission's View**

The Commission taken note of the stakeholders submission and its reply by the Petitioners.

## ***ISSUE No. 34: Installation of line and transformers***

### **Issue Raised by Stakeholder**

The stakeholder stated that in many places DISCOMs demand consumer to install line & transformer on his own cost (In spite of Paying System strengthening charges fixed by you.) and this line and transfer becomes the property of DISCOM which is totally un- justice. Due to this Bank do not finance these expenses.

Therefore, the Commission is requested to allow consumer to get back his investment in installment in the 12-month energy bill.

### **Petitioner's Response**

The Petitioners have proposed that any contribution received from the consumers for creation of any assets is deducted from the gross fixed assets of the Licensee. DISCOMs do not claims any expenses or return over such assets created through consumer contribution through ARR or Tariff.

### **Commission's View**

The Commission has taken note of the stakeholders submission and its reply by the Petitioners. The Commission has not allowed RoE, Depreciation and Interest on Loan to Petitioners on assets created through consumer contribution, which has been detailed in ARR chapter of this Order.

***ISSUE No. 35: Disconnection on delay in payment***

**Issue Raised by Stakeholder**

In case of delay in payment due to some billing dispute, if the due date is crossed than the DISCOMs immediately disconnects the electricity supply, whereas as per Supply code they should give 15 days' Notice before disconnections. Further this despite the Licensee having 45 days bill equivalent Security deposit. Due to this communication gets affected in the area and the common public suffers. Moreover, if billing dispute is on account of DISCOMs and the bill is corrected than the due date of payment should be calculated from the date of correction.

Another stakeholder stated that if the Industrial Consumer has not paid the bill on time due to some reason, then apart from the late fee, additional security is also demanded by the DISCOMs. This practice should be immediately stopped as this discourages the Industrial consumers and the investors.

**Petitioner's Response**

As regards to 15 days' notice, the issue is not pertaining to instant Petition.

The Petitioners have proposed that the billing of security funds is done as per the Para 1.19 of the regulation MPERC (Security Deposit) Regulation, 2009 issued by the Hon'ble Commission.

**Commission's View**

The Commission has taken cognizance of stakeholders' suggestions, Petitioners' reply, the Commission directs the Petitioners to comply with the due procedure specified in the appropriate Regulations.

***ISSUE No. 36: Electricity Tripping***

**Issue Raised by Stakeholder**

The stakeholder stated that currently the DISCOMs and especially East DISCOM is not providing continuous power supply to its consumers because of that the Industrial consumers are facing losses. Therefore, the Commission is requested to if tripping happens continuously than concession should be provided to the consumers as per the number of power trip done by the DISCOMs.

**Petitioner's Response**

The objection does not pertain to the petition but if the stakeholder has any special complaint for a place, then it should be sent to regional chief, engineer or company's office.

### **Commission's View**

The Commission has specified MPERC Distribution Performance Standard Regulations, 2012 and its amendments thereof, which provides compensation to the eligible affected Consumers.

#### ***ISSUE No. 37: Compliance of electricity act, 2003***

### **Issue Raised by Stakeholder**

As per Section 62 of electricity act, 2003 the commission needs to have all details in respect of electricity for determination of tariff and no tariff or part of tariff to be amended frequently except expressively permitted under terms of fuel surcharge formula as specified. So, currently tariff should be determined on the basis of costs and fuel surcharges only, not on respondent's deficits. However, State and its instrumentalities are frequently increasing the tariff in view of respondent's losses.

### **Petitioner's Response**

When the revenue from existing tariff is not sufficient to recover the ARR DISCOM proposes tariff hike to recover the cost of supply. The proposed tariff hike is in accordance with the provision of law and any contrary submission in this regard is denied. It is noteworthy to mention that while issuing the Tariff Order Hon'ble Commission considers the aggregate revenue requirement /cost of supply only on normative basis as per provision of the MYT Regulations, 2021. As per the provision of the Electricity act 2003 State Government may provide subsidy to any class of consumer out of the tariff determined by the Hon'ble Commission. As far as determination of Tariff under section 62 read with section 61 of the Act is concerned same is determined by the Hon'ble Commission based on the principle of cost of supply.

### **Commission's View**

The Commission has determined the ARR for the Control Period from FY 2022-23 to FY 2026-27 and tariff for FY 2022-23 in accordance to the MYT Regulations, 2021 issued by the Commission in exercise of powers conferred under Section 181(2)(zd) read with Sections 45 and 61 of the Electricity Act, 2003.

#### ***ISSUE No. 38: Wheeling Charge- Segregation of Wheeling and Retail ARR***

### **Issue Raised by Stakeholder**

The ARR consists of components such as O&M expense, interest & finance charges, RoE, depreciation etc.- these expense components also form part of the retail segment. Thus, it is necessary to bifurcate the ARR among wheeling and retail expenses.

The Commission is requested to define the allocation matrix for the distribution licensee in line with the actual prudent expenses among wheeling and retail system of the distribution

licensee. The methodology so defined will give certainty of wheeling charge to be levied on STOA consumers.

### **Petitioner's Response**

The Petitioners have proposed that the Hon'ble Commission under Regulations 8.12 of MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 has already defined allocation matrix for the purpose of segregation of ARR between Wheeling and Supply Businesses of Distribution Licensee. The Hon'ble may take appropriate action as regards to this.

### **Commission's View**

Allocation matrix for segregation of ARR into expenses for Supply Business and Wheeling Business has been specified in the MYT Regulations, 2021. Based on the allocation matrix, the Commission in this tariff order has determined wheeling and supply Business ARR, which has been shown in ARR chapter of this Order.

## ***ISSUE No. 39: Participation in Public Hearing***

### **Issue Raised by Stakeholder**

The applicant Shri Mahesh Garg, requested through his representation for a personal hearing in the matter before any final decision is taken by the Commission, in order to enable him to explain his stand regarding not to increase electricity tariff in MP burdening the consumers of the State.

### **Petitioner's Response:**

The instant stakeholder has submitted the comments (Annexure-P/8) in response to pursuance of ARR & Tariff Petition FY 2020-21. The response of the West DISCOM on such comments of the stakeholder was duly submitted before Hon'ble Commission vide letter No. 4015 Indore dated. 11.03.2020 (Annexure-P/9). The Tariff order FY 2020-21 has already been issued by the Hon'ble Commission on dated 17.12.2020.

### **Commission View:**

During the Public Hearing held on 9th March 2022 (for West DISCOM), the stakeholder was heard by the Commission through video conferencing.

## ***ISSUE No. 40: Exemptions during Covid-19***

### **Issue Raised by Stakeholder**

During Covid-19 pandemic, exemptions were given to the DISCOMs by the State government. Therefore, for these exemptions only government should pay the compensation and not the consumers.

### **Petitioner's Response**

As regards to this, as per Section 108 of the Electricity Act 2003, the State government is empowered to issue directions in public interest.

### **Commission's View**

The issue raised by the Stakeholders does not pertain to the subject matter of this Petition.

#### ***ISSUE No. 41: Defective meters and readings***

### **Issue Raised by Stakeholder**

Faulty meters provided by DISCOMs to its consumers provide deceptive readings which also produces variations in the average meter readings, this impacts the consumer's electricity bills negatively.

### **Commission View:**

The Commission has taken note of the stakeholder submission. The Commission has issued appropriate direction on this matter.

#### ***ISSUE No. 42: Revenue generation by electricity supply***

### **Issue Raised by Stakeholder**

Electricity should be considered as the basic amenity and a public service. So, it's a duty of the State, MP electricity commission as well as DISCOMs to provide electricity within a reasonable price without making profit from it.

### **Commission View:**

The Commission has determined the tariff for FY 2022-23 in accordance to the provision of the MYT Regulations, 2021.

#### ***ISSUE No. 43: Metering Charges***

### **Issue Raised by Stakeholder**

The respondents charge the metering charges in every bill even though such charges are taken at the time of beginning of the connection when the meter is installed. This is a way of doubling their profits from the same service.

### **Commission View:**

The Commission has not approved levying of any metering charges for FY 2022-23.

***ISSUE No. 44: Non fulfilment of commitment by M.P government***

**Issue Raised by Stakeholder**

It is to be notified that the state government on June 2020 has declared in public that the electricity bill will be reduced to half, instead the government increased the electricity charges in December 2020 by 0.15 paise per unit and with this tariff proposal the electricity charges will be further increased by 6% within a period of 4 months.

**Petitioner's Response:**

As per the provision of the Electricity Act, 2003, the State Government may provide subsidy to any class of consumer out of the tariff determined by the Commission. As far as determination of Tariff under section 62 read with section 61 of the Act is concerned same is determined by the Commission based on the principle of cost of supply.

**Commission View:**

The Commission has determined the tariff for FY 2022-23 in accordance to the provision of the MYT Regulations, 2021. The Government may provide subsidy to any consumer or any class of consumer in accordance to provision of Section 65 of the Electricity Act, 2003.

***ISSUE No. 45: High tariff Impact on agricultural consumers***

**Issue Raised by Stakeholder**

The small and marginal farmers that operates machinery like electric pumps suffers the most due to the continuous hikes in electricity tariffs. Due to Covid lockdown they were not able to harvest their crops and sell them for their living. Recently, a 35-year-old farmer in the district Chhatarpur (M.P) had committed suicide as he was unable to pay the electricity bill. In a letter addressed to Prime Minister he also mentioned that he was harassed by the electricity company for non-payments of bills. This provides ample evidence that lower income group can't afford to pay the proposed hike in tariff rates.

**Petitioner's Response:**

As far as Tariff for Agriculture and Irrigation pump consumers is concerned as per Tariff order FY 2021-22 the average billing rate for LV-5 Agriculture and Allied Activities is Rs. 5.73 per unit against the overall average billing rate of Rs. 6.66 per unit. Apart from this agriculture consumers are also availing benefits of subsidies provided by the State Govt.

**Commission View:**

The Commission has determined the tariff for FY 2022-23 in accordance to the provision of the MYT Regulations, 2021. The Government may provide subsidy to any consumer or any class of consumer in accordance to provision of Section 65 of the Electricity Act, 2003.

## Annexure-1 (List of Stakeholders)

### LIST OF STAKEHOLDERS- EAST DISCOM

Sr. No.	Name & Designation	Address
1	Shri. Akhil Mishra	M/s. Lardganj Vyapari Sangh, 26, S.P. Market, Lardganj, Jabalpur
2	Shri. D R Jeswani	M/s. Mahakaushal Udyog Sangh, Industrial Area, Richhai, Jabalpur
3	Shri. Manindar Oberai	M/s Satna Jila Udyog Sangh, Udyog Bhawan, Audyogik Kshetra, Satna
4	Shri. Shankar Nagdev	M/s. Mahakaushal Chamber of Commerce & Industry, Chamber Bhawan, Civic Centre, Marhatal, Jabalpur 482 002
5	Shri. Vinay Kumar Singh Parihar, General Secretary	Madhya Pradesh Vidyut Mandal Abhiyanta Sangh, Shade No.13, Vidyut Nagar P.O., Rampur, Jabalpur-482008
6	-	M/s. MP Power Transmission Co. Ltd. Shakti Bhawan Rampur Jabalpur
7	Shri. Arun Jain	MP Small Scale Industry Organisation
8	Shri. P G Najpande Shri. Vivek Tankha	Raj krishna Smriti, 842, North Civil Lines, Jabalpur
9	Shri. Jabir Khan	M/s. Prism Johnson Ltd. Vill. Mankahari, P.O. Bathia, Distt. Satna 485111
10	Shri. D Khandelwal, Advocate	960, Napier Town, Jabalpur
11	Shri. Rajendra Prasad Mor	Prabudha Puri Gali No.4, Adarsh Colony, Katni
12	Shri. Rajendra Agrawal	1995/A, Gyan Vihar Colony, Narmada Road, Jabalpur 408068
13	Shri. Nirmal Lohia, Advocate	Taldarbaja, Tikamgarh
14	A.P. Trivedi Sons	M/s AP Trivedi Sons, Main Road, Balaghat-481001
15	Shri. K K Agrawal	Bhartiya Krishak Samaj
16	Shri. Ravi Gupta	SAC Member, MPERC
17	Shri. Himanshu Khare	Jabalpur

### LIST OF STAKEHOLDERS- WEST DISCOM

Sr. No.	Name & Designation	Address
1	Shri. Himanshu Shah Vishal Jain	M/s. M.P. Smal Scale Drug Manufacturers' Association, 104, Shrinath Niketan, Snelata Ganj, Indore 452 007
2	Shri. M.C. Rawat	The Madhya Pradesh Textile Mills Association, Jal Sabhagrah, 56/1, South Tukoganj, Indore 452 001
3	Shri. Rajesh Kumar Bajaj	M/s. Textile Processors Association, Burhanpur, TPA Bhawan, Industrial Estate, Near Gurudwara, Burhanpur
4	Shri. Gautam Kothari	M/s. Pithampur Audyogik Sangthan, 231, Saket Nagar, Indore 452018
5	Shri. S.M. Jain, President M.P. Chapter	M/s. All India Induction Furnaces Association M.P. Chapter, C/o. Venus Alloys Pvt. Ltd., 67, Industrial Area, Mandsaur - 458001 (M.P.)
6	Shri. S.M. Jain, President M.P. Chapter	M/s. Venus Alloys Pvt. Ltd., Unit -II, Khasra No. 612/1/1, Village Fatehganj, Tehsil Dalauda, Distt. Mandsaur R/O, 67, Industrial Area, Mandsaur - 458001 (M.P.)
7	Shri. Ashwini Pandey	M/s. Vidyut Mandal Pensioners Association, 301-A, Goyal Vihar, Near Ganesh Mandir, Khajrana, Indore
8	Shri. Mahesh Garg	16, Samwad Nagar, Near Navlakha, Indore
9	Shri. R C Somani	M/s. Vidyut Mandal Pensioners Association, Urja Parisar, Pologround, Indore 452003
10	Shri. R C Somani	M/s. Association of Industries, Dewas, 1/B/1, 1B/2A, I.S. Gajra Industria Area, No. 1, A.B. Road, Dewas 455001
11	Shri. R S Goyal	M/s. Madhyanchal Cotton Ginners & Traders Association, C/o. Harman Cotex, Opp. Dejla Devda Colony, Bisthan Road, Khargone
12	Shri. R S Goyal	M/s. Mandi Vyapari Sangh, C/o Harman Cottex, Vyapari Vishranti Bhawan, Krishi Upaj Mandi Parisar, Bistan Road, Khargone, Distt. Khargone-451 001
13	Shri. R S Goyal	M/s. S.M.O. Industries, Indore Road, Kasrawad, Tahsil - Kasrawad, Distt. Khargone 451 228



Sr. No.	Name & Designation	Address
14	Shri. R S Goyal	M/s. Diveel Cotton Industires, Khetia, Pansemal Road, Distt. Barwani
15	Shri. R S Goyal	M/s. Satyam Industries Ginning & Pressing Factory, Pati Bokrata Road, Khetia, 451881 Tah. Pansemal Distt. Barwani
16	Shri. R S Goyal	Shri Rajrajeshwar Cottn (P) Ltd, Warla Road, Sendhwa, Tahsil Sendhwa, Distt. Barwani
17	Shri. R S Goyal	M/s. Venkatesh Industries, Niwali Road, Sendhwa, Distt. Barwani
18	Shri. R S Goyal	M/s. Gomtesh Ginning & Pressing, Bakaner, Tehsil Manwari, Distt. Dhar
19	Shri. R S Goyal	M/s. Manjeet Global Pvt. Ltd. Village - Satrati Agra Mumbai Road, Tahsil - Kasrawad, Distt. Khargone 451 660
20	Shri. Ajay Porwal	M/s. Porwal Auto Components Ltd (Solar Division), Ploy No. 209, Sector-I, Pithampur rict Dhar (MP)
21	Shri. Ajay Porwal	M/s. Grasim Industries Ltd. (Chemical Div.) Nagda Ujjain 456 331
22	Shri. Indra Industries Maheshwari Ji	M/s. Indra Industires Ltd.
23	Shri. Krishnkant Mandlia, Shri Ravindra Tiwari	M/s. Indus Towers Limited, H-4th Floor, Metro Tower, Scheme No. 54, A.B. Road, Indore 452010
24	-	M/s/ MD Enterrprises Pithampur, Plot No. 560, Sector - III, Industrial Area, Pithampur
25	-	M/s. Shree Mahalaxmi Cotton Pressing Factory, Karwad Road, Bamania - 457770 Distt. Jhabua
26	Shri. Pankaj M. Kataria	M/s. Kataria Industries Pvt. Ltd. 304, Jhabua Tower Block No. 170, R.N. Tagore Marg, Indore
27	Shri. Pawan Singhania	M/s. Rath Iron & Steel Industries Ltd. 103, Laxmi Tower, 576, M.G. Road, Indore
28	Shri. Shubham Jain	1.M/s. Jaideep Ispat & Alloys Pvt. Ltd. 103, Laxmi Tower, 576, M.G. Road, Indore 452001
29	Shri. Rajendra Rishabh	Sri Rajendra Rishabh Ginning & Pressing Cotton Ginners Merchant, 1-3, Dilip Nagar, Main Road, Ratlam 457001
30	Shri. Rajesh Bhatewara	M/s. Multy Engineering Services, 22, Shastrinagar, Near Kamdhenu Apartment, Ratlam
31	Shri. Samarpan Mahajan	M/s. Kalindi Fibers
32	Shri. Satish Sood, Director	M/s. Oasis Distillries Limited, H No. 102, B-2 Metro Towers, Vijay Nagar, Indore
33	Shri. Suhas Khandekar	Flat No. 201, Vasant Kunj, 270, Lokmanya Nagar, Indore 452009
34	Shri. Sunil K Jain	548 Kasturva Nagar, Road No. 7, Ratlam
35	-	M/s. Vindhya Papers, 80 F, Industrial Area, Narwal Village, Sanwer Road, Indore
36	Shri. Sanjay Agrawal	Upbhokta hit prahari mahoo
37	Shri. Mukesh Kaul	M/s. Akhil Bhartiya Grahak Manch, Indore

**LIST OF STAKEHOLDERS- CENTRAL DISCOM**

Sr. No.	Name & Designation	Address
1	Shri. Yogesh Goel	M/s. Govindpura Industries Association, Association Complex, Industrial Area, Govindpura, Bhopal 462 023
2	Shri. R S Goswami Shri. Yogesh Goel	M/s. Federation of MP Chambers of Commerce & Industry, Udyog Bhawan, 129 -A, Malviya Nagar, Bhopal 462003
3	Shri. Vipin Kumar Jain	M/s. M.P. Small Scale Industries Organisation, E-2/30, Mahavir Nagr, Arera Colony, 462 016
4	Shri. Mahendra P Khante	M/s. Vardhman Febrics. (A Unit of Vardhman Textile Ltd.) Village Pilikarar-Talpur, Rehti Road, Teh. Budhni, Distt. Sehore
5	Shri. M C Bansal	M/s. Justice for Public Cause Foundation Trus, Flat No. 402, Sapphire Block, Nikhil Nestles, Near Ashima Mall, Hoshangabad Road, Jatkhedi, Bhopal 462 026
6	Shri. C B Malpani	M/s. Association of All Industries, Mandideep, Plot No. AM-19, Sector-B, Industrial Area, Mandideep Distt. Raisen
7	Shri. Amrit Plastic	M/s. Amrit Plastic Industires, Plot No. 148 New Industrial Area, Phase 2 Mandideep Distt. Raisen

<b>Sr. No.</b>	<b>Name &amp; Designation</b>	<b>Address</b>
8	Shri. A K Saxena	Shree Ganga International, Plot No. 28-B, Sector-A, Industrial Area, Mandideep Distt. Raisen.
9	-	M/s. Badri Ecofibres Pvt. Ltd., 201-K, C-21 Corporate Zone-I, Capital Mall, Hoshangabad Road, Bhopal MP 462026
10	-	M/s. Mechanical Constructors, No. 3, Sector-F, Industrial Area Govindpura, Bhopal 462023
11	Shri. Ashutosh Bansal	M/s. Om Smelters & Rollers Pvt. Ltd., Gram Bharthari, Tehsil Chinour, Jhansi Gwalior Road, Distt. Gwalior
12	-	Shree Palod Industries Pvt. Ltd., 29-B, Sector-D, Mandideep
13	-	M/s. Park Benz Laboratories, Plot No. 92 New Industrial Area, - II, Mandideep Distt. Raisen MP
14	-	M/s. Satrang Steels & Alloys (P). Ltd., Plot No. 7, New Industrial Area No. 2, Mandiddep, Distt. Raisen
15	Shri. Deomani Tiwari Shri. Rajendra Malviya	M/s. Sonic Biochem, extractions, Khasra No. 3 & 4, at Gram Mandheri, Near Mandideep Railway Station Road, Tahsil Goharganj, Distt. Raisen
16	-	M/s. Vidhya Cylinders Pvt. Ltd., Plot No. 112-A, Sector-A, Ind Area, Mandideep Distt. Raisen MP 462046
17	-	M/s. Win Axles Pvt. Ltd., Plot No. F-10, Industrial Area, Phase II, Mandideep
18	Shri. Pradeep Khandelwal	Aam Aadmi Party, S-2/112, Chitragupt Nagar, Kotra Sultanabad, Bhopal 462003
19	Shri. Jogendra Behera	M/s. Indian Energy Exchange, Plot No. C-001/A/1, 9th Floor Max Tower, Sector 16B Noida, Gautam Buddha Nagar, Uttar Pradesh 201 301

# **TARIFF SCHEDULES**

**Annexure-2 (Tariff Schedules for Low Tension Consumers)**

**ANNEXURE TO THE TARIFF ORDER PASSED BY MPERC FOR  
FINANCIAL YEAR 2022-23**

**MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION**

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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)	Energy Charge (paise per unit) Urban/ Rural areas	Monthly Fixed Charge (Rs.)
Up to 30 units	334	NIL

**(b) Minimum Charges:** Rs. 45 per connection per month as minimum charges is applicable to this category of consumers.

**LV 1.2****(i) Energy Charge and Fixed Charge – For metered connection**

Monthly Consumption Slab (units)	Energy Charge with telescopic benefit (paise per unit) Urban/ Rural areas	Monthly Fixed Charge (Rs.)	
		Urban areas	Rural areas
Up to 50 units	421	69 per connection	55 per connection
51 to 150 units	517	121 per connection	98 per connection

Monthly Consumption Slab (units)	Energy Charge with telescopic benefit (paise per unit) Urban/ Rural areas	Monthly Fixed Charge (Rs.)	
		Urban areas	Rural areas
151 to 300 units	655	26 for each 0.1 kW load	23 for each 0.1 kW load
Above 300 units	674	27 for each 0.1 kW load	26 for each 0.1 kW load

**Minimum Energy Charges: Rs. 70 per connection per month as minimum charges towards energy charges are applicable for above categories.**

**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 2022

Next Meter Reading: 10<sup>th</sup> May 2022

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 slab
0-50	50 units/30 days*36 days	60
51-150	100 units/30 days *36 days	120
151-300	150 units /30 days *36 days	180
Above 300	Balance Units	90
<b>Total</b>		<b>450</b>

**(ii) Energy Charge and Fixed Charge for Temporary connections**

Temporary connection	Energy Charge (paise per unit)  Urban/ Rural areas	Monthly Fixed Charge (Rs.)	
		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)		
Temporary connection for social/ marriage purposes and religious functions.	845	75 for each one kW of sanctioned or connected or recorded load, whichever is highest, for each 24 hours duration or part thereof.	60 for each one kW of sanctioned or connected or recorded load, whichever is highest, for each 24 hours duration or part thereof.

**Minimum Charges:** Rs. 1000/- per connection per month is applicable towards energy charges for temporary connection.

**(iii) Energy Charge and Fixed Charge for un-metered rural domestic connections having connected load upto 500 watts:**

Particulars	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 upto 500 watts	75 units @ 524 per unit	109 per connection

**Note: Minimum charges:** No minimum charges are applicable to this category of consumers.

**Specific Terms and Conditions for LV-1 category:**

- a) In case Energy Charges for actual consumption are less than minimum charges, minimum charges shall be billed towards energy charges. All other charges, as applicable, shall also be billed.

- b) In case of prepaid consumers, a rebate of 25 paise per unit is applicable on the basic energy charges. All other charges should be calculated on the Tariff applicable after rebate. A consumer opting for prepaid meter shall not be required to make any security deposit.
- c) 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.
- d) In case of temporary requirement for renovation/upgradation of premises, additional load is allowed to be used from existing metered connection on the same tariff applicable for permanent connection. Provided that the total load being used in the premises at a time should not exceed 130% of its sanctioned load.
- e) Other terms and conditions shall be as specified under General Terms and Conditions for Low Tension Tariff.



**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	Energy Charge (paise/unit) Urban/ Rural areas	Monthly Fixed Charge (Rs.)	
		Urban areas	Rural areas
Sanctioned load based tariff (only for connected load up to 10 kW)	650	156 per kW	125 per kW
Demand based tariff <b>Mandatory</b> 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

**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	Energy Charge (paise/unit) Urban/ Rural areas	Monthly Fixed Charge (Rs.)	
		Urban areas	Rural areas
Sanctioned load based tariff (only for connected load up to 10 kW) On all units if monthly consumption is <b>upto 50 units</b>	630	82 per kW	67 per kW
Sanctioned load based tariff (only for connected load up to 10 kW) On all units in case monthly consumption <b>exceeds 50 units</b>	780	138 per kW	117 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
Temporary connections including Multi point temporary connection 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

Sub category	Energy Charge (paise/unit) Urban/ Rural areas	Fixed Charges (Rs.)	
		Urban areas	Rural areas
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

\* 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 is applicable on the basic energy charges, all other charges should be calculated on the Tariff applicable after rebate. A consumer opting for prepaid meter shall not be required to make any security deposit.
- e) Other terms and conditions shall be as specified under General Terms and Conditions of Low Tension Tariff.

**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	Energy Charge (paise per unit)	Monthly Fixed Charge (Rs. per kW)	Minimum Charges (Rs)
<b>LV 3</b>			
Municipal Corporation/ Cantonment board /Municipality / Nagar Panchayat	568	352	No Minimum Charges
Gram Panchayat	540	164	
Temporary supply	1.25 times the applicable tariff		

**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)** Other terms and conditions shall be as specified under General Terms and Conditions of Low Tension Tariff.

**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:**

S. No.	Category of consumers	Monthly Fixed Charge (Rs.)		Energy Charge (paise per unit) – Urban / Rural Area
		Urban Areas	Rural Areas	
4.1	<b>Non seasonal consumers</b>			
4.1 a	Demand based tariff* (Contract demand up to 150 HP/112kW)	320 per kW or 256 per kVA of billing demand	205 per kW or 164 per kVA of billing demand	660
4.1 b	Temporary connection	1.25 times of the applicable tariff		

\* 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.

S. No.	Category of consumers	Monthly Fixed Charge (Rs.)		Energy Charge (paise per unit) – Urban / Rural Area
		Urban Areas	Rural Areas	
4.2	<b>Seasonal Consumers</b> (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

S. No.	Category of consumers	Monthly Fixed Charge (Rs.)		Energy Charge (paise per unit) – Urban / Rural Area
		Urban Areas	Rural Areas	
4.2 b	During Off - season	Normal tariff as for Non-seasonal consumers on 10 % of contract demand or actual recorded demand, whichever is more	Normal tariff as for Non-seasonal consumers on 10 % of contract demand or actual recorded demand, whichever is more	120 % of normal tariff as for Non-seasonal consumers

### Terms and Conditions:

- (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) **Minimum Charges:** Shall be as per following:
- i. **For LT Industries in rural areas:** The consumer shall pay minimum annual charges based on consumption (kWh) of 120 units per HP or part thereof of contract demand irrespective of whether any energy is consumed or not during the year.
  - ii. **For LT Industries in urban areas:** The consumer shall pay minimum annual charges based on consumption (kWh) of 240 units per HP or part thereof of contract demand irrespective of whether any energy is consumed or not during the year.
  - iii. The consumer shall be billed monthly minimum 10 units per HP per month in rural area and 20 units per HP per month in urban area in case the actual consumption is less than above specified units.
  - iv. Method of billing of minimum charges shall be as given in the General Terms and Conditions of Low Tension tariff.
- (d) **Additional Charge for Excess Demand:** Shall be billed as given in the General Terms and Conditions of Low Tension Tariff.
- (e) **Other Terms and conditions for seasonal consumers:**
- i. Season shall mean continuous period upto 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.
- (f)** Other terms and conditions shall be as specified under General Terms and Conditions of Low Tension Tariff.



## **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:**

<b>S. No.</b>	<b>Sub-Category</b>	<b>Monthly Fixed charges (Rs. per HP)</b>	<b>Energy charges (paise per unit)</b>
<b>LV- 5.1</b>			
a) (i)	First 300 units per month	58	479
(ii)	Above 300 units up to 750 units in the month	74	582
(iii)	Rest of the units in the month	81	610
b)	Temporary connections	81	610
c)	DTR metered group consumers	Nil	459
<b>LV-5.2</b>			
a) (i)	First 300 units per month	58	479
(ii)	Above 300 units up to 750 units in the month	74	582
(iii)	Rest of the units in the month	81	610
b)	Temporary connections	81	610
<b>LV-5.3</b>			
a)	Up to 25 HP in urban areas	118 per HP	535
b)	Up to 25 HP in rural areas	88 per HP	518
c)	Demand based tariff (Contract demand up to 150 HP) (Mandatory above 25 HP) in urban areas	272 per kW or 217 per kVA of billing demand	610
d)	Demand based tariff (Contract demand up	145 per kW or 116 per	610

S. No.	Sub-Category	Monthly Fixed charges (Rs. per HP)	Energy charges (paise per unit)
	to 150 HP) (Mandatory above 25 HP) in rural areas	kVA of billing demand	
<b>LV-5.4</b>		See para 1.2 of terms & conditions	

**Note: 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.**

**Terms and Conditions:**

- 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:

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

- 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 Area	Rural Area
Type of Pump/ Motor		
Three Phase	220	195
Single Phase	230	205

- 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 –

S. No.	Particulars of Energy Saving Devices	Rate of rebate
1.	ISI / BEE star labeled motors for pump sets	15 paise per unit
2.	ISI / BEE star labeled 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 Minimum Charges

- (i) **For Metered agricultural consumers (LV-5.1 and LV-5.2):** The consumer shall pay a minimum charge based on consumption of 30 units per HP or part thereof of connected load per month for the months from April to September and 90 units per HP or part thereof of connected load per month for the months from October to March irrespective of whether any energy is consumed or not during the month.

(ii) **For other than agricultural use (LV-5.3):**

- a) The consumer shall pay a minimum annual charge based on consumption (kWh) of 180 units/HP or part thereof of contract demand in notified rural areas and 360 units/HP or part thereof of contract demand in urban areas irrespective of whether any energy is consumed or not during the year.
- b) The consumer shall be billed monthly minimum 15 units per HP per month in rural area and 30 units per HP per month in urban area in case the actual consumption is less than monthly minimum consumption (kWh).
- c) **Method of billing of minimum consumption** shall be as given in the General Terms and Conditions of Low Tension Tariff.

1.7 **Additional Charge for Excess Demand:** Shall be billed as given in the General Terms and Conditions of Low Tension Tariff.

1.8 **Delayed payment surcharge** in case of agriculture consumers on LV - 5.4 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.

1.9 **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.

1.10 One CFL/ LED lamp up to 20 Watt is permitted at or near the pump in the power circuit.

1.11 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.

1.12 Other terms and conditions shall be as specified under General Terms and Conditions of Low Tension Tariff.

**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.

**Applicable Tariff:**

<b>Category</b>	<b>Monthly Fixed Charges</b>	<b>Energy Charge (Paise/unit)</b>
Electric Vehicle/ Rickshaw charging installations	Rs 100 per kVA or 125 per kW of Billing Demand	600

- a) **Additional Charge for Excess demand:** Shall be billed as given in General Terms and Conditions of Low Tension tariff.
- b) For the consumers in this category, demand based tariff is mandatory.
- c) Other terms and conditions shall be as specified under General Terms and Conditions of Low Tension Tariff.

## **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. 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.
3. 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.
4. 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.
5. **Method of billing of Minimum Charges:**
  - A. **For metered agricultural consumers and other than agricultural consumers horticulture activity - LV 5.1 and LV 5.2:** For recovering minimum charges the consumer shall be billed minimum monthly consumption (kWh) specified for his category for the month in which his actual consumption is less than prescribed minimum consumption.
  - B. **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

**6. 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 the 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 rate of 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 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 the following, for the period for which the use of excess load is determined in condition i) above:

1. **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.

2. **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.

## 7. Incentives/Rebates:

**(a) Rebate on advance payment:** For advance payment made before commencement of consumption period for which bill is prepared, a rebate of 1 % per month on the amount (excluding security deposit) which remains with the Distribution Licensee at the end of billing month 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 arrears, 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:** Rebate of 0.50% on the total bill amount maximum up to Rs 20 and minimum of Rs 5 will be applicable for making online payment of bill.

Provided that the consumers covered under LV-1: Domestic, shall be eligible for rebate of 0.50%, without any ceiling on maximum rebate amount.

(d) **Load Factor incentive:** Following slabs of incentive shall be allowed for consumers billed under demand based tariff:

Load factor	Concession in energy charges
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:

$$\text{Load factor (\%)} = \frac{\text{Monthly consumption X 100}}{\text{No. of hours in the billing month X Demand (KW)}}$$

- 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 the consumer (other than LV-1: Domestic Consumer) is equal to or more than 85%, incentive shall be payable as follows:

<b>Power Factor</b>	<b>Percentage incentive payable on billed energy charges</b>
Above 85% up to 86%	0.5
Above 86% up to 87%	1.0
Above 87% up to 88%	1.5
Above 88% up to 89%	2.0
Above 89% up to 90%	2.5
Above 90% up to 91%	3.0
Above 91% up to 92%	3.5
Above 92% up to 93%	4.0
Above 93% up to 94%	4.5
Above 94% up to 95%	5.0
Above 95% up to 96%	6.0
Above 96% up to 97%	7.0
Above 97% up to 98%	8.0
Above 98% up to 99%	9.0
Above 99%	10.0

For this purpose, the “average monthly power factor” is defined as the ratio in percentage of total kilowatthours to the total kilovoltampere hours recorded during the month.

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.**

**8. 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 112kW / 150 HP except where a higher limit is specified 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 as stated in Schedule of Miscellaneous 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 (Revision-I), 2009 and its amendments thereof shall also be applicable.
- (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):

**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>
Below 80% up to 79%	1%
Below 79% up to 78%	2%
Below 78% up to 77%	3%
Below 77% up to 76%	4%
Below 76% up to 75%	5%
Below 75% up to 74%	6.25%
Below 74% up to 73%	7.50%
Below 73% up to 72%	8.75%
Below 72% up to 71%	10.00%
Below 71%	10.00%

In case of billing or credit of minimum consumption such surcharge shall be billed with respect to energy actually consumed during the month.”

- 2. For the consumer whose meter is not capable of recording average power factor:** 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. This provision shall not be applicable to that category where the levy of delayed payment surcharge has been prescribed separately.
- (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.

**9. 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 according to the charges specified in the order of the Commission regarding Schedule of Miscellaneous Charges.

- (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 112kW / 150 HP.
- (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.
- (e) Connection and disconnection charges and other miscellaneous charges shall be paid separately as may be specified in the Schedule of Miscellaneous Charges.
- (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.

**10.** Green Energy Tariff of Rs. 1.13/ kWh, which is over and above the normal tariff of the respective category as per this Tariff Order, be levied to consumers opting for meeting their demand by 100% Renewable Energy from Distribution Licensee.

**11.** 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.

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## **Annexure-3 (Tariff Schedules for High Tension Consumers)**

### **ANNEXURE TO THE TARIFF ORDER PASSED BY MPERC FOR FINANCIAL YEAR 2022-23**

**MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION**

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**Tariff Schedule - HV - 1****RAILWAY TRACTION:****Applicability:**

This Tariff shall apply to the Railways for Traction loads only.

**Tariff:**

S. No.	Category of consumer	Monthly Fixed Charge (Rs. per kVA of billing demand per month)	Energy Charge (paise / unit)
1	Railway Traction on 132 kV / 220 kV	310	590

**Note: A rebate of Rs. 2 per Unit in energy charges is applicable. This rebate shall be applicable up to FY 2022-23.**

**Specific Terms and Conditions:**

- (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 2022-23 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 1500 units (kWh) 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. 341 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. 465 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 the consumer falls below 90 percent, 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 the consumer falls below 85 percent, 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 total amount of bill under the head of “Energy Charge”. This penalty shall be 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” is defined as the ratio expressed in percentage of total kilowatthours recorded to the total kilovoltampere hours recorded during the billing month. This ratio (%) shall be rounded off to the nearest integer figure and the fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored.
- iv. Notwithstanding what has been stated above, if the average power factor of a new connection of the consumer is found to be less than 90% 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 less than 90%.
  - 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 less than 90% at any time during 6 months from the date of connection. Thereafter, the charges on account of low average power factor, if found less than 90%, 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.
-

**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	Monthly Fixed Charge (Rs./kVA of billing demand per month)	Energy Charge for consumption up to 50% load factor (paise / unit)	Energy Charge for consumption in excess of 50% load factor (paise / unit)
<b>Coal Mines</b>			
11 kV supply	690	736	650
33 kV supply		728	629
132 kV supply		708	608
220 kV supply		686	586

**Specific Terms and Conditions:**

- a. **Minimum Charges based on Consumption** shall be on the following basis:

Supply Voltage	Annual minimum consumption in units (kWh) per kVA of contract demand
<i>For supply at 220 / 132 kV</i>	1620
<i>For supply at 33 / 11 kV</i>	1200

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 Surcharge / Rebate:** This surcharge/ rebate shall be 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.

## **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

**Tariff:**

S. No.	Sub-Category of consumer	Monthly Fixed Charge (Rs./kVA of billing demand per month)	Energy Charge for consumption up to 50% load factor (paise / unit)	Energy Charge for consumption in excess of 50% load factor (paise / unit)
<b>3.1</b>	<b>Industrial</b>			
	11 kV supply	372	720	620
	33 kV supply	597	716	611
	132 kV supply	682	675	576
	220/400 kV supply	682	630	530
<b>3.2</b>	<b>Non-Industrial</b>			
	11 kV supply	337	755	665
	33 kV supply	485	738	640
	132 kV supply	575	690	580
<b>3.3</b>	<b>Shopping Malls</b>			
	11 kV supply	345	735	660
	33 kV supply	400	725	620
	132 kV supply	530	675	600
<b>3.4</b>	<b>Power intensive industries</b>			
	33 kV supply	608	550	550
	132 kV supply	742	526	526
	220 kV supply	742	520	520

**Specific Terms and Conditions:**

- (a) **Minimum Charges based on Consumption** for all the above categories shall be on following basis:

Supply Voltage	Sub- category	Annual minimum consumption in units (kWh) per kVA of contract demand
For supply at 220/132 kV	Rolling Mills	1200
	Educational institutions	720

Supply Voltage	Sub- category	Annual minimum consumption in units (kWh) per kVA of contract demand
	Others	1800
For supply at 33 / 11 kV	Educational institutions	600
	Contract demand up to 100 kVA	600
	Others	1200

**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 Surcharge / Rebate:** This surcharge/ rebate shall be 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 upto FY 2022-23 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 through their captive power plants located in Madhya Pradesh.
- ii. The rebate shall be applicable upto FY 2022-23 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 2022-23) 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:-

	Base Year		Current Financial Year		Incremental Consumption from DISCOM	Reduction in Captive Generation	Units eligible for Rs 1/unit rebate in energy charges as per Clause (d) of specific terms & conditions	Units eligible for Rs 2/ Unit rebate on incremental units
	Consumption from DISCOM (Units)	Captive Generation Units	Consumption from DISCOM (Units)	Captive Generation (Units)	Units	Units	Units	Units
	(A1)	(B1)	(A2)	(B2)	$X = A2 - A1$	$Y = B1 - B2$		
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, 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 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 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 2021-22).
- 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 2022-23) compared to the same month in last year (FY 2021-22).
- iii. The rebate shall be applicable from the date of request submitted by the consumer to the Licensee during FY 2022-23.
- 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.

	FY 2021-22		FY 2022-23		Incremental Consumption from DISCOM $X = A2 - A1$	Reduction in OA units $Y = B1 - B2$	Applicable units for rebate as per clause (d) of specific terms & conditions	Rs 1/unit rebate on incremental units of Open Access
	Consumption from DISCOM (A1)	Wheeled Units (B1)	Consumption from DISCOM (A2)	Wheeled Units (B2)				
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 Rs 1 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 2022-23. The rebate is applicable for FY 2022-23 for the units billed only after the commencement of HT Agreement during FY 2022-23.

**(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.

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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:**

Category of consumers	Monthly Fixed Charge (Rs./kVA of billing demand per month)	Energy Charge for consumption up to 50% load factor (paise / unit)	Energy Charge for consumption in excess of 50% load factor (paise / unit)
<b>During Season</b>			
11 kV supply	392	708	602
33 kV supply	434	688	583
<b>During Off-Season</b>			
11 kV supply	Rs. 392 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
33 kV supply	Rs. 434 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

#### **Specific Terms and Conditions:**

- a) Season shall mean continuous period upto 6 months with a ceiling of 185 days and minimum period of 3 months.
- b) Period other than the declared season shall be considered as the off season period.
- c) 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.

- d)** 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 900 units (kWh) 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
  - h)** **Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be 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 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	Monthly Fixed Charge (Rs. / kVA of billing demand per month)	Energy Charge (paise per unit)
11 kV supply	372	610
33 kV supply		596
132 kV & above supply		556

**Specific Terms and Conditions:**

- (a) **Annual Minimum Charge shall be based on Consumption** of 720 units (kWh) 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 Surcharge / Rebate:** This surcharge/ rebate shall be 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.

**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/Commercial 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.	Category of consumers	Monthly Fixed Charge (Rs. / kVA of billing demand per month)	Energy Charge for consumption up to 50% load factor (paise / unit)	Energy Charge for consumption in excess of 50% load factor (paise / unit)
<b>1</b>	<b>For Tariff Sub-Category 6.1</b>			
	11 kV supply	352	637	572
	33 kV supply		622	552
	132 kV supply		600	530
<b>2</b>	<b>For Tariff Sub-Category 6.2</b>			
	11 kV supply	230	637	572
	33 kV supply		622	552
	132 kV supply		555	515

**Specific Terms and Conditions:**

- (a) **Annual Minimum Charges shall be based on Consumption** of 780 units (kWh) 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) 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	Energy Charge (Paise/unit)
For all Voltage levels of HV category	978

**Terms and Conditions:**

- (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:**

<b>Category</b>	<b>Monthly Fixed Charges</b>	<b>Energy Charge (Paise/unit)</b>
HT Supply	Rs 100 per KVA of Billing Demand	590

**Terms and Conditions:**

- a) **Additional Charge for Excess demand:** Shall be billed as given in General Terms and Conditions for High Tension tariff.
  - b) Other terms and conditions shall be as specified under General Terms and Conditions for 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 Character of Service: The character of service shall be as per the Madhya Pradesh Electricity Supply Code, 2021 as amended from time to time.
- 1.3 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.
- 1.4 **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.
- 1.5 **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 1.15 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

**1.6 Minimum charges shall be billed as follows:**

- 1) The consumer shall be billed for annual minimum charges based on consumption (kWh) number of units per kVA of contract demand specified for his 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 (kWh) specified for his category each month in case the actual consumption is less than above mentioned 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 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

- 1.7 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****1.8 Power Factor Incentive:**

Power factor incentive shall be payable as follows:

<b>Power Factor</b>	<b>Percentage incentive payable on billed energy charges on the basis of energy actually consumed</b>
Above 95% and up to 96%	1.0 (one percent)
Above 96% and up to 97%	2.0 (two percent)
Above 97% and up to 98%	3.0 (three percent)
Above 98 % up to 99%	5.0 (five percent)
Above 99 %	7.0 (seven percent)

**1.9 Load factor calculation**

1) The **Load Factor** shall be calculated as per the following formula:

$$\text{Load Factor (\%)} = \frac{\text{Monthly consumption X 100}}{\text{No. of hours in the billing month X Demand (KVA) X PF}}$$

- Monthly consumption shall be units (kWh) consumed in the month excluding those received from sources other than Licensee.
- No. of Hours in billing month shall exclude period of scheduled outages in hours.
- Demand shall be maximum demand recorded or contract demand whichever is higher.
- Power factor shall be 0.9 or actual monthly power factor 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.

**1.10 Incentive for advance payment:** For advance payment made before commencement of consumption period for which bill is prepared, an incentive of 1 % per month on the amount which remains with the licensee at the end of calendar month (excluding security deposit) shall be credited to the account of the consumer after adjusting any amount payable to the licensee.

**1.11 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.

- 1.12 **Prompt payment incentive:** An incentive for prompt payment @0.25% of bill amount (excluding arrears, 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.
- 1.13 **Time of Day (ToD) Surcharge / Rebate:** This scheme is applicable to categories of consumers for which applicability of ToD/ Rebate is expressly mentioned in the tariff order. This is applicable for different periods of the day i.e. normal period, peak load and off-peak load period. The surcharge / rebate on energy charges according to the period of consumption shall be as per following table:

Sr. No	Peak / Off-peak Period	Surcharge / Rebate on energy charges on energy consumed during the corresponding period
<b>Months</b>	<b>April to October</b>	
1.	Normal hours (i.e. Hours excluding Off peak hours)	Normal rate of Energy Charge
2.	Off peak load period (10 PM to 6 AM next day)	10 % of Normal rate of Energy Charge as Rebate
<b>Months</b>	<b>November to March</b>	
1.	Normal hours (i.e. Hours excluding Off peak hours)	Normal rate of Energy Charge
2.	Off peak load period (10 PM to 6 AM next day)	20 % of Normal rate of Energy Charge as Rebate

**Note:** Fixed charges shall always be billed at normal rates i.e. ToD Surcharge / Rebate shall not be applied on Fixed Charges

- 1.14 **Power Factor Penalty (For consumers other than Railway Traction HV-1)**
- (i) If the average monthly power factor of the consumer falls below 90 percent, 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 total amount of bill under the head of “Energy Charges”:
  - (ii) If the average monthly power factor of the consumer falls below 85 percent, 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 total 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 below 70%, 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) For this purpose, the “average monthly power factor” is defined as the ratio expressed in percentage of total kilowatthours to the total kilovoltampere hours recorded during the billing month. This ratio (%) shall be rounded off to the nearest integer figure and the fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored.

Power Factor penalty shall be billed on the basis of energy actually consumed during the month.

- (v) Notwithstanding what has been stated above, if the average monthly power factor of a new consumer is found to be less than 90% 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:
- a) This period of six months shall be reckoned from the month following the month in which the average power factor was found for the first time to be less than 90%.
- b) In all cases, the consumer will be billed the penal charges for low power factor, but in case the consumer maintains the average monthly 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.
- c) The facility, as mentioned herein, shall be available not more than once to new consumer whose average monthly power factor is less than 90% in any month during 6 months from the date of connection. Thereafter, the charges on account of low average power factor, if found less than 90%, shall be payable as applicable to any other consumer.

#### **1.15 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.
- 1.16 **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.
- 1.17 All the rebates/incentives shall be calculated on amount excluding Government Subsidy.

1.18 **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.

1.19 **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 calendar month.

(b) The consumer shall ensure minimum consumption (kWh) 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 1.15 above.
- (g) Power factor incentives/penalties and 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:**

- 1.20 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.
- 1.21 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.
- 1.22 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.
- 1.23 No Metering Charges shall be levied.
- 1.24 Green Energy Tariff of Rs. 1.13/ kWh, which is over and above the normal tariff of the respective category as per this Tariff Order, be levied to consumers opting for meeting their demand by 100% Renewable Energy from Distribution Licensee.
- 1.25 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.

- 1.26 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.
- 1.27 In case a consumer, at his request, avails supply at a voltage higher than the standard supply voltage as specified under relevant category, he shall be billed at the rates applicable for actually availed supply voltage and no extra charges shall be levied on account of higher voltage.
- 1.28 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.
- 1.29 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.
- 1.30 All conditions prescribed herein shall be applicable notwithstanding if any contrary provisions, exist in the agreement entered into by the consumer with the licensee.
- 1.31 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.
- 1.32 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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