MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

5th Floor, Metro Plaza, Bittan Market, Bhopal - 462 016

AGGREGATE REVENUE REQUIREMENT AND RETAIL SUPPLY TARIFF ORDER FOR FY 2023-24

Petition No. 84/2022

PRESENT:

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

IN THE MATTER OF:

Determination of Aggregate Revenue Requirement (ARR) and Retail Supply Tariff for FY 2023-24 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
CUF	Capacity Utilisation Factor
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	Deviation Settlement Mechanism
DTR	Distribution Transformer
DVC	Damodar Valley Corporation
EHT	Extra High Tension
ER	Eastern Region
FPPAS	Fuel and Power Purchase Adjustment Surcharge
FCA	Fuel Cost Adjustment
FY	Financial Year
GFA	Gross Fixed Asset
GoI	Government of India
GoMP	Government of Madhya Pradesh
GPP	Gas Power Plant
GST	Goods and Services Tax
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 or MP Transco	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
RSD	Reserve Shut Down
RDSS	Revamped Distribution Sector Scheme
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
TMM	Technical Minimum
ToD	Time of Day
TPS	Thermal Power Station
TP	Tariff Policy
UDAY	Ujwal DISCOM Assurance Yojana
UMPP	Ultra Mega Power Plant
UI	Unscheduled Interchange
VAT	Value Added Tax
WR	Western Region
WRPC	Western Regional Power Committee

A1: ORDER

(Passed on this 28th Day of March, 2023)

1.1 This order is in response to the Petition No. 84 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 and amendments thereof {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. 84 of 2022 on 30th November, 2022. The motion hearing on the Petition was held by the Commission on 06th December, 2022, vide which the Commission admitted the Petition and directed the Petitioners to submit draft public notice for approval of the Commission.

1.3 The Commission vide letter dated 22nd December, 2022 sought clarification/ information to fill data gaps, based on the scrutiny of the Petition. Thereafter, the Commission vide letter dated 28th December, 2022 received communications from Petitioners for extension of time by 15 days for submission of additional information and reply to fill data gaps. The Commission vide letter dated 03rd January, 2023 allowed 7 days additional time for furnishing the additional information to fill data gaps.

1.4 The Petitioners submitted the consolidated response to fill data gaps by way of clarifications and additional information vide letter dated 13th January, 2023. The Petitioners furnished another submission vide letter dated 28th February, 2023 relating to Metro Rail Tariff, Wheeling Charges, Peak ToD Slots and Green Energy Tariff.

1.5 The Commission vide letter dated 21st December, 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. 84 of 2022) by 16th January, 2023. Accordingly, the Petitioners published the public notice in the following newspapers as shown in the table below:

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

Newspaper	Language
Dainik Bhaskar, Jabalpur	Hindi
Dainik Bhaskar, Sagar	Hindi
Deshbandhu, Satna	Hindi
Hitvada, Jabalpur	English
Nai Duniya, Indore	Hindi
Times of India, Indore	English
Peoples Samachar, Bhopal	Hindi
Dainik Bhaskar, Bhopal	Hindi
Navbharat, Gwalior	Hindi
Raj Express, Gwalior	Hindi
Times of India, Bhopal	English

1.6 In response to public notice, the Commission received 132 comments (East DISCOM: 44 Nos., West DISCOM: 63 Nos., Central DISCOM: 25 Nos.) from different stakeholders. The Commission scheduled Public Hearings on 23rd January, 2023 for East DISCOM, 24th January, 2023 for West DISCOM and 25th January, 2023 for Central DISCOM through video conferencing and heard the objections/comments/suggestions of stakeholders.

1.7 Details of objections/suggestions/comments received and response thereon from the Petitioners alongwith views of the Commission are given in Chapter '**A8: Public Objections/ suggestions and Comments on Petition'** of this order.

Disclaimer for Rounding

1.8 In this Order certain numbers as a whole, upto several decimal places have been rounded up or down. Therefore, there may be discrepancies between the totals of the individual numbers shown in the tables upto 2 decimal places and numbers given in the corresponding analyses in the text of this order.

Snapshot of Petition

1.9 The Petitioners through instant Petition have submitted the Revised ARR for FY 2023-24 and tariff proposal for FY 2023-24. The Petitioners have prayed to approve the net ARR of Rs 49,530 Crore and the revenue gap of Rs. 1,537 Crore for FY 2023-24 and to recover the same through a tariff hike of 3.20%. Summary of the Tariff proposal as submitted by the Petitioners for FY 2023-24 is as follows:

Table 2 : Summary of Tariff proposal for FY 2023-24 as submitted by Petitioners (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Aggregate Revenue Requirement	13,820.73	19,328.69	16,380.40	49,529.81
Revenue from sale of power as per existing tariff	13,395.46	18,726.88	15,869.98	47,992.32
Revenue Gap for FY 2023-24	**425.26**	**601.81**	**510.42**	**1,537.49**

State Advisory Committee

1.10 The Commission convened a meeting of State Advisory Committee (SAC) on 30th January, 2023 through video conferencing. SAC members provided 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. The Commission has taken due cognisance of these issues while determining the ARR and Tariff for FY 2023-24.

Energy Accounting, Meterisation and technical & commercial loss reduction

1.11 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 level 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 unmetered Domestic Rural connections upto the level of 8.41% and 13.61%, 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 and 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, 2022 is given below:

Table 3: 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	33,43,261	2,81,139	8.41%
West DISCOM	23,03,806	22,123	0.96%
Central DISCOM	20,29,150	2,76,244	13.61%
State	**76,76,217**	**5,79,506**	**7.55%**

Table 4: 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	1,11,890	11,909	10.64%
West DISCOM	1,95,584	36,231	18.52%
Central DISCOM	2,86,057	64,139	22.42%
State	**5,93,531**	**1,12,279**	**18.92%**

1.12 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.

1.13 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 on Distribution losses. The Commission desires that the DISCOMs should perform energy audit on the agriculture DTRs where the meters have already been installed. DISCOMs are also identified as designated consumers under Perform, Achieve and Trade (PAT) scheme within the framework of Energy Conservation Act, 2001. DISCOMs are required to conduct energy audit as per Bureau of Energy Efficiency (BEE) (Manner and Intervals for Conduct of Energy Audit in Electricity Distribution Companies) Regulations, 2021. It is expected that East and Central DISCOMs will also take all measures to comply with energy audit requirements laid down under the Energy Conservation Act, 2001.

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 2022-23 to FY 2026-27 is given in the following table:

Table 5: Distribution Loss Trajectory specified in the Regulations

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

1.15 Against the aforesaid targets, the actual loss level for FY 2021-22 reported by the DISCOMs in the Tariff Petition is as follows:

Table 6: Actual Distribution Loss for FY 2021-22

DISCOMs	FY 2021-22
East DISCOM	27.40%
West DISCOM	11.61%
Central DISCOM	24.67%

1.16 The Commission appreciates the performance of West DISCOM for achieving lower Distribution losses in comparison with the loss trajectory specified by the Commission. On the other hand, it is observed that the loss levels 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 had 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. The Commission had admitted the capital investment schemes of the DISCOMs in the past years for reduction of losses. 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 desired levels.

1.18 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 feeders 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 for 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 the need to implement a concrete program to achieve the targeted loss level in a time bound manner for making the DISCOMs financially viable.

1.19 The Commission has noted that the Government of India has launched Revamped Distribution Sector Scheme (RDSS) with an objective of improving quality, reliability and affordability of Power Supply to consumers through a financially sustainable and operationally efficient distribution sector. The scheme has targeted to reduce AT&C losses to pan-India levels of 12-

15% and to reduce ACS & ARR gap to zero by FY 2024-25. This scheme is reforms based and result linked. DISCOMs of the State are participating in the scheme and committed to reduce AT&C losses as per prescribed targets under the approved Scheme for Madhya Pradesh in a time bound manner. The Commission has admitted the capital investment plan under RDSS and directed the Petitioners that outcome of the capital investment under RDSS be monitored closely and that envisaged results through capital investment are met in a timely manner.

Aggregate Revenue Requirement of DISCOMs

1.20 The Commission has determined the revised ARR and Retail Supply Tariff for FY 2023-24 for the DISCOMs in this order as shown below in the table:

Table 7: ARR admitted by the Commission for FY 2023-24 (Rs. Crore)

Particulars	East DISCOM		West DISCOM		Central DISCOM		State	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Power Purchase Cost including Inter-State Transmission Charges	7,694.38	9,163.32	16,855.22	14,743.63	10,472.32	11,737.90	35,021.92	35,644.84
Intra-State Transmission including SLDC Charges	1,288.68	1,290.73	1,543.98	1,544.05	1,502.35	1,504.67	4,335.01	4,339.45
O&M Expenses	1,907.31	1,875.67	1,812.03	1,744.43	1,801.31	1,828.55	5,520.64	5,448.66
Depreciation	295.86	241.02	345.77	141.99	395.36	276.97	1,036.98	659.98
Interest & Finance Charges								
On Project Loans	281.95	281.10	145.45	148.94	348.39	366.90	775.78	796.95
On Working Capital Loans	78.28	68.43	17.15	10.58	39.51	57.81	134.95	136.81
On Consumer Security Deposit	53.19	42.83	68.29	85.25	58.26	59.09	179.73	187.17
Return on Equity	234.51	231.54	174.91	172.41	277.25	270.16	686.67	674.11
Bad & Doubtful Debts	2.00	0.00	2.00	0.00	2.00	0.00	6.00	0.00
Total Expenses Admitted	**11,836.16**	**13,194.64**	**20,964.78**	**18,591.27**	**14,896.74**	**16,102.06**	**47,697.68**	**47,887.97**
Less: Other income and Non-Tariff Income	186.01	132.98	202.80	147.66	183.31	142.65	572.12	423.29
Total ARR Admitted	**11,650.15**	**13,061.66**	**20,761.98**	**18,443.60**	**14,713.43**	**15,959.42**	**47,125.57**	**47,464.68**
Revenue at Existing Tariff	13,395.46	13,265.45	18,726.88	18,731.47	15,869.98	16,200.87	47,992.32	48,197.80
Revenue Gap/(Surplus) at Existing Tariff	**(1,745.32)**	**(203.79)**	**2,035.11**	**(287.87)**	**(1,156.54)**	**(241.45)**	**(866.76)**	**(733.12)**

1.21 From above, it can be observed that the Commission has admitted standalone ARR (excluding true up of previous years) of Rs. 47,464.68 Crore for FY 2023-24 against the Petitioners claim of Rs. 47,125.57 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 and amendments thereof. 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 2023-24 at existing tariff is Rs. 48,197.80 Crore. Accordingly, on standalone basis for FY 2023-24, the DISCOMs are in revenue surplus of Rs. 733.12 Crore. The Commission has recently approved following True Ups Order for MPPGCL, MPPTCL and DISCOMs as follows:

(i) Revenue Gap of Rs. 1,648.21 Crore in True Up of ARR of FY 2021-22 of DISCOMs approved vide order dated 20th March, 2023.

(ii) Revenue Gap of Rs.762.11 Crore in True Up of ARR of FY 2021-22 of MP Power Transmission Company Ltd. approved vide order dated 07th March, 2023.

(iii) Revenue Surplus of Rs. 1,026.52 Crore in True Up of ARR of FY 2020-21 of MP Genco approved vide order dated 30th December, 2022.

1.22 These true-up amounts (Surplus/Gap) have been admitted by the Commission after carrying out due diligence and the same needs to be considered while approving ARR and tariff for FY 2023-24 to enable recovery of the same for DISCOMs. Therefore, considering the above true ups, the revenue gap at existing tariff for FY 2023-24 works out as Rs.794.87 Crore. In order to allow recovery of the same, the Commission in this Order has allowed a tariff hike of 1.65% against the Petitioners claim of 3.20%.

1.23 The ARR admitted for the DISCOMs for FY 2023-24, Revenue at Existing Tariff and Proposed/Admitted Tariff is shown in the following table:

Table 8: ARR admitted and Revenue at Existing/Approved Tariff for FY 2023-24 (Rs. Crore)

Particulars	East DISCOM		West DISCOM		Central DISCOM		State	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Total ARR (excluding True-up)	**11,650.15**	**13,061.66**	**20,761.98**	**18,443.60**	**14,713.43**	**15,959.42**	**47,125.57**	**47,464.68**
Revenue Gap of MP Transco True-up of FY 2020-21	72.98	72.98	22.25	22.25	48.96	48.96	144.19	144.19
Revenue Surplus of MP Genco True-up of FY 2020-21	(338.61)	(342.17)	(338.61)	(342.17)	(338.61)	(342.17)	(1,015.83)	(1,026.52)
Revenue Gap of MP DISCOMs True-up of FY 2021-22	2,436.21	455.58	(1,116.94)	635.80	1,956.61	556.83	3,275.88	1,648.21
Revenue Gap of MP Transco True-up of FY 2021-22	-	232.50	-	284.08	-	245.53	-	762.11
Total ARR (including True-up)	**13,820.73**	**13,480.54**	**19,328.69**	**19,043.56**	**16,380.39**	**16,468.57**	**49,529.81**	**48,992.66**
Revenue at Existing Tariff	13,395.46	13,265.45	18,726.88	18,731.47	15,869.98	16,200.87	47,992.32	48,197.80
Revenue Gap at Existing Tariff	**425.26**	**215.09**	**601.81**	**312.09**	**510.42**	**267.69**	**1,537.49**	**794.87**
Revenue at Proposed Tariff	13,820.73	13,480.54	19,328.69	19,043.56	16,380.39	16,468.57	49,529.81	48,992.66
Revenue Gap/(Surplus) at Proposed Tariff	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

1.24 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 2021-22, the Petitioner had claimed revenue gap of Rs. 3,275.88 Crore. However, the Commission after exercising prudence check of the said claim and considering the stakeholders observations has admitted revenue gap of Rs. 1,648.21 Crore, thereby disallowing expenses towards inefficiency of the DISCOMs.

1.25 The Licensees are 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.

1.26 In case of grant of tariff subsidy by the State Government 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.

1.27 The Commission through 1st Amendment to MYT Regulations, 2021 has specified mechanism for recovery of Fuel and Power Purchase Adjustment Surcharge (FPPAS) on monthly basis so that uncontrollable costs on account of variations in the fuel and power purchase charges are adjusted/recovered timely in accordance with the provisions of the Electricity Act, 2003.

1.28 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 The Commission in this order has determined the Green Energy Charges for consumers availing Green Energy from Distribution Licensee only for the purpose of reducing their carbon footprint and seeking Certification to this effect. Besides, Tariff has been determined for Green Energy for consumers availing Green Energy from Distribution Licensee as per MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof.

1.30 In compliance to 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

1.31 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.

1.32 The detailed order provides for the grounds and reasons of determining the ARR, discusses the functional and financial performance of three DISCOMs and includes a section dealing with the status report on compliance of the Commission's Directives as well as responses of the Distribution Licensees thereto along with the Commission's observations on the suggestions/objections/comments received from various stakeholders on 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 tariff schedules annexed with (Annexure-2 and Annexure-3) 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/-	**Sd/-**
(Gopal Srivastava)	**(S.P.S. Parihar)**
Member (Law)	**Chairman**

Date: 28th March, 2023
Place: Bhopal

A2: AGGREGATE REVENUE REQUIREMENT FOR PETITIONERS

Sales Forecast

Sales forecast as submitted by the Petitioners

2.1 For projection of sales for FY 2023-24, the Petitioners have considered the past growth trends for each consumer category as historical trend method has proved to be reasonably accurate and well accepted method for estimating the load, number of consumers and energy consumption. Further, submitted that as per Regulation 25.1 of MYT Regulations, 2021 category wise and slab wise sales are to be determined based on the actual/audited data of the preceding three years. However, the preceding three years include COVID-19 year as well. Hence, in order to normalize the abnormal effect of COVID-19 on sales projections, the Petitioners have taken preceding five years data, i.e., form FY 2017-18 to FY 2021-22 and the sales data of FY 2022-23 up to the month of August 2022.

2.2 Accordingly, category and slab wise actual data of the sale of electricity, number of consumers, connected / contracted load, etc. as per the annual R-15 statement corresponding to said period are taken and Compounded Annual Growth Rates (CAGR) of sales have been computed from the past sales for each category and sub-category. The approach being followed by the Petitioners is as follows:-

(a) Analyse 5-year, 4-year, 3-year and 2-year CAGRs and Year-on-Year growth rate in Number of Consumers, Sales and Demand of each category and its sub-categories in respect of Urban & Rural consumers separately

(b) After analysis of the data, appropriate / reasonable growth rates have been assumed for future consumer forecasts from the past CAGRs of the Category/Sub-category by the three DISCOMs.

(c) During the analysis, if an abnormal growth rate (high or low), relative to the current trend is observed, then the same is normalized for the purpose of projection for ensuing year.

(d) In cases where the past data shows a declining trend, a nil growth has been considered.

(e) The growth rate assumed is then applied on sales per consumer / sales per kW and connected load while forecasting the connected load, number of consumers and sales in each category/sub-category.

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

2.4 Details of the category-wise sales as projected by the Petitioners, is given in the table as follows:

Table 9: Category wise sales projected by Petitioners for FY 2023-24 (MU)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
LV-1: Domestic	6,043	6,328	6,599	18,970
LV-2: Non-Domestic	1,281	1,332	1,285	3,897
LV-3: Public Water Works & Street Light	409	536	457	1,402
LV-4 LT Industries	568	792	339	1,699
LV 5: Agriculture and Allied Activities	7,339	11,600	9,755	28,694
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	0.13	0.16	0.18	0.47
LT Total	**15,640**	**20,587**	**18,435**	**54,662**
HV-1: Railway Traction	55.32	-	55.32	110.64
HV-2: Coal Mines	483	-	23	506
HV-3.1: Industrial	2,788	5,422	3,966	12,176
HV-3.2: Non-Industries	308	548	444	1,300
HV-4: Seasonal & Non-Seasonal	9	10	2	21
HV-5: Irrigation, Public Water Works and Other than Agricultural	250	1,244	330	1,149
HV-6: Bulk Residential Users	237	32	155	1823
HV-7: Synchronization and Start-Up Power	1	24	3	28
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	2	17	3	23
HT Total	**4,133**	**7,297**	**4,982**	**16,412**
Total Sales for State	**19,773**	**27,884**	**23,417**	**71,074**

Note :- *As per Additional Submission made by the Petitioners Sales to Metro Rail is projected as 16 MU which has been considered by the Commission.*

Commission's Analysis on Sales forecast

2.5 The Commission has observed that the Petitioners have relied on the actual data pertaining to FY 2017-18 to FY 2022-23 (up to August) for projection of number of consumers, connected load and sales for FY 2023-24. In order to project number of consumers, connected load and sales for FY 2023-24, the Commission has found it appropriate to consider last five years data from FY 2016-17 to FY 2021-22 and FY 2022-23 (up to December).

2.6 Based on the actual data, the Commission has also computed projected connected load per consumer and sales per unit load (kW) and / or demand (kVA) and sales per consumer.

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

- Number of Consumers, Connected load / Contract Demand for FY 2023-24 have been projected based on the analysis of corresponding data of last 5 years and considering the appropriate CAGR.

- In order to have more realistic projections, the Commission has re-assessed the Sales for FY 2022-23 considering 9 months actual data i.e April to December, 2022 and estimated the sales for January to March, 2023 by considering the proportion of actual energy sales in last 3 months (Jan – Mar 2022) with respect to actual energy sales during first nine months of FY 2021-22 (April 2021 to December 2021). Using this average proportion of sales, the Commission has extrapolated the actual energy sales till the month of December 2022 for the full year to assess the revised estimated energy sales for FY 2022-23. Thereafter, the Commission analysed category wise, sub-category wise 5-Year CAGR, 4 Years CAGR, 3 Years CAGR, 2 Years CAGR and Year-on-Year growth rate, compared the same with the growth rates considered by the Petitioners for projections and considered appropriate growth rates for projection of sales for FY 2023-24.

- For Categories LV-6 and HV-8 (Electric Vehicle and Charging Stations), wherein any peculiar trend in growth rates has not been observed, the number of consumers, connected load and sales have been projected as per Petitioners’ submission.

- For HV-1 (Railway Traction) and HV-9 (Metro Rail), Number of consumers, connected load and sales have been considered as proposed by the Petitioners.

2.8 Based on above approach, the sales admitted for FY 2023-24 by the Commission is as follows:

Table 10: Category wise sales admitted by the Commission for State for FY 2023-24 (MUs)

Consumer Categories	East DISCOM	West DISCOM	Central DISCOM	State
LV-1: Domestic	6,185.65	6,579.53	6,605.67	19,370.86
LV-2: Non-Domestic	1,177.36	1,446.49	1,351.83	3,975.68
LV-3: Public Water Works & Street Light	407.09	571.27	489.12	1,467.48
LV-4 LT Industries	483.94	772.88	364.88	1,621.70
LV 5: Agriculture and Allied Activities	7,285.47	11,566.55	10,125.32	28,977.33
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	0.13	0.16	0.18	0.47
LT Total	**15,539.63**	**20,936.88**	**18,937.00**	**55,413.51**
HV-1: Railway Traction	55.32	0.00	55.32	110.64
HV-2: Coal Mines	489.51	0.00	21.52	511.03
HV-3.1: Industrial	2,869.15	3,836.44	3,303.60	10,009.19
HV-3.2: non-Industrial	318.47	485.98	416.51	1,220.96
HV-3.3: shopping malls	9.17	58.05	43.74	110.96
HV-3.4: Power Intensive Industries	98.89	1,547.50	803.32	2,449.72
HV-3: HT Industrial, Non-Industrial and shopping malls	3,295.69	5,927.97	4,567.17	13,790.82
HV-4: Seasonal & Non-Seasonal	9.54	8.32	0.90	18.75
HV-5: Irrigation, Public Water Works and Other than Agricultural	212.68	1,208.69	344.26	1,765.63
HV-6: Bulk Residential Users	249.72	39.83	157.58	447.13

Consumer Categories	East DISCOM	West DISCOM	Central DISCOM	State
HV-7: Synchronization/ Start-Up Power	3.70	31.19	5.44	40.33
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	2.10	17.27	3.35	22.71
HV-9: Metro Rail	0.00	8.09	7.81	15.90
HT Total	**4,318.25**	**7,241.35**	**5,163.35**	**16,722.95**
Total Sales for State (LT + HT)	**19,857.89**	**28,178.23**	**24,100.35**	**72,136.47**

Energy Balance

Petitioners' Submission

2.9 The Petitioners submitted that for projecting the energy requirement for FY 2023-24, annual sales have been converted into monthly sales using the sales profile actually observed in the past five years including FY 2021-22 for each DISCOM.

2.10 Further, the Petitioners submitted that the Commission in the MYT Regulations, 2021 has specified normative distribution loss levels for the MYT period from FY 2022-23 to FY 2026-27. Whereas the actual losses for East, West and Central DSICOM for FY 2021-22 stands at 27.40%, 11.61% and 24.67%, respectively. However, for the instant Petition, the Petitioners have considered normative Distribution Losses only 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 Distribution loss level trajectory specified by the Commission in MYT Regulations, 2021.

2.11 The Intra-State Transmission Losses of 2.63% for FY 2021-22 as reported by MPPTCL to MPPMCL have been considered for FY 2023-24. Further, Inter -State Transmission Losses have been computed as per Regulation 10 of CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 in which it is specified that Inter-State transmission (ISTS) losses shall be calculated on all India average basis for each week. The ISTS losses for FY 2021-22 were 3.42%, on the same basis the Petitioners have considered 3.47% ISTS losses for power stations under the Western, Northern & Eastern Region. which is based on last 52 weeks moving average losses (17th October 2021 – 23rd October 2022) for FY 2023-24.

2.12 Based on the above, the Petitioners have projected energy requirement for FY 2023-24 by grossing up the projected sales by normative distribution losses and projected transmission losses, as shown in the table below:

Table 11: Energy Requirement proposed by Petitioners for FY 2023-24 (MU)

Particulars	Unit	East DISCOM	West DISCOM	Central DISCOM	State
LT	MU	15,640	20,587	18,434	54,662
HT	MU	4,133	7,297	4,982	16,412
Sales	**MU**	**19,773**	**27,884**	**23,417**	**71,074**
Distribution loss	%	15.50%	14.50%	16.50%	15.95%
Distribution loss	MU	3,615	5,215	4,655	13,485
Energy Requirement at DISCOM Boundary	MU	23,388	33,099	28,071	84,559
Intra-State Transmission Losses	%	2.63%	2.63%	2.63%	2.63%
Intra-State Transmission Losses	MU	632	894	758	2,284
Energy Requirement at State Boundary	MU	24,020	33,993	28,829	86,843
Inter-State Transmission Losses	MU	419	592	503	1,513
Ex-Bus Energy Requirement	**MU**	**24,439**	**34,585**	**29,332**	**88,356**

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 FY 2023-24, monthly sales profile which is based on the actual sales profile of last five years, as submitted by the Petitioners, has been considered.

2.14 The distribution loss level trajectory as specified for FY 2023-24 in the MYT Regulations, 2021 is given in the table below:

Table 12: Loss targets as per Regulations (in %)

DISCOMs	FY 2023-24
East	15.50%
West	14.50%
Central	16.50%

2.15 The Commission has considered the distribution losses as specified in the MYT Regulations, 2021 for projecting the energy requirement for FY 2023-24. The Commission has not considered any deviation in the monthly losses as proposed by the Petitioner and has considered the normative losses as specified in the MYT Regulations, 2021 for every month.

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 6th February, 2022 to 30th January 2023 (52-weeks data).

2.17 Intra-State transmission losses have been considered as per actual losses for FY 2021-22 i.e., 2.63% as submitted by MPPTCL in their annual report of regulatory compliance for FY 2021-22.

2.18 The energy balance / Energy requirement computed based on admitted sales and normative losses for FY 2023-24, is shown in the following tables:

Table 13: Energy requirement admitted by the Commission for FY 2023-24

Particular	East DISCOM	West DISCOM	Central DISCOM	State
Total Sales (MU)	19,857.89	28,178.23	24,100.35	72,136.47
Distribution loss (%)	15.50%	14.50%	16.50%	**15.45%**
Distribution loss (MU)	3,642.57	4,778.76	4,762.34	13,183.68
Input at T-D interface (MU)	23,500.46	32,956.99	28,862.69	85,320.15
Intra State Transmission loss (%)	**2.63%**	**2.63%**	**2.63%**	**2.63%**
Intra State Transmission loss (MU)	634.76	890.18	779.59	2,304.53
Input at G-T interface (MU)	24,135.22	33,847.18	29,642.29	87,624.68
Inter State Transmission Losses (MU)	639.74	907.79	776.41	2,323.94
Power Purchase Requirement for FY 2023-24 (MU)	**24,774.95**	**34,754.96**	**30,418.70**	**89,948.62**

Assessment of Energy Availability

Petitioners' Submission

2.19 The Petitioners have assessed availability of energy for the State, on the following basis:

(a) Existing long-term allocated generation capacity of MP

(b) New generation capacity additions during FY 2023-24 for MPPGCL, Central Sector, Joint venture and by Private players awarded through competitive bidding.

(c) Allocation of generation capacity to MP from various Central Generating Stations.

2.20 Further, the petitioners in their additional submission to fill data gaps stated that Petitioners have considered following approach for forecast of Energy Availability: -

(a) New generation capacity additions during FY 2023-24 have been considered as per Power Purchase Agreement.

(b) 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.

(c) The details of chosen Plant Availability Factor (PAF) and Capacity Utilisation Factor (CUF) for various plants are as indicated below:

(i) PAF of MP GENCO Thermal plants have been considered on the basis of past pattern.

(ii) PAF of Central Generating Stations have been considered as 85% for coal based Thermal Power Plants and 60% for Gas based Thermal Power Plants.

(iii) PAF of IPPs has also been considered as 85%, except for BLA power, for which it has been considered at 75%.

(iv) CUF of Solar plants has been considered as 20% and that of Non Solar renewable energy plants has been considered as 19%.

(v) CUF of new renewable sources is considered as mentioned in PPAs.

(vi) PAF of all new thermal power plants has been considered as 85%.

(vii) 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 actual availability during past three to five years data.

(viii) RPO has been considered as per MPERC's Regulations.

(ix) COD of new thermal units has been considered as intimated by concerned developers.

2.21 Allocation of power to MP from Central Generating Stations is as per Western Regional Power Committee letter No. WRPC/Comml-I/6/Alloc/2022/10680 dated 13th October,2022 and from Eastern Region NTPC Kahalgaon-2 as per GoI MoP letter no. 5/31/2006 dated 21st February, 2007 and from Northern Region as per Northern Regional Power Committee letter no. NRPC/OPR/103/02/2022 dated 14th October 2022 and communication held with their concerned offices. Allocation from MP Genco and other sources have been considered based on inputs provided and latest updates from 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. 01st March, 2018 & 15th May, 2017, respectively. Hence, no power is being scheduled from these stations after the said date. However, since September, 2020, power on STOA basis is being scheduled from 100 MW DVC (DTPS) through LOI dated 10th July, 2020. Similarly, LOI for 200 MW from DVC (CTPS) on STOA basis has also been issued on 10th July, 2020. Thus, costs of these plants have also been considered while calculating the power purchase cost for FY 2023-24.

2.23 During FY 2021-22, power from Essar, BLA and Sugen Torrent Generating Stations has been scheduled following MoD whereas in the Tariff Order for FY 2022-23, 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 2022-23. 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 scheduled to commence generation during FY 2023-24 are as follows:

Table 14: Upcoming Stations and Technical Parameters

Sr. No.	Particulars	Capacity (MW)	MP's Share		Energy Availability (MU)	CoD
			(%)	(MW)		
1	NHPC Lower Subanshiri HEP	8x250	5%	104	73	September-2023 (Unit-1 & 2) December-2023 (Unit-3 & 4)

2.25 Following table shows allocated capacity from existing stations as well as the new capacity additions, which are expected to become operational during the FY 2023-24:

Table 15: Allocated stations submitted by the Petitioners for FY 2023-24

Sr. No.	Source	Plant Capacity (MW)	MP's Share in %	MP's Share in MW
1	Amarkantak TPS Ph-III	210	100%	210
2	Satpura TPS Ph-II & III	830	100%	830
3	Satpura TPS Ph-IV	500	100%	500
4	SGTPS Ph-I & II	840	100%	840
5	SGTPS Ph-III	500	100%	500
6	Shri Singaji STPS Phase-I	1,200	100%	1,200
7	Shri Singaji STPS Phase-II	1,320	100%	1,320
A	**Total (MP Genco Thermal-MP Share)**	**5,400**		**5,400**
8	Rani Awanti Bai Sagar, Bargi HPS	90	100%	90
9	Bansagar Ph I HPS (Tons)	315	100%	315
10	Bansagar Ph-II HPS (Silpara)	30	100%	30
11	Bansagar Ph-III HPS (Deolond)	60	100%	60
12	Bansagar Ph-IV HPS (Jhinna)	20	100%	20
13	Birsinghpur HPS	20	100%	20
14	Madikheda HPS	60	100%	60
15	Rajghat HPS	45	60%	27
16	Gandhisagar HPS	115	50%	58
17	Ranapratap Sagar HPS	172	50%	86
18	Jawahar Sagar HPS	99	50%	50
19	Pench HPS	160	67%	107
B	**Total (MP Genco Hydel)**	**1,186**		**922**
20	NHDC Indira Sagar HPS	1,000	100%	1,000
21	NHDC Omkareshwar HPS	520	100%	520
22	NVDA Sardar Sarovar HPS	1,450	57%	827
23	Rihand HPS	300	15%	45
24	Matatila HPS	31	33%	10
25	SJVN Rampur HPS	412	31%	128
26	SJVN Jhakri HPS	1,500	0%	2
27	Tehri HPS	1,000	0%	2
28	Koteshwar HPP	400	0%	1
29	NHPC Parbati III	520	0%	1
30	NHPC Chamera II	300	0%	1
31	NHPC Chamera III	231	0%	1
32	NHPC Dulhasti	390	0%	1
33	NHPC Dhauliganga	280	0%	1
34	NHPC Sewa II	120	0%	0
35	NHPC Uri II	240	0%	1
36	NHPC Kishanganga	330	0%	1
37	NTPC Koldam HPP I	800	0%	1
38	NTPC Singrauli Small HPP	8	0%	0
39	NHPC Lower Subansiri HEP (Unit-1 to Unit-8)	2,000	5%	100
C	**Total (JV Hydel & Other Hydel)**	**11,832**		**2,642**
40	NTPC Korba	2,100	23%	473
41	NTPC Korba III	500	10%	48
42	NTPC Vindyachal I	1,260	22%	275

Sr. No.	Source	Plant Capacity (MW)	MP's Share in %	MP's Share in MW
43	NTPC Vindyachal II	1,000	21%	207
44	NTPC Vindyachal III	1,000	15%	155
45	NTPC Vindyachal IV	1,000	18%	183
46	NTPC Vindyachal V Unit 1	500	18%	89
47	NTPC Sipat I	1,980	11%	209
48	NTPC Sipat II	1,000	11%	115
49	NTPC Mouda I	1,000	1%	12
50	NTPC Mouda II Unit 1	1,320	1%	16
51	NTPC Solapur STPS	1,320	16%	208
52	NTPC Gadarwara STPS, Unit-1	800	31%	247
53	NTPC Lara STPS, Raigarh, Unit I	800	11%	89
54	NTPC Khargone STPS, Unit-I & II	1,320	52%	685
55	NTPC Kawas GPP	656	21%	140
56	NTPC Gandhar GPP	657	18%	117
57	KAPP Kakrapar	440	25%	111
58	TAPP Tarapur	1,080	21%	231
59	NTPC Gadarwara STPS, Unit-2	800	31%	247
60	NTPC Lara STPS, Raigarh, Unit II	800	11%	89
D	**Total WR Region (Central Generating Stations)**	**21,334**		**3,946**
61	NTPC Kahalgaon II	1,500	5%	74
62	LoI through DVC Chandrapur	500	40%	200
63	LoI through DVC Durgapur	1,000	10%	100
E	**Total ER Region (Central Generating Stations)**	**3,000**		**374**
63	Auraiya APM (NR)	663	0.25%	2
64	National Capital Thermal Power Station Dadri-II (NR)	980	0.25%	2
65	Dadri APM (NR)	830	0.25%	2
66	Indira Gandhi STPS (Jhajjar) (NR)	1,500	0.13%	2
67	Anta APM (NR)	419	0.25%	1
68	Unchahar I (NR)	420	0.08%	0
69	Unchahar III (NR)	210	0.25%	1
70	Unchahar II (NR)	420	0.25%	1
71	Singrauli (NR)	2,000	0.20%	4
72	Rihand III (NR)	1,000	0.24%	2
73	Rihand I (NR)	1,000	0.21%	2
74	Rihand II (NR)	1,000	0.23%	2
75	Dulhasti (NR)	390	0.25%	1
76	Parbati III (NR)	520	0.25%	1
77	Tehri I (NR)	1,000	0.17%	2
78	Koldam (NR)	800	0.12%	1
79	URI II (NR)	240	0.00%	0
80	Sewa II (NR)	120	0.24%	0
81	Chamera III (NR)	231	0.30%	1
82	Kishanganga (NR)	330	0.25%	1
83	Koteshwar (NR)	400	0.17%	1
84	Rampur HEP (NR)	412	0.15%	1
85	Nathpa-Jhakri (NR)	1,500	0.16%	2

Sr. No.	Source	Plant Capacity (MW)	MP's Share in %	MP's Share in MW
86	Dhauliganga (NR)	280	0.25%	1
87	Chamera II (NR)	300	0.30%	1
88	NAPS	440	0.24%	1
89	RAPS – B	440	0.00%	0
90	RAPS – C	440	0.25%	1
91	Dadri I	840	0.00%	0
92	Dadri Solar	5	0.00%	0
93	BTPS	705	0.00%	0
94	RGPPL	540	0.00%	0
95	Unchahar IV	500	0.25%	1
96	Singrauli HEP	8	0.25%	0
97	MEJA	1,320	0.13%	2
98	Tanda	660	0.17%	1
F	**Total NR Region (Central Generating Stations)**	**22,863**		**40**
99	Torrent Power	1,148	4%	50
100	BLA Power, Unit-I & II	90	35%	32
101	Jaypee Bina Power	500	70%	350
102	Lanco Amarkantak TPS Unit 1	300	100%	300
103	Reliance UMPP, Sasan	3,960	38%	1,485
104	Essar Power STPS	1,200	5%	60
105	Jaiprakash Power STPS, Nigri	1,320	38%	495
106	MB Power STPS, Unit-I	600	35%	210
107	MB Power STPS, Unit-II	600	35%	210
108	Jhabua Power STPS, Unit-1	600	35%	210
G	**Total (IPPs)**	**10,318**		**3,402**
109	Renewable Energy (Solar)	3,578	100%	3,578
110	Renewable Energy (other than Solar)	2,548	100%	2,548
H	**Total Renewable Energy**	**6,126**		**6,126**
I	**Grand Total**	**82,058**		**22,851**

2.26 The petitioners submitted that after fully meeting the requirement of the State and selling power on the power exchange, the Petitioners still have to partially back-down plants so as to save on the variable costs being incurred. The Petitioners have applied month-wise merit order dispatch principle on the basis of variable costs for FY 2023-24 and thereafter, after considering all generating stations allocated to MPPMCL. The Petitioners have considered the actual data for FY 2021-22 & FY 2022-23 (till September 2022) for calculating normative availability including backing down of power for FY 2023-24.

2.27 The Petitioners have also considered partial backing down of units/stations which are higher up in the MoD, during those periods when their scheduling is not required to meet the demand in periods when there is less demand in open market also. 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 benefit of reduced power procurement cost or sale at a higher rate, whichever the case maybe, is in turn being 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 16: Power Plant Wise backing down considered by the Petitioners for FY 2023-24 (MU)

Sr. No.	Sources	Energy Availability	Energy Scheduled	Backdown
1	Amarkantak TPS Ph-III	1,511	1,511	0
2	Satpura TPS Ph-II & III	0	0	0
3	Satpura TPS Ph-IV	3,597	3,597	0
4	SGTPS Ph-I & II	4,566	4,566	0
5	SGTPS Ph-III	3,519	3,519	0
6	Shri Singaji STPS Phase-I	8,444	8,444	0
7	Shri Singaji STPS Phase-II	9,289	9,289	0
A	**Total (MP Genco Thermal-MP Share)**	**30,926**	**30,926**	**0**
8	Rani Awanti Bai Sagar, Bargi HPS	395	395	0
9	Bansagar Ph I HPS (Tons)	1,167	1,167	0
10	Bansagar Ph-II HPS (Silpara)	93	93	0
11	Bansagar Ph-III HPS (Deolond)	100	100	0
12	Bansagar Ph-IV HPS (Jhinna)	92	92	0
13	Birsinghpur HPS	44	44	0
14	Madikheda HPS	110	110	0
15	Rajghat HPS	43	43	0
16	Gandhisagar HPS	104	104	0
17	Ranapratap Sagar HPS	134	134	0
18	Jawahar Sagar HPS	124	124	0
19	Pench HPS	199	199	0
B	**Total (MP Genco Hydel)**	**2,606**	**2,606**	**0**
20	NHDC Indira Sagar HPS	1,966	1,966	0
21	NHDC Omkareshwar HPS	1,158	1,158	0
22	NVDA Sardar Sarovar HPS	1,607	1,607	0
23	Rihand HPS	94	94	0
24	Matatila HPS	29	29	0
25	SJVN Rampur HPS	2	2	0
26	SJVN Jhakri HPS	9	9	0
27	Tehri HPS	6	6	0
28	Koteshwar HPP	2	2	0
29	NHPC Parbati III	5	5	0
30	NHPC Chamera II	3	3	0
31	NHPC Chamera III	2	2	0
32	NHPC Dulhasti	4	4	0
33	NHPC Dhauliganga	3	3	0
34	NHPC Sewa II	1	1	0
35	NHPC Uri II	0	0	0
36	NHPC Kishanganga	3	3	0
37	NTPC Koldam HPP I	3	3	0
38	NTPC Singrauli Small HPP	0	0	0
39	NHPC Lower Subansiri HEP Unit-1	148	148	0
C	**Total (JV Hydel & Other Hydel)**	**5,045**	**5,045**	**0**
40	NTPC Korba	3,295	3,295	0
41	NTPC Korba III	506	506	0

Sr. No.	Sources	Energy Availability	Energy Scheduled	Backdown
42	NTPC Vindyachal I	2,955	2,955	0
43	NTPC Vindyachal II	2,196	2,196	0
44	NTPC Vindyachal III	1,682	1,682	0
45	NTPC Vindyachal IV	1,937	1,937	0
46	NTPC Vindyachal V Unit 1	966	966	0
47	NTPC Sipat I	2,253	2,253	0
48	NTPC Sipat II	1,276	1,276	0
49	NTPC Mouda I	135	0	135
50	NTPC Mouda II Unit 1	172	0	172
51	NTPC Solapur STPS	2,257	0	2,257
52	NTPC Gadarwara STPS, Unit-1	5,841	0	5,841
53	NTPC Lara STPS, Raigarh, Unit I	1,248	1,248	0
54	NTPC Khargone STPS, Unit-I & II	4,819	455	4,364
55	NTPC Kawas GPP	0	0	0
56	NTPC Gandhar GPP	0	0	0
57	KAPP Kakrapar	730	730	0
58	TAPP Tarapur	1,518	1,518	0
59	NTPC Gadarwara STPS, Unit-2	0	0	0
60	NTPC Lara STPS, Raigarh, Unit II	0	0	0
61	NTPC Lara STPS, Raigarh, Unit III	0	0	0
62	NTPC Lara STPS, Raigarh, Unit IV	0	0	0
63	NTPC Lara STPS, Raigarh, Unit V	0	0	0
D	**Total WR Region (Central Generating Stations)**	**33,784**	**21,016**	**12,768**
64	NTPC Kahalgaon I	0	0	0
65	NTPC Kahalgaon II	521	521	0
66	NTPC Farakka	0	0	0
67	NTPC Talcher	0	0	0
68	NTPC Barh	0	0	0
69	DVC (MTPS & CTPS)	211	0	211
70	DVC (DTPS)	493	0	493
E	**Total ER Region (Central Generating Stations)**	**1,224**	**521**	**704**
71	NTPC Auraiya GPP	12	0	12
72	NTPC Dadri GPP	15	15	0
73	NTPC Anta GPP	7	7	0
74	NTPC Firoz Gandhi Unchahar I	2	0	2
75	NTPC Firoz Gandhi Unchahar II	7	0	7
76	NTPC Firoz Gandhi Unchahar III	4	0	4
77	NTPC Firoz Gandhi Unchahar IV	9	0	9
78	NTPC Rihand TPS-I	15	15	0
79	NTPC Rihand TPS-II	16	16	0
80	NTPC Rihand TPS-III	17	17	0
81	NTPC NCTP Dadri II	16	0	16
82	NTPC Singrauli	28	28	0
83	NTPC IGPS I Jhajjar	14	0	14
84	MEJA Urja Nigam	6	6	0
85	NTPC Tanda	8	0	8
86	NTPC Badarpur	0	0	0
87	Rajasthan (NPCIL)	8	8	0

Sr. No.	Sources	Energy Availability	Energy Scheduled	Backdown
88	NARORA (NPCIL)	7	7	0
F	**Total NR Region (Central Generating Stations)**	**191**	**120**	**72**
89	Torrent Power	214	0	214
90	BLA Power, Unit-I & II	189	189	0
91	Jaypee Bina Power	2,378	2,378	0
92	Lanco Amarkantak TPS Unit 1	2,038	2,038	0
93	Reliance UMPP, Sasan	10,450	10,450	0
94	Essar Power STPS	422	0	422
95	Jaiprakash Power STPS, Nigri	3,483	3,483	0
96	MB Power STPS, Unit-I	1,478	1,478	0
97	MB Power STPS, Unit-II	1,478	1,478	0
98	Jhabua Power STPS, Unit-1	1,478	1,478	0
99	DB Power STPS Unit-1	0	0	0
100	Pench Thermal Energy, Unit-1	0	0	0
G	**Total (IPPs)**	**23,608**	**22,972**	**636**
101	Renewable Energy (Solar)	10,298	10,298	0
102	Renewable Energy (other than Solar)	6,465	6,465	0
H	**Total Renewable Energy**	**16,763**	**16,763**	**0**
	Total	**114,148**	**99,968**	**14,180**

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 2023-24 as submitted by the Petitioners:

Table 17: Total Availability of Energy submitted by the Petitioners for FY 2023-24 (MU)

Particulars	FY 2023-24
Ex-Bus Availability	1,14,147
Ex-Bus Energy Required by DISCOMs	88,356
Backdown of Power and Surplus Sale of Power	25,792
Backdown	14,179
Surplus Units available for Sale	11,612

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 subsequently submitted by the Petitioners.

2.31 The Commission has considered the CGS allocation from Western Region stations for FY 2023-24 as provided by Western Regional Power Committee vide their letter No. WRPC/Comml-I/6/Alloc/2022/13036 dated 30th November, 2022 and from Eastern Region NTPC Kahalgaon-2 communicated vide GoI MoP letter no. 5/31/2006- dated 21st February, 2007 and from Northern Region as per Northern Regional Power Committee letter no. NRPC/OPR/103/02/2022/12546/73 dated 23rd December, 2022. Further, the Commission has considered the allocation of remaining generating stations as per notification no. 2211/F-3-13/2016/XIII dated 21st 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 FY 2023-24 as shown in the following table:

Table 18: Allocation of Generating Station considered by the Commission for FY 2023-24

Sr. No.	Generating Stations	Region	Installed Capacity (MW)	Allocation (%)	Total (in MW)
I	**Central Generating Stations**		**38,796**		**5,478**
1	NTPC Korba	WR	2,100	22.52%	473
2	NTPC Korba III	WR	500	14.31%	72
3	NTPC Vindyachal I	WR	1,260	34.48%	435
4	NTPC Vindyachal II	WR	1,000	31.17%	312
5	NTPC Vindyachal III	WR	1,000	23.87%	239
6	NTPC Vindyachal IV	WR	1,000	27.46%	275
7	NTPC Vindyachal V Unit 1	WR	500	27.39%	137
8	NTPC Sipat I	WR	1,980	16.11%	319
9	NTPC Sipat II	WR	1,000	18.11%	181
10	NTPC Mouda I	WR	1,000	1.35%	14
11	NTPC Mouda II Unit 1	WR	1,320	1.80%	24
12	NTPC Kawas GPP	WR	656	21.35%	140
13	NTPC Gandhar GPP	WR	657	17.82%	117
14	NTPC Auraiya GPP	NR	663	0.36%	2
15	NTPC Dadri GPP	NR	830	0.38%	3
16	NTPC Anta GPP	NR	419	0.37%	2
17	NTPC Kahalgaon 2	ER	1,500	4.93%	74
18	KAPP Kakrapar	WR	440	24.99%	110
19	TAPP Tarapur	WR	1,080	21.02%	227
20	RAPP Rawabhatta	NR	440	0.37%	2
21	NAPP Narora	NR	440	0.35%	2
22	NTPC Solapur STPS, Phase-1	WR	1,320	24.23%	320
23	NTPC Gadarwara STPS, Unit-1	WR	800	51.82%	415
24	NTPC Gadarwara STPS, Unit-2	WR	800	51.82%	415
25	NTPC Lara STPS, Raigarh, Unit I	WR	800	11.01%	88
26	NTPC Lara STPS, Raigarh, Unit II	WR	800	11.01%	88
27	NTPC Firoz Gandhi Unchahar I	NR	420	0.03%	0.13
28	NTPC Firoz Gandhi Unchahar II	NR	420	0.09%	0.38
29	NTPC Firoz Gandhi Unchahar III	NR	210	0.09%	0.19
30	NTPC Firoz Gandhi Unchahar IV	NR	500	0.10%	1
31	NTPC Rihand I	NR	1,000	0.08%	1
32	NTPC Rihand II	NR	1,000	0.09%	1
33	NTPC Rihand III	NR	1,000	0.10%	1
34	NTPC NCTP Dadri II	NR	980	0.09%	1
35	NTPC Singrauli	NR	2,000	0.08%	2
36	NTPC IGPS I Jhajjar	NR	1,500	0.18%	3
37	NTPC Khargone STPS, Unit-I	WR	660	51.81%	342
38	NTPC Khargone STPS, Unit-II	WR	660	51.81%	342
39	Meja Urja Nigam	NR	1,320	0.18%	2
40	NTPC Tanda Stage-II	NR	1,320	0.06%	1

Sr. No.	Generating Stations	Region	Installed Capacity (MW)	Allocation (%)	Total (in MW)
41	DVC (MTPS & CTPS)	ER	500	40.00%	200
42	DVC (DTPS)	ER	1,000	10.00%	100
II	**MP Genco Power Station (Thermal & Hydro)**		**5,756**		**5,487**
43	Amarkantak TPS Ph-III	State	210	100.00%	210
44	Satpura TPS Ph-IV	State	500	100.00%	500
45	SGTPS Ph-I & II	State	840	100.00%	840
46	SGTPS Ph-III	State	500	100.00%	500
47	Shri Singaji STPS, Ph-I	State	1,200	100.00%	1,200
48	Shri Singaji STPS, Ph-2	State	1,320	100.00%	1,320
49	Rani Awanti Bai Sagar, Bargi HPS	State	90	100.00%	90
50	Bansagar Ph I HPS (Tons)	State	315	100.00%	315
51	Bansagar Ph-II HPS (Silpara)	State	30	100.00%	30
52	Bansagar Ph-III HPS (Deolond)	State	60	100.00%	60
53	Bansagar Ph-IV HPS (Jhinna)	State	20	100.00%	20
54	Birsinghpur HPS	State	20	100.00%	20
55	Marhikheda HPS	State	60	100.00%	60
56	Rajghat HPS	State	45	50.00%	23
57	Gandhisagar HPS	State	115	50.00%	58
58	Ranapratap Sagar & Jawahar Sagar HPS	State	271	50.00%	136
59	Pench HPS	State	160	66.69%	107
III	**JV Hydel & Other Hydels**		**9,842**		**2,432**
60	NHDC Indira Sagar HPS	WR	1,000	100.00%	1,000
61	NHDC Omkareshwar HPS	WR	520	100.00%	520
62	Sardar Sarovar HPS	WR	1,450	57.00%	827
63	Rihand HPS	NR	300	15.00%	45
64	Matatila HPS	NR	31	32.68%	10
65	SJVN Rampur HPS	NR	412	0.22%	1
66	SJVN Jhakri HPS	NR	1,500	0.24%	4
67	Tehri HPS	NR	1,000	0.24%	2
68	Koteshwar HPP	NR	400	0.24%	1
69	NHPC Parbati III	NR	520	0.37%	2
70	NHPC Chamera II	NR	300	0.44%	1
71	NHPC Chamera III	NR	231	0.37%	1
72	NHPC Dulhasti	NR	390	0.37%	1
73	NHPC Dhauliganga	NR	280	0.37%	1
74	NHPC Sewa II	NR	120	0.37%	0.44
75	NHPC Kishanganga	NR	330	0.37%	1
76	NTPC Koldam HPP I	NR	800	0.17%	1
77	NTPC Singrauli Small HPP	NR	8	0.37%	0.03
IV	**IPPs**		**7,970**		**3,292**
78	BLA Power	State	90	35.00%	32
79	Jaypee Bina Power	State	500	70.00%	350
80	Lanco Amarkantak TPS Unit 1	WR	300	100.00%	300
81	Reliance UMPP, Sasan	WR	3,960	37.50%	1,485
82	Jaiprakash Power STPS, Nigri	WR	1,320	37.50%	495
83	MB Power STPS	WR	1,200	35.00%	420
84	Jhabua Power STPS, Unit-1	WR	600	35.00%	210

Sr. No.	Generating Stations	Region	Installed Capacity (MW)	Allocation (%)	Total (in MW)
V	**Renewables**		**6,126**		**6,126**
85	Other RPO (excluding Hydro)		4,783	100.00%	4,783
86	Wind RPO		1,343	100.00%	1,343
87	HPO (NHPC Lower Subansiri HEP)	NER	250	5.25%	13
	Total		**68,489**		**22,815**

2.33 The Commission in order to project energy availability for FY 2023-24 has analysed the following:

(i) Actual average scheduled energy in previous three years, i.e., FY 2020-21 to FY 2022-23 (Upto December, 2022) as per State Energy Accounts;
(ii) Actual availability of Central Generating Stations as per Regional Energy Account for FY 2018-19 to FY 2021-22;
(iii) Actual availability of IPPs, MPPGCL, NHDC and NVDA as per State / Regional Energy Account for FY 2021-22;
(iv) Projections made by NHDC, NVDA and MPPGCL for FY 2023-24;
(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 2021-22 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 2021-22.

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 FY 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 has considered the energy availability from MPPGCL thermal generating stations & Hydro generating stations as per the projection submitted by the MPPGCL.

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 FY 2023-24.

Energy Availability from Renewable Energy Generating Stations

2.39 The energy availability from Renewable Energy sources has been considered in accordance with 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), Regulations, 2021 and amendments thereof has been considered to be met through additional procurement during the FY 2023-24. The details of availability from existing power purchase agreements and additional procurement for fulfilment of RPO projected for FY 2023-24 has been detailed in the subsequent Section of this Order.

Energy Availability from New Generating Stations

2.40 With regard to NHPC Lower Subhansiri HEP, NHPC has communicated to the Petitioners that the station is expected to be Commissioned during September, 2023. Therefore, the availability from this generating station has been considered as per Petitioners submission for FY 2023-24.

2.41 Availability from Essar power as concessional energy submitted in the Petition is not in accordance with the Commission's Order dated 4th May, 2016 in SMP No 51/2015. Therefore, the availability from Essar power as proposed by the petitioners for FY 2023-24 has not been considered in this Order. Also, the Commission has not considered the availability and the cost thereon, for the Sugen Torrent Generating Station in view of the approach previously followed by the Commission in its Retail Supply Tariff Orders from 2016-17 onwards. Moreover, 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 through a separate Petition in this regard.

2.42 Based on the above, month-wise and generating station-wise details of projected availability for FY 2023-24 is shown in the following table:

Table 19 : 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	321.68	329.60	315.34	322.88	282.73	307.39	316.58	316.27	303.89	322.11	282.54	292.18	3,713.19
NTPC Korba III	51.00	46.71	33.70	40.99	52.22	50.49	52.41	51.08	52.58	52.68	47.81	52.57	584.23
NTPC Vindyachal I	267.84	263.98	246.18	287.97	236.69	260.21	265.01	264.46	287.93	268.01	253.58	280.34	3,182.21
NTPC Vindyachal II	207.93	206.94	187.18	167.33	167.46	173.14	184.46	202.68	162.72	193.58	196.20	211.30	2,260.92
NTPC Vindyachal III	143.74	164.32	117.06	149.01	134.04	137.14	166.87	158.39	163.35	151.20	144.13	148.27	1,777.54
NTPC Vindyachal IV	193.78	185.94	169.10	190.22	182.30	191.35	196.26	192.60	165.68	131.69	139.61	158.61	2,097.13
NTPC Vindyachal V Unit 1	67.51	94.34	84.09	96.24	88.25	91.24	97.87	94.76	95.96	88.24	78.09	50.49	1,027.07
NTPC Sipat I	146.01	179.09	185.33	206.41	203.04	163.28	142.80	177.09	192.94	189.53	167.32	186.01	2,138.86
NTPC Sipat II	133.03	140.09	130.29	127.55	129.55	121.82	114.53	118.99	111.77	126.66	95.48	129.74	1,479.51
NTPC Mouda I	8.10	4.51	4.73	18.77	8.19	12.12	15.00	18.11	29.41	38.53	29.61	26.17	213.27
NTPC Mouda II Unit 1	8.13	5.33	4.96	17.48	12.09	9.83	11.89	25.34	31.40	34.95	33.02	31.67	226.09
NTPC Kawas GPP	9.90	10.75	4.56	3.25	6.30	10.29	5.36	5.07	0.00	0.58	0.71	1.41	58.18
NTPC Gandhar GPP	5.45	9.58	2.17	10.51	6.84	7.84	0.02	0.00	0.00	0.05	7.68	0.00	50.16
NTPC Auraiya GPP	10.98	1.99	2.18	0.12	0.01	0.17	0.00	0.00	0.00	0.13	1.71	1.05	18.33
NTPC Dadri GPP	1.30	1.23	0.99	4.32	0.72	1.76	1.40	0.57	3.29	0.97	2.08	5.93	24.57
NTPC Anta GPP	0.00	0.19	0.00	8.63	2.05	0.63	0.00	0.00	0.00	0.00	0.00	0.00	11.51
NTPC Kahalgaon 2	54.06	49.27	39.98	55.45	35.11	35.61	31.56	51.10	42.07	44.28	53.34	53.99	545.80
KAPP Kakrapar	59.43	65.62	66.92	69.93	69.74	64.32	68.81	63.18	67.51	76.47	69.65	75.84	817.42
TAPP Tarapur	146.87	148.93	152.04	149.65	154.83	127.60	130.16	135.64	146.51	82.59	84.94	132.05	1,591.79
RAPP Rawabhatta	0.94	1.03	1.03	1.13	0.98	1.03	0.82	0.63	0.67	0.64	0.47	0.61	9.99
NAPP Narora	0.60	0.52	0.53	0.62	0.54	0.59	0.65	0.68	0.73	0.50	0.57	0.70	7.23
NTPC Solapur STPS, Phase-1	82.80	13.03	23.38	256.26	197.66	205.26	132.11	304.54	380.32	177.28	297.80	344.63	2,415.06
NTPC Gadarwara STPS, Unit-1	279.85	169.07	109.47	252.52	266.57	261.12	207.24	281.29	252.16	199.01	278.88	388.14	2,945.32
NTPC Gadarwara STPS, Unit-2	281.35	169.97	110.06	253.87	268.00	262.52	208.35	282.80	253.51	198.76	265.93	390.21	2,945.32
NTPC Lara STPS, Raigarh, Unit I	55.37	52.60	52.52	54.95	52.17	42.71	34.48	68.59	61.01	55.95	64.24	73.32	667.90
NTPC Lara STPS, Raigarh, Unit II	59.10	41.66	42.36	57.52	66.78	51.51	50.02	86.98	82.58	26.26	37.47	61.62	663.86
NTPC Firoz Gandhi Unchahar I	0.05	0.03	0.00	0.15	0.06	0.08	0.03	0.00	0.05	0.03	0.26	0.15	0.90
NTPC Firoz Gandhi Unchahar II	0.16	0.18	0.03	0.76	0.27	0.26	0.11	0.16	0.23	0.12	0.43	0.21	2.93
NTPC Firoz Gandhi Unchahar III	0.20	0.09	0.02	0.26	0.08	0.09	0.04	0.20	0.06	0.04	0.22	0.20	1.51
NTPC Firoz Gandhi Unchahar IV	0.56	0.34	0.07	0.58	0.16	0.19	0.13	0.29	0.12	0.06	0.56	0.68	3.73
NTPC Rihand I	0.43	0.46	0.33	1.22	0.54	0.96	0.69	0.39	0.30	0.23	0.40	0.39	6.34
NTPC Rihand II	0.34	0.45	0.33	1.20	0.60	0.66	0.70	0.41	0.34	0.24	0.39	0.35	6.00
NTPC Rihand III	0.52	0.54	0.54	1.52	0.94	0.88	0.72	0.67	0.47	0.31	0.29	0.60	7.99
NTPC NCTP Dadri II	1.03	0.46	0.07	2.03	0.79	0.32	0.22	0.27	0.15	0.19	0.78	0.48	6.79
NTPC Singrauli	0.78	0.92	0.47	1.12	0.59	1.62	1.22	1.21	0.98	0.55	1.05	0.55	11.06

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 IGPS I Jhajjar	3.29	1.89	0.44	5.27	2.07	2.65	0.74	1.16	0.59	0.44	0.67	2.02	21.22
NTPC Khargone STPS, Unit-I	186.12	117.33	70.10	147.41	174.68	171.96	137.58	292.33	287.84	313.26	273.58	276.70	2,448.91
NTPC Khargone STPS, Unit-II	186.12	117.33	70.10	147.41	174.68	171.96	137.58	292.33	287.84	313.26	273.58	276.70	2,448.91
Meja Urja Nigam	1.40	1.17	1.05	1.17	1.67	1.69	1.44	1.77	1.78	1.08	0.71	1.79	16.72
NTPC Tanda Stage-II	0.25	0.60	0.06	0.22	0.24	0.14	0.10	2.02	0.28	0.05	1.15	1.07	6.17
DVC (MTPS & CTPS)	29.16	22.53	17.51	31.31	24.34	29.37	22.43	11.20	7.73	6.97	8.56	0.00	211.11
DVC (DTPS)	68.05	52.57	40.86	73.05	56.79	68.53	52.33	26.13	18.04	16.26	19.97	0.00	492.60
Amarkantak TPS Ph-III	127.70	131.95	127.70	126.48	126.48	122.40	132.08	127.82	132.08	132.08	123.56	132.08	1,542.42
Satpura TPS Ph-IV	298.11	308.04	298.11	229.11	204.03	294.53	314.02	303.89	314.02	314.02	293.76	314.02	3,485.67
SGTPS Ph-I & II	369.22	326.16	352.71	350.15	315.66	304.32	444.66	449.07	464.03	464.03	434.10	464.03	4,738.16
SGTPS Ph-III	325.73	336.59	325.73	332.06	166.03	0.00	344.23	333.12	344.23	344.23	322.02	344.23	3,518.18
Shri Singaji STPS, Ph-I	655.53	677.38	325.73	547.95	658.44	637.20	690.84	668.56	690.84	690.84	646.27	690.84	7,580.41
Shri Singaji STPS, Ph-2	514.14	472.25	685.52	691.67	691.67	669.35	733.02	709.37	733.02	733.02	685.73	733.02	8,051.76
Rani Awanti Bai Sagar, Bargi HPS	32.80	29.80	24.80	29.80	41.80	44.80	49.80	24.80	34.80	34.80	34.80	34.80	417.60
Bansagar Ph I HPS (Tons)	49.45	54.45	64.45	99.45	99.45	109.45	99.45	99.45	79.45	79.45	79.45	79.45	993.40
Bansagar Ph-II HPS (Silpara)	4.85	4.85	6.85	6.85	7.85	9.85	9.85	9.85	6.85	6.85	6.85	6.85	88.20
Bansagar Ph-III HPS (Deolond)	0.00	0.00	0.00	11.90	19.90	25.90	29.90	9.90	0.00	0.00	0.00	0.00	97.50
Bansagar Ph-IV HPS (Jhinna)	7.90	5.90	4.90	3.90	2.90	7.90	8.90	8.90	8.90	8.90	8.90	8.90	86.80
Birsinghpur HPS	0.00	0.00	1.90	9.90	10.90	9.90	9.90	4.90	4.90	4.90	0.00	0.00	57.20
Marhikheda HPS	0.00	0.00	1.75	10.75	21.75	14.75	19.75	14.75	10.75	9.75	4.75	4.75	113.50
Rajghat HPS	0.00	0.00	0.00	5.82	7.01	7.01	10.00	7.01	5.82	2.83	2.83	2.83	51.17
Gandhisagar HPS	2.35	4.85	4.85	9.85	9.85	14.85	14.85	14.85	14.85	17.35	12.35	12.35	133.20
Ranapratap Sagar & Jawahar Sagar HPS	3.48	0.45	0.88	2.64	13.62	7.75	24.80	47.14	48.04	40.21	33.86	17.80	240.68
Pench HPS	5.15	6.49	13.15	13.15	19.82	43.15	39.82	19.82	18.49	11.82	11.82	11.82	214.51
NHDC Indira Sagar HPS	109.89	123.75	113.85	142.56	308.88	391.05	225.72	131.67	157.41	164.34	129.69	129.69	2,128.50
NHDC Omkareshwar HPS	55.44	66.33	69.30	79.20	134.64	189.09	118.80	75.24	90.09	91.08	69.30	65.34	1,103.85
Sardar Sarovar HPS	121.83	105.82	144.89	135.43	212.73	339.20	194.89	89.29	120.19	127.33	108.91	98.28	1,798.78
Rihand HPS	5.25	5.56	13.00	6.70	14.12	22.31	12.77	5.60	6.59	6.73	6.41	5.88	110.92
Matatila HPS	1.98	2.22	3.75	3.24	4.23	3.85	4.41	1.53	3.62	4.69	3.85	2.87	40.24
SJVN Rampur HPS	0.02	0.23	0.05	0.06	0.37	0.58	0.60	0.35	0.54	0.26	0.55	0.39	4.01
SJVN Jhakri HPS	0.72	1.48	2.26	2.53	2.44	2.14	1.14	0.68	0.56	0.47	0.39	0.52	15.32
Tehri HPS	0.30	0.58	0.91	1.10	1.06	0.93	0.49	0.29	0.23	0.15	0.12	0.19	6.35
Koteshwar HPP	0.22	0.15	0.13	0.18	0.30	0.32	0.24	0.16	0.24	0.21	0.21	0.19	2.54
NHPC Parbati III	0.32	0.37	0.49	0.41	0.56	0.55	0.33	0.27	0.43	0.39	0.42	0.42	4.96
NHPC Chamera II	0.26	0.44	0.75	1.43	1.42	0.79	0.36	0.20	0.15	0.12	0.10	0.15	6.18
NHPC Chamera III	0.31	0.44	0.49	0.54	0.54	0.44	0.26	0.15	0.12	0.12	0.10	0.19	3.70
NHPC Dulhasti	0.48	0.81	0.95	1.03	0.99	0.77	0.38	0.21	0.16	0.15	0.12	0.25	6.29

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 Dhauliganga	0.27	0.49	0.48	0.46	0.45	0.47	0.39	0.19	0.15	0.13	0.10	0.16	3.75
NHPC Sewa II	0.10	0.17	0.25	0.32	0.32	0.28	0.18	0.09	0.06	0.05	0.03	0.05	1.90
NHPC Uri II	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NHPC Kishanganga	0.55	0.61	0.54	0.92	0.85	0.71	0.09	0.00	0.00	0.00	0.00	0.07	4.33
NTPC Koldam HPP I	0.50	0.70	0.66	0.77	0.68	0.47	0.19	0.19	0.15	0.14	0.15	0.46	5.07
NTPC Singrauli Small HPP	0.01	0.01	0.03	0.04	0.04	0.02	0.01	0.01	0.01	0.01	0.00	0.01	0.19
BLA Power	11.00	3.59	6.46	6.83	12.87	9.77	4.86	12.25	16.32	3.59	6.03	12.87	106.46
Jaypee Bina Power	240.32	152.77	170.44	168.37	168.06	179.17	146.00	284.12	271.47	141.50	135.01	365.04	2,422.25
Lanco Amarkantak TPS Unit 1	179.24	124.57	181.39	164.40	116.04	104.63	175.66	178.38	202.39	214.56	169.20	227.88	2,038.33
Reliance UMPP, Sasan	970.23	1,022.46	970.71	957.36	884.69	871.52	958.90	931.42	924.24	965.60	912.14	1,028.53	11,397.79
Jaiprakash Power STPS, Nigri	253.75	300.87	308.79	316.03	298.61	302.82	311.28	306.24	316.88	287.56	244.97	235.55	3,483.36
MB Power STPS	228.67	202.74	198.32	287.15	247.57	249.68	229.69	276.41	291.70	254.61	263.24	225.78	2,955.57
Jhabua Power STPS, Unit-1	96.00	108.21	98.88	148.12	124.33	109.47	100.26	154.12	133.23	98.60	140.62	165.94	1,477.79
Other RPO	1,597.58	1,709.72	1,197.69	1,122.83	1,092.89	1,077.92	1,047.98	1,047.98	1,047.98	1,154.44	1,393.98	1,618.54	15,109.53
Wind RPO	133.97	173.29	159.36	161.29	162.06	119.89	115.09	115.09	115.09	120.05	132.44	145.43	1,653.05
HPO	35.03	31.83	26.49	31.83	44.64	47.85	65.35	38.64	49.32	73.73	73.73	75.23	593.66
Total	**9,515.82**	**9,172.56**	**8,198.43**	**9,440.82**	**9,316.89**	**9,392.09**	**9,482.91**	**10,035.39**	**10,155.17**	**9,719.44**	**9,708.36**	**10,922.43**	**1,15,060.31**

Assessment of Power Purchase Cost

Petitioners' Submission

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

Table 20 : Fixed cost and Energy charges of MPPMCL allocated stations as submitted by the Petitioners for FY 2023-24

Sr No	Source	Fixed Charge (Rs. Crore)	Basis for Fixed Charges	Energy Charge (Rs. /kWh)	Basis for Energy Charges
1	Amarkantak TPS Ph-III	164	MPERC MYT Order dated 19.05.2021 in respect of MP Genco Plants for FY 2019-20 to FY 2023-24 in P.no. 53 of 2020	3.25	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
2	Satpura TPS Ph-II & III	0		0.00	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
3	Satpura TPS Ph-IV	604		2.45	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
4	SGTPS Ph-I & II	457		2.48	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
5	SGTPS Ph-III	309		2.10	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)

Sr No	Source	Fixed Charge (Rs. Crore)	Basis for Fixed Charges	Energy Charge (Rs. /kWh)	Basis for Energy Charges
6	Shri Singaji STPS Phase-I	1,247		3.41	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
7	Shri Singaji STPS Phase-II	1,314		3.06	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
8	Rani Awanti Bai Sagar, Bargi HPS	8	As Approved by the Hon'ble Commission in MYT order	1.00	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
9	Bansagar Ph I HPS (Tons)	45	MPERC MYT Order dated 19.05.2021 in respect of MP Genco Plants for FY 2019-20 to FY 2023-24 in P.no. 53 of 2020	0.39	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
10	Bansagar Ph-II HPS (Silpara)	26		0.73	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
11	Bansagar Ph-III HPS (Deolond)	22		1.11	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
12	Bansagar Ph-IV HPS (Jhinna)	3		0.76	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
13	Birsinghpur HPS	3		0.82	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
14	Madikheda HPS	3		1.48	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
15	Rajghat HPS	3		2.52	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
16	Gandhisagar HPS	2	MPERC MYT Order dated 19.05.2021 in respect of MP Genco Plants for FY 2019-20 to FY 2023-24 in P.no. 53 of 2020	1.00	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
17	Ranapratap Sagar HPS	0		1.54	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
18	Jawahar Sagar HPS	0		1.54	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
19	Pench HPS	9		0.51	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
20	NHDC Indira Sagar HPS	279	As Approved by the Hon'ble Commission in MYT order	2.00	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
21	NHDC Omkareshwar HPS	189	As Approved by the Hon'ble Commission in MYT order	2.12	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
22	NVDA Sardar Sarovar HPS	101	As Approved by the Hon'ble Commission in MYT order	0.82	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
23	Rihand HPS	0	As Approved by the Hon'ble Commission in MYT order	0.41	As Approved by the Hon'ble Commission in MYT order

Sr No	Source	Fixed Charge (Rs. Crore)	Basis for Fixed Charges	Energy Charge (Rs. /kWh)	Basis for Energy Charges
24	Matatila HPS	0	As Approved by the Hon'ble Commission in MYT order	0.41	As Approved by the Hon'ble Commission in MYT order
25	SJVN Rampur HPS	1	CERC Order dtd. 24-01-2022 in P.no. 28/GT/2020 for 01.04.2019 to 31.03.2024	1.85	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
26	SJVN Jhakri HPS	1	CERC Order dtd. 16-09-2021 in P.no. 30/GT/2020 for 01.04.2019 to 31.03.2024	1.18	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
27	Tehri HPS	1	CERC Order dtd. 13-05-2022 in P.no. 97/GT/2020 for 01.04.2019 to 31.03.2024	1.99	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
28	Koteshwar HPP	1	CERC Order dtd. 03.10.2022 in P.no. 244/GT/2020 for 01.04.2019 to 31.03.2024	0.39	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
29	NHPC Parbati III	1	CERC Order dtd. 23-04-2019 in P.no. 6/GT/2017 for 01.04.2014 to 31.03.2019	1.26	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
30	NHPC Chamera II	0	CERC Order dtd. 17-06-2016 in P.no. 233/GT/2014	1.25	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
31	NHPC Chamera III	1	CERC Order dtd. 29.01.2020 in P.no. 321/GT/2018 for 01.04.2014 to 31.03.2019	2.12	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
32	NHPC Dulhasti	1	CERC Order dtd. 09.05.2022 in P.no. 146/GT/2020 for 01.04.2019 to 31.03.2024	2.60	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
33	NHPC Dhauliganga	0	CERC Order dtd. 18-08-2022 in P.no. 284/GT/2020 for 01.04.2019 to 31.03.2024	1.24	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
34	NHPC Sewa II	0	CERC Order dtd. 05-02-2020 in P.no. 322/GT/2018 for FY 2014-15 to FY 2018-19.	3.34	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
35	NHPC Uri II	0	CERC Order dtd. 05-02-2020 in P.no. 308/GT/2018 for FY 2014-15 to FY 2018-19.	0.00	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
36	NHPC Kishanganga	1	CERC Order dtd. 28-10-2019 in P.no. 43/GT/2018	2.18	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
37	NTPC Koldam HPP I	1	CERC Order dtd. 05-04-2018 in P.no. 107/GT/2015 up to FY 2018-19	2.61	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
38	NHPC Lower Subansiri HEP Unit-1	0		5.09	As per levelised tariff.
39	NTPC Korba	248	CERC Ord dtd. 21.04.2022 in P.no. 486/GT/2020 for 01-04-2019 to 31-03-2024	1.73	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
40	NTPC Korba III	57	CERC Ord dtd. 23.03.2022 in P.no. 419/GT/2020 for 01-04-2019 to 31-03-2024	1.61	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
41	NTPC Vindyachal I	270	CERC Order 31.01.2022 in P.no. 401/GT/2022 for 01-04-2019 to 31-03-2024	1.99	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)

Sr No	Source	Fixed Charge (Rs. Crore)	Basis for Fixed Charges	Energy Charge (Rs. /kWh)	Basis for Energy Charges
42	NTPC Vindyachal II	170	CERC Order 10-06-2022 in P.no. 485/GT/2014 for 01-04-2019 to 31-03-2024	1.93	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
43	NTPC Vindyachal III	176	CERC Order 24-02-2017 in P.no. 342/GT/2014 for 01-04-2014 to 31-03-2019	1.72	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
44	NTPC Vindyachal IV	304	CERC Order 10-03-2017 in P.no. 339/GT/2014 for 01-04-2014 to 31-03-2019	1.71	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
45	NTPC Vindyachal V Unit 1	160	CERC Order 31-08-2016 in P.no. 234/GT/2015 for 30-10-2015 to 31-03-2019	1.77	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
46	NTPC Sipat I	282	CERC Order 06-06-2022 in P.no. 425/GT/2020 for 01-04-2014 to 31-03-2019	2.24	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
47	NTPC Sipat II	125	CERC Order 06-06-2022 in P.no. 435/GT/2020 for 01-04-2014 to 31-03-2019	1.57	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
48	NTPC Mouda I	25	CERC TuP Ord dtd.19-09-2022 in P.no.393/GT/2020 for 01-04-2014 to 31-03-2019	5.67	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
49	NTPC Mouda II Unit 1	25	CERC Order 05-04-2019 in P.no. 142/GT/2016 for period CoD to 31-03-2019	4.43	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
50	NTPC Solapur STPS	311	CERC Order dtd. 06-01-2020 in P.no. 178/GT/2017 for 25-09-2017 to 31-03-2019	4.12	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
51	NTPC Gadarwara STPS, Unit-1	1,140	Prorated Fixed Charges based on actual bills for the Period Sept'21 to Aug'22	3.84	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
52	NTPC Lara STPS, Raigarh, Unit I	138	Prorated Fixed Charges based on actual bills for the Period Sept'21 to Aug'22	2.28	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
53	NTPC Khargone STPS, Unit-I & II	852	Prorated Fixed Charges based on actual bills for the Period Sept'21 to Aug'22	3.76	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
54	NTPC Kawas GPP	96	CERC Order 04-06-2022 in P.no. 488/GT/2020 for 01-04-2019 to 31-03-2024	3.25	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
55	NTPC Gandhar GPP	89	CERC Order 04.06.2022 in P.no. 420/GT/2020 for 01-04-2019 to 31-03-2024	2.80	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
56	KAPP Kakrapar	0		2.34	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
57	TAPP Tarapur	0	Tariff @ Rs 2.9058 as DAE Notification dtd 22.03.2018 for 01.04.2017 to 31.03.2022	3.45	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
58	NTPC Gadarwara STPS, Unit-2	0		3.73	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
59	NTPC Lara STPS, Raigarh, Unit II	138	Prorated Fixed Charges based on actual bills for the Period Sept'21 to Aug'22	2.28	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)

Sr No	Source	Fixed Charge (Rs. Crore)	Basis for Fixed Charges	Energy Charge (Rs. /kWh)	Basis for Energy Charges
60	NTPC Kahalgaon I	0		0.00	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
61	NTPC Kahalgaon II	57	CERC TuP Ord 21-04-2022 in P.no. 362/GT/2020 for 01-04-2014 to 31-03-2019	3.28	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
62	DVC (MTPS & CTPS)	37	CERC Order dtd. 17-0-2017 in P.no. 180/GT/2015 for 01.04.2014 to 31.03.2019	3.81	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
63	DVC (DTPS)	120	CERC Order dtd. 17-03-2017 in P.no. 205/GT/2015 for 01.04.2014 to 31.03.2019	3.81	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
64	NTPC Auraiya GPP	1	CERC Order dtd. 18-04-2017 in P.no. 285/GT/2014 for 01-04-2014 to 31-03-2019	8.76	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
65	NTPC Dadri GPP	1	CERC Order dtd. 13-11-2021 in P.no. 400/GT/2020 for 01-04-2019 to 31-03-2024	2.65	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
66	NTPC Anta GPP	1	CERC Order dtd. 19-09-2017 in P.no. 287/GT/2014 for 01-04-2014 to 31-03-2019	3.09	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
67	NTPC Firoz Gandhi Unchahar I	0	CERC Order dtd. 07.10.2022 in P.no. 431/GT/2020 for 01.04.2019 to 31.03.2024	4.47	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
68	NTPC Firoz Gandhi Unchahar II	1	CERC Order dtd. 12-12-2021 in P.no. 438/GT/2020 for 01.04.2019 to 31.03.2024	4.39	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
69	NTPC Firoz Gandhi Unchahar III	0	CERC Order dtd. 07.10.2022 in P.no. 427/GT/2020 for 01.04.2019 to 31.03.2024	4.49	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
70	NTPC Firoz Gandhi Unchahar IV	1	CERC TuP Ord dtd. 16.03.2022 in P.no. 364/GT/2020 for FY 2017-18 & FY 2018-19	4.64	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
71	NTPC Rihand TPS-I	1	CERC Order dtd. 23-08-2016 in P.no. 291/GT/2014	1.88	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
72	NTPC Rihand TPS-II	1	CERC Order dtd. 08-04-2022 in P.no. 426/GT/2020 for 01-04-2019 to 31-03-2024	1.83	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
73	NTPC Rihand TPS-III	3	CERC Order dtd. 06-02-2017 in P.no. 372/GT/2014 for 01-04-2014 to 31-03-2019	1.92	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
74	NTPC NCTP Dadri II	2	CERC Ord 02-06-2022 in P.no. 2/GT/2021 for 01-04-2019 to 31-03-2024	4.67	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
75	NTPC Singrauli	2	CERC Order dtd. 28-07-2016 in P.no. 290/GT/2014 for 01-04-2014 to 31-03-2019	1.89	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
76	NTPC IGPS I Jhajjar	2	CERC Order dtd. 22.09.2022 in P.no. 489/GT/2020 for 01-04-2019 to 31-03-2024	4.57	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
77	MEJA Urja Nigam	2	CERC Ord dtd. 02-05-2019 in P.no. 341/GT/2018 for 31.10.2018 to 31.03.2019	2.65	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)

Sr No	Source	Fixed Charge (Rs. Crore)	Basis for Fixed Charges	Energy Charge (Rs. /kWh)	Basis for Energy Charges
78	NTPC Tanda	3	Fixed Charge as per past 12 months Bills (Sep-21 to Aug-22)	4.01	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
79	Rajasthan (NPCIL)	0	Tariff @ Rs 2.9914 as DAE Notification dtd 22.03.2018 for 01.04.2017 to 31.03.2022	4.05	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
80	NARORA (NPCIL)	0	Tariff @ Rs 3.3439 as DAE Notification dtd 22.03.2018 for 01.04.2017 to 31.03.2022	3.08	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
81	Torrent Power	34	CERC Ord dtd 10-03-2022 in P.no. 236/GT/2020 for 01.04.2019 to 31.03.2024	4.69	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
82	BLA Power, Unit-I & II	19	MPERC Ord dtd 25-10-2021 in P.no. 17/2018 for FY 2016-17 to FY 2018-19	3.15	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
83	Jaypee Bina Power	453	MPERC Ord dtd 30-04-2021 in P.no. 44/2020	3.39	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
84	Lanco Amarkantak TPS Unit 1	264	MPERC Ord dtd 24-08-2021 in P.no. 60/2020 for FY 2014-15 to FY 2018-19	2.58	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
85	Reliance UMPP, Sasan	193	Prorated Fixed Charges based on actual bills for the Period Sept'21 to Aug'22	1.34	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
86	Essar Power STPS	0		5.77	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
87	Jaiprakash Power STPS, Nigri	618	MPERC Ord dtd 03-05-2021 in P.no. 43/2020 for FY 2019 to FY 2024	0.92	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
88	MB Power STPS, Unit-I	264	MPERC Ord dtd 01-05-2021 in P.no. 46/2020 for FY 2019 to FY 2024	2.97	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
89	MB Power STPS, Unit-II	264	MPERC Ord dtd 01-05-2021 in P.no. 46/2020 for FY 2019 to FY 2024	2.97	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
90	Jhabua Power STPS, Unit-1	272	MPERC Ord dtd 08-05-2021 in P.no. 47/2020 for FY 2019 to FY 2024	2.86	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
91	Renewable Energy (Solar)	0		3.17	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)
92	Renewable Energy (other than Solar)	0		4.52	Energy Charge as per Weighted Avg of past 12 months Bills (Sep-21 to Aug-22)

2.44 Further, the Petitioners submitted that all plants allocated to MPPMCL have been considered and Merit Order Dispatch (MOD) has been applied for FY 2023-24 to all the plants. The energy availability after considering the backing down, as submitted by the Petitioners is given in the following table:

Table 21 : MOD for FY 2023-24 as submitted by the Petitioners

Sr. No	Generating Stations	Energy Charge (Paisa/kWh)	Availability (MUs)
1	KAPP Kakrapar	2.34	730
2	TAPP Tarapur	3.45	1,518
3	Rajasthan (NPCIL)	4.05	8
4	NARORA (NPCIL)	3.08	7
5	NTPC Singrauli Small HPP	0.00	0
6	NHPC Lower Subansiri HEP Unit-1	5.09	148
7	Renewable Energy (Solar)	3.17	10,298
8	Renewable Energy (other than Solar)	4.52	6,465
9	Bansagar Ph I HPS (Tons)	0.39	1,167
10	Koteshwar HPP	0.39	2
11	Rihand HPS	0.41	94
12	Matatila HPS	0.41	29
13	Pench HPS	0.51	199
14	Bansagar Ph-II HPS (Silpara)	0.73	93
15	Bansagar Ph-IV HPS (Jhinna)	0.76	92
16	NVDA Sardar Sarovar HPS	0.82	1,607
17	Birsinghpur HPS	0.82	44
18	Jaiprakash Power STPS, Nigri	0.92	3,483
19	Rani Awanti Bai Sagar, Bargi HPS	1.00	395
20	Gandhisagar HPS	1.00	104
21	Bansagar Ph-III HPS (Deolond)	1.11	100
22	SJVN Jhakri HPS	1.18	9
23	NHPC Dhauliganga	1.24	3
24	NHPC Chamera II	1.25	3
25	NHPC Parbati III	1.26	5
26	Reliance UMPP, Sasan	1.34	10,450
27	Madikheda HPS	1.48	110
28	Ranapratap Sagar HPS	1.54	134
29	Jawahar Sagar HPS	1.54	124
30	NTPC Sipat II	1.57	1,276
31	NTPC Korba III	1.61	506
32	NTPC Vindyachal IV	1.71	1,937
33	NTPC Vindyachal III	1.72	1,682
34	NTPC Korba	1.73	3,295
35	NTPC Vindyachal V Unit 1	1.77	966
36	NTPC Rihand TPS-II	1.83	16
37	SJVN Rampur HPS	1.85	2
38	NTPC Rihand TPS-I	1.88	15
39	NTPC Singrauli	1.89	28
40	NTPC Rihand TPS-III	1.92	17
41	NTPC Vindyachal II	1.93	2,196

Sr. No	Generating Stations	Energy Charge (Paisa/kWh)	Availability (MUs)
42	Tehri HPS	1.99	6
43	NTPC Vindyachal I	1.99	2,955
44	NHDC Indira Sagar HPS	2.00	1,966
45	SGTPS Ph-III	2.10	3,519
46	NHPC Chamera III	2.12	2
47	NHDC Omkareshwar HPS	2.12	1,158
48	NHPC Kishanganga	2.18	3
49	NTPC Sipat I	2.24	2,253
50	NTPC Lara STPS, Raigarh, Unit I	2.28	1,248
51	NTPC Lara STPS, Raigarh, Unit II	2.28	0
52	Satpura TPS Ph-IV	2.45	3,597
53	SGTPS Ph-I & II	2.48	4,566
54	Rajghat HPS	2.52	43
55	Lanco Amarkantak TPS Unit 1	2.58	2,038
56	NHPC Dulhasti	2.60	4
57	NTPC Koldam HPP I	2.61	3
58	MEJA Urja Nigam	2.65	6
59	NTPC Dadri GPP	2.65	15
60	NTPC Gandhar GPP	2.80	0
61	Jhabua Power STPS, Unit-1	2.86	1,478
62	MB Power STPS, Unit-I	2.97	1,478
63	MB Power STPS, Unit-II	2.97	1,478
64	Shri Singaji STPS Phase-II	3.06	9,289
65	NTPC Anta GPP	3.09	7
66	BLA Power, Unit-I & II	3.15	189
67	Amarkantak TPS Ph-III	3.25	1,511
68	NTPC Kawas GPP	3.25	0
69	NTPC Kahalgaon II	3.28	521
70	NHPC Sewa II	3.34	1
71	Jaypee Bina Power	3.39	2,378
72	Shri Singaji STPS Phase-I	3.41	8,444
73	NTPC Gadarwara STPS, Unit-2	3.73	0
74	NTPC Khargone STPS, Unit-I & II	3.76	4,819
75	DVC (MTPS & CTPS)	3.81	211
76	DVC (DTPS)	3.81	493
77	NTPC Gadarwara STPS, Unit-1	3.84	5,841
78	NTPC Tanda	4.01	8
79	NTPC Solapur STPS	4.12	2,257
80	NTPC Firoz Gandhi Unchahar II	4.39	7
81	NTPC Mouda II Unit 1	4.43	172
82	NTPC Firoz Gandhi Unchahar I	4.47	2
83	NTPC Firoz Gandhi Unchahar III	4.49	4
84	NTPC IGPS I Jhajjar	4.57	14
85	NTPC Firoz Gandhi Unchahar IV	4.64	9

Sr. No	Generating Stations	Energy Charge (Paisa/kWh)	Availability (MUs)
86	NTPC NCTP Dadri II	4.67	16
87	Torrent Power	4.69	214
88	NTPC Mouda I	5.67	135
89	Essar Power STPS	5.77	422
90	NTPC Auraiya GPP	8.76	12
91	**Total**		**1,14,148**

2.45 The table below shows generating station-wise details of fixed costs and energy costs for FY 2023-24 as submitted by the Petitioners:

Table 22 : Fixed cost and Energy cost as Claimed by Petitioners for FY 2023-24 (Rs. Crore)

Sr. No	Particulars	Fixed Charge	Energy Charge	Total
1	Amarkantak TPS Ph-III	163.59	249.02	412.61
2	Satpura TPS Ph-II & III	0.00	0.00	0.00
3	Satpura TPS Ph-IV	603.99	881.94	1,485.93
4	SGTPS Ph-I & II	457.03	1,130.25	1,587.28
5	SGTPS Ph-III	309.32	740.37	1,049.69
6	Shri Singaji STPS Phase-I	1,246.84	925.21	2,172.05
7	Shri Singaji STPS Phase-II	1,314.19	1,857.63	3,171.82
A	**Total (MP Genco Thermal-MP Share)**	**4,094.96**	**5,784.43**	**9,879.39**
8	Rani Awanti Bai Sagar, Bargi HPS	8.12	39.53	47.65
9	Bansagar Ph I HPS (Tons)	44.91	45.31	90.22
10	Bansagar Ph-II HPS (Silpara)	25.88	6.81	32.69
11	Bansagar Ph-III HPS (Deolond)	21.58	11.01	32.59
12	Bansagar Ph-IV HPS (Jhinna)	2.67	6.96	9.63
13	Birsinghpur HPS	2.63	3.61	6.24
14	Madikheda HPS	2.56	16.38	18.94
15	Rajghat HPS	2.70	10.95	13.65
16	Gandhisagar HPS	1.69	10.47	12.16
17	Ranapratap Sagar HPS	0.00	20.67	20.67
18	Jawahar Sagar HPS	0.00	19.07	19.07
19	Pench HPS	8.82	10.17	18.99
B	**Total (MP Genco Hydel)**	**121.56**	**200.94**	**322.50**
20	NHDC Indira Sagar HPS	279.46	392.27	671.73
21	NHDC Omkareshwar HPS	189.25	245.91	435.16
22	NVDA Sardar Sarovar HPS	101.45	131.75	233.20
23	Rihand HPS	0.00	3.84	3.84
24	Matatila HPS	0.00	1.18	1.18
25	SJVN Rampur HPS	0.67	0.41	1.08
26	SJVN Jhakri HPS	1.46	1.02	2.48
27	Tehri HPS	0.63	1.22	1.85
28	Koteshwar HPP	0.90	0.10	0.99
29	NHPC Parbati III	0.81	0.59	1.40
30	NHPC Chamera II	0.43	0.41	0.84
31	NHPC Chamera III	0.57	0.44	1.01

Sr. No	Particulars	Fixed Charge	Energy Charge	Total
32	NHPC Dulhasti	1.16	0.92	2.08
33	NHPC Dhauliganga	0.37	0.31	0.69
34	NHPC Sewa II	0.28	0.15	0.43
35	NHPC Uri II	0.00	0.00	0.00
36	NHPC Kishanganga	0.64	0.65	1.29
37	NTPC Koldam HPP I	0.67	0.91	1.57
38	NTPC Singrauli Small HPP	0.00	0.00	0.00
39	NHPC Lower Subansiri HEP Unit-1	0.00	75.15	75.15
C	**Total (JV Hydel & Other Hydel)**	**578.74**	**857.22**	**1,435.96**
40	NTPC Korba	247.85	568.95	816.80
41	NTPC Korba III	56.80	81.38	138.18
42	NTPC Vindyachal I	270.28	589.24	859.52
43	NTPC Vindyachal II	170.17	423.78	593.95
44	NTPC Vindyachal III	175.98	289.59	465.56
45	NTPC Vindyachal IV	304.07	330.90	634.96
46	NTPC Vindyachal V Unit 1	160.14	171.28	331.42
47	NTPC Sipat I	282.14	504.46	786.60
48	NTPC Sipat II	125.24	200.10	325.34
49	NTPC Mouda I	24.90	0.00	24.90
50	NTPC Mouda II Unit 1	25.43	0.00	25.43
51	NTPC Solapur STPS	311.11	0.00	311.11
52	NTPC Gadarwara STPS, Unit-1	1,140.36	0.00	1,140.36
53	NTPC Lara STPS, Raigarh, Unit I	138.17	284.49	422.66
54	NTPC Khargone STPS, Unit-I & II	851.54	117.23	968.77
55	NTPC Kawas GPP	95.84	0.00	95.84
56	NTPC Gandhar GPP	88.76	0.00	88.76
57	KAPP Kakrapar	0.00	170.59	170.59
58	TAPP Tarapur	0.00	523.80	523.80
59	NTPC Gadarwara STPS, Unit-2	0.00	0.00	0.00
60	NTPC Lara STPS, Raigarh, Unit II	138.17	0.00	138.17
D	**Total WR Region (Central Generating Stations)**	**4,606.94**	**4,255.78**	**8,862.72**
61	NTPC Kahalgaon II	57.03	71.50	128.53
62	DVC (MTPS & CTPS)	36.51	0.00	36.51
63	DVC (DTPS)	119.62	0.00	119.62
E	**Total ER Region (Central Generating Stations)**	**213.16**	**71.50**	**284.66**
63	NTPC Auraiya GPP	0.80	0.00	0.80
64	NTPC Dadri GPP	0.86	3.88	4.74
65	NTPC Anta GPP	0.59	1.14	1.73
66	NTPC Firoz Gandhi Unchahar I	0.24	0.00	0.24
67	NTPC Firoz Gandhi Unchahar II	0.85	0.00	0.85
68	NTPC Firoz Gandhi Unchahar III	0.45	0.00	0.45
69	NTPC Firoz Gandhi Unchahar IV	1.38	0.00	1.38
70	NTPC Rihand TPS-I	1.28	2.79	4.07
71	NTPC Rihand TPS-II	1.31	2.97	4.29
72	NTPC Rihand TPS-III	2.75	3.25	6.01
73	NTPC NCTP Dadri II	1.94	0.00	1.94

Sr. No	Particulars	Fixed Charge	Energy Charge	Total
74	NTPC Singrauli	1.99	5.35	7.35
75	NTPC IGPS I Jhajjar	2.14	0.00	2.14
76	MEJA Urja Nigam	2.04	1.60	3.64
77	NTPC Tanda	3.25	0.00	3.25
78	NTPC Badarpur	0.00	0.00	0.00
79	Rajasthan (NPCIL)	0.00	3.14	3.14
80	NARORA (NPCIL)	0.00	2.30	2.30
F	**Total NR Region (Central Generating Stations)**	**21.89**	**26.44**	**48.33**
81	Torrent Power	33.90	0.00	33.90
82	BLA Power, Unit-I & II	19.22	31.23	50.45
83	Jaypee Bina Power	452.90	362.45	815.35
84	Lanco Amarkantak TPS Unit 1	264.22	526.45	790.67
85	Reliance UMPP, Sasan	192.50	1,403.69	1,596.20
86	Essar Power STPS	0.00	0.00	0.00
87	Jaiprakash Power STPS, Nigri	617.63	319.19	936.82
88	MB Power STPS, Unit-I	263.90	426.37	690.27
89	MB Power STPS, Unit-II	263.90	404.34	668.24
90	Jhabua Power STPS, Unit-1	271.60	412.56	684.16
G	**Total (IPPs)**	**2,379.77**	**3,886.30**	**6,266.07**
91	Renewable Energy (Solar)	0.00	3,269.55	3,269.55
92	Renewable Energy (other than Solar)	0.00	2,920.60	2,920.60
H	**Total Renewable Energy**	**0.00**	**6,190.14**	**6,190.14**
	Total	**12,017.02**	**21,272.76**	**33,289.78**

Commission's Analysis

2.46 The Commission observed that petitioners have considered actual energy charges as per bills for the period from September 2021 to August 2022 and fixed charges as per MYT orders approved by the Commission and Hon'ble CERC for claiming power purchase cost for FY 2023-24.

2.47 The Commission has considered fixed and energy charges for the generating station for FY 2023-24 based on following approach: -

Determination of Energy Cost

Central, State and IPPs Thermal Generating Stations

2.48 The Commission has considered energy charges for the Thermal generating stations as per actuals during the period September, 2021 to August 2022 as submitted by the Petitioners for FY 2022-23.

Central and State Hydro Generating Stations

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

NPCIL Generating Stations

2.50 For Nuclear Power Generating Stations, the Commission has considered the tariff for FY

2023-24 as per latest DAE notification dated 22nd March 2018.

Renewable Sources

2.51 The Commission has considered rate of power purchase from Wind, HPO and Other (excluding Hydro) energy sources, as the weighted average purchase rates as per the Power Purchase Agreements. However, for fulfillment of HPO, additional power procurement has been considered at the rate of Rs. 5.09/kWh i.e., Rate of latest signed PPA for NHPC Lower Subansiri HEP.

New generating stations

2.52 The Commission has considered energy charge for Subhansiri HEP as submitted by the Petitioner in the Petition and reply for filling data gaps i.e., Rs. 5.09/kWh.

Determination of Fixed Cost

Central, State and IPPs Generating Stations

2.53 For Central/Inter-State Generating Stations (Thermal and Hydro), the Commission has considered latest available Tariff Orders issued by CERC for individual stations.

2.54 For MPPGCL stations (Thermal and Hydro), the Fixed Charges has been considered in accordance with latest available MYT Orders issued by the Commission.

2.55 The Commission has considered fixed costs of IPPs for which tariff is determined by the Commission, based on the latest available MYT Order or the PPA.

2.56 For new generating stations for which tariffs are yet to be determined/admitted by the appropriate Commission, the Fixed Charges have been considered based on actual bills of previous financial year.

Power Purchase from Captive Power Plants (CPP)

2.57 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."

2.58 The Commission has observed that the Petitioner has not projected any availability of power from Captive Power Plants for FY 2023-24. 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

2.59 For NHPC Lower Subhansiri HEP, no fixed charge has been considered in accordance to the Petitioners' reply submitted for filling data gaps.

2.60 On the basis of the above considerations, the Fixed and Energy Charges considered for FY 2023-24 is shown in the table below:

Table 23: Basis of Fixed and Energy charges for the generating stations for FY 2023-24

Sr. No.	Generating Station	Fixed Charges for FY 2023-24 (Rs. Crore)	Basis	Energy Charges (Rs./kWh) for FY 2023-24	Basis
1	NTPC Korba	1,101	CERC Order Dated 21st April, 2022 in Petition No. 486/GT/2020 for 1.4.2019 to 31.3.2024.	1.73	As Per Petitioners' submission
2	NTPC Korba III	395	CERC Order dated 23rd March, 2022 in Petition No. 419/GT/2020 for 1.4.2019 to 31.3.2024	1.61	As Per Petitioners' submission
3	NTPC Vindyachal I	783	CERC Order 31-01-2022 in P.no. 401/GT/2022 for 01-04-2019 to 31-03-2024	1.99	As Per Petitioners' submission
4	NTPC Vindyachal II	545	CERC Order 10th June, 2022 in Petition No. 485/GT/2020 for 1.4.2019 to 31.3.2024	1.93	As Per Petitioners' submission
5	NTPC Vindyachal III	736	CERC Order 24-02-2017 in P.no. 342/GT/2014 for 01-04-2014 to 31-03-2019	1.72	As Per Petitioners' submission
6	NTPC Vindyachal IV	1,105	CERC Order 10-03-2017 in P.no. 339/GT/2014 for 01-04-2014 to 31-03-2019	1.71	As Per Petitioners' submission
7	NTPC Vindyachal V Unit 1	583	CERC Order 31-08-2016 in P.no. 234/GT/2015 for 30-10-2015 to 31-03-2019	1.77	As Per Petitioners' submission
8	NTPC Sipat I	1,745	CERC Order 6th June, 2022 in Petition No. 425/GT/2020 for 1.4.2019 to 31.3.2024.	2.24	As Per Petitioners' submission
9	NTPC Sipat II	691	CERC Order dated 4th June, 2022 in Petition No. 435/GT/2020 for 1.4.2019 to 31.3.2024	1.57	As Per Petitioners' submission
10	NTPC Mouda I	1,188	CERC Order dated 14th November, 2022 in Petition No. 437/GT/2020 for 1.4.2019 to 31.3.2024	5.67	As Per Petitioners' submission
11	NTPC Mouda II Unit 1	1,387	CERC Order 05-04-2019 in P.no. 142/GT/2016 for COD to 31-03-2019	4.43	As Per Petitioners' submission
12	NTPC Kawas GPP	449	CERC Order Dated 4th June, 2022 in Petition No. 488/GT/2020 for 1.4.2019 to 31.3.2024.	3.25	As Per Petitioners' submission
13	NTPC Gandhar GPP	498	CERC Order dated 4th June, 2022 in Petition No. 420/GT/2020 for 1.4.2019 to 31.3.2024.	2.80	As Per Petitioners' submission
14	NTPC Auraiya GPP	309	CERC Order 18-04-2017 in P.no. 285/GT/2014 for 01-04-2014 to 31-03-2019	8.76	As Per Petitioners' submission
15	NTPC Dadri GPP	318	CERC Order 13th November, 2021 in Petition No. 400/GT/2020 for 1.4.2019 to 31.3.2024	2.65	As Per Petitioners' submission
16	NTPC Anta GPP	218	CERC Order 19-09-2017 in P.no. 287/GT/2014 for 01-04-2014 to 31-03-2019	3.09	As Per Petitioners' submission

Sr. No.	Generating Station	Fixed Charges for FY 2023-24 (Rs. Crore)	Basis	Energy Charges (Rs./kWh) for FY 2023-24	Basis
17	NTPC Kahalgaon 2	1,149	CERC Order 21-01-2017 in P.no. 283/GT/2014 for 01-04-2014 to 31-03-2019	3.28	As Per Petitioners' submission
18	KAPP Kakrapar	0		2.34	As Per Petitioners' submission
19	TAPP Tarapur	0		2.91	DAE Notification dtd 22.03.2018 for 01.04.2017 to 31.03.2022
20	RAPP Rawabhatta	0		3.34	DAE Notification dtd 22.03.2018 for 01.04.2017 to 31.03.2022
21	NAPP Narora	0		2.99	DAE Notification dtd 22.03.2018 for 01.04.2017 to 31.03.2022
22	NTPC Solapur STPS, Phase-1	1,284	Prorated Fixed Charges based on actual bills for FY 2020-21	4.12	As Per Petitioners' submission
23	NTPC Gadarwara STPS, Unit-1	1,100	Prorated Fixed Charges based on actual bills for the Period January 2020 to December 2020	3.84	As Per Petitioners' submission
24	NTPC Gadarwara STPS, Unit-2	1,100	Same as Fixed Charges for Gadarwara Unit-1	3.84	As Per Petitioners' submission
25	NTPC Lara STPS, Raigarh, Unit I	1,255	Prorated Fixed Charges based on actual bills for the Period January 2020 to December 2020	2.28	As Per Petitioners' submission
26	NTPC Lara STPS, Raigarh, Unit II	1,255	Same as Fixed Charges for Lara Unit-1	2.28	As Per Petitioners' submission
27	NTPC Firoz Gandhi Unchahar I	298	CERC Order dated 7th October, 2022 in Petition No. 431/GT/2020 from 1.4.2019 to 31.3.2024	4.47	As Per Petitioners' submission
28	NTPC Firoz Gandhi Unchahar II	316	CERC Order dated 12th December, 2021 in Petition No. 438/GT/2020	4.39	As Per Petitioners' submission
29	NTPC Firoz Gandhi Unchahar III	172	CERC Order dated 7th October, 2022 in Petition No. 427/GT/2020 from 1.4.2019 to 31.3.2024.	4.49	As Per Petitioners' submission
30	NTPC Firoz Gandhi Unchahar IV	572	CERC Order dated 15th April, 2022 in Petition No. 3/GT/2021	4.64	As Per Petitioners' submission
31	NTPC Rihand I	586	CERC Order dated 23.08.2016 in P. No. 291/GT/2014	1.88	As Per Petitioners' submission
32	NTPC Rihand II	547	CERC Order date 8th April, 2022 in Petition No. 426/GT/2020 for 1.4.2019 to 31.3.2024	1.83	As Per Petitioners' submission
33	NTPC Rihand III	1,019	CERC Order 06-02-2017 in P.no. 372/GT/2014 for 01-04-2014 to 31-03-2019	1.92	As Per Petitioners' submission
34	NTPC NCTP Dadri II	925	CERC Order 02-05-2017 in P.no. 324/GT/2014 for 01-04-2014 to 31-03-2019	4.67	As Per Petitioners' submission
35	NTPC Singrauli	907	CERC Order 28-07-2016 in P.no. 290/GT/2014 for 01-04-2014 to 31-03-2019	1.89	As Per Petitioners' submission
36	NTPC IGPS I Jhajjar	1,709	CERC Order 09-03-2017 in P.no. 266/GT/2014 for 01-04-2014 to 31-03-2019	4.57	As Per Petitioners' submission
37	NTPC Khargone STPS, Unit-I	822	Prorated Fixed Charges as per actual bills for the period April 2020 to March 2021	3.76	As Per Petitioners' submission

Sr. No.	Generating Station	Fixed Charges for FY 2023-24 (Rs. Crore)	Basis	Energy Charges (Rs./kWh) for FY 2023-24	Basis
38	NTPC Khargone STPS, Unit-II	822	Prorated Fixed Charges as per actual bills for the period April 2020 to March 2021	3.76	As Per Petitioners' submission
39	Meja Urja Nigam	1,133	Prorated Fixed Charges as per Petitioner submission	2.65	As Per Petitioners' submission
40	NTPC Tanda Stage-II	2,850	Prorated Fixed Charges as per Petitioner submission	4.01	As Per Petitioners' submission
41	DVC (MTPS & CTPS)	91	CERC Order 17-02-2017 in P.no. 180/GT/2015 for 01-04-2014 to 31-03-2019 Fixed Charge as per Weighted Avg of 12 month Bill (Nov-19 to Oct-20)	3.81	As Per Petitioners' submission
42	DVC (DTPS)	1,104	CERC Order 17-03-2017 in P.no. 205/GT/2015 for 01-04-2014 to 31-03-2019	3.81	As Per Petitioners' submission
43	Amarkantak TPS Ph-III	164	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	3.25	As Per Petitioners' submission
45	Satpura TPS Ph-IV	604	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	2.45	As Per Petitioners' submission
46	SGTPS Ph-I & II	457	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	2.48	As Per Petitioners' submission
47	SGTPS Ph-III	309	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	2.10	As Per Petitioners' submission
48	Shri Singaji STPS, Ph-I	1,247	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	3.41	As Per Petitioners' submission
49	Shri Singaji STPS, Ph-2	1,314	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	3.06	As Per Petitioners' submission
50	Rani Awanti Bai Sagar, Bargi HPS	18	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.18	Computed based on the Design Energy as per Tariff Order
51	Bansagar Ph I HPS (Tons)	156	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.74	Computed based on the Design Energy as per Tariff Order
52	Bansagar Ph-II HPS (Silpara)		MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.74	Computed based on the Design Energy as per Tariff Order
53	Bansagar Ph-III HPS (Deolond)		MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.74	Computed based on the Design Energy as per Tariff Order
54	Bansagar Ph-IV HPS (Jhinna)	10	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.65	Computed based on the Design Energy as per Tariff Order
55	Birsinghpur HPS	6	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.66	Computed based on the Design Energy as per Tariff Order
56	Marhikheda HPS	19	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	1.71	Computed based on the Design Energy as per Tariff Order
57	Rajghat HPS	15	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	1.02	Computed based on the Design Energy as per Tariff Order
58	Gandhisagar HPS	16	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.19	Computed based on the Design Energy as per Tariff Order
59	Ranapratap Sagar & Jawahar Sagar HPS	0	As Per Petitioners' submission	1.51	Computed based on the Design Energy as per Tariff Order
60	Pench HPS	28	MPERC Order dated 19.05.2021 in P. No. 53 of 2020	0.46	Computed based on the Design Energy as per Tariff Order

Sr. No.	Generating Station	Fixed Charges for FY 2023-24 (Rs. Crore)	Basis	Energy Charges (Rs./kWh) for FY 2023-24	Basis
61	NHDC Indira Sagar HPS	559	CERC order dated: 06.1.2022, Petition No.106/GT/2020	2.39	Computed based on the Design Energy as per Tariff Order
62	NHDC Omkareshwar HPS	343	CERC order dated: 11th March, 2022, Petition No. 107/GT/2020	2.54	Computed based on the Design Energy as per Tariff Order
63	Sardar Sarovar HPS	356	MPERC Order dated August 6,2013 in P. No. 18 of 2013	1.08	Computed based on the Design Energy as per Tariff Order
64	Rihand HPS	0	As Per Petitioners' submission	0.40	Computed based on the Design Energy as per Tariff Order
65	Matatila HPS	0	As Per Petitioners' submission	0.40	Computed based on the Design Energy as per Tariff Order
66	SJVN Rampur HPS	673.33	CERC Order dated 24th January, 2022 in Petition No. 28/GT/2020 from 1.4.2019 to 31.3.2024	2.18	Computed based on the Design Energy as per Tariff Order
67	SJVN Jhakri HPS	1378.97	CERC Order dated 16th September, 2021 in Petition No.30/GT/2020 for 1.4.2019 to 31.3.2024.	1.32	Computed based on the Design Energy as per Tariff Order
68	Tehri HPS	1,029	CERC Order dated 13th May 2022 in Petition No. 97/GT/2020 for 1.4.2019 to 31.3.2024	2.21	Computed based on the Design Energy as per Tariff Order
69	Koteshwar HPP	552.56	CERC Order 3rd October, 2022 in Petition No. 244/GT/2020 from 1.4.2019 to 31.3.2024	2.81	Computed based on the Design Energy as per Tariff Order
70	NHPC Parbati III	519.52	CERC Order dated 23.04.2019 in P. No. 6/GT/2017	1.52	Computed based on the Design Energy as per Tariff Order
71	NHPC Chamera II	262	CERC Order dated 17.6.2016 in P. No. 233/GT/2014	1.08	Computed based on the Design Energy as per Tariff Order
72	NHPC Chamera III	375	CERC Order dated 29.01.2020 in P. No. 321/GT/2018	1.99	Computed based on the Design Energy as per Tariff Order
73	NHPC Dulhasti	772	CERC Order dated 9th May, 2022 in Petition No. 146/GT/2020	2.36	Computed based on the Design Energy as per Tariff Order
74	NHPC Dhauliganga	253	CERC Order dated 18th August, 2022 in Petition No. 284/GT/2020	1.31	Computed based on the Design Energy as per Tariff Order
75	NHPC Sewa II	243	CERC in Order dated 05.02.2020 in P. No. 322/GT/2018 for FY 2014-15 to FY 2018-19.	2.73	Computed based on the Design Energy as per Tariff Order
76	NHPC Uri II	412	CERC Tariff Order 05.02.2020 in P. No. 308/GT/2018	0.00	Computed based on the Design Energy as per Tariff Order
77	NHPC Kishanganga	498	CERC Tariff Order 28.10.2019 in P. No. 43/GT/2018	1.66	Computed based on the Design Energy as per Tariff Order
78	NTPC Koldam HPP I	1,310	CERC order dated 05.04.2018 in P. No. 107/GT/2015 upto FY 2018-19	2.58	Computed based on the Design Energy as per Tariff Order
79	NTPC Singrauli Small HPP	0	As Per Petitioners' submission	9.32	As Approved in MYT

Sr. No.	Generating Station	Fixed Charges for FY 2023-24 (Rs. Crore)	Basis	Energy Charges (Rs./kWh) for FY 2023-24	Basis
80	NHPC Lower Subansiri HEP Unit-1	0	As Per Petitioners' submission	5.09	As Per Petitioners' submission
81	BLA Power	64	MPERC Order in P. No. 17 of 2018 dated 25.10.2021	3.15	As Per Petitioners' submission
82	Jaypee Bina Power	647	MPERC Order in P. No. 44 of 2020 dated 30.04.2021	3.39	As Per Petitioners' submission
83	Lanco Amarkantak TPS Unit 1	264	MPERC Order in P.No. 60 of 2020 dated 24.08.2021	2.58	As Per Petitioners' submission
84	Reliance UMPP, Sasan	513	As per Petitioner submission	1.34	As Per Petitioners' submission
85	Jaiprakash Power STPS, Nigri	1,605	MPERC order in Petition No. 43 of 2020 dated 03.05.2021	0.92	As Per Petitioners' submission
86	MB Power STPS	1,467	MPERC Order in Petition No. 46 of 2020 dated 01.05.2021	2.89	As Per Petitioners' submission
87	Jhabua Power STPS, Unit-1	752	MPERC order in Petition No. 47 of 2020 dated 08.05.2021	2.79	As Per Petitioners' submission
88	Other RPO (exculding Hydro)	0		3.80	Weighted Average Energy purchase Rates for Other RPO
89	Wind RPO	0		2.74	Weighted Average Energy purchase Rates for Wind RPO
90	HPO	0		5.09	As per NHPC Lower Subansiri HEP

2.61 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 FY 2023-24. Further, the Commission directs the Petitioners to not restrict supply unduly to any category of consumers during the FY 2023-24.

2.62 The allocation of Merit Order Dispatch for generating station applicable for FY 2023-24 is shown in the table below:

Table 24: MOD on allocated generating stations for FY 2023-24

Sr. No.	Generating Station	Dispatch Type (1 Must Run, 0 Others)	Energy Charges (Paisa/kWh)
1	Rani Awanti Bai Sagar, Bargi HPS	1	18
2	Gandhisagar HPS	1	19
3	Rihand HPS	1	40
4	Matatila HPS	1	40
5	Pench HPS	1	46
6	Bansagar Ph-IV HPS (Jhinna)	1	65
7	Birsinghpur HPS	1	66
8	Bansagar Ph I HPS (Tons)	1	74
9	Bansagar Ph-II HPS (Silpara)	1	74
10	Bansagar Ph-III HPS (Deolond)	1	74
11	Rajghat HPS	1	102
12	Sardar Sarovar HPS	1	108
13	NHPC Chamera II	1	108
14	NHPC Dhauliganga	1	131
15	SJVN Jhakri HPS	1	132
16	Ranapratap Sagar & Jawahar Sagar HPS	1	151
17	NHPC Parbati III	1	152
18	NHPC Kishanganga	1	166
19	Marhikheda HPS	1	171
20	NHPC Chamera III	1	199
21	SJVN Rampur HPS	1	218
22	Tehri HPS	1	221
23	KAPP Kakrapar	1	234
24	NHPC Dulhasti	1	236
25	NHDC Indira Sagar HPS	1	239
26	NHDC Omkareshwar HPS	1	254
27	NTPC Koldam HPP I	1	258
28	NHPC Sewa II	1	273
29	Wind RPO	1	274
30	Koteshwar HPP	1	281
31	TAPP Tarapur	1	291
32	NAPP Narora	1	299
33	RAPP Rawabhatta	1	334
34	Other RPO (excluding Hydro)*	1	380
35	NHPC Lower Subansiri HEP Unit-1	1	509
36	HPO (excluding NHPC Lower Subansiri HEP)	1	509
37	NTPC Singrauli Small HPP	1	932
38	Jaiprakash Power STPS, Nigri	0	92
39	Reliance UMPP, Sasan	0	134
40	NTPC Sipat II	0	157
41	NTPC Korba III	0	161
42	NTPC Vindyachal IV	0	171

Sr. No.	Generating Station	Dispatch Type (1 Must Run, 0 Others)	Energy Charges (Paisa/kWh)
43	NTPC Vindyachal III	0	172
44	NTPC Korba	0	173
45	NTPC Vindyachal V Unit 1	0	177
46	NTPC Rihand II	0	183
47	NTPC Rihand I	0	188
48	NTPC Singrauli	0	189
49	NTPC Rihand III	0	192
50	NTPC Vindyachal II	0	193
51	NTPC Vindyachal I	0	199
52	SGTPS Ph-III	0	210
53	NTPC Sipat I	0	224
54	NTPC Lara STPS, Raigarh, Unit I	0	228
55	NTPC Lara STPS, Raigarh, Unit II	0	228
56	Satpura TPS Ph-IV	0	245
57	SGTPS Ph-I & II	0	248
58	Lanco Amarkantak TPS Unit 1	0	258
59	NTPC Dadri GPP	0	265
60	Meja Urja Nigam	0	265
61	Jhabua Power STPS, Unit-1	0	279
62	NTPC Gandhar GPP	0	280
63	MB Power STPS	0	289
64	Shri Singaji STPS, Ph-2	0	306
65	NTPC Anta GPP	0	309
66	BLA Power	0	315
67	NTPC Kawas GPP	0	325
68	Amarkantak TPS Ph-III	0	325
69	NTPC Kahalgaon 2	0	328
70	Jaypee Bina Power	0	339
71	Shri Singaji STPS, Ph-I	0	341
72	NTPC Khargone STPS, Unit-I	0	376
73	NTPC Khargone STPS, Unit-II	0	376
74	DVC (MTPS & CTPS)	0	381
75	DVC (DTPS)	0	381
76	NTPC Gadarwara STPS, Unit-1	0	384
77	NTPC Gadarwara STPS, Unit-2	0	384
78	NTPC Tanda Stage-II	0	401
79	NTPC Solapur STPS, Phase-1	0	412
80	NTPC Firoz Gandhi Unchahar II	0	439
81	NTPC Mouda II Unit 1	0	443
82	NTPC Firoz Gandhi Unchahar I	0	447
83	NTPC Firoz Gandhi Unchahar III	0	449
84	NTPC IGPS I Jhajjar	0	457
85	NTPC Firoz Gandhi Unchahar IV	0	464
86	NTPC NCTP Dadri II	0	467
87	NTPC Mouda I	0	567
88	NTPC Auraiya GPP	0	876

** In accordance with the MPERC (Cogeneration and Generation of Electricity from Renewable Sources of Energy) (Revision-II) Regulations, 2021 and amendment thereof.*

Fixed and Energy Charges

2.63 On the basis of the above, the Fixed and Energy charges of the generating stations towards allocated capacities of MPPMCL admitted by the Commission are shown in the following table:

Table 25 : Fixed and Energy Charges of all generating stations admitted for FY 2023-24

Sr. No.	Generating Station	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Total (Rs. Crore)
1	KAPP Kakrapar	0.00	190.95	190.95
2	TAPP Tarapur	0.00	462.54	462.54
3	RAPP Rawabhatta	0.00	3.34	3.34
4	NAPP Narora	0.00	2.16	2.16
5	Rani Awanti Bai Sagar, Bargi HPS	9.15	7.57	16.73
6	Bansagar Ph I HPS (Tons)	77.75	73.51	151.26
7	Bansagar Ph-II HPS (Silpara)	0.00	6.53	6.53
8	Bansagar Ph-III HPS (Deolond)	0.00	7.21	7.21
9	Bansagar Ph-IV HPS (Jhinna)	4.82	5.68	10.49
10	Birsinghpur HPS	2.39	3.78	6.16
11	Marhikheda HPS	9.47	19.43	28.90
12	Rajghat HPS	2.72	5.21	7.92
13	Gandhisagar HPS	1.95	2.58	4.52
14	Ranapratap Sagar & Jawahar Sagar HPS	0.00	36.34	36.34
15	Pench HPS	9.17	9.91	19.09
16	NTPC Singrauli Small HPP	0.00	0.17	0.17
17	NHPC Lower Subansiri HEP Unit-1	0.00	75.15	75.15
18	Other RPO (exculding Hydro)	0.00	5,737.15	5,737.15
19	Wind RPO	0.00	452.99	452.99
20	HPO (exculding NHPC Lower Subansiri HEP)	0.00	227.02	227.02
21	Rihand HPS	0.00	4.44	4.44
22	Matatila HPS	0.00	1.61	1.61
23	Jaiprakash Power STPS, Nigri	601.82	319.19	921.00
24	NHPC Chamera II	0.58	0.67	1.24
25	Sardar Sarovar HPS	101.45	194.07	295.52
26	NHPC Dhauliganga	0.47	0.49	0.96
27	SJVN Jhakri HPS	1.65	2.02	3.68
28	Reliance UMPP, Sasan	192.50	1,530.99	1,723.50
29	NHPC Parbati III	0.96	0.75	1.72
30	NTPC Sipat II	125.09	231.98	357.07
31	NTPC Korba III	56.55	93.98	150.53
32	NHPC Kishanganga	0.75	0.72	1.47
33	NTPC Vindyachal IV	303.39	358.34	661.72
34	NTPC Vindyachal III	175.78	306.06	481.84

Sr. No.	Generating Station	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Total (Rs. Crore)
35	NTPC Korba	247.82	641.10	888.92
36	NTPC Vindyachal V Unit 1	159.78	182.14	341.92
37	NTPC Rihand II	0.49	1.10	1.59
38	NTPC Rihand I	0.47	1.19	1.66
39	NTPC Singrauli	0.72	2.09	2.82
40	NTPC Rihand III	1.02	1.53	2.55
41	NTPC Vindyachal II	170.02	436.39	606.42
42	NHPC Chamera III	0.69	0.74	1.43
43	NTPC Vindyachal I	270.06	634.61	904.67
44	SGTPS Ph-III	309.32	740.30	1,049.62
45	SJVN Rampur HPS	0.74	0.87	1.61
46	Tehri HPS	1.23	1.40	2.64
47	NTPC Sipat I	281.05	478.86	759.91
48	NTPC Lara STPS, Raigarh, Unit I	138.17	152.26	290.43
49	NTPC Lara STPS, Raigarh, Unit II	138.17	151.34	289.51
50	NHPC Dulhasti	1.43	1.48	2.91
51	NHDC Indira Sagar HPS	279.46	509.69	789.14
52	Satpura TPS Ph-IV	603.99	854.63	1,458.62
53	SGTPS Ph-I & II	404.14	1,145.74	1,549.88
54	NHDC Omkareshwar HPS	171.38	280.00	451.38
55	NTPC Koldam HPP I	1.11	1.31	2.42
56	Lanco Amarkantak TPS Unit 1	264.22	469.72	733.94
57	Meja Urja Nigam	2.04	3.74	5.78
58	NTPC Dadri GPP	1.21	5.84	7.05
59	NHPC Sewa II	0.45	0.52	0.97
60	Jhabua Power STPS, Unit-1	263.03	355.55	618.58
61	NTPC Gandhar GPP	88.73	9.84	98.57
62	Koteshwar HPP	0.66	0.71	1.38
63	MB Power STPS	513.40	728.28	1,241.67
64	Shri Singaji STPS, Ph-2	1,314.19	1,603.53	2,917.72
65	NTPC Anta GPP	0.81	0.00	0.81
66	BLA Power	18.77	17.62	36.39
67	Amarkantak TPS Ph-III	163.59	253.38	416.97
68	NTPC Kawas GPP	95.82	4.27	100.09
69	NTPC Kahalgaon 2	56.67	90.55	147.22
70	Jaypee Bina Power	452.96	407.38	860.34
71	Shri Singaji STPS, Ph-I	1,246.84	898.90	2,145.74
72	NTPC Khargone STPS, Unit-I	425.77	147.07	572.84
73	NTPC Khargone STPS, Unit-II	425.77	0.00	425.77
74	DVC (MTPS & CTPS)	36.51	0.00	36.51
75	DVC (DTPS)	110.42	0.00	110.42

Sr. No.	Generating Station	Fixed Charges (Rs. Crore)	Energy Charges (Rs. Crore)	Total (Rs. Crore)
76	NTPC Gadarwara STPS, Unit-1	570.18	0.00	570.18
77	NTPC Gadarwara STPS, Unit-2	570.18	0.00	570.18
78	NTPC Tanda Stage-II	1.71	0.00	1.71
79	NTPC Solapur STPS, Phase-1	311.11	0.00	311.11
80	NTPC Firoz Gandhi Unchahar II	0.28	0.00	0.28
81	NTPC Mouda II Unit 1	24.95	0.00	24.95
82	NTPC Firoz Gandhi Unchahar I	0.09	0.00	0.09
83	NTPC Firoz Gandhi Unchahar III	0.15	0.00	0.15
84	NTPC IGPS I Jhajjar	3.08	0.00	3.08
85	NTPC Firoz Gandhi Unchahar IV	0.57	0.00	0.57
86	NTPC NCTP Dadri II	0.83	0.00	0.83
87	NTPC Mouda I	16.06	0.00	16.06
88	NTPC Auraiya GPP	1.11	0.00	1.11
	Total	**11,841.82**	**21,590.24**	**33,432.06**

Renewable Purchase Obligation (RPO)

Petitioners' Submission

2.64 The Petitioners submitted that 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 12th November, 2021 and Tariff Policy, 2016, the Petitioners have made arrangements under various PPA's for its compliance. Further, the Commission defined a percentage of RPO on Ex-Bus Requirement by excluding Hydel sources of power. As a result, surplus availability is projected from Solar and deficit in availability is projected from Non-solar sources during the FY 2023-24, for complying with RPO targets.

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

Table 26: Renewable Purchase Obligation and Cost as submitted by the Petitioners for FY 2023-24

Sr. No.	Particulars	FY 2023-24
A	**RPO Obligations (%)**	**20.00%**
1	Solar	10.00%
2	Other than Solar	10.00%
B	**Ex-Bus RPO Requirement based on MoD (MUs) excluding Hydro**	**16,140.99**
1	Solar	8,070.50
2	Other than Solar	8,070.50
C	**Energy Available from Existing Sources (MUs)**	**16,762.58**
1	Solar	10,297.82
2	Other than Solar	6,464.76
D	**Shortfall (MUs)**	**1,605.74**
1	Solar	-
2	Other than Solar	1,605.74

Sr. No.	Particulars	FY 2023-24
E	**Extra Power Available for Sale after meeting RPO obligations which needs to be sold (MUs)**	2,227.32
1	Solar	2,227.32
2	Other than Solar	-
G	**Renewable Energy Purchase Rate (Paisa/kWh)**	
1	Solar	317.50
2	Other than Solar	451.77
H	**Renewable Energy Purchase from Existing Source (Rs Crores)**	**6,190.14**
1	Solar	3,269.55
2	Other than Solar	2,920.60
I	**Renewable Energy Purchase for Shortage Power (Rs Crores)**	**725.43**
1	Solar	-
2	Other than Solar	725.43
J	**Total Renewable Energy Purchase to meet RPO (Rs Crores)**	**6,915.57**
1	Solar	3,269.55
2	Other than Solar	3,646.02
K	**Renewable Energy Sale Rate for Surplus Power (Paisa/kWh)**	
1	Solar	470.40
2	Other than Solar	470.40
L	**Revenue from sale of additional Renewable Energy (Rs Crores)**	**755.34**
1	Solar	-
2	Other than Solar	755.34
M	**Net additional cost to be borne due to shortage of RPO (Rs. Cr)**	**(29.91)**
1	Solar	-
2	Other than Solar	(29.91)

Commission's Analysis

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

2.67 Accordingly, the Commission has computed quantum of Wind, HPO and Other power purchase requirement for RPO compliance based on the total energy requirement admitted for the FY 2023-24, as shown in the table below:

Table 27: Renewable Purchase Obligation and Cost as computed by the Commission for FY 2023-24

Particulars	FY 2023-24
Other RPO (%)	25.13%
Wind RPO (%)	1.60%
HPO (%)	0.66%
Total (%)	**27.39%**
Energy Requirement for Computation of RPO	**89,948.62**

Particulars	FY 2023-24
Power purchase to fulfil RPO (MUs)	
Other RPO	22,604.09
Wind RPO	1,439.18
HPO	593.66
Total	**24,636.93**
Energy available from existing RE Plants (MU)	
Other RPO	22,850.14
Wind RPO	1,653.05
HPO	147.65
Total	**24,650.84**
Shortfall / (Surplus) (MU)	
Other RPO	0.00
Wind RPO	0.00
HPO	446.01
Total	**446.01**

2.68 From above, it can be observed that the Petitioners will be having surplus energy from Other (inclusive of Wind sources from the existing Wind Generating Stations, considered as per Regulation 3.1(a) of the Co-generation, Regulations, 2021 and amendments thereof) and Wind RPO resources after meeting the RPO obligation in FY 2023-24, whereas there will be shortfall in availability for compliance of HPO. Therefore, the Commission has considered the cost of additional power purchase for compliance of RPO shortfall in the Power Purchase Cost.

2.69 The Commission has considered rate of Rs. 5.09/kWh i.e., Rate of latest signed PPA for NHPC Lower Subansiri HEP for fulfilment of shortfall in HPO as the renewable energy certificate mechanism corresponding to Hydro power has not yet been implemented for HPO compliance.

2.70 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 28: RE power purchase cost for RPO compliance for FY 2023-24

Particulars	FY 2023-24
Additional Power purchase requirement for fulfilment of RPO (MU)	
Other RPO	0.00
Wind RPO	0.00
HPO	446.01
Total	**446.01**
Renewable Energy purchase Rates for additional power procurement (Rs./kWh)	
Other RPO	0.00
Wind RPO	0.00
HPO	5.09

Particulars	FY 2023-24
Power Purchase Cost for meeting shortfall in RPO (Rs. Crore)	
Other RPO	0.00
Wind RPO	0.00
HPO	227.02
Total	**227.02**
Total Power Purchase cost for RPO Compliance (Rs. Crore)	
Other RPO (excluding Hydro)	5,737.15
Other RPO (Hydro)	1,859.86
Wind RPO	452.99
HPO	302.17
Total	**8,352.17**
Weighted Average Energy purchase Rates for RE (Rs./kWh)	
Other RPO (excluding Hydro)	3.80
Wind RPO	2.74
HPO	5.09

2.71 The Cost of purchase from Wind, HPO and Other Sources has been considered in the power purchase cost shown in table 25 of this Order.

Management of Surplus Energy

Petitioners' Submission

2.72 The Petitioners submitted that the Commission admitted quantum of 14,608.19 MU as surplus Energy available for sale in power exchange for FY 2023-24 at rate of Rs.3.33 per unit resulting into saving of Rs. 398.93 Crore in power purchase cost. However, it has been observed that the quantum of sale of surplus power have always been approved on higher side in respective Tariff Orders as against the realistic sale of surplus energy sold by the Petitioners. The consideration of higher quantum of surplus results in reducing the power purchase cost and thereby ARR of DISCOMs.

2.73 However, the Petitioners have been projecting the realistic sale of surplus energy based on its past experience considering the actual energy traded at power exchange during the past years. Further, the Petitioners submitted that the sale of power at power exchange depends on the factors such as Demand situation of MP-State in MW, availability of surplus energy with MPPMCL in MW in time blocks, Demand-Supply position in the power sector and Marginal Clearing Price (MCP) at the market. It is to mention that Petitioners do not have control over the availability of power stations and MCP of power exchange.

2.74 Further, the Petitioners submitted that the approval of higher quantum of surplus sale is mainly because the Commission approves the sales at normative losses and the difference of approved sales and availability are being considered as surplus power available for sale. However, on actual scenario considering the Demand-Supply position with actual losses the results are different. For FY 2023-24 also, as per the current power supply position, and after meeting the energy requirement at actual loss situation, the Petitioners envisage to have surplus energy in few of the time blocks and months in the ensuing year. Further, in case the Petitioners projects the surplus sale considering the past trend, the same would not get approved as the Commission adopts different methodology. Hence, in order to have minimum deviation in projection and approval of power purchase cost, MPPMCL has considered ambitious target to sale around 50% to 60% of surplus energy available, i.e., around 11,612 MUs. However, the Petitioners requested the Commission to consider lower quantum of surplus power to be sold through exchange considering the past actuals.

2.75 The Petitioners submitted that the average IEX rate for the past 24 months (From October 2022 to October-2022) is Paisa 470.40 per unit. Hence, for the purpose of computation of revenue from surplus energy, the average rate has been considered as Paisa 470.40 per unit for FY 2023-24.

2.76 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 as per submission of Petitioners are shown in the table below.

Table 29: Management of Surplus Energy as submitted by Petitioners

Particulars	FY 2023-24
Ex-Bus Availability (MU)	1,14,147
Ex-Bus Energy Required by DISCOMs (MU)	88,356
Backdown of Power including Surplus Sale of Power (MU)	25,792
Backdown (MU)	14,179
Surplus Units available for Sale (MU)	11,612
IEX Rate (Paisa/kWh)	470.40
Revenue from Sale of Surplus Power (Rs. Crore)	5,462
Purchase Cost of Surplus Power- Variable (Rs Crores)	3,827
Total saving in variable cost from sale of surplus energy from sale of surplus energy (Rs. Crore)	**1,635**

Commission's Analysis

2.77 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. It is expected that various rebates given to consumers would encourage them to utilise some of the surplus power.

2.78 Further, the Commission has considered the actual rate discovered in IEX from April, 2021 to January, 2023 excluding abnormal months (i.e months having MCP above Rs. 5/kWh) as the reference rate i.e., Rs. 3.89/kWh for backing down in line with the approach adopted in MYT Order. Last year due to extraordinary situation the power prices increased sharply in some months. However, due to various measures taken this year, abnormal price rise may not be there.

2.79 For arriving at the quantum of power to be sold and rate to be considered, the Commission obtained the information about the actual quantum sold and average rate at which it has been sold for last 3 years (FY 2020-21, FY 2021-22 and FY 2022-23 (upto Dec 2022). The actual information submitted by the Petitioners is given in Table below:

Table 30: Surplus Energy information for last 3 years as submitted by Petitioners

Particulars	FY 2020-21	FY 2021-22	FY 2022-23 (upto Dec)
Actual Ex-Bus Energy Availability (MUs)	1,10,408.32	1,04,358.59	80,356.13
Actual Ex-Bus Energy Requirement by DISCOMs (MUs)	83,458.94	86,498.06	67,909.41
Actual Surplus Energy Available (MUs)	26,949.39	17,860.53	12,446.72
Actual Energy Backdown (MUs)	26,373.24	14,614.58	8,249.23
Actual Energy Sold in Open Market (MUs)	1,511.68	2,915.67	3,677.38
Actual Energy Sold as % of Surplus Energy (%)	5.61%	16.32%	29.54%
Actual Revenue from the Sale of Surplus Power (Rs. Crore)	613.77	1,309.90	1,748.55

2.80 Based on analysis of actual surplus energy sold it is observed that sale of surplus energy in open market is showing increasing trend. Therefore, considering the realistic scenario of sale of surplus power through open market and considering gradual increasing trend in previous years, the Commission has considered 8,000 MUs as likely scenario for sale of surplus power through Power Exchanges, bilateral arrangements or through bidding. **However, the Commission directs the Petitioners to make all efforts to sale maximum possible surplus energy through Power Exchanges, bilateral arrangements or through bidding in order to maximize the revenue and also make best use of new platforms like HP-DAM (High Price Day Ahead Market) and surplus power portal (PUShp) for disposing of surplus power.**

2.81 As regards the rate for sell of surplus energy, it is observed that the average rate at which the surplus energy was sold in FY 2021-22 is Rs 4.49/kWh which has increased to Rs 4.75/kWh during first nine months of FY 2022-23. The rate has increased marginally in FY 2022-23 due to extra ordinary circumstances of power shortages in the months of April to June 2022 i.e., summer months. However, for FY 2023-24, MoP, GoI has now directed all the generating stations to maximise the generation in summer months. MoP has also directed the generating stations to use 6% imported coal to maximise the generation in summer months. The average clearing price in IEX during last one year excluding the abnormal price months works out to around Rs 4.46/kWh. Accordingly, the Commission has considered the rate of Rs 4.50/kWh for sale of surplus energy to assess the total revenue from sale of surplus energy.

2.82 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. MPIDC has been purchasing the remaining requirement of energy also from MPPMCL only. The projected requirement of MPIDC for FY 2023-24 has been considered as 562 MUs and average rate of power purchase of Rs. 3.92/kWh as approved by the Commission in MYT Order for FY 2023-24. Any under /over recovery shall be adjusted at the time of truing up of FY 2023-24.

2.83 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 FY 2023-24:

Table 31 : Details of saving in power purchase cost through sale of Surplus energy

Sr. No.	Particulars	Reference	FY 2023-24
1	Total Energy Availability including additional availability due to purchase of additional RE Power RPO Compliance (MU)	A	1,15,060.31
2	Total Energy Requirement (MU)	B	89,948.62
3	Total Energy surplus (MU)	C=A-B	25,111.69
4	Energy Backdown (MU)	D	2,915.98
5	Energy Available for surplus sale of power (MU)	E=C-D	22,195.71
7	Sale of power to MPIDC (MU) as approved in MYT Order for FY 2022-23	F	562.16
8	Average Power Purchase Cost of MPIDC as per approved in MYT Order for FY 2022-23 (Rs. /kWh)	G	3.92
9	Revenue from sale of power MPIDC (Rs. Crore)	H=F*G/10	220.37
10	Net Surplus Energy available for sale (MU)	I=E-F	21,633.55
11	Surplus Energy considered for sale	J	8,000.00
12	Per unit cost of sale of power through energy exchange (Paisa/kWh)	K	4.50
13	Revenue from Sale of Power through Power Exchange (PX) (Rs Crore)	L=J*K/10	3,600.00
14	Total Revenue from sale of surplus power in PX and MPIDC (Rs. Crore)	M=H+I	3,820.37
15	Energy Charge of Surplus Energy (Rs Crore)	N	3,013.88
16	**Total saving in Power Purchase Cost by sale of surplus Energy (Rs. Crore)**	**O=M-N**	**806.49**

2.84 With these principles, though the estimated surplus energy works out to 22,195.71 MUs, the Commission has considered the sale of 8,562.16 MUs only (8000 MUs surplus sale and 562.16 MUs to MPIDC). The variable cost of remaining surplus energy of 13,633.55 MUs has not been considered by the Commission while projecting the power purchase costs for FY 2023-24. However, the Petitioners are directed to make all efforts to sale maximum possible surplus energy as mentioned in para 2.80.

2.85 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, further.

Inter-State Transmission Charges

Petitioners' Submissions

2.86 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 2021-22 as per actual figures from power purchase statement and the same has been increased annually by 4% for each year form actuals for FY 2023-24.

2.87 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 32: Inter-State Transmission Charges claimed for FY 2023-24 (Rs. Crore)

Particulars	FY 2023-24
State	**3,025.47**

Commission's Analysis

2.88 Inter State transmission charges consist of charges to be paid for transmission systems of Western, Eastern and Northern Regions. The Commission observed that Inter-Sate transmission charges increased by 15.15% in FY 2021-22 with respect to FY 2020-21, which is not in line with the increase in previous years. The Petitioners have claimed nominal increase of 4% in Inter-State transmission charges for each year from actual figures of FY 2021-22, which is less than the increase observed in previous years. Therefore, the Commission has considered the escalation rate of 4% per annum for increase in Inter State Transmission Charges during each year which is line with the approach adopted in MYT Order for FY 2022-23 to FY 2026-27. The actual Inter -State transmission charges of FY 2021-22 have been escalated by 4% per annum for 2 years to arrive at the Inter-State transmission charges for FY 2023-24.

Table 33: Inter-State Transmission Charges admitted for FY 2023-24 (Rs. Crore)

Particulars	FY 2023-24
State	**3,025.47**

Intra-State Transmission Charges and SLDC Charges

Petitioners' Submission

2.89 The Petitioners have considered Intra-State Transmission Charges for FY 2023-24 as per MPPTCL Transmission Tariff Order for the Control Period from FY 2019-20 to FY 2023-24.

2.90 The Petitioners have considered actual SLDC Charges of FY 2020-21 and has considered 4% increment in each year from actual incurred for FY 2021-22.

2.91 Further the Petitioners have allocated Intra-State transmission charges based on energy allocation from Central Generating Stations and as per Ex-bus Energy requirement. which is indicated in the table below:

Table 34: Intra-State Transmission Charges and SLDC charges claimed for FY 2023-24 (Rs. Crore)

Sr. No	Transmission Charges	FY 2023-24
1	East DISCOM	1,286.14
2	Central DISCOM	1,499.32
3	West DISCOM	1,538.56
4	**State**	**4,324.02**
Sr. No	**SLDC Charges**	**FY 2023-24**
1	East DISCOM	2.54

Sr. No	Transmission Charges	FY 2023-24
2	Central DISCOM	3.03
3	West DISCOM	5.42
4	**State**	**10.99**
Sr. No	**Transmission Charges including SLDC Charges**	**FY 2023-24**
1	East DISCOM	1,288.68
2	Central DISCOM	1,502.35
3	West DISCOM	1,543.98
4	**State**	**4,335.01**

Commission's Analysis

2.92 The Commission has already determined Intra-State Transmission Charges for the period from FY 2019-20 to FY 2023-24 in the MPPTCL MYT order dated 19th May, 2021 in Petition No. 45/2020. Accordingly, Commission has considered Intra-State transmission charges for FY 2023-24 as per aforesaid MYT Order.

2.93 The Commission has admitted SLDC Charges for FY 2023-24 vide SLDC fees and charges Order dated 20th February, 2023 in Petition No.73 of 2022. The same has been considered for the FY 2023-24.

2.94 Accordingly, Intra–State transmission charges including SLDC charges for FY 2023-24 have been admitted as shown in the table below:

Table 35 : Intra-State Transmission Charges including SLDC Charges admitted for FY 2023-24 (Rs. Crore)

Sr. No	Intra-State Transmission Charges	FY 2023-24
1	East DISCOM	1,286.14
2	West DISCOM	1,538.56
3	Central DISCOM	1,499.32
4	**State**	**4,324.02**
Sr. No	**SLDC Charges**	**FY 2023-24**
1	East DISCOM	4.59
2	West DISCOM	5.49
3	Central DISCOM	5.35
4	**State**	**15.43**
Sr. No	**Transmission Charges including SLDC Charges**	**FY 2023-24**
1	East DISCOM	1,290.73
2	West DISCOM	1,544.05
3	Central DISCOM	1,504.67
4	**State**	**4,339.45**

2.95 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 true-up petition to be filed by MPPTCL after exercising prudence check.

MPPMCL Costs: Details and DISCOM-wise Allocation

Petitioners' Submission

2.96 As per item No.8 (ii) of State Govt. Notification No.2260-F-3-24-2009-XIII dated 19th 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.

2.97 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 FY 2023-24 are mentioned in the table below:

Table 36: MPPMCL Cost claimed for FY 2023-24 (Rs. Crore)

Sr. No.	Particulars	FY 2023-24
I.	Revenue from operations (including Revenue Subsidy)	-
II.	Other income	117.92
III.	Income from other business allocated to Licensed business	
IV	Total Revenue (I + II+III)	117.92
V	Expenses:	
	Purchase of Power from Other Sources	99.87
	Inter-State Transmission charges	7.34
	Depreciation and amortzation expenses	8.49
	Interest & Finance Charges	266.91
	Repairs and Maintenance	3.37
	Employee costs	70.22
	Administration and General expenses	29.64
	Other Debits, Write-offs	4.37
	Total Expenses	**490.19**
VI	Profit before exceptional and extraordinary items and tax (IV-V)	(372.26)
VII	Exceptional items	-
VIII	**Profit before extraordinary items and tax (VI – VII)**	**(372.26)**

Commission's Analysis

2.98 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 Petitioners 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 2022-23 all the bills are likely to be passed through the monthly bills to the DISCOMs, hence, revenue from operations has been considered as nil in FY 2023-24 as per Petitioners submission.

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

2.100 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.

2.101 The Commission has also considered other income of MPPMCL for FY 2023-24 as per the Petitioners submission. Accordingly, the net MPPMCL cost admitted in this Order is surplus income for the FY 2023-24. Further, the expenses related to power purchase, if any, incurred by MPPMCL would be appropriately considered at the time of truing up for FY 2023-24, after prudence check.

2.102 MPPMCL Cost/ Income admitted by the Commission for FY 2023-24 has been shown in the table below:

Table 37: MPPMCL Costs/ Income admitted by the Commission for FY 2023-24 (Rs. Crore)

Sr. No.	Particulars	FY 2023-24
1	Depreciation and Amortization	8.49
2	Employee Expenses	70.22
3	R&M Expenses	3.37
4	A&G Expenses	29.64
5	**Total Expenses**	**111.71**
6	Other Income	117.92
7	**Net MPPMCL Cost/ (Income)**	**(6.21)**

Summary of Power Purchase Cost

Petitioners' Submission

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

Table 38: Power Purchase Cost as filed by Petitioners for FY 2023-24 (Rs. Crore)

Sr. No.	Particulars	UoM	East DISCOM	West DISCOM	Central DISCOM	State
A	**Ex- Bus Net Power Purchase Cost excluding Transmission Charges (Inter, Intra & SLDC) etc.**					
I	Quantum	MUs	24,439	34,585	29,332	88,356
Ii	Fixed Cost	Rs Crores	3,324	4,704	3,989	12,017
Iii	Variable Cost	Rs Crores	5,423	7,675	6,509	19,607
Iv	MPPMCL Cost	Rs Crores	103	146	124	372
V	**Total Cost**	**Rs Crores**	**8,850**	**12,524**	**10,622**	**31,996**
Vi	**Average Cost**	**Rs./kWh**	**3.62**	**3.62**	**3.62**	**3.62**
B	**Power Purchase Cost at State Boundary**					
I	Quantum	MUs	24,020	33,993	28,830	86,843
Ii	Fixed Cost	Rs Crores	4,161	5,888	4,994	15,042
Iii	Variable Cost	Rs Crores	5,423	7,675	6,509	19,607
Iv	MPPMCL Cost	Rs Crores	103	146	124	372
V	**Total Cost**	**Rs Crores**	**9,687**	**13,708**	**11,627**	**35,022**
Vi	**Average Cost**	**Rs./kWh**	**4.03**	**4.03**	**4.03**	**4.03**
C	**Power Purchase Cost at Discom Boundary**					
I	Quantum	MUs	23,388	33,099	28,071	84,559
Ii	Fixed Cost including Transmission Charges	Rs Crores	5,449	7,432	6,496	19,378
Iii	Variable Cost	Rs Crores	5,423	7,675	6,509	19,607
Iv	MPPMCL Cost	Rs Crores	103	146	124	372
V	**Total Cost**	**Rs Crores**	**10,976**	**15,252**	**13,129**	**39,357**
Vi	**Average Cost**	**Rs./kWh**	**4.69**	**4.61**	**4.68**	**4.65**

Commission's Analysis

2.104 The total power purchase cost as admitted by the Commission for FY 2023-24 is summarized in the following table:

Table 39 : Total Power Purchase cost admitted for FY 2023-24 (Rs. Crore)

Sr. No.	Particulars	UoM	FY 2023-24
A	Fixed Charges	Rs. Crore	11,841.82
B	Energy Charge including additional cost of RPO compliance	Rs. Crore	21,590.24
C	MPPMCL Cost/ (Income)	Rs. Crore	(6.21)
D	Less: Saving from Sale of Surplus Power	Rs. Crore	(806.49)
E	**Power Purchase Cost**	Rs. Crore	**32,619.37**
F	Inter State Transmission Charges (PGCIL)	Rs. Crore	3,025.47

Sr. No.	Particulars	UoM	FY 2023-24
G	Intra-State Transmission Charges including SLDC Charges	Rs. Crore	4,339.45
H	**Net Power Purchase Cost including Transmission Charges**	Rs. Crore	**39,984.29**
I	Ex-Bus Energy Requirement	Mus	89,948.62
J	**Power Purchase Rate at Ex-Bus (J = E/I*10)**	**Rs/Unit**	**3.63**
K	Input at G-T interface	MUs	87,624.68
L	**Power Purchase Rate at State Periphery (L=(E+F)/K*10)**	**Rs/Unit**	**4.07**
M	Input at T-D interface	MUs	85,320.15
N	**Power Purchase Rate at DISCOMs Periphery (N=H/M*10)**	**Rs/Unit**	**4.69**
O	Total Sales	MUs	72,136.47
P	**Power Purchase Per Unit Sales (P=H/O*10)**	**Rs/Unit**	**5.54**

Capital Expenditure Plans/ Capitalization of Assets

Petitioners Submission

Investments

2.105 The Petitioners submitted that for strengthening of the system and reduction of Distribution losses, all the three DISCOMs of the State are undertaking various projects in the forthcoming years. The focus is on creation of new 33/11 kV S/s, bifurcation of overloaded 33 kV feeders, feeder bifurcation of agricultural feeder at 11 kV level, Addl. / Aug of PTRs, Installation of DTRs, conversion of bare LT line into AB Cables and replacement of service lines etc.

2.106 The overall distribution loss of the system is a mix of technical and commercial losses. The technical losses are mainly due to comparatively inadequate infrastructure, which needs strengthening, renovation and upgradation of the capacity of lines, sub-stations and associated infrastructures. The commercial losses are mainly due to commercial parameters like theft & pilferage of energy, presence of prominent nos. of stop & defective meters in the system, inadequate meter reading system etc. which can also be reduced to a large extent by re-engineering of the system which requires capital investment and directed efforts. DISCOMs are working on both the issues regularly, which have resulted in reduction in Distribution losses considerably over the past years, but these reductions are not up to the normative loss levels which are more stringent at this level.

2.107 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 20th July 2021 for supporting DISCOMs to undertake reforms and improve performance in a time bound manner. DISCOMs have participated in the RDSS Scheme. The Revamped Distribution Sector Scheme has the following parts:

Part A – Metering & Distribution Infrastructure Works:

2.108 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;

2.109 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:

2.110 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

2.111 Further, as regard to Smart Metering under RDSS, the Petitioners would like to submit that the implementation of the same has been planned to be undertaken in a phased manner, i.e., in Phase I and II as per RDSS guidelines. The expected completion period for Phase-1 is December 2023 and that of Phase II is March 2025 as per RDSS guidelines. The Government of India as approved the DISCOMs plan under Smart Metering according to which total 34.72 Lakhs smart meters will be installed by all three DISCOMs under Phase-1 of the scheme, covering Consumer meter, DTRs meters and feeder meters. Further, as per 5th Monitoring committee meeting of the RDSS held on 10th February 2022, it was instructed that all DTRs are to be metered by March 2023. Accordingly, a total of 3.20 Lakhs DTRs which earlier was planned to be covered under Phase-2 of the scheme are clubbed with phase-1 of the scheme. Considering both, Smart Meters of Phase-1 and DTRs of Phase-2, the DISCOMs have to install approximate 38 Lakhs Smart Meters under Phase-1 of the scheme.

2.112 Further, the Petitioners submitted that they have already issued bids/awarded work for installation of 23.20 Lakhs Smart Meters (Central DISCOM- 9.58 Lakhs, West DISCOM-3.79 Lakhs, East DISCOM-9.83 Lakhs) with the financial support from KfW Development Bank. Further, the bids were issued by all three DISCOMs in December 2021. As per bid conditions, bids would be opened sequentially starting from Central DISCOM, then West DISCOM then East DISCOM, as there is a condition that once a work awarded to any agency in one DISCOMs that agency will not participate in next bids of DISCOMs.

2.113 The Petitioners further submitted that as per bid condition, the Central DISCOM bid was to open first, however, due to low participation of bidders in Central DISCOM bid, the bid was cancelled, and fresh bid was issued. Due to this change, the next bid, which was in sequence, i.e., West DISCOMs bid was opened, and work was awarded to M/s BCISTs in July, 2022. Further, next bid for East DISCOM was opened and work was awarded to M/s Monte Carlo in November 2022. The bid of Central DISCOM is opened in November 2022 and the same is under evaluation. Therefore, due to above events, the Smart Metering plan mainly for Central DISCOM has been deferred.

2.114 Further, the Petitioners submitted that in order to meet the target of RDSS Phase-1, DISCOMs have to issue bids for approximately 15 Lakhs Smart meters. The bids shall be issued using Standard Bidding Document (SBD) issued by REC for RDSS scheme. DISCOMs have requested to REC to allow certain deviations in Smart Metering SBD, the response of REC on those deviations are still awaited. Once, approved by REC the bids will be issued by DISCOMs. The Petitioners further submitted that the due to low participation and pending deviation of REC bids, the CAPEX as estimated to be incurred during FY 2022-23 as well as for FY 2023-24 has been deferred. Due to this reason, there is downward revision in CAPEX under Smart Metering.

2.115 Further, the bids of West and East DISCOMs have been opened and awarded, so the rates for Meters have been disclosed (as quoted by the bidders in recent awarded work). The same rates have been considered by the Petitioners while estimating the revised CAPEX for FY 2023-24. However, for Central DISCOM, since the no bid is awarded, the rates are not yet disclosed. Therefore, the rates as discovered under East DISCOM bid has been considered for Central DISCOMs CAPEX estimation for Smart Metering as the area and number of meters in East DISCOMs and Central DISCOMs bids are similar. The scheme wise summary of capital expenditure of the three DISCOMs for FY 2023-24 as filed are indicated below:-

Table 40: Capital Expenditure Plan for FY 2023-24 (Rs. Crore)

Name of Scheme	East DISCOM	West DISCOM	Central DISCOM
Government schemes (ST(N), TSP, SCSP)	70	219	184
Supervision	-	-	194
Capital store and spares	-	-	28
Smart Meterization	297	306	285
Loss Reduction	1,105	1,209	1,304
SSTD & Modernization	749	-	423
Total	**2,221**	**1,734**	**2,419**

Capitalization and CWIP

2.116 DISCOM-wise capitalization plan and the status of Capital Works in Progress (CWIP) as filed by the Petitioners for FY 2023-24 are indicated below:

Table 41 : DISCOM-wise proposed capitalization and bifurcation of CWIP (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	State
1	Opening Balance of CWIP	2,342	3,342	2,517	8,202
2	Fresh Investment during the year	2,221	1,734	2,419	6,374
3	**Total Capitalisation during the year**	1,406	1,151	1,417	3,974
4	**Closing Balance of CWIP**	**3,157**	**3,926**	**3,520**	**10,602**

Commission's Analysis on Asset Capitalization

2.117 The DISCOMs need to obtain appropriate approval timely 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 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.

2.118 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.

2.119 The Commission vide order dated 30th December, 2022 has accorded in principle approval to the proposed Capex plan for all three DISCOMs for the Period of FY 2022-23 to FY 2025-26 which includes RDSS scheme. However, the Petitioners in the Petition submitted that due to low participation and pending deviation of REC bids, the estimated capital expenditure plan to be incurred during FY 2022-23 as well as for FY 2023-24 has been deferred by the Petitioners. Therefore, the Commission finds it appropriate to consider the capitalisation plan as submitted by the Petitioners on provisional basis as there shall be downward revision of capital expenditure and capitalisation under Smart Metering RDSS scheme. The Commission will carry out prudence check of actual capitalisation at the time of true up subject to achievement of physical and financial of targets approved by the Commission in respective schemes based on the outcome of the final approved capex order for FY 2023-24. Accordingly, the capitalisation plan provisionally considered by the Commission for the FY 2023-24 is shown in the table below:

Table 42: Projected Asset Capitalization considered by the Commission for FY 2023-24 (Rs. Crore)

DISCOM	FY 2023-24
East DISCOM	1,406.34
West DISCOM	1,150.55
Central DISCOM	1,416.80
State	**3,973.69**

Operations and Maintenance Expenses

Petitioners' Submission

2.120 Operation and Maintenance (O&M) expenses have been calculated for FY 2023-24 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.

2.121 The Petitioners submitted that the audited expenses of FY 2021-22 are available. Further, escalation rate of FY 2021-22 is also available. Hence, in order to have realistic projection capturing the true inflation, it is necessary that the actual expenses being incurred by the Licensees during FY 2021-22 are taken into account. Otherwise the actual expenses of FY

2023-24 at the time of True-up of FY 2023-24 would appear higher than the approved norms. Therefore, there is need to revise the base year and rework the expenditure for FY 2023-24.

2.122 Further, the Petitioners submitted that the revised base year has been considered as the year ending 31st March 2023 instead of the year ending 31st March 2022 as specified in Regulation 36.2 of MYT Regulations, 2021. The normative Employee expenses and A&G expenses for the base year has been arrived based on the audited expenses of past three financial years, i.e., from FY 2019-20 to FY 2021-22 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 31st March, 2022, which in turn is escalated with revised escalation rate to arrive at the normative expenses for the base year ending 31st March, 2023. The base year expenses so calculated are then escalated to arrive at normative Employee expenses and A&G expenses for FY 2023-24.

2.123 The Petitioners submitted that 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 2021-22 has been derived as 4.24% which is based on the average yearly inflation of past five years, i.e, from FY 2016-17 to FY 2020-21 with 30% and 70% weightage to WPI and CPI, respectively. Similarly, the revised escalation rate for FY 2022-23 has been worked out as 5.06% as shown in the following Table:

Table 43: Escalation Rate for FY 2021-22 and FY 2022-23 (%)

Year	Yearly WPI	WPI Inflation	Yearly CPI	CPI Inflation
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%
FY 2021-22	139.41	13.00%	356.06	5.13%
Average from FY17 to FY21		2.38%		5.04%
Average from FY18 to FY22		4.63%		5.24%
Weightage		30%		70%
Escalation rate for FY 2021-22 (2.38%*30%+5.04%*70%)				**4.24%**
Escalation rate for FY 2022-23 (4.63%*30%+5.24%*70%)				**5.06%**

Employee Expenses

2.124 The Petitioners submitted that various head under employee cost have been escalated based on the aforementioned escalation rate except for Dearness Allowances (D.A.). Further, Petitioners submitted that they have not considered any provisions made towards terminal benefit during the past three audited years in their normative Employee expenses calculations for ensuing years. However, they have considered Rs.70 Crore each as a provision towards terminal benefit trust fund in line with the Commission's past Orders. As regard to D.A., which is linked to basic salary of Employees, Petitioners have considered latest available actual rate for FY 2022-23 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 4% over previous quarters' D.A. rate as shown below:-

Table 44: Dearness Allowance Considered (%)

Particulars (As per 7th Pay)	FY 2023-24
DA as percentage of Basic for first quarter - Apr to June	38%
DA as percentage of Basic for 2nd and 3rd quarter - July to Dec	42%
DA as percentage of Basic for 4th quarter - Jan to March	46%

2.125 Petitioners further submitted that during past three financial years, i.e., from FY 2019-20 to FY 2020-21, they have paid actual 7th 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 7th pay revision in normative expenses of ensuing years, the Petitioners have considered the actual payment made against the 7th pay in its calculations.

2.126 Based on the above, the Employee expense for the ensuing years 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

2.127 The A&G expenses have been projected by Petitioners 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 "Madhya Pradesh Electricity Regulatory Commission (Fees, Fines and Charges) (Revision-I) (First Amendment) Regulations, 2010.

R&M Expenses

2.128 The Petitioners submitted that they have projected R&M expenses by applying the rate of 2.30% of the opening Gross Block Assets (GFA) of the year as per Regulation 36.4 of MYT Regulations, 2021.

Additional Operational Expenditure (OPEX) Cost

2.129 Under part A of RDSS 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.

2.130 Accordingly, DISCOMs have planned to implement the smart meterization through PPP in TOTEX mode. Under this, only partial capex will be paid upfront by DISCOMs, and balance shall be paid through annuity during next 10 years period of operations under OPEX. However, due to uncontrollable situation, the smart metering plan has been deferred. Therefore, the Petitioners have projected downward revision in CAPEX particularly for Smart Metering during FY 2023-24 and there is a downward revision in OPEX part too. The Petitioners have re-estimated the OPEX portion for FY 2023-24 which as follows:-

Table 45: Additional OPEX submitted by the Petitioners (Rs Crore)

Particular	East DISCOM	West DISCOM	Central DISCOM	State
Additional OPEX Expenses	16.98	19.73	15.25	51.96

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

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

Table 46: O&M Expenses Claimed by the Petitioners for FY 2023-24 (Rs. Crore)

Sr. No.	Particular	East DISCOM	West DISCOM	Central DISCOM	State
1	Employee Expenses (including arrears, DA and others)	1.442.60	1.421.58	1,326.22	4,190.40
2	A&G Expenses	129.12	145.43	134.29	408.84
3	R&M Expenses	318.61	225.29	325.54	869.43
4	Additional OPEX Expenses	16.98	19.73	15.25	51.96
5	**Total O&M Expenses**	**1,907.31**	**1,812.03**	**1,801.31**	**5,520.64**

Commission's Analysis on O&M Expenses

2.133 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."

2.134 The Commission has computed the O&M expenses considering the methodology specified in the aforesaid Regulation. For approval of Employee Expenses for the FY 2023-24, following approach has been adopted:

- The average of past years' actual audited employee expenses from FY 2019-20 to FY 2021-22 has been considered for deriving normative Employee Expenses for FY 2020-21 and then escalated with escalation rate of FY 2021-22 to arrive at the base year i.e FY 2021-22 .

- The base year expenses so calculated has been escalated twice to arrive at normative Employee expenses for FY 2023-24.

2.135 The escalation rate considered for calculating the normative expenses of FY 2021-22 has been derived based on the average yearly inflation of past five years, i.e., from FY 2016-17 to FY 2020-21 with 30% and 70% weightage to WPI and CPI, respectively. Accordingly, based on the same, the Commission have arrived at escalation rate of 4.24% for FY 2021-22. Similarly, the escalation rate for FY 2022-23 has been worked out as 5.06% as shown in the table below:-

Table 47: Escalation Rate admitted for FY 2021-22 and FY 2022-23 (%)

Year	Yearly WPI	WPI Inflation	Yearly CPI	CPI Inflation
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%
FY 2021-22	139.41	13.00%	356.06	5.13%
Average from FY17 to FY21		2.38%		5.04%
Average from FY18 to FY22		4.63%		5.24%
Weightage		30%		70%
Escalation rate for FY 2021-22 (2.38%*30%+5.04%*70%)				**4.24%**
Escalation rate for FY 2022-23 (4.63%*30%+5.24%*70%)				**5.06%**

2.136 The Commission has considered increase in DA by 4% every quarter for FY 2023-24, as projected by the Petitioners

2.137 With regard to claim towards 7th pay commission arrears, the Commission considered it appropriate that the same shall be considered at the time of true up based on actuals.

2.138 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). The 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..."

2.139 Considering the above, the Commission had allowed Rs. 1,170 Crore in Tariff Orders for FY 2017-18 to FY 2022-23 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, 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 FY 2023-24.

2.140 Based on the methodology adopted for projection of Employee Expenses for the FY 2023-24, A&G Expenses including other expenses have 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 amendments.

2.141 With regard to R&M Expenses, the Commission has considered 2.30% of opening GFA towards base R&M expenses for FY 2023-24 in accordance with Regulation 36.4 of the MYT Regulations, 2021.

2.142 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 FY 2023-24. However, as the proposed expenditure under Part A of the RDSS 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 actuals at the time of true up of FY 2023-24.

2.143 Further the Commission has projected the O&M Expenses capitalisation for FY 2023-24 considering capitalisation percentage of 2.74%, 1.89% and 2.10% for East, West and Central DISCOM respectively during FY 2021-22.

2.144 Accordingly, the admitted Operation and Maintenance Expenses for FY 2023-24 is shown in the table below:

Table 48: Operation and Maintenance Expenses admitted for FY 2023-24 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Opening GFA	12,939.25	9,753.68	14,153.89	36,846.82
Repair and Maintenance Expenses @ 2.30%	**297.60**	**224.33**	**325.54**	**847.48**
Basic Salary	956.87	865.71	824.76	2,647.34
Dearness Allowance	401.88	363.60	346.40	1,111.88
Terminal Benefits	41.00	72.86	57.52	171.38
Employee Expenses	**1,399.75**	**1,302.18**	**1,228.67**	**3,930.60**
Administrative and General Expenses	**126.96**	**140.60**	**214.10**	**481.66**
Other Expenses (Rates & Taxes etc.)	1.75	10.22	2.89	14.86
MPERC fees	0.49	0.59	0.69	1.77
Provision for Terminal Benefit Trust Fund	70.00	70.00	70.00	210.00
O&M Expenses Capitalised	(37.86)	(23.22)	(28.59)	(89.66)
Additional Operational Expenditure (RDSS)	16.98	19.73	15.25	51.96
Total O&M Expenses	**1,875.67**	**1,744.43**	**1,828.55**	**5,448.66**

Depreciation

Petitioners' Submission

2.145 The Petitioners submitted that they have computed depreciation 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. As per the said Regulations, depreciation needs to be calculated on value base of the capital cost as admitted by the Commission. The salvage value of the assets needs to be considered as 10% of Capital Cost and Depreciation shall be allowed up to maximum of 90% of the Capital Cost of the Asset.

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

2.147 The Petitioners have also submitted that they have claimed depreciation on the net block of assets excluding consumer contribution and grants, since the Petitioners have not considered deferred income booked towards the amortization of assets created through consumer contribution and grants under their Non-Tariff Income.

2.148 The DISCOM wise depreciation claimed by the Petitioners for FY 2023-24 is as shown in the table below:

Table 49: Depreciation claimed for FY 2023-24 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Building	0.88	4.36	4.76	10.00
Hydraulic Works	0.00	0.28	0.34	0.62
Other Civil Works	1.01	0.43	0.13	1.56
Plant & Machinery	104.45	143.86	94.10	342.42
Line Cable Networks etc.	155.37	185.90	147.94	489.22
Vehicles	0.11	0.21	0.00	0.32
Furniture & fixtures	0.00	0.12	0.09	0.21
Office Equipment	9.34	4.93	11.02	25.28
Asset not belonging to Company (RGGVY, IPDS, Soubhagya, DDUGJY, RRRDS)	24.14	0.00	119.16	143.30
Amortization of Intangible Assets	0.56	5.66	0.35	6.57
Supervision assets	0.00	0.00	0.00	0.00
Capital Stores & Spares	0.00	0.00	17.47	17.47
Total	**295.86**	**345.77**	**395.36**	**1036.98**

Commission's Analysis of Depreciation

2.149 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 31stMarch 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 Regulation34.2:

(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."

2.150 Accordingly, the Commission has considered the asset addition for FY 2023-24 as admitted in Table 42. Further, consumer contributions, grants and subsidies towards Capital Assets have been considered as per petitioner submission and subtracted from the GFA for arriving at net GFA for FY 2023-24. Depreciation has been worked out on the basis of the projected average net GFA computed considering the opening and closing net GFA of FY 2023-24. In accordance to the provision of the Regulations, the Commission has not allowed depreciation towards assets created through consumer contribution and grants.

2.151 The Commission has observed that the Petitioners have submitted Fixed Assets Registers up to FY 2021-22. However, the same are not found completely in the format specified by the Commission. It is observed that the Petitioners have not been able to link the individual assets details with its cost in years prior to FY 2021-22 in Fixed Asset Registers. The Petitioners have provided the quantity against the assets in cumulative manner, separately.

2.152 During Technical Validation Session held earlier for MYT Order for FY 2022-23 to FY 2026-27, the Petitioners informed the Commission that from FY 2020-21 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. Since, the Fixed Asset Registers are not as per format specified by the Commission, Petitioners are hereby directed to submit the Fixed Asset Register as per format specified by the Commission in next Tariff Petition for FY 2024-25 and true-up petition for FY 2022-23.

2.153 The Commission as per the approach adopted in the MYT Order has allowed 60% of depreciation amount in this Order and remaining 40% shall be considered at the time of True-up Petition for FY 2023-24 on submission of Fixed Asset Registers in the specified formats.

2.154 Further, depreciation rates specified in the MYT Regulations, 2021, differ from rates specified in the MYT Regulations, 2015. As such, the depreciation for FY 2023-24 is required to be computed in accordance to the rate specified in MYT Regulations, 2021. For computation of depreciation as per the rates specified in the MYT Regulations, 2021 class wise GFA is required for FY 2023-24. As the GFA for FY 2023-24 has been admitted provisionally, the weighted average depreciation rate (i.e., 4.81%, 4.25% and 4.58% for East, West and Central DISCOMs, respectively) derived on the basis of Fixed Asset Register submitted by the DISCOMs for FY 2021-22, has been considered for computation of depreciation for FY 2023-24.

2.155 The depreciation admitted for FY 2023-24 is given in the following table:

Table 50: Depreciation admitted for FY 2023-24 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Opening GFA as on 1st April, 2022	**7,479.99**	**4,717.74**	**9,119.74**	**21,317.46**
Add: Addition during Financial Year	1,001.51	886.50	1,024.89	2,912.91
Less: Consumer Contribution/Grants in Financial Year	469.93	359.32	414.09	1,243.33
Opening GFA as on 1st April, 2023	**8,011.56**	**5,244.93**	**9,730.54**	**22,987.04**
Add: Addition during Financial Year	1,406.34	1,150.55	1,416.80	3,973.69
Less: Consumer Contribution/Grants in Financial Year	726.97	504.20	719.82	1,950.98
Closing GFA as on 31st March, 2023	**8,690.93**	**5,891.29**	**10,427.52**	**25,009.74**
Average GFA	8,351.25	5,568.11	10,079.03	23,998.39
Rate of Depreciation	**4.81%**	**4.25%**	**4.58%**	**4.58%**
Depreciation	**401.69**	**236.64**	**461.62**	**1,099.96**
Depreciation withheld (40%)	160.68	94.66	184.65	439.98
Depreciation Admitted	**241.02**	**141.99**	**276.97**	**659.98**

Interest and Finance Charges

Petitioners' submission

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

2.157 Petitioners have submitted that interest and finance charges on loan capital have been computed in line with the methodology adopted by the Commission in its previous Tariff/True-up Orders. The opening debt of FY 2021-22 has been considered in line with the closing debt as approved by the Commission in its True-up Order of FY 2020-21. The asset addition to GFA, consumer deposit & grant and actual equity contribution has been considered as proposed in the True-up Petition of FY 2021-22. The repayment of loan has been considered equal to depreciation. Accordingly, the closing debt of FY 2021-22 has been arrived by adding the net GFA considered as funded through debt and subtracting debt repayment of the respective year. The Closing debt of FY 2021-22 is then considered as opening debt of FY 2022-23.

2.158 Similarly, opening and closing debt of FY 2023-24 has been arrived by the Petitioners. However, while doing so the GFA addition, consumer deposit & grant and equity has been considered as projected in this Petition. Further, 30% of the net asset addition to GFA during the year or actual equity infusion as admitted, whichever being less has been considered as funded through equity. Balance of net asset addition to GFA is considered as having been funded through debt and added to the total debt in GFA.

2.159 The interest on loan for FY 2023-24 has been calculated by the Petitioners on the normative average loan of the year by applying the weighted average rate of interest. Further, the weighted average rate of interest for each DISCOM has been calculated based on the actual loan portfolio of DISCOMs in line with the Regulations.

2.160 The 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.

2.161 The DISCOM-wise summary of interest and finance charges as submitted by the Petitioners is mentioned in the table below:

Table 51: Interest on Project Loan claimed for FY 2023-24 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Opening Debt associated with GFA (as per True-up Order)	3,725.57	1,377.16	4,674.25	9,776.99
GFA Addition during the year	1,406.34	1,150.55	1,416.80	3,973.69
Consumer Deposit and Grants utilized during the year	726.97	504.20	719.82	1,950.98
Net GFA Addition during the year	679.37	646.36	696.98	2,022.70
Addition of Equity	38.87	31.35	80.25	150.46
Net GFA considered as funded through debt	640.50	615.01	616.73	1,872.24
Debt repayment during the year	295.86	345.77	395.36	1,036.98
Closing debt associated with GFA	4,070.21	1,646.41	4,895.62	10,612.24
Average debt associated with Loan	3,897.89	1,511.79	4,784.94	10,194.61
Weighted average rate of interest (%) on all loans	7.17%	8.30%	7.13%	7.32%
Interest on Project Loans	**279.58**	**125.41**	**341.35**	**746.33**
Other Finance cost	**2.37**	**20.04**	**7.04**	**29.45**
Bank Charges	0.08	9.44	7.04	16.56
Commitment Charges	0.36	10.60	0.00	10.96
Guarantee/LC Charges	1.93	0.00	0.00	1.93
Interest Cost Claimed in Petition	**281.95**	**145.45**	**348.39**	**775.78**

Commission's Analysis of Interest and Finance Charges

2.162 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."

2.163 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 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."

2.164 Based on the above, the Commission has considered interest and finance charges as pass through in the ARR only for those loans, for which the associated capital works have been completed and assets have been put to use.

2.165 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 IDC 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.

2.166 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.

2.167 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 FY 2023-24 is as follows:

a) Opening loan for FY 2022-23 has been considered same as the closing loan admitted in true up of FY 2021-22. Thereafter addition in FY 2022-23 has been considered as per the Petitioners submission. The closing loan thus arrived for FY 2022-23 has been considered opening loan for FY 2023-24.

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) The Commission has workout the weighted average rate of interest based on the submissions made by the Petitioners in Format 3a. 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 FY 2023-24.

f) Other Finance costs for FY 2023-24 have been admitted considering the actual percentage of actual finance cost to average loan in FY 2020-21 and FY 2021-22, the average of FY 2020-21 and FY 2021-22 workout to 0.11%, 0.94% and 0.08% for East, West and Central DISCOM, respectively.

2.168 Based on the above, the Interest and Finance charges admitted for FY 2023-24 are shown in the table below:

Table 52: Interest and finance charges admitted for FY 2023-24 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Opening Debt associated with GFA as on 1st April,2022	**3,407.39**	**1,272.09**	**4,648.00**	**9,327.48**
Addition to GFA during the year	531.58	527.19	610.81	1,669.57
70% of addition to net GFA considered as funded through Loan net of Consumer Contribution	479.04	474.64	527.21	1,480.89
Debt repayment during the year	223.54	127.02	259.00	609.57
Opening Debt associated with GFA as on 1st April,2023	**3,662.89**	**1,619.71**	**4,916.20**	**10,198.80**
Addition to GFA during the year	679.37	646.36	696.98	2,022.70
70% of addition to net GFA considered as funded through Loan net of Consumer Contribution	640.50	615.01	616.73	1,872.24
Debt repayment during the year	241.02	141.99	276.97	659.98
Closing debt associated with GFA as on 31st March,2023	**4,062.37**	**2,092.73**	**5,255.96**	**11,411.06**
Average debt	3,862.63	1,856.22	5,086.08	10,804.93
Weighted average rate of interest (%) on all loans as per Petitioner	7.17%	7.08%	7.13%	7.14%
Interest on Project Loans	276.95	131.42	362.64	771.01
Other Finance cost	4.15	17.52	4.27	25.94
Interest cost admitted on project loans	**281.10**	**148.94**	**366.90**	**796.95**

Interest on Working Capital

Petitioners' Submission

2.169 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.

2.170 Further, as per the Regulation 38, the Rate of interest on working capital shall be equal to the Base Rate as on 01st 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, 2022 is 7%. Accordingly, the Petitioners have considered the interest rate on working capital as 10.50% (SBI-MCLR 7% plus 350 bps).

2.171 The summary of DISCOMs Wise Interest on Working Capital is mentioned in the table below:

Table 53: Interest on Working Capital claimed for 2023-24 (Rs Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	State
I	**Wheeling**				
A)	1/6th of annual requirement of inventory for 1% GFA of previous year	18.47	13.06	18.87	50.40
B)	O&M expenses				
	R&M expenses	318.61	225.29	325.54	869.43
	A&G expense	135.69	145.21	134.29	415.19
	Employee expenses	1,445.01	1,421.58	1,326.22	4,192.81
B) i)	Total of O&M expenses	1,899.31	1,792.08	1,786.05	5,477.44
B) ii)	1/12th of total	158.28	149.34	148.84	456.45
C)	Receivables	-	-	-	-
C) i)	Annual Revenue from wheeling charges**	-	5.63	-	5.63
C) ii)	Receivables equivalent to 2 months average billing of wheeling charges	-	0.94	-	0.94
D)	Total Working capital [A) + B) ii) - C) ii)]	176.75	163.34	167.71	507.79
E)	Rate of Interest *	10.50%	10.50%	10.50%	10.50%
F)	**Interest on Working capital (Wheeling)**	**18.56**	**17.15**	**17.61**	**53.32**
II	**Retail Supply**				
A)	1/6th of annual requirement of inventory for previous year	4.62	3.27	4.72	12.60
B)	Receivables				
B) i)	Annual Revenue from Tariff and charges**	13,395	18,727	15,870	47,992
B) ii)	Receivables equivalent to 2 months average billing	2,233	3,121	2,645	7,999
C)	Power Purchase expenses	7,722	16,897	10,439	35,058
C) i)	1/12th of power purchase expenses	644	1,408	870	2,922
D	Consumer Security Deposit	1,027	2,059	1,568	4,655
E)	Total Working capital (A+B ii) - C i) - D)	566	**(343)**	**566**	790
F)	Rate of Interest *	10.50%	10.50%	10.50%	10.50%

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	State
G)	Interest on Working capital (Retail Supply)	59.48	0.00	22.19	81.68
	Total Interest on Working Capital (Wheeling + Retail Supply)	78.04	17.15	39.80	134.99

Commission's Analysis of Interest on Working Capital

2.172 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 1April 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."

2.173 Accordingly, the Commission has considered the opening Gross Fixed Asset of FY 2023-24 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 average consumer security deposit has been considered which is average of Opening and Closing of consumer security deposit for FY 2023-24. 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 2019-20 to FY 2021-22 for FY 2023-24.

2.174 Further, the SBI Base Rate on 1st of April, 2022 (MCLR-7% plus 350 basis) stands at 10.50%. The same has been considered as normative interest rate applicable for working capital loans to DISCOMs for FY 2023-24. Accordingly, the interest on working capital admitted by the Commission for wheeling and retail sales activity combined together is shown in the table below:

Table 54: Interest on Working Capital admitted by the Commission (Rs. Crore)

Sr. No	Particulars	Months	East DISCOM	West DISCOM	Central DISCOM	State
For wheeling Activity						
A)	1/6th of annual requirement of inventory for previous year	6	15.92	11.82	17.51	45.25
B) i)	Total of O&M Expenses		1,875.67	1,744.43	1,828.55	5,448.66
B) ii)	1/12th (1 Months) of total O&M Expenses		156.31	145.37	152.38	454.06
C)	Receivables					
C) i)	Annual Revenue from wheeling charges		0.83	6.47	0.65	7.95
C) ii)	Receivables equivalent to 2 months average billing of wheeling charges	6	0.14	1.08	0.11	1.32
D)	Total Working capital (A+B(ii)+C(ii))		172.36	158.27	169.99	500.62
E)	Rate of Interest		10.50%	10.50%	10.50%	10.50%
F)	**Interest on Working Capital for Wheeling Activity**		**18.10**	**16.62**	**17.85**	**52.57**
For Retail Sale Activity						
A)	1/6th of annual requirement of inventory for previous year	6	3.98	2.96	4.38	11.31
B)	Receivables					
B) i)	Annual Revenue from Tariff and charges		13,480.54	19,043.56	16,468.57	48,992.66
B) ii)	Receivables equivalent to 2 months average billing (B(i)/6)		2,246.76	3,173.93	2,744.76	8,165.44
C)	Annual Power Purchase expenses		9,163.32	14,743.63	11,737.90	35,644.84

Sr. No	Particulars	Months	East DISCOM	West DISCOM	Central DISCOM	State
For wheeling Activity						
C) i)	1/12th (1 Months) of power purchase expenses (C/12)		763.61	1,228.64	978.16	2,970.40
D	Consumer Security Deposit		1,007.81	2,005.80	1,390.38	4,403.98
E)	Total Working capital (A+B (ii) - C (i) - D)		479.32	(57.55)	380.60	802.37
F)	Rate of Interest		10.50%	10.50%	10.50%	10.50%
G)	**Interest on Working capital for Retail Sale Activity**		**50.33**	**(6.04)**	**39.96**	**84.25**
	Summary					
	For wheeling Activity		18.10	16.62	17.85	52.57
	For Retail Sale Activity		50.33	(6.04)	39.96	84.25
	Total Interest on working Capital		68.43	10.58	57.81	136.81
	Total Interest on working Capital Admitted		**68.43**	**10.58**	**57.81**	**136.81**

Interest on Consumer Security Deposit

Petitioners Submission

2.175 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 amendment thereof. The Petitioners have provisionally considered rate on Consumer Security Deposit rate in line with the actual rate arrived based on the audited accounts.

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

Table 55: Interest on Consumer Security Deposit claimed by the Petitioners for FY 2023-24 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Interest on Consumer Security Deposit	53.19	68.29	58.26	179.73

Commission's Analysis of Consumer Security Deposit

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

Table 56: Interest on Consumer Security Deposit (CSD) admitted for FY 2023-24 (Rs. Crore)

DISCOM	FY 2023-24
East DISCOM	42.83
West DISCOM	85.25
Central DISCOM	59.09
State	**187.17**

Return on Equity (RoE)

Petitioners' submission

2.178 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.

2.179 Regulation 22 of the MYT Regulations, 2021 provides that the debt-equity ratio of the capital employed for determination of tariff shall be 70:30. However, in case the actual equity is less than 30%, actual equity infused is to be considered and wherever the actual equity infused exceeds 30%, equity in excess of 30% shall be treated as normative loan. Accordingly, based on the above provisions, the Petitioners have worked out Return of Equity for the FY 2023-23 as follows:

(a) Opening Equity for FY 2022-23 has been considered as the closing equity admitted in true up of FY 2021-22. Thereafter addition in equity for FY 2022-23 has been considered as per the Petitioners submission. The closing equity thus arrived for FY 2022-23 has been considered as opening equity for FY 2023-24.

(b) Net asset addition to GFA during FY 2022-23 and FY 2023-24 of the Control Period is arrived by subtracting the consumer contribution/Grants from total asset addition to GFA as projected in this Petition.

(c) 30% of the net asset addition to GFA during the year or actual equity infusion as proposed, whichever being less has been considered by the Petitioners as funded through equity.

Table 57: Return on Equity Claimed by the Petitioners for FY 2023-24 (Rs. Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	State
A	**Gross Fixed Assets at the beginning of year (net of consumer contributions)**	**8,228.98**	**8,640.48**	**9,752.17**	**26,621.63**
A1	Opening balance of GFA identified as funded through equity	1,655.66	1,233.68	1,940.23	4,829.57
B	**Proposed capitalization of assets as per the investment plan (net of consumer contribution and grant)**	**679.37**	**646.36**	**696.98**	**2,022.71**

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM	State
B1	Proportion of capitalized assets funded out of equity, internal reserves	38.87	31.35	80.25	150.47
B2	Balance Proportion of capitalized assets funded out of project loans (B - B1)	640.50	615.01	616.73	1,872.24
C1	Normative additional equity (30% of B)	203.81	193.91	209.09	606.81
C2	Normative additional debt (70% of B)	475.56	452.45	487.88	1,415.89
D1	Excess / shortfall of additional equity over normative (B1-C1)	(164.94)	(162.56)	(128.85)	(456.35)
D2	Excess / shortfall of additional debt over normative (B2-C2)	164.94	162.56	128.85	456.35
E	**Equity eligible for Return (A1+(C1/2)) OR (A1+(B1/2)), whichever is lower**	**1,675.09**	**1,249.36**	**1,980.36**	**4,904.81**
F	**Rate of Return in Equity**	**14.00%**	**14.00%**	**14.00%**	**14.00%**
G	**Return on Equity (14% on E)**	**234.51**	**174.91**	**277.25**	**686.67**

Commission's Analysis of Return on Equity

2.180 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:

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

(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."

2.181 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, the Commission in this order has considered base rate of 14% for computation for Return of Equity for FY 2023-24.

2.182 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.

2.183 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 FY 2023-24 is as follows:

a) Opening Equity for FY 2022-23 has been considered as the closing equity admitted in true up of FY 2021-22. Thereafter addition in equity for FY 2022-23 has been considered as per the Petitioners Submission. The closing equity thus arrived for FY 2022-23 has been considered as opening equity for FY 2023-24.

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.

2.184 The total equity identified along with RoE as admitted for FY 2023-24 is shown in the tables below:

Table 58: Return on Equity admitted for FY 2023-24 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Opening Equity identified with GFA as on 1st April, 2022	**1,581.91**	**1,163.24**	**1,806.00**	**4,551.16**
Equity addition admitted during the Year	52.53	52.55	83.60	188.68
Opening Equity identified with GFA as on 1st April, 2023	**1,634.45**	**1,215.79**	**1,889.60**	**4,739.84**
GFA Addition	1,406.34	1,150.55	1,416.80	3,973.69
Consumer Deposit and Grants received	726.97	504.20	719.82	1,950.98
Net GFA Addition	679.37	646.36	696.98	2,022.70
30% of addition to net GFA considered as funded through equity net of consumer contribution	203.81	193.91	209.09	606.81
Proposed Equity addition during the Year	38.87	31.35	80.25	150.46
Equity addition admitted during the Year	38.87	31.35	80.25	150.46
Closing Equity as on 31st March, 2023	**1,673.31**	**1,247.14**	**1,969.85**	**4,890.30**
Average Equity	1,653.88	1,231.47	1,929.72	4,815.07
RoE @ 14% Admitted	**231.54**	**172.41**	**270.16**	**674.11**

Other Items of ARR

2.185 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

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

Table 59: Provision for Bad and Doubtful Debts Claimed for FY 2023-24 (Rs Crore)

DISCOM	FY 2023-24
East DISCOM	2.00
West DISCOM	2.00
Central DISCOM	2.00
State	**6.00**

Commission's Analysis on Bad and Doubtful debts

2.186 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 trued up during the true up exercise for the relevant year subject to a limit of 1% of the yearly revenue"

2.187 The Commission has not considered any provision for Bad and doubtful debt for FY 2023-24 as these shall be allowed based on actual written off. The Commission is of the view that any expenses against the bad and doubtful debts should be considered only at time of true-up based on actual bad debt written off after prudence check.

2.188 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

2.189 The main components of Non-Tariff Income are Wheeling Charges, Supervision Charges, Sale of Scrap, income from Trading and Miscellaneous Charges from consumers as per MYT Regulations, 2021 and as per the "Schedule of Miscellaneous and General Charges" under MPERC (Details to be furnished and fee payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004 and amendments thereof. The Petitioners have projected their Other Income & Non-Tariff Income for FY 2023-24 based on averaging method over various components of other income.

2.190 Petitioners further submitted that they have not considered deferred income i.e., income booked towards the amortization of assets created through consumer contribution and grants under their claim of Other Income since, the depreciation is claimed on net 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. Accordingly, the Other Income and Non-Tariff Income as filed by the Petitioners are shown in tables below:

Table 60: Other Income and Non-Tariff Income for FY 2023-24 (Rs Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Income from Investment, Fixed & Call Deposits	8.99	33.62	26.70	69.31
Interest on loans and Advances to staff	-	0.09	-	0.09
Other Income from Trading/Sale of scrap	17.88	8.65	9.74	36.27
Interest on Advances to Suppliers / Contractors	-	0.29	-	0.29
Income/Fee/Collection against staff welfare activities	-	0.02	-	0.02
Miscellaneous receipts	76.52	-	41.90	118.42
Wheeling charges	0.92	5.63	0.25	6.80
Supervision charges	17.44	24.78	22.90	65.12
Recovery from theft	7.33	-	-	7.33
Other Charges from Consumers	56.92	-	-	56.92
Utility Charges	-	-	0.77	0.77
Income from renting	-	3.17	-	3.17
Other miscellaneous income	-	126.56	81.05	207.61
Total	**186.01**	**202.80**	**183.31**	**572.12**

Commission's Analysis on Other Income

2.191 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-II) 2022 on 31st May 2022, vide which the Commission has notified metering and other charges. As per the Regulation, metering charges (if any) shall be applicable in accordance with the respective retail supply tariff order issued by the Commission from time to time. The relevant extract of the Regulation is as follows:

"5.Other Charges to be recovered from consumers

5.1 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 as provided in Annexure-1 of these Regulations. Metering charges (if any) shall be applicable in accordance with the respective retail supply tariff order issued by the Commission from time to time."

2.192 The Commission has decided not to levy any metering charges on the consumers.

2.193 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 61: Total actual other income as per true-up orders (Rs Crore)

DISCOM	FY 2019-20	FY 2020-21	FY 2021-22
East DISCOM	156.92	151.11	90.91
West DISCOM	134.07	117.83	191.10
Central DISCOM	117.87	102.41	207.66

2.194 Based on the above actual other income admitted by the Commission in true-up orders for FY 2019-20, FY 2020-21 and FY 2021-22, the Commission has admitted Other Income for FY 2023-24 as the average of actual other income during FY 2019-20 to FY 2021-22, which includes interest on deposits, sale of scrap, other miscellaneous receipts, etc., but excludes meter rent and deferred income. The admitted Other Income for FY 2023-24 by the Commission excluding metering charges is as tabulated below, which shall be considered actuals at the time of true-up:

Table 62: Other Income admitted for FY 2023-24 (Rs. Crore)

DISCOM	FY 2023-24
East DISCOM	132.98
West DISCOM	147.66
Central DISCOM	142.65
State	**423.29**

Differential Bulk Supply Tariff (DBST)

Petitioners' Submission

2.195 The Government of MP vide gazette notification dated 21st 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.

2.196 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.

2.197 The Power Purchase cost allocated to DISCOMs based on DBST methodology for FY 2023-24 submitted by the Petitioners is given in the table below:

Table 63: DBST submitted by the Petitioners for FY 2023-24 (Rs Crore)

Sr.No	Particulars	Unit	East DISCOM	West DISCOM	Central DISCOM	State
A	**Revenue from Existing Tariff**	**Rs. Crore**	**13,395**	**18,727**	**15,870**	**47,992**
B	**Other costs of Discoms (Expenditure other than power purchase cost)**	**Rs. Crore**	**4,838**	**929**	**4,406**	**10,173**
1	R&M Expense	Rs. Crore	336	245	341	921
2	Employee Expenses	Rs. Crore	1,443	1,422	1,326	4,190
3	A&G Expense	Rs. Crore	129	145	134	409
4	Depreciation and Related debits	Rs. Crore	296	346	395	1,037
5	Interest & Finance Charges	Rs. Crore	413	231	446	1,090
6	Other Debits, Write-offs (Prior period and bad debts)	Rs. Crore	2	2	2	6
7	RoE	Rs. Crore	235	175	277	687
8	Less: Other income	Rs. Crore	186	203	183	572
9	Impact of True ups	Rs. Crore	2,171	(1,433)	1,667	2,404
C	**Intra- State transmission Charges including SLDC Charges**	**Rs. Crore**	**1,289**	**1,544**	**1,502**	**4,335**
D	**Aggregated Amount available with Discoms for Power purchase (A-B-C)**	**Rs. Crore**	**7,269**	**16,253**	**9,962**	**33,484**
E	**Total Power Purchase Cost**	**Rs. Crore**				**35,022**
F	**Surplus/Gap (E-D)**	**Rs. Crore**				**1,537**
G	Ex-Bus Energy Requirement	MU	24,439	34,585	29,332	88,356
H	Ex-Bus Energy Requirement	%	28%	39%	33%	100%
I	**Allocation of surplus/Gap as per the Energy Requirement**	**Rs. Crore**	**425**	**602**	**510**	**1,537**
J	**Power Purchase Cost for Discom (D+I)**	**Rs. Crore**	**7,694**	**16,855**	**10,472**	**35,022**
K	**Bulk Supply Tariff**	**Rs./kWh**	**3.15**	**4.87**	**3.57**	**3.96**

Commission's Analysis of DBST

2.198 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. It is observed that the Government of Madhya Pradesh vide gazette notification dated 21st 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.

2.199 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 arrive at 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 2023-24, which is shown in the table below:

Table 64: Differential Bulk Supply Tariff Admitted by the Commission for FY 2023-24 (Rs Crore)

Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	State
Revenue from Admitted Tariff (Rs. Crore)	**A**	**13,480.54**	**19,043.56**	**16,468.57**	**48,992.66**
Other Costs of ARR of DISCOMs (Expenses other than Power Purchase Cost) (Rs. Crore)	**B**	**3,026.49**	**2,755.88**	**3,226.00**	**9,008.37**
O&M Expenses		1,875.67	1,744.43	1,828.55	5,448.66
Depreciation		241.02	141.99	276.97	659.98
Interest & Finance Charges					
On Project Loans		281.10	148.94	366.90	796.95
On Working Capital Loans		68.43	10.58	57.81	136.81
On Consumer Security Deposit		42.83	85.25	59.09	187.17
Return on Equity		231.54	172.41	270.16	674.11
Bad & Doubtful Debts		0.00	0.00	0.00	0.00
Less: Other Non-Tariff Income		132.98	147.66	142.65	423.29

Particulars	Reference	East DISCOM	West DISCOM	Central DISCOM	State
Revenue Gap of MP DISCOMs, MP Genco and MP Transco True-up		418.88	599.96	509.15	1,527.99
Intra-State Transmission Charges including SLDC	**C**	**1,290.73**	**1,544.05**	**1,504.67**	**4,339.45**
Aggregated Amount available with DISCOMs for Power purchase (Rs. Crore)	**D=A-B-C**	**9,163.31**	**14,743.62**	**11,737.90**	**35,644.84**
Total Power Purchase Cost (Rs. Crore)	**E**				**35,644.84**
Revenue Gap/(Surplus) (Rs. Crore)	**F=E-D**				**0.00**
Ex-Bus Energy Requirement (MU)	**G**	**24,774.95**	**34,754.96**	**30,418.70**	**89,948.62**
% Allocation as per Ex-Bus Energy Requirement		28%	39%	34%	100%
Allocation of Revenue Gap/(Surplus) as per Ex-Bus Energy Requirement (Rs. Crore)	**H**	**0.00**	**0.00**	**0.00**	**0.00**
Power Purchase Cost for DISCOMs (Rs. Crore)	**I=H+D**	**9,163.32**	**14,743.63**	**11,737.90**	**35,644.84**
Bulk Supply Tariff for FY 2022-23		**3.70**	**4.24**	**3.86**	**3.96**

2.200 Based on the above, the ARR as admitted for FY 2023-24 is shown in the following table:

Table 65: Aggregate Revenue Requirement (ARR) admitted for State for FY 2023-24 (Rs Crore)

Particulars	East DISCOM		West DISCOM		Central DISCOM		State	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Power Purchase Cost including Inter State Transmission Charges	7,694.38	9,163.32	16,855.22	14,743.63	10,472.32	11,737.90	35,021.92	35,644.84
Intra-State Transmission Charges including SLDC	1,288.68	1,290.73	1,543.98	1,544.05	1,502.35	1,504.67	4,335.01	4,339.45
O&M Expenses	1,907.31	1,875.67	1,812.03	1,744.43	1,801.31	1,828.55	5,520.64	5,448.66
Depreciation	295.86	241.02	345.77	141.99	395.36	276.97	1,036.98	659.98
Interest & Finance Charges								
On Project Loans	281.95	281.10	145.45	148.94	348.39	366.90	775.78	796.95

Particulars	East DISCOM		West DISCOM		Central DISCOM		State	
	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
On Working Capital Loans	78.28	68.43	17.15	10.58	39.51	57.81	134.95	136.81
On Consumer Security Deposit	53.19	42.83	68.29	85.25	58.26	59.09	179.73	187.17
Return on Equity	234.51	231.54	174.91	172.41	277.25	270.16	686.67	674.11
Bad & Doubtful Debts	2.00	0.00	2.00	0.00	2.00	0.00	6.00	0.00
Total Expenses Admitted	**11,836.16**	**13,194.64**	**20,964.78**	**18,591.27**	**14,896.74**	**16,102.06**	**47,697.68**	**47,887.97**
Less: Other income and Non-Tariff Income	186.01	132.98	202.80	147.66	183.31	142.65	572.12	423.29
Total ARR Admitted	**11,650.15**	**13,061.66**	**20,761.98**	**18,443.60**	**14,713.43**	**15,959.42**	**47,125.57**	**47,464.68**
Revenue Gap of MP Transco True-up of FY 2020-21	72.98	72.98	22.25	22.25	48.96	48.96	144.19	144.19
Revenue Surplus of MP Genco True-up of FY 2020-21	(338.61)	(342.17)	(338.61)	(342.17)	(338.61)	(342.17)	(1,015.83)	(1,026.52)
Revenue Gap of MP DISCOMs True-up of FY 2021-22	2,436.21	455.58	(1,116.94)	635.80	1,956.61	556.83	3,275.88	1,648.21
Revenue Gap of MP Transco True-up of FY 2021-22	-	232.50	-	284.08	-	245.53	-	762.11
Total ARR (including True-up)	**13,820.73**	**13,480.54**	**19,328.69**	**19,043.56**	**16,380.39**	**16,468.57**	**49,529.81**	**48,992.66**

2.201 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:

Particulars	***Wheeling Business***	***Supply Business***
Operation and Maintenance expenses	*70%*	*30%*
Depreciation	*95%*	*5%*
Interest on loan	*95%*	*5%*
Interest on working capital	*10%*	*90%*
Return on Equity	*90%*	*10%*

Particulars	*Wheeling Business*	*Supply Business*
Power purchase cost including transmission and SLDC charges	*0%*	*100%*

”

2.202 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.

2.203 Accordingly, the Commission has allocated the cost related to Wheeling and Supply activities as per allocation matrix. As such the ARR for FY 2023-24 for all the three DISCOMs is segregated as under:

Table 66: Admitted ARR for Wheeling Business for FY 2023-24 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Operation and Maintenance expenses	1,875.67	1,744.43	1,828.55	5,448.66
70% of Operation and Maintenance expenses for Wheeling Business	1,312.97	1,221.10	1,279.99	3,814.06
Depreciation	241.02	141.99	276.97	659.98
95% of Depreciation for Wheeling Business	228.97	134.89	263.12	626.98
Interest on Project Loans	281.10	148.94	366.90	796.95
95% of Interest on Project Loans for Wheeling Business	267.05	141.49	348.56	757.10
Interest on Working Capital for Wheeling Business	18.10	10.58	17.85	46.52
Return on Equity	231.54	172.41	270.16	674.11
90% of Return on Equity for Wheeling Business	208.39	155.16	243.15	606.70
Less: Other income and Non-Tariff Income	132.98	147.66	142.65	423.29
10% of other income and Non-Tariff Income for Wheeling Business	13.30	14.77	14.26	42.33
Impact of True-Ups of Past Years of MP Transco and DISCOMs for Wheeling Business	418.88	599.96	509.15	1,527.99
10% of Impact of True-Ups of Past Years of MP Transco and DISCOMs	41.89	60.00	50.91	152.80
Total for Wheeling Business	**2,064.06**	**1,708.46**	**2,189.31**	**5,961.83**

Table 67: Admitted ARR for Supply Business for FY 2023-24 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Power Purchase Cost including transmission and SLDC charges	10,454.05	16,287.68	13,242.57	39,984.29
100% of Power Purchase Cost including transmission and SLDC charges for Supply Business	10,454.05	16,287.68	13,242.57	39,984.29
Operation and Maintenance expenses	1,875.67	1,744.43	1,828.55	5,448.66
30% of Operation and Maintenance expenses for Supply Business	562.70	523.33	548.57	1,634.60
Depreciation	241.02	141.99	276.97	659.98
5% of Depreciation for Supply Business	12.05	7.10	13.85	33.00
Interest on Project Loans	281.10	148.94	366.90	796.95
5% of Interest on Project Loans for Supply Business	14.06	7.45	18.35	39.85
Interest on Working Capital for Supply Business	50.33	0.00	39.96	90.29
Return on Equity	231.54	172.41	270.16	674.11
10% of Return on Equity for Supply Business	23.15	17.24	27.02	67.41
Interest on Consumer Security Deposit	42.83	85.25	59.09	187.17
100% of Interest on Consumer Security Deposit for Supply Business	42.83	85.25	59.09	187.17
Less: Other income and Non-Tariff Income	132.98	147.66	142.65	423.29
90% of other income and Non-Tariff Income for Supply Business	119.68	132.90	128.38	380.96
Impact of True-Ups of Past Years of MP Transco and DISCOMs	418.88	599.96	509.15	1,527.99
90% of Impact of True-Ups of Past Years of MP Transco and DISCOMs for Supply Business	376.99	539.96	458.23	1,375.19
Total for Supply Business	**11,416.48**	**17,335.10**	**14,279.25**	**43,030.83**

Revenue from Existing and Admitted Tariffs and Gap/Surplus

Petitioners' Submission

2.204 The Petitioners submitted that there has not been any substantial tariff hike for the years FY 2014-15 and FY 2015-16 in the state of Madhya Pradesh which has severely affected the financial health of the DISCOM's. For FY 2016-17 to FY 2018-19, the Commission had approved an average tariff hike of 8.40%, 9.48% and 0% respectively. In FY 2019-20 & FY 2020-21, there was 7% & 2% hike respectively, whereas in FY 2021-22 there was a marginal tariff hike of 0.63% only. The DISCOMs are finding it extremely difficult to sustain its operations at the present tariff levels because of intrinsic rise in expenditure due to inflationary pressures, and consistent rise in power and energy demands, an ambitious normative loss reduction trajectory and benchmarks set by the Commission, and obligations to be met under the policy objectives of the State and Central Governments.

2.205 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.

2.206 Petitioners have proposed a hike of 3.20% for FY 2023-24 as without it DISCOMs will not be able to maintain its operational viability.

2.207 The revenue from existing and proposed tariff for FY 2023-24 is as follows:

Table 68: Revenue at Existing and proposed Tariff submitted by Petitioner for FY 2023-24 (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	3,839	3,949	4,083	4,197	4,266	4,383	12,188	12,529
LV-2	Non-Domestic	1,145	1,186	1,280	1,327	1,270	1,322	3,695	3,834
LV-3	Public Waterworks & Street Light	273	281	387	399	329	340	989	1,021
LV-4	LT Industry	503	520	694	716	319	329	1,516	1,564

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-5	Agriculture	4,282	4,418	6,970	7,193	5,984	6,177	17,236	17,788
LV-6	EV Charging	0	0	0	0	0	0	0	0
	TOTAL – LT	**10,042**	**10,355**	**13,413**	**13,832**	**12,168**	**12,550**	**35,623**	**36,737**
HV-1	Railway Traction	41	43	0	0	39	40	80	83
HV-2	HV 2: Coal Mines	409	423	0	0	24	25	433	448
HV-3.1	Industrial Use	2,129	2,205	2,987	3,098	2,466	2,555	7,582	7,858
HV-3.2	Non-Industrial	263	272	431	447	368	381	1,063	1,100
HV-3.3	Shopping Mall	7	8	47	49	35	36	90	93
HV-3.4	Power Intensive Industries	70	72	817	850	407	424	1,294	1,347
HV-4	Seasonal & Non-Seasonal	8	9	10	11	2	2	21	21
HV-5	PWW Works & Other Agri.	233	240	959	988	245	253	1,437	1,482
HV-6	Bulk Residential Users	190	186	23	23	111	108	324	317
HV-7	RECs/Synchro of power for Generator connected to Grid	2	2	26	26	3	3	30	31
HV-8	EV Charging	1	1	12	11	2	2	16	15
HV-9	Metro Rail*	-	-	-	6	-	6	-	11
	TOTAL – HT	**3,354**	**3,461**	**5,314**	**5,508**	**3,702**	**3,836**	**12,369**	**12,804**
	TOTAL (LT+HT)	**13,395**	**13,816**	**18,727**	**19,340**	**15,870**	**16,386**	**47,992**	**49,541**

**Additional Submission*

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

Table 69: Gap/Surplus for FY 2023-24 as submitted by the Petitioner

Particulars	Unit	East DISCOM	West DISCOM	Central DISCOM	State
Total ARR	Rs Crore	13,820.73	19,328.69	16,380.40	49,529.81
Revenue at Current Tariffs	Rs Crore	13,395.46	18,726.88	15,869.98	47,992.32
Total Revenue Gap/(Surplus)	Rs Crore	425.26	601.81	510.42	1,537.49
Average Cost of Supply	**Rs./Unit**	**6.99**	**6.93**	**7.00**	**6.97**

Commission Analysis

2.209 The consumer category-wise revenue including rebate/incentives at existing and admitted tariff for FY 2023-24 is presented in the table below:

Table 70: Revenue including Rebate/ Incentives at Existing and Admitted Tariffs for FY 2023-24 (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	3,910.79	3,969.27	4,215.37	4,275.20	4,270.49	4,328.94	12,396.64	12,573.41
LV-2	Non-Domestic	1,081.43	1,081.43	1,363.76	1,363.76	1,311.51	1,311.51	3,756.70	3,756.70
LV-3	Public Water Works & Street Light	270.12	270.98	405.55	407.24	345.19	346.45	1,020.86	1,024.67
LV-4	LT Industries	441.96	441.96	683.96	683.96	331.88	331.88	1,457.80	1,457.80
LV-5	Agriculture and Allied Activities	4,124.31	4,209.69	6,841.64	6,977.88	6,143.07	6,261.95	17,109.02	17,449.52
LV-6	E-Vehicle/ E-Rickshaws Charging Stations	0.08	0.09	0.15	0.11	0.12	0.12	0.35	0.32
	LT Total	**9,828.69**	**9,973.42**	**13,510.43**	**13,708.15**	**12,402.25**	**12,580.85**	**35,741.37**	**36,262.42**
HV-1	Railway Traction	30.28	31.39	0.00	0.00	27.59	28.61	57.87	60.00
HV-2	Coal Mines	412.46	423.13	0.00	0.00	22.23	22.83	434.69	445.95
HV-3	HT Industrial, Non-Industrial and shopping malls	2,601.81	2,657.93	4,207.42	4,309.23	3,367.94	3,447.09	10,177.17	10,414.26
	HV-3.1: Industrial	2,242.95	2,289.57	2,932.67	2,993.91	2,535.60	2,587.72	7,711.22	7,871.20
	HV-3.2: non-Industrial	277.88	284.65	423.78	434.53	378.40	388.17	1,080.05	1,107.35
	HV-3.3: shopping malls	7.88	8.06	46.85	47.95	36.37	37.22	91.10	93.23
	HV-3.4: Power Intensive Industries	73.10	75.65	804.13	832.84	417.57	433.99	1,294.79	1,342.48
HV-4	Seasonal & Non-Seasonal	7.45	7.49	7.27	7.33	0.97	0.98	15.68	15.80

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-5	Irrigation, Public Water Works and Other than Agricultural	181.27	182.73	932.20	938.87	261.65	263.80	1,375.12	1,385.40
HV-6	Bulk Residential Users	198.51	199.26	27.81	27.93	110.81	111.28	337.14	338.47
HV-7	Synchronization / Start-Up Power	3.62	3.73	33.97	34.94	5.30	5.47	42.89	44.14
HV 8	E-Vehicle/ E-Rickshaws Charging Stations	1.35	1.46	12.37	11.63	2.14	2.33	15.86	15.42
HV-9	Metro Rail	0.00	0.00	0.00	5.48	0.00	5.32	0.00	10.80
	HT Total	**3,436.76**	**3,507.12**	**5,221.04**	**5,335.41**	**3,798.63**	**3,887.72**	**12,456.43**	**12,730.24**
	Grand Total (LT + HT)	**13,265.45**	**13,480.54**	**18,731.47**	**19,043.56**	**16,200.87**	**16,468.57**	**48,197.80**	**48,992.66**

2.210 On 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 2023-24 is as shown in the table below:

Table 71: Final ARR and Revenue from existing tariffs for FY 2023-24 (Rs Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Total ARR admitted including True-up (A)	13,480.54	19,043.56	16,468.57	48,992.66
Revenue at existing Tariffs (B)	13,265.45	18,731.47	16,200.87	48,197.80
Uncovered Gap/(Surplus) (C=A-B)	**215.09**	**312.09**	**267.69**	**794.87**

2.211 To meet the aforesaid Revenue Gap of Rs. 794.87 Crore, the Commission has increased the tariff by 1.65%, 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 72: Final ARR and Revenue from admitted tariffs for FY 2023-24 (Rs Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	State
Total ARR admitted including True-up (A)	13,480.54	19,043.56	16,468.57	48,992.66
Revenue at admitted Tariffs (B)	13,480.54	19,043.56	16,468.57	48,992.66
Uncovered Gap/(Surplus) (C=A-B)	**0.00**	**0.00**	**0.00**	**0.00**

A3: WHEELING CHARGES, CROSS SUBSIDY SURCHARGE AND ADDITIONAL SURCHARGE

Determination of Wheeling Cost

Petitioners' Submission

3.1 The Petitioners in their ARR Petition requested the Commission to determine wheeling charges for FY 2023-24. Thereafter, the Petitioners made additional submission vide letter dated 28th February, 2023 for determination of Wheeling Charges in this regard.

3.2 In the additional submission the Petitioners submitted that they have allocated the cost related to Wheeling and Supply activities as per allocation matrix specified in Regulation 8.11 of the MYT Regulations, 2021. Based on the allocation matrix, the expenditure towards wheeling business for all the DISCOMs works out to be Rs. 6,542.69 Crore.

3.3 The Petitioners also submitted that the expenses of wheeling activity at different voltages have been worked out using the asset value ratios as considered in MYT Tariff Order dated 31st March, 2022. Thereafter, the allocation of wheeling cost has been done based on the usage of the network at different voltage levels by consumers, which is in line with the methodology as adopted by the Commission in previous Tariff Orders. The Petitioners have considered "Units to be Sold" approach at different voltage levels as the measure of network usage to allocate the associated costs. Since 33 kV network is used by the consumers at 33 kV and below 33 kV (those at 11 kV and LT), cost of wheeling at 33 kV is again allocated to the users appropriately in the submission of the Petitioners as detailed below:

Table 73 : Wheeling Charges submitted by the Petitioners for FY 2023-24

Sr. No.	Level	Wheeled Sales (MUs)	Level wise % Wheeled Sales mix	% Wheeled sales mix between 33kV & below 33kV	% Alloca-tion Ratio FY 22-23	Wheeling Cost segre-gation (as per % Alloca-tion) (Rs. Crore)	Wheeling Cost allocation for 33kV (Rs. Crore)	Wheeling Cost allocation for below 33kV (Rs. Crore)	Total Wheeling Cost allocation (Rs. Crore)	Wheeling Charges allocation (Rs/ kWh)	Wheeling Charges allocation (Rs / KVAh)
1	EHV (above 33kV)	6,053	9%								
2	HT 33 kV	9,427	13%	14%	17.78%	1,163	169		169	**0.18**	**0.17**
3	Below 33 kV	55,594	78%	86%	82.22%	5,379	995	5,379	6,374	**1.15**	**-**
	Total Sale	**71,074**	**100%**	**100%**	**100%**	**6,543**	**1,163**	**5,379**	**6,543**		

Commission's Analysis

3.4 From the Petitioners submission, the Commission observed that the Petitioners have derived wheeling cost for the consumers at 33 kV and below 33 kV (those at 11 kV and LT). However, as per the Madhya Pradesh Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewable Sources of Energy), Regulations, 2021 (First Amendment) any consumer who has contracted demand or sanctioned load of 100kW or more except captive consumer is eligible for requisition of green energy from the Distribution Licensee. The

Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Intra-State Open Access in Madhya Pradesh) Regulations, (Revision-I) 2021 as amended and Madhya Pradesh Electricity Regulatory Commission (Methodology for determination of Open Access charges and Banking charges for Green Energy Open Access consumers) Regulations, 2023 specify various charges to be levied on Green Energy Open Access Consumers which includes wheeling charges. In view of the above, the Commission has determined wheeling charges for the consumers at 33kV, 11kV and LT separately in this Order.

3.5 Regulation 8.11 of the MYT Regulations, 2021 specify allocation matrix for apportioning expenses of DISCOMs into wheeling and supply businesses as follows:

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

3.6 On the basis of the above allocation matrix and admitted ARR for FY 2023-24, the expenditure towards wheeling business for all the DISCOMs works out to be Rs. 5,961.83 Crore.

Segregation of costs among voltage levels

3.7 The costs of wheeling activity have been distributed among three voltage levels of distribution, i.e., 33 kV, 11kV and LT. Though, the EHT consumers (i.e., at voltages above 33 kV) are consumers of the DISCOMs, they are not directly connected to the distribution system. Certain costs related with metering, billing and collection are associated with EHT consumers. At this juncture, the Commission is not inclined to get into these details, primarily on account unavailability of data.

3.8 The Distribution Licensees in the State presently do not maintain accounts of their costs voltage-wise. Similar is the case with other Government-owned Distribution Licensees operating in most of the Other States.

3.9 It is observed that the present accounting practices followed by DISCOMs do not permit segregation of GFA across voltage levels directly. The Commission, therefore, considers it appropriate to adopt the approach of using transformation capacity in MVA at interfaces of 33/11 kV and 11/0.4 kV.

3.10 The data used for this exercise to arrive at the value of asset base is as follows:

Table 74 : Voltage level-wise Cost Break-up of Sub transmission & Distribution Lines

Voltage level of Lines	East DISCOM (ckt-kms)	West DISCOM (ckt-kms)	Central DISCOM (ckt-kms)	Length of lines at State Level (ckt-kms)	Total Cost of lines (Rs. Crore.)	Per unit cost (Rs. Lakh /ckt-km)
33KV	20,805.00	18,374.00	20,116.43	59,295.43	10,459.97	17.64
Below 33 KV						
(a) 11 KV	1,66,189.00	1,38,668.00	1,62,636.55	4,67,493.55	76,152.41	16.29
(b) LT	1,46,050.00	1,74,433.00	1,27,849.33	4,48,332.33	42,108.49	9.39
Sub-Total	3,12,239.00	3,13,101.00	2,90,485.88	9,15,825.88	1,18,260.90	
Total	**3,33,044.00**	**3,31,475.00**	**3,10,602.31**	**9,75,121.31**	**1,28,720.87**	

Table 75 Voltage level-wise cost of Transformer

Transformer Voltage Level	East DISCOM (MVA)	West DISCOM (MVA)	Central DISCOM (MVA)	State (MVA)	Total Cost (Rs. Crore)	Per unit cost (Rs. Lakh /MVA)
33/11 kV Transformer	11,436.00	13,733.05	13,386.00	38,555.05	18,657.17	48.39
11/0.4 kV Transformer	11,400.00	21,816.00	16,518.55	49,734.55	16,195.81	3.26
Total	**22,836.00**	**35,549.05**	**29,904.55**	**88,289.60**	**34,852.98**	

3.11 Data for length of lines and transformation capacity expected to be added during FY 2023-24 has been considered as provided in the Petition.

3.12 In order to identify the asset values at different voltage levels, it is necessary to "assign" the interface transformers to the voltage levels. For this exercise, the 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 works out to be as follows:

Table 76 : Identification of value of network at different each voltage level (Rs. Crore)

Voltage level	Cost of Lines (Rs. Crore)	Cost of Transformation (Rs. Crore)	Total Cost (Rs. Crore)
33 kV	10,459.97	18,657.17	29,117.14
Below 33 kV			
(a) 11 kV	76,152.41	16,195.81	92,348.22
(b) LT	42,108.49		42,108.49
Total	**1,28,720.87**	**34,852.98**	**1,63,573.85**

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

Table 77 : 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	29,117.14	17.80%		1,061.24
Below 33 kV				
(a) 11 kV	92,348.22	56.46%	5,961.83	3,365.85
(b) LT	42,108.49	25.74%		1,534.74
Total	**1,63,573.85**	**100.00%**		**5,961.83**

Sharing of Wheeling costs

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

3.15 The Sales at different voltage levels are as follows:-

Table 78 : Sales at different voltage levels

EHT (400 kV, 220 kV, 132 kV & 66 kV)	33 kV System	11 kV	LT	State
5,923.80	**9,844.72**	**954.44**	**55,413.51**	**72,136.47**

3.16 The Commission has chosen "Units to be Sold" at different voltage levels as the measure of network usage to allocate the costs as detailed below:

Table 79 : Allocation of wheeling cost over Distribution System Users at 33 kV

Particulars	Reference	Unit for item under reference	Quantum/ Amount
Wheeling Cost at 33 kV	A	Rs. Crore	1,061.24
Sales at 33 kV (as per Table:-78)	B	MU	9,844.72
Total Sales {excluding sales at 132 kV} (as per Table:-78)	C	MU	66,212.67
Proportion of 33 kV sales to total sales	D=B/C*100	%	14.87%
Cost allocation			
Wheeling cost of 33 kV allocated to 33 kV users only	**E=A*D**	**Rs. Crore**	**157.79**

Table 80 : Allocation of wheeling cost over Distribution System Users at 11 kV

Particulars	Reference	Unit for item under reference	Quantum/ Amount
Wheeling Cost at 33 kV	A	Rs. Crore	1,061.24
Wheeling cost of 33 kV allocated to 33 kV users only	B	Rs. Crore	157.79
Remaining Wheeling Cost of 33kV	C=A-B	Rs. Crore	903.45
Wheeling Cost at 11 kV	D	Rs. Crore	3,365.85
Wheeling Cost at 11 kV along with remaining Wheeling Cost of 33kV	E=C+D	Rs. Crore	4,269.30
Sales at 11 kV (as per Table:-78)	F	MU	954.44
Total Sales {excluding sales at 132 kV} (as per Table:-78)	G	MU	66,212.67
Proportion of 11 kV sales to total sales	H	MU	1.44%
Cost allocation			
Wheeling cost of 11 kV allocated to 11 kV users only	**I=E*H**	**Rs. Crore**	**61.54**

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

Table 81 : Wheeling Charges at different Voltage levels

Voltage	Wheeling Cost allocated (Rs. Crore)	Sales (MU)	Wheeling charges (Rs. /kWh)
33 kV	157.79	9,844.72	0.16
Below 33 kV			
(a) 11 KV	61.54	954.44	0.64
(b) LT	5,742.50	55,413.51	1.04

3.18 Applicability of wheeling charges for the Open Access consumers depending on their connectivity shall be governed by MPERC (Terms and Conditions for Intra-State Open Access in Madhya Pradesh) Regulations, 2021 and MPERC (Methodology for determination of Open Access charges and Banking charges for Green Energy Open Access consumers) Regulations, 2023 and amendments thereof.

Determination of Cross-Subsidy Surcharge

Petitioners' Submission

3.19 The Petitioners submitted that the basis for determination of the cross-subsidy surcharge to be taken as per provisions of Tariff Policy, 2016. The Commission has determined the average tariff based on the power purchase cost as per previous year's available data. Any variation on account of such change in fuel cost is also passed on to the consumer through FCA, which will result in an increase in average tariff by FCA amount. Therefore, it will be appropriate to increase the cross-subsidy surcharge to the extent of FCA charges payable for a particular period.

Commission's Analysis

3.20 The Tariff Policy notified by GOI on dated 28th January, 2016 prescribes the following formula for determination of cross- subsidy surcharge for various categories of consumers.

"8.5 Cross-subsidy surcharge and additional surcharge for open access

8.5.1 …

….

Surcharge formula:

S= T – [C/ (1-L/100) + D+ R]

Where

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is the per unit cost of carrying regulatory assets.

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

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

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

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

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

3.21 Accordingly, the cost of supply to the consumer may be computed on the basis of the weighted average cost of power purchase by the Licensee including cost of meeting the Renewable Purchase Obligation (C), applicable transmission and distribution losses (L), Cost of transmission and distribution of electricity (D). 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 MPERC (Terms and Conditions for Intra-State Open Access in Madhya Pradesh) Regulations, 2021 and MPERC (Methodology for determination of Open Access charges and Banking charges for Green Energy Open Access consumers) Regulations, 2023 and amendments thereof, the Licensee shall compute the Cross Subsidy surcharge.

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

Table 82 : Weighted average cost of power purchase by the Licensee including cost of meeting the Renewable Purchase Obligation

Generating Stations	Requirement (MU)	Total cost (Rs. Crore)	Wt. Average rate of power purchase (Rs./unit)
Dispatched	89,948.62	32,619.37	3.63

3.23 The Tariff Policy prescribes that the Loss level (term 'L') should be worked out for each voltage level separately. Losses at each voltage level are assumed as below for this purpose because of non-availability of required reliable data with the DISCOMs:

Table 83 : Voltage-wise losses

Voltage Level	Loss level (L)
EHT (transmission system) including External losses*	3.53%
33 kV #	4.17%
11 kV#	5.22%
LT#	6.06%

** EHT Voltage level losses have been considered 3.53% for FY 2023-24.*

#Average voltage losses at each level submitted by the Petitioners have been considered and apportioned as per the normative distribution losses.

3.24 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 2023-24 are worked out as under:

Table 84 : Transmission Charges

Particulars	Unit	Quantity
PGCIL Charges	Rs. Crore	3,025.47
MPPTCL Charges including SLDC Charges	Rs. Crore	4,339.45
Total Charges	**Rs. Crore**	**7,364.93**
Units to be handled	MU	89,948.62
Transmission Charges per unit	**Rs/kWh**	**0.82**

3.25 Wheeling charges have been determined for consumers connected at 33 kV, 11kV and LT as shown in Table 81 : Wheeling Charges, above.

3.26 Finally, the term in the Tariff Policy formula, ‘T’, Average Tariff for different categories, is derived from expected revenue for FY 2023-24 as shown in the following table:

Table 85: Average Billing Rate (ABR) for FY 2023-24 at approved tariff (Rs./kWh)

Category of consumers	Average Tariff 'T' (Rs Per Unit)
LV-1: Domestic	6.49
LV-2: Non Domestic	9.45
LV-3: PWW	6.98
LV-4: LT Industries	8.99
LV-5: Agriculture & allied activities	6.02
LV-6: E-Vehicle/ E-Rickshaws Charging Stations	6.79
HV-1: Railway Traction	5.42
HV-2: Coal Mines	8.73
HV-3: HT Industrial, Non-Industrial and Shopping Malls	7.55
HV-3.1: Industrial	7.86
HV-3.2: Non Industrial	9.07
HV-3.3: Shopping Malls	8.40
HV-3.4: Power Intensive Industries	5.48
HV-4: Seasonal & Non Seasonal	8.42
HV-5: Irrigation, Public Water Works and Other than Agricultural	7.85
HV-6: Bulk Residential Users	7.57
HV-7: Synchronization and Start-Up Power	10.95
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	6.79
HV 9: Metro Rail	6.79

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

3.28 Further, Renewable Energy Generators and users having capacity of 100 kW or above are also eligible for Open Access, subject to no operational constraints in the Licensee's system as per MPERC (Terms and Conditions for Intra-State Open Access in Madhya Pradesh) Regulations, 2021 and MPERC (Methodology for determination of Open Access charges and Banking charges for Green Energy Open Access consumers) Regulations, 2023 and amendments thereof{hereinafter referred to as MPERC (Intra-State or Green Energy Open Access) Regulations}.

3.29 In accordance with the above provisions, the total charges (Rs/unit) i.e. *[C/ (1-L/100) + D+ R]* for various LT & HT categories are to be computed as per applicable cost and eligibility as per the MPERC (Intra-State or Green Energy Open Access) Regulations. The Cross-Subsidy Surcharge shall be the difference of average tariff (T) as specified in Table:85, above and the total charges (Rs/unit) for that particular category at particular voltage level to be computed based on cost component determined above depending upon its applicability as per MPERC (Intra-State or Green Energy Open Access) Regulations. However, Cross-Subsidy surcharge is not to exceed 20% of the average cost of supply for the consumers seeking Open Access as per MYT Regulations, 2021 and amendments thereof. In case where Cross-Subsidy Surcharge, based on above methodology, works out to be negative, the same shall be considered as zero for billing purposes.

Illustration for computation of Cross Subsidy Surcharge

Illustration-1: Both Generator and consumer are connected to transmission network (132 kV or above)

Illustration-2: Generator is connected to Transmission network (EHT voltages), while the consumer is connected to the distribution network at 33 kV of Distribution Licensee.

Table 86 : Illustration of Computation of Cost for Cross Subsidy Surcharge (Rs. per unit)

Illustration	Wt. Average rate of power purchase (Rs. /unit)	Cost of Power grossed up for transmission losses (3.53%)	Cost of Power grossed up for distribution losses (33kV-4.17%,)	Transmission charges (Rs. per unit)	Wheeling charges at 33 kV (Rs. per unit)	Total Cost [C/(1-L/100) + D+R]
1	3.63	3.76	-	0.82	-	4.58
2	3.63	3.76	3.92	0.82	0.16	4.90

Table 87: 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% of AcoS (Rs/Unit)	CSS (Rs/Unit)	Applicable CSS (Rs/Unit)
HV-1: Railway Traction (Illustration -1)	5.42	1.36	0.85	0.85
HV-2: Coal Mines	8.73	1.36	3.82	1.36
HV-3: HT Industrial, Non-Industrial and Shopping Malls	7.55	1.36	2.65	1.36

Category of HT/EHT consumers	**Average Tariff 'T' (Rs Per Unit)**	**Ceiling 20% of AcoS (Rs/Unit)**	**CSS (Rs/Unit)**	**Applicable CSS (Rs/Unit)**
HV-3.1: Industrial	7.86	1.36	2.96	1.36
HV-3.2: Non Industrial	9.07	1.36	4.17	1.36
HV-3.3: Shopping Malls	8.40	1.36	3.50	1.36
HV-3.4: Power Intensive Industries	5.48	1.36	0.58	0.58
HV-4: Seasonal & Non Seasonal	8.42	1.36	3.52	1.36
HV-5: Irrigation, Public Water Works and Other than Agricultural	7.85	1.36	2.94	1.36
HV-6: Bulk Residential Users	7.57	1.36	2.67	1.36
HV-7: Synchronization and Start-Up Power	10.95	1.36	6.04	1.36
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	6.79	1.36	1.89	1.36

Note:

1. Cross-Subsidy surcharge shall not exceed 20% of the average cost of supply for the consumers seeking Open Access.

2. Based on the applicability of charges specified in the MPERC (Intra-State or Green Energy Open Access) Regulations, the DISCOMs shall compute applicable CSS for other consumer categories.

3.The applicable Terms and Conditions of MPERC (Intra-State or Green Energy Open Access) Regulations shall be applicable to the consumers seeking Open Access.

Determination of Additional Surcharge

Petitioners' submission

3.30 The Petitioners submitted that the Tariff Policy, 2016 prescribes for the determination of additional surcharge to be levied from consumers who are permitted Open Access.

3.31 As per submission of the Petitioners, 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.

3.32 Petitioners have stated that 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.

3.33 In light of the provisions prescribed 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 Madhya Pradesh) Regulations, 2005, the Petitioners worked out 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 2021 to August 2022.

3.34 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 88 : Computation of Additional Surcharge Submitted by the Petitioners for FY 2023-24

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-21	5,821.08	5,419.66	401.42	1.63	186.47	30.30
2	Oct-21	6,160.09	5,405.75	754.33	1.23	109.80	13.51
3	Nov-21	6,490.20	5,660.75	829.45	1.23	153.65	18.92
4	Dec-21	7,186.38	6,258.70	927.67	1.15	162.49	18.67
5	Jan-22	6,977.32	5,781.90	1,195.43	0.98	134.32	13.18
6	Feb-22	6,744.78	6,165.06	579.71	1.32	141.02	18.66
7	Mar-22	6,976.92	6,791.40	185.53	1.55	84.67	13.16
8	Apr-22	6,539.67	6,478.58	61.09	1.21	53.65	6.48
9	May-22	7,084.46	6,645.12	439.34	1.41	119.41	16.85
10	Jun-22	6,931.75	6,302.04	629.71	2.86	101.91	29.17

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)
11	Jul-22	6,788.46	5,955.12	833.33	1.57	145.13	22.72
12	Aug-22	6,222.26	5,291.62	930.64	1.38	146.05	20.23
Total		**79,923.37**	**72,155.71**	**7,767.66**		**1,538.58**	**221.85**
Additional Surcharge on OA Consumers (Rs./Unit) = (8/7)							**1.44**

3.35 The Petitioners have thus claimed the Additional Surcharge of Rs. 1.44 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

3.36 The Commission has considered the submission made by the Petitioners and stakeholders in light of the provisions of 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.

3.37 The Commission has computed the Additional Surcharge by considering the average per unit fixed charge of the Thermal power plants as per the approach adopted by the Commission in MYT Order. Computation of the Additional Surcharge is shown in the table below:

Table 89 : Determination of Additional Surcharge for FY 2023-24

Sr. No.	Particulars	Reference	Unit	Amount
1	Fixed Cost of Thermal Generating Sources for FY 2023-24	A	Rs. Crore	11,161.39
2	Total Available MU from Thermal Generating Stations for FY 2023-24	B	Mus	87,537.02
3	**Wt. Avg. Per Unit FC of Thermal Generating Stations for FY 2023-24**	**C=A/B**	**Rs. /kWh**	**1.28**
4	Total Projected Backdown/RSD Volume for FY 2023-24	D	MUs	2,915.98
5	Projected Open Access Volume for year for FY 2023-24 based on actual of previous year (as per Petitioners submission)	E	MUs	1,538.58
6	Fixed Cost pertaining to Backdown/RSD capacity for FY 2023-24	F=E*C/10	Rs. Crore	196.18
7	**Per Unit Additional Surcharge (to be applicable on OA Consumers)**	**G=F/E**	**Rs./kWh**	**1.28**

3.38 The Commission has thus determined the Additional Surcharge of Rs. 1.28 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 The Petitioners submitted that there is a growing demand from consumers for a rapid transition to a zero-carbon economy. Over 175 of the world's most influential companies have already made this commitment through the global corporate leadership initiative, RE100. 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 It is mentioned by the Petitioners that the 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 Petitioners have stated that 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, petitioners requested the Commission for determination of Green Energy Tariff in MYT Petition for Control Period for FY 2022-23 to FY 2026-27. The Commission considered the proposal of the petitioners and approved the Green Energy Tariff of Rs. 1.13 per unit for FY 2022-23 in the MYT Order.

4.5 The Commission determined the 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.

4.6 In view of the variations in power purchase cost and expected capacity additions of renewable energy during FY 2022-23 & FY 2023-24, the Petitioners have computed the Green Energy Tariff to be paid by such consumers on the basis of projected power purchase cost for FY 2023-24 as indicated below:

Table 90 : Green Energy Tariff proposed by the Petitioners for FY 2023-24

RE Power Procurement for the Period FY 2023-24			Non-RE Power Procurement (Only Variable) for the Period FY 2023-24			Difference between RE & Non-RE Power	Claimed Green Energy Tariff
MU	Rs. Cr	Rs/Unit	Rs/Unit	Rs. Cr	Rs/Unit	Rs/Unit	Rs/Unit
A	B	C	D	E	F	G = (C – F)	H=G*50%
16,763	6,190	3.69	71,593	15,083	2.11	1.58	0.79

4.7 As per Petitioners 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's pledge towards green energy, clean environment and sustainable development Goals.

4.8 Thereafter, the Petitioners made additional submission vide letter dated 28th February, 2023 for proposal for Green Energy Tariff for Certification and for RPO Compliance to the Commission.

Additional Submission regarding applicability of Green Energy Tariff for consumers willing to avail RE power Certification only.

4.9 The Petitioners submitted that till date only a few consumers have opted to avail Green Energy Tariff and this may be mainly because the existing provision mandate for procurement of 100% RE. Hence in order to promote use of Green Energy by consumers who are willing to reduce their carbon footprint, the petitioners wish to extend this tariff to such potential consumers also who wants to avail Renewable energy for meeting part of their total monthly consumption and/or for entire monthly consumption.

4.10 The Petitioners submitted that, consumers are also approaching the DISCOMs for availing Renewable / Green Energy for occasions like marriage functions fests' parties etc. on permanent or temporary connection for shorter durations than a month. So, if the Green energy is allowed for shorter durations also then there would be more takers for Green Energy. The petitioners therefore propose to offer supply of Renewable Energy in terms of number of days in a particular billing month.

4.11 The Petitioners proposed amendment in the submission made under para 18.7 of the Petition which is as follows:-

"18.7 All Electricity Consumers in the State may opt to purchase Green Energy on voluntary basis up to a certain percentage (in the multiplication of 5) of their monthly consumption or for entire consumption during any billing month. For example, the consumer may apply for say a minimum 25% of his/her Monthly consumption from Green Energy, which can go up to 100% in steps of 5%.

Further, any electricity Consumer who wishes to avail Green Energy Tariff for any number of days in a billing month may also place a requisition for Green Energy Tariff with their respective Distribution Licensee.

………………………………….."

Additional Submission for determination of Green Energy Tariff for RPO compliance of an Entity

4.12 The Petitioners submitted that as per MoP (Promoting Renewable Energy through Green Energy Open Access) Rules, 2022, the green open access is allowed to any consumer and the limit of Open Access transaction has been reduced from 1 MW to 100 kW for green Energy. This is mainly to enable small consumers to purchase Renewable Energy (RE) through Open Access.

4.13 Further, as per MPERC (Cogeneration and generation of electricity from Renewable Sources of Energy), (Revision-II), Regulations, 2021 (First amendment) an entity whether obligated or not has an option to meet its Renewable Purchase Obligation (RPO) by purchasing RE power directly from the DISCOM. In such case the DISCOMs are required to procure such quantity of Green Energy and supply it to the consumers and a separate tariff is to be determined by the Commission. The Regulation 3.8(A)(c)(iii) of the first amendment to MPERC Cogen Regulations, 2021 and Clause 4 (C) (c) of Rules, 2022, the component for Green Energy Tariff for RPO obligation of an entity shall include:

(A) Average Pooled Power Purchase Cost of RE
(B) Cross Subsidy Charges, if any and
(C) Service Charge covering prudent cost of distribution licensee for providing Green Energy.

4.14 The Petitioners submitted that the basic intention here is to ascertain the cost that the Distribution Licensee will incur in order to procure and supply such quantity of green energy as requisitioned by the consumer. Therefore, to arrive at such cost, the said Regulations have clearly stipulated the components which shall constitute the part of such cost. The Petitioners submitted that, while such cost can be determined separately for individual categories of consumer taking into account the current level of cross subsidy and the service charge covering prudent cost or can be determined as an incremental cost which will be over and above the existing tariff/ABR of the consumer.

4.15 The consumer requisitioning the Green Energy will remain to be the consumer of DISCOMs and for such consumer, a tariff/ABR has already been approved which not only take care the current level of cross subsidy but also cover the service charges of the Distribution Licensee such as O&M, Interest on loan etc. and also cover the average pooled power purchase cost. Hence, the existing tariff takes care of the component (A), (B) and Part of component (C) of Green Energy Tariff as stipulated in the said Regulations. Therefore, the Petitioners have adopted a simplistic approach wherein it has calculated the incremental prudent cost which is envisaged to be incurred while procuring and supplying additional RE power as requisitioned by the consumer to fulfill his RPO Obligation. Such incremental cost has been termed as Green Energy Tariff and is proposed to be levied over and above the existing Tariff structure. The detailed approach and rationale considered by the Petitioners is discussed in the subsequent paras:

4.16 The Petitioners submitted that as per said Rules, the consumer shall have the flexibility to give separate requisition for Solar and Non-Solar power. The Petitioners understand that since earlier the RPO obligation were defined separately as a percentage of Solar and Non-Solar Power, hence, to fulfill such obligation the aforesaid Rules/Regulations have categorically mentioned separate requisition for Solar and Non-Solar power. However, the Commission has recently redefined the RPO trajectory as per its first amendment to MPERC (Co-generation and Generation of Electricity from Renewable Sources of Energy) (Revision-II) Regulations, 2021 dated 16th January, 2023.As per the said amendments, now the RPO will be measured in terms of Wind RPO, HPO, Other RPO and Storage separately. Therefore, the Petitioners have proposed Green Energy Tariff separately for Wind RPO, HPO and Others (mainly Solar).

4.17 As regard to ascertaining the prudent cost, the Petitioners submitted that RE power (namely wind and solar) are infirm sources of generation as they depend on the availability of wind and sunlight. Envisaging the average Capacity Utilization Factor (CUF) of 25% for Solar and Non-Solar (mainly wind), the MPPMCL/Discoms would have to contract/tie up for additional RE power equivalent to around 3 to 4 times the demand requisitioned by the consumers.

4.18 As per Petitioners, the RE power being a must run has to be consumed as and when it is generated. Although there are technologies where the electricity can be stored in a small quantum however the technology for storing electricity on large-scale on commercial basis is still under development.

4.19 Considering the above, it is envisaged by the Petitioners that when a consumer requisitions for say Solar power only, then the MPPMCL/DISCOMs would require to tie-up with additional capacity of around 3 to 4 times as explained above. In other word for a demand of say 100 MW, MPPMCL/DISCOMs would have to contract with additional RE for around 300MW to 400 MW. However, such a power will be available to DISCOMs only during the day when sunlight is available and considering the requirement of RE power for consumer as 100% of its entire consumption, the MPPMCL/DISCOMs would have to arrange RE power for entire day. In such cases the MPPMCL/DISCOMs would have to purchase RE from short term market/power exchange. The other option is to have additional contracted capacity of say around 7 to 8 times in such a way that the additional surplus power generated during the day would get absorbed in a day and on cumulative basis the demand of consumer gets matched with solar generation at the month end.

4.20 As per Petitioners, the cost of procuring such additional RE power being Solar, Wind or Hydro would be different from that of the existing weighted average power purchase cost. The Petitioners submitted that the weighted average cost of existing RE arrangement of DISCOMs is for RPO compliance of DISCOMs only and such a cost cannot be considered as the cost for arranging additional RE power for RPO compliance of consumer since the same pertains to historically discovered price with different tied up capacities of DISCOMs. However, at present the price for arranging RE power has substantially changed due to various factors which are beyond the control of the Petitioners. Although, such costs cannot be ascertained beforehand as it will be subjected to future bidding and availability vis-à-vis demand of such RE sources, however, it is necessary to factor in some cost to balance the interest of the Petitioners. In order to do so the Petitioners have factored in the latest price discovered against such RE power. This is mainly because the future price of such RE sources would be near to latest price discovered through competitive bidding. Accordingly, the Petitioners have factored in the marginal balancing cost against such RE sources while determining the Green Energy Tariff.

4.21 In case consumer opts for Wind Power and say the cost of arranging Wind power is Rs. 4.78/kWh which is as per latest bid price. However, the weighted average power purchase price from all sources of the Petitioners is Rs. 3.77/kWh which is already being a part of tariff/ABR. That means, out of additional cost of Rs. 4.78/kWh, Rs. 3.77/kWh will be recovered from the tariff/ABR. Hence, marginal balancing cost would become Rs. 1.01/kWh (i.e., Rs. 4.78/kWh- Rs. 3.77/kWh). Similar, marginal balancing cost has been worked out for

HPO and Other RPO requirements. In addition to the above, the Petitioners have also submitted that since the actual cost of arranging RE power is not known in advance, therefore the Petitioners reserve their right to approach the Commission again in case the discovered price is higher than the existing weighted average power purchase cost being levied through tariff/ABR.

4.22 Petitioners have also submitted that while arranging RE power it may also happen that the consumption or demand by the consumer on real time basis is lower than the generation such as during peak solar hours or night hours when wind generation may be higher. Thus, there would be large variation during a day between RE generation and consumption on real time basis. Therefore, even if quantum of RE generation and consumption is matching on monthly basis, there would be additional cost implication on MPPMCL/Discoms in such arrangements. Such additional cost implication has been preliminary identified and categorized by the Petitioners as under

(a) Backing Down Cost of Conventional Generator to absorb RE
(b) Compensation Cost for Scheduling conventional Generator on TMM
(c) DSM Cost
(d) Marginal Balancing Cost

a) Backing Down Cost: As explained in paras above that to satisfy the requisition made by the consumer for RE power, MPPMCL/DISCOMs would require to contract for at least 3 to 4 times of their demand. Being an intermittent source in nature it can be envisaged that during the low demand period of the Distribution licensee (non-rabi season) and/or of the consumer coupled with sunny days or windy seasons, the penetration of Solar/wind power would be high. Since, RE power is must absorb power, there will be more pressure on Distribution Licensee to accommodate RE power by backing down long-term source of power. Also, considering the 100% requirement of consumer, the backing down quantum would further increase. The Distribution Licensee have Long Term PPAs, there is an obligation to pay the fixed capacity charges to the backed down generators in addition to the compensation and start-up cost when these generators would again be required. The Petitioners submitted that such a cost cannot be passed on to other consumers as it would lead to unjust enrichment of consumers placing requisition for RE power at the cost of others. Hence, it is necessary to factor such cost in determining the Green Energy Tariff.

The Petitioners submitted that in this Petition, they have proposed additional surcharge of Rs. 1.44 per kWh for Open Access consumer to meet the fixed cost of the distribution licensee arising out of his obligation to supply in terms of Section 43 of the Act. The underlying principle of determination of fixed cost due to stranded power backed down by the distribution licensee is same in case of additional RE power requisition by existing consumers or consumer shifting to Open Access. Therefore, to avoid discrimination between the two, the Petitioners have considered the same rate as determined for Open Access consumer towards backing down cost, i.e., Rs. 1.44/kWh for determination of Green Energy Tariff.

b) **Compensation Cost for Scheduling on TMM:** The Petitioners submitted that on account of high intermittent incidence of RE power, the conventional generating station would subject to frequent ramp-up and ramp-down to accommodate the variation in RE generation. Such adhoc operation of generating units results in degradation of their Heat Rate, Auxiliary Energy Consumption and Secondary fuel oil consumption due to part load operation etc. Acknowledging this, the Commission vide its Order dated 29th January, 2020 had approved the mechanism for compensation due to part load operation and multiple start/ stop of such coal based generating units. Based on the above approved mechanism, State Generators have submitted the station wise working of compensation ranging from Rs. 0.04/kWh to Rs.0.23/kWh based on the range of part load operation from 85% to 55%.The Petitioners are paying compensation cost ranging from Rs. 0.07/kWh to Rs.0.21/kWh to central generating stations on account of scheduling their stations on TMM. The Petitioners have considered the average of minimum and maximum compensation rate applicable for part load operation from 85% to 55% as Rs. 0.14/kWh towards Compensation Cost for Scheduling on TMM for determination of Green Energy Tariff.

c) **DSM Cost:** Petitioners submitted that being an infirm nature of power, MPPMCL/Discoms would also be subjected to DSM charges in some time blocks howsoever efficient scheduling may be. Such expense incurred by the Petitioners for arranging RE power based on the requisition placed by the consumers cannot be passed on to other consumers. Therefore, the DSM charges need to be factored in while determining the Green Energy Tariff. For ascertaining the DSM charges, the Petitioners have considered the actual DSM schedule for FY 2021-22, wherein the average rate for over drawl during the year was Rs. 5.30/kWh and the average rate for under drawl during the year was Rs. 2.66/kWh. The difference of the same worked out as Rs. 2.64/kWh which was the net cost incurred by the MPPMCL/Discoms. Since the incremental impact on account of additional RE injection is not known therefore at present only 50% of such rate, i.e., Rs. 1.32/kWh has been considered by the Petitioners towards DSM charges while determining the Green Energy Tariff.

d) **Marginal Balancing Cost:** As discussed in the above paras that the marginal cost associated with arranging additional RE power towards RPO compliance of the consumer needs to be factored in while determining the Green Energy Tariff. In Case of Wind Power, the Petitioner finds that the latest prudent rate as per last PPA with Thar Wind Power Projects Pvt. Ltd is Rs. 4.78/kWh. However, through tariff/ABR Rs. 3.77/kWh is being recovered as weighted average price of total power portfolio of the Petitioners. Hence, marginal balancing cost would become as Rs. 1.01/kWh (i.e., Rs. 4.78/kWh- Rs. 3.77/kWh). Similarly, for Hydro power, the latest levelized Tariffs for Small Hydro for FY 2022-23 being approved by CERC vide its Order in Petition No. 14/SM/2022 dated 7th November, 2022 is considered as Rs. 5.84/kWh for below 5 MW and Rs. 5.76/kWh for 5 MW to 25 MW. Accordingly, the marginal cost is arrived at Rs. 2.03/kWh (i.e., Avg (Rs.5.84/kWh+Rs.5.76/kWh) - Rs. 3.77/kWh). In case of other RPO (mainly Solar and MSW/Bio/Waste to Energy) the latest price discovered is Rs. 3.26/kWh for Solar in case of SJVN-90 MW bid and Rs. 6.39/kWh in case of Jabalpur MSW Pvt Ltd and Rewa Waste 2 Energy Pvt Ltd. Accordingly, the weighted average discovered price for Other RPO is arrived as Rs. 3.30/kWh. Therefore, marginal cost is worked out as Rs. (0.47)/kWh.

4.23 The Petitioners submitted that the existing Tariff structure in MP is a two-part Tariff involving Fixed Charges and Energy Charges which further have multiple slab structure, dynamic fixed charge billing, computation of monthly minimum charges, fuel cost adjustment, etc. As Green Energy Tariff can be sought by any consumer having contracted demand or sanctioned load of 100 kW and above, hence, designing separate categories of Green Energy Tariff for such consumers will not be suitable as it will lead to complex the existing structure and will unnecessarily increase the number of Tariff Categories. The Petitioners submitted that in previous Tariff Petition as well as in present Petition they have proposed Green Energy Tariff for the purpose of Certification (without RPO Obligation of consumer) which is a premium added to the existing tariff structure of respective consumers. Hence, on a similar line they have proposed Green Energy Tariff for RPO obligation of consumer as per MPERC (Cogeneration and Generation of Electricity from Renewable Sources of Energy), (Revision)(II), Regulations, 2021 (First Amendment).

4.24 The Petitioners have worked out the incremental cost estimated to be incurred for arranging Wind Power and HPO and Other RE power for RPO obligation of consumer as explained in paras above. Further, such cost is nothing but the estimated incremental cost covering the prudent cost for arranging additional RE power as per MPERC (Cogeneration and Generation of Electricity from Renewable Sources of Energy), (Revision-II), Regulations, 2021 (First Amendment) and has been termed as Green Energy Tariff.

4.25 Further. as per Rules, the consumer has an option to place separate requisition for Solar and Non-Solar Power separately and also as per first amendment to MPERC (Co-generation and Generation of Electricity from Renewable Sources of Energy) (Revision-II) Regulations, 2021 dated 16th January 2023, the RPO will be measured in terms of Wind RPO, HPO, Other RPO and Storage separately. Therefore, the Petitioners have proposed Green Energy Tariff separately for Wind RPO, HPO and Others (mainly Solar) as shown in the Table below:

Table 91 : Proposed Green Energy Tariff for RPO compliance of an entity FY 2023-24

Green Energy Source	Backing Down Charges	Compensation on TMM charges	DSM Charges	Marginal Balancing Cost	Green Energy Tariff
Basis	**A**	**B**	**C**	**D**	**E=Sum (A:D)**
Wind	1.44	0.14	1.32	1.01	**3.91**
Hydro	1.44	0.14	N.A	2.03	**3.61**
Others	1.44	0.14	1.32	(0.47)	**2.43**

4.26 The Consolidated proposal of Green Energy Tariff for the purpose of Certification only and for RPO compliance of an entity is as summarized in the table below

Table 92 : Proposal for Green Energy Tariff for FY 2023-24

Particular	Green Energy Tariff (Rs./KWh)			
	For Certification only	For RPO Compliance		
	Tariff	Wind RPO	HPO	Others (mainly solar)
Green Energy Tariff for Certification only (No. RPO compliance of any consumer)	0.79	-	-	-
Green Energy Tariff for RPO compliance of an entity	-	3.91	3.61	2.43

4.27 The Petitioners submitted that the above Green Energy Tariff shall be over and above the existing energy charges applicable for different categories of consumers. Also, in addition to above Green Energy Tariff, the Demand Charges/Fixed Charges or any other charges as being approved by the Commission for FY 2023-24 shall also be applicable to the respective categories of consumer.

Commission's Analysis

4.28 The Commission in this order considering the submissions of the Petitioner, stakeholders' comments and provisions of Regulations has separately determined the Green Energy Charges/Tariff and Modalities for two types of Green Energy transactions as follows:

a) Green Energy Charges and Modalities for consumers availing Green Energy from Distribution Licensee only for the purpose of reducing their carbon footprint and seeking Certification to this effect.

b) Tariff for Green Energy and Modalities for consumers availing Green Energy from Distribution Licensee as per MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof.

a) Green Energy Charges and Modalities for Consumers availing Green Energy from Distribution Licensee only for the purpose of reducing their carbon footprint and seeking Certification to this effect.

Applicability

4.29 The Commission introduced Green Energy Tariff in its Tariff Order for FY 2022-23 as an optional / voluntary arrangement for the consumers who are willing to procure 100% power from RE sources from DISCOMs for the purpose of reducing their carbon footprint. As per the information submitted by the Petitioners till November,2022 only one consumer has opted for Green Energy Tariff.

4.30 The Commission has observed that during the meeting of State Advisory Committee as well during the public hearings some of the stakeholders have suggested to lower the criteria for consumption from RE sources from existing level of 100% as per FY 2022-23 Tariff Order to 10%-20% from Distribution Licenses. The Petitioners in additional submission have submitted that consumers are also approaching the DISCOMs for availing Renewable / Green Energy for occasions like marriage functions fests' parties etc. on permanent or temporary connection for shorter durations than a month.

4.31 The Commission after taking cognisance of the Electricity Act, 2003, stakeholders and Petitioners submission has decided to lower the requirement of consumption from RE sources from existing level of entire 100% consumption to minimum 25% of their monthly consumption of electricity during any billing month for availing power from RE sources. Further, the consumers on a voluntary basis may purchase more power from RE sources and in such cases, consumers shall be permitted to increase their consumption from RE Power in steps of 5% of their monthly consumption over and above 25% upto 100% from RE sources during any billing month.

4.32 In addition to above, such consumers shall also be permitted to avail power from RE sources for any number of days in a billing month subject to meeting consumption criteria as mentioned above.

4.33 The consumers shall have to place a requisition for availing power from RE sources with their respective Distribution Licensee.

Treatment of RPO.

4.34 The RE power supplied by the Petitioners for consumers availing Green Energy from Distribution Licensee only for the purpose of reducing their carbon footprint and seeking Certification from Distribution Licensee to this effect shall only be considered towards RPO compliance of the Petitioners and shall not be considered for fulfilment of RPO for obligated entities which is in line with the approach adopted by the Commission in MYT Order. If the consumer is also an obligated entity, then he may make its own arrangement or submit requisition to Distribution Licensee for procuring RE power from Distribution Licensee for the purpose of meeting their RPO compliance for entity as per MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof towards fulfilment of its RPO, separately.

Green Energy Charges

4.35 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 determined Green Energy Charges for the consumers who wishes to procure RE Power for the purpose of reducing their carbon footprint and seeking Certification to this effect as 75% of the difference in weighted average rate of RE power and weighted average rate of Energy charge (Variable Charges) of Non RE sources as shown in the following table:

Table 93 : Green Energy Charges (for the consumers who wish to procure RE Power for the purpose of reducing their carbon footprint and seeking Certification to this effect) approved by the Commission for FY 2023-24

RE Power Procurement for the Period FY 2023-24			Non-RE Power Procurement (Only Variable) for the Period FY 2023-24			Difference between RE & Non-RE Power	Approved Green Energy Charges
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*75%
25,096.85	8,352.17	3.33	64,851.76	13,238.06	2.04	1.29	0.97

b) Tariff for Green Energy and Modalities for Consumers availing Green Energy from Distribution Licensee from Distribution Licensee as per MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof.

Applicability

4.36 As per the Regulation 3.8A of the MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021, any entity, whether obligated or not, may elect to generate, purchase and consume renewable energy as per their requirements by one or more of the following methods: -

- **a.** Own Generation from renewable energy sources
- **b.** By procuring Renewable Energy through Open Access from any Developer either directly or through a trading licensee or through power markets.
- **c.** By requisition from Distribution Licensee

4.37 Accordingly, in this section, the Commission has dealt with the Tariff and modalities of Green Energy Tariff applicable for entities who elect to consume renewable energy in accordance with the provisions of Regulation 3.8A(c) of the MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 through requisition from Distribution Licensee.

4.38 Regulation 3.8 (A)(C) (iv) and (v) of MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof also specify that any requisition for green energy from a Distribution Licensee shall be for a minimum period of one year and the quantum of green energy shall be pre-specified for at least one year. Hence the provisions of this Regulation shall be applicable for entities who elect to consume renewable energy in accordance with the provisions of Regulation 3.8A(c) of the MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 through requisition from Distribution Licensee.

Tariff for Green Energy

4.39 As per the provisions of the Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022 as well as MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof, the Commission has to determine separate Tariff for Green Energy.

4.40 As per Regulation 3.8(A)(c)(iii) of MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof, the components for determining Tariff for Green Energy for consumer shall include :

a) Average Pooled Power Purchase Cost of RE
b) Cross Subsidy Charges, if any and
c) Service Charge covering prudent cost of distribution licensee for providing Green Energy.

4.41 As per provisions of MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof, Green Energy can be requisitioned by any consumer having contracted demand or sanctioned load of 100 kW and above.

4.42 The Commission observed that the tariff structure in the State of MP is of two part tariff involving fixed charges and energy charges which further have multiple slab structure, fixed charge billing, computation of monthly minimum charges and Fuel and Power Purchase Adjustment Surcharge (FPPAS), etc, which are applicable for consuming power from Distribution Licensee. The tariffs approved in this Order covers all the costs of the Distribution Licensees including power purchase cost from all the sources, element of cross subsidy charges and all other costs of Distribution Licensee approved as part of ARR which also includes Service Charges.

4.43 In view of the above and considering the provisions of the Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022 as well as MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof, the Commission instead of determining separate category wise Tariff for Green Energy for consumers purchasing Green Energy from DISCOMs has determined the Green Energy Charges for such consumers based on the incremental cost basis for availing RE power from Wind, HPO and Others which shall be applicable to consumers over and above the normal tariff of the respective category as per the provisions of Regulations.

4.44 The Commission observed that the Petitioners while proposing Tariff for Green Energy has only asked for Green Energy Tariff for RPO compliance of an entity whereas the provisions of Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022 as well as MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof provides any consumer may elect to purchase Green Energy.

4.45 The approach adopted by the Commission for determining Tariff for Green Energy for consumers electing to purchase Green Energy from DISCOMs is as follows:-

a) The Average Pooled Power purchase cost of RE sources (Wind, HPO and Others,) and its contribution in Average Cost of Supply has been worked out separately considering the normative losses, Intra-State Transmission losses and Inter and Intra State Transmission Charges as shown in the table below:

Table 94 : Effective Cost of Pooled Power Purchase of RE sources

Particulars	Unit	Wind	HPO	Others
Power Purchase Cost of RE Sources	Rs. Crore	452.99	302.17	7,597.01
Quantum of RE Source	MUs	1,653.05	593.66	22,850.14
Weighted Average Rate of RE Sources	**Rs./kWh**	**2.74**	**5.09**	**3.32**
Distribution loss	%	15.45%	15.45%	15.45%
RE Source Rate after considering Distribution loss	Rs./kWh	3.24	6.02	3.93
Intra-State Transmission loss	%	2.63%	2.63%	2.63%
RE Source Rate after Considering Intra-State Transmission loss	Rs./kWh	3.33	6.18	4.04
Inter and Intra – State Transmission Charges	Rs./kWh	0.82	0.82	0.82
Contribution of Pooled Power Purchase of RE sources in ACOS	**Rs./kWh**	**4.15**	**7.00**	**4.86**

b) In order to determine the Cross Subsidy Charges, the difference between ACoS and ABR of respective tariff categories have been considered.

c) Services Charges pertains to the cost of distribution licensee other than the cost associated for purchase of power (i.e Other ARR components) and the fixed cost of power purchase including transmission charges as the power purchase from Renewable Energy is at single part tariff only. Hence, it is important to consider the fixed cost of power purchase also while determining the Service Charges of Distribution Licensee.

d) In the Average Cost of Supply approved by the Commission, the contribution of other components of ARR excluding power purchase cost works out to be Rs 1.25/kWh (i.e Rs. 9,008.37 Crore of Other ARR Components / Sales of 72,136.47 MU*10) and the same is considered as Service Charges covering prudent cost of distribution licensee for supplying power to the consumers. In case Distribution Licensees procure more power from Renewable Energy sources to meet the requisitions of consumers opting for procuring RE power, the thermal capacity contracted by the Distribution Licensees will become stranded and hence the fixed cost due to stranded power also needs to be considered as part of Service Charges of Distribution Licensee for providing Green Energy, which works out to Rs.1.64/kWh (i.e Rs. 11,841.82 Crore as Fixed Cost of Power Purchase /Sales of 72,136.47 MU*10). The Service Charges related to other ARR components and fixed cost of power purchase takes care of all the other costs, Distribution Licensee will incur in supplying Green Energy for consumer. Hence, the Commission has not considered any other cost separately as proposed by the Petitioners while determining the Tariff for Green Energy.

e) Thereafter, the Green Energy Tariff applicable for different category of consumers for different RE Sources has been computed considering effective cost of pooled power purchase cost from RE, Cross Subsidy Charges and Services Charges in accordance with the provisions of Regulations.

f) Based on the above, incremental Green Energy Charges has been determined (i.e Green Energy Tariff applicable minus ABR applicable)

4.46 Accordingly, incremental Green Energy Charges for different RE sources and tariff categories computed is given below:-

Table 95 : Computation of Incremental Green Energy Charges for consumers for FY 2023-24

Category of consumers	Effective Cost of Pooled Power Purchase Cost of RE (Rs/kWh)			ABR (Rs/kWh)	Cross Subsidy (Rs/kWh)	Services Charges (Rs/kWh)		Green Energy Tariff Applicable (Rs/kWh)			Incremental Green Energy Charges (Rs/kWh)		
	Others	Wind	Hydro			Fixed Cost of Power Purchase including Transmission Charges	Other ARR Components	Other	Wind	Hydro	Other	Wind	Hydro
A	B	C	D	E	F	G	H	I=B+F+G+H	J=C+F+G+H	K=D+F+G+H	L=I-E	M=J-E	N=K-E
LV-2: Non Domestic	4.86	4.15	7.00	9.45	2.66	1.64	1.25	10.41	9.70	12.55	0.96	0.25	3.10
LV-3: Public Water Works				6.98	0.19			7.94	7.23	10.08			
LV-4: LT Industries				8.99	2.20			9.95	9.24	12.09			
LV-5: Agriculture & allied activities				6.02	(0.77)			6.98	6.27	9.12			
LV-6: E-Vehicle/ E-Rickshaws Charging Stations				6.79	0.00			7.75	7.04	9.89			
HV-1: Railway Traction				5.42	(1.37)			6.38	5.67	8.52			
HV-2: Coal Mines				8.73	1.93			9.68	8.97	11.83			
HV-3: HT Industrial, Non-Industrial and Shopping Malls				7.55	0.76			8.51	7.80	10.65			
HV-4: Seasonal & Non Seasonal				8.42	1.63			9.38	8.67	11.53			
HV-5: Irrigation, Public Water Works and Other than Agricultural				7.85	1.05			8.80	8.09	10.95			
HV-6: Bulk Residential Users				7.57	0.78			8.53	7.82	10.67			
HV-7: Synchronization and Start-Up Power				10.95	4.15			11.90	11.19	14.05			
HV 8: E-Vehicle/ E-Rickshaws Charging Stations				6.79	0.00			7.75	7.04	9.89			
HV 9: Metro Rail				6.79	0.00			7.75	7.04	9.89			

Treatment of RPO .

4.47 The treatment of RPO for consumers availing Green Energy shall be as per MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof towards fulfilment of its RPO. The Green Energy purchased by Obligated Entity from Distribution Licensees shall be first considered to meet the Renewable Power Obligation of the obligated entity. As per Regulation 3.8 (A)(c) (vi) and (vii) of MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof, the green energy purchased from Distribution Licensee or from Renewable Energy sources other than Distribution Licensee in excess of Renewable Purchase Obligation of obligated entity shall be counted towards Renewable Purchase Obligation compliance of the Distribution Licensee.

Summary of Green Energy Charges

4.48 In view of the above, the summary of Green Energy Charges determined for consumers availing Green Energy from Distribution Licensee only for the purpose of reducing their carbon footprint and seeking Certification to this effect and for consumers availing Green Energy from Distribution Licensee as per MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof for FY 2023-24 are as follows:-

Table 96 : Green Energy Charges for FY 2023-24

Particular	For availing Green Energy for purpose of reducing their carbon footprint and seeking Certification to this effect (Rs./kWh)	For availing Green Energy as per MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof. (Rs./kWh)		
Green Energy Charges for purpose of reducing their carbon footprint and seeking Certification to this effect. (RPO compliance for DISCOMs)	**0.97**	**Wind**	**HPO**	**Others**
Green Energy Charges for Consumers *	-	**0.25**	**3.10**	**0.96**

Note:- In case of Tariff for Green Energy, the applicable terms and conditions of MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof shall be applicable.*

4.49 Further, the Green Energy Charges shall be over and above the existing fixed and energy charges applicable for different categories of consumers. Also, in addition to above Green Energy Charges, Demand Charges/Fixed Charges or any other charges as being approved by the Commission in this order shall also be applicable to the respective categories of consumer.

4.50 The revenue earned by the Petitioners from sale of power from Green Energy for purpose of reducing their carbon footprint and seeking Certification to this effect 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.

4.51 The revenue earned by the Petitioners from sale of power to consumers under Tariff for Green Energy shall be considered as revenue from sale of power. **The Distribution Licensee are directed to separately maintain tariff category and sub-category wise accounting of no.**

of consumers, connected load, sale and revenue from sale under Tariff for Green Energy for consumers and same shall be shown separately by the Petitioners at the time of truing up.

4.52 It is to be noted that above arrangements is optional / voluntary and shall only be provided on the request of the Consumer. The Green Energy Charges and Tariff for Green Energy shall only be applicable if Consumer wishes to avail power under the respective above arrangement.

A5: FUEL AND POWER PURCHASE ADJUSTMENT SURCHARGE

Petitioners' submission

5.1 The Ministry of Power (MoP), Government of India (GoI) vide its notification dated 22nd October 2021 has issued Electricity (Timely Recovery of Costs due to Change in Law) Rules, 2021. The said Rules are applicable to Generating and Transmission companies and provide automatic pass-through of impact in tariff due to Change in Law automatically by a formula.

5.2 As per the notified rules, the condition of prior approval of appropriate Commission for compensation on account of change in law events has been removed and the same has been made an automatic pass through to the procurers. As stated earlier the aforesaid rules applicable for the Generating or Transmission Company, however, did not provide stipulation regarding the impact of the automatic claim of the Generating or Transmission Company on the DISCOMs. Acknowledging the fact that DISCOMs will also face revenue constrains on account of such change in law, if pass through of costs is not done regularly and timely in the retail tariff, MOP issued a recommendation letter No. 23/23/2021-R&R dated 9th November 2021. In this letter MoP has asked the respective Commissions to formulate a mechanism for automatic pass through of change in law burden to retail consumers. The relevant extract from the letter is as reproduced below:

3. Learning from the recent experience and in order to ensure that the power sector does not face any constraints in maintaining assured power supply to meet the demand, all the stakeholders in the value chain of power sector must ensure that there is timely recovery of cost. This involves two steps:

a) The cost pass through by the generating companies to the distribution companies.

b) The cost pass through from distribution companies to the consumer.

4. For the lack of a robust mechanism of timely automatic pass through of fuel cost and transportation cost, the generating companies face constraints in maintaining stock of fuel during such periods. This results in shortage of supply in the grid which may affect the power supply to the consumer.

5. ***Distribution companies face revenue constraints as the corresponding pass through of cost is not done regularly and timely in the retail tariff. Timely collection of revenue from consumer would ensure timely payment by the distribution company to the generating stations and coal companies. This will also help in ensuring availability of supply to meet the expected increase in demand.***

……

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}***

5.3 As regard to above, the Petitioners submitted 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 DISCOMs are not compensated for such an increase cost during the period, their liquidity would be affected.

5.4 The Petitioners submitted that Section 62(4) of the Electricity Act, 2003 provides for periodic tariff adjustment during a year to take care of the variations in fuel prices, as may be specified. The relevant extract is as reproduced below:-

"No tariff or part of any tariff may ordinarily be amended, more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified."

5.5 Further, the APTEL in the judgement dated 11.11.2011 in Appeal No. 1 of 2011 issued, *inter alia*, the following direction to the State Electricity Regulatory Commissions regarding the Fuel and Power Purchase Cost Adjustment:

*"**Fuel and Power Purchase cost is a major expense of the distribution Company which is uncontrollable**. Every State Commission must have in place a mechanism for Fuel and Power Purchase cost in terms of Section 62 (4) of the Act. **The Fuel and Power Purchase cost adjustment should preferably be on monthly basis** on the lines of the Central Commission's Regulations for the generating companies but in no case exceeding a quarter. Any State Commission which does not already have such formula/mechanism in place must*

*within 6 months of the date of this order put in place such formula/mechanism."***{Emphasis Added}.**

5.6 Furthermore, The National Tariff Policy, 2016 states that all power purchase costs need to be considered legitimate unless it is established that the merit order principle has been violated or power has been purchased at unreasonable rates.

5.7 Thus, from the above, DISCOMs should be allowed to recover full legitimate power purchase cost including fixed and variable charges as quickly and as practically as possible. However, the existing formula specified for computation of the FCA as governed under Regulation 9 of MYT Regulations, 2021 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. 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.

5.8 In addition to the above, the existing FCA recovery mechanism is a quarterly based which require prior approval of the Commission. As per existing mechanism, the FCA is to be computed by MPPMCL and the details is required to be submitted before the Commission before commencement of the billing quarter. After approval of the Commission, FCA charge shall be leviable in the billing quarter. Therefore, as per the existing mechanism the FCA charges of say 'n' month is allowed to get levied on 'n+4' month.

5.9 The Petitioners submitted that the generating and transmission companies have been raising bills on monthly basis in line with the notified Regulations and Rules. Further, as per the governing provision of respective PPAs with generators, 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 per existing mechanism. 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.

5.10 Further, as regard to existing prior approval mechanism, the Petitioners further submitted that the DISCOMs have participated in Government of India's Revamped Distribution Sector Scheme (RDSS) aimed at improving the financial condition and operational efficiencies of state-owned DISCOMs. The RDSS is a result linked evaluation scheme. Under the scheme it is mandatory for DISCOMs to meet the specified pre-qualifying criteria every year before the funds can be released under the scheme. Further, to ensure strict compliance of the pre-qualification criteria, Standard Operating Procedures (SOPs) for States/DISCOMs are being issued which will help Ministry of Power, Nodal Agencies, State Governments and DISCOMs achieve and monitor the targets set for themselves under the scheme in time bound manner.

As per *"SOPs in respect to important conditionalities under RDSS, LIS, Additional borrowings etc. to be followed during implementation and evaluation"* dated 1st July 2022 it has been directed to State and Discoms to make changes in their policies and procedures to align with the SOPs prepared on the following areas:

PQ Criteria	***SOP***	***Relevant Clause***
State Government to ensure 100% payment of subsidy for the previous year and advance payment of subsidy up to current period in line with section 65 of EA2003 and wipe out the remaining subsidy amount by the end of the project period.	***100% timely payment of Subsidy on the basis of correct subsidy accounting mechanism***	***3.1***
No. of days Payables to Creditors including Gencos for the year under evaluation is equal to or less than the projected trajectory as per results evaluation framework.	***Linkage of no. of days Payables for power purchase with LPS Rules*** ***Automatic pass through of fuel adjustment cost to achieve financial sustainability through elimination of ACS-ARR gap***	***3.2*** ***3.3***
DISCOMs will have ensured that no new Regulatory Assets have been created in latest tariff determination cycle.	***No new creation of regulatory assets and treatment of outstanding regulatory assets***	***3.4***
All Government Departments/Attached Offices/ Local Bodies/Autonomous Bodies/ Boards/Corporations have made 100% payment of current electricity dues for the year under evaluation	***Mechanism to ensure 100% payment of Government department dues***	***3.5***

5.11 The clause 3.3 of SOPs as mentioned above further stipulate as under:
One of the main reasons for financial stress for DISCOMs is the widening ACS-ARR gap. There are multiple reasons which contribute to such a gap. However, States/Regulators/DISCOMs have to work in tandem to bridge this gap and bring it to zero. This is one of the most critical evaluation criteria of RDSS. Amongst other, measures to be adopted by States/DISCOMs for elimination of ACS-ARR gap, following steps need to be taken:

1. ***All States/DISCOMs to create a mechanism for automatic pass through of fuel cost adjustment on monthly/quarterly basis in retail tariffs without the need for any prior approval***
2. *All such changes shall be reconciled at the true-up stage by the DISCOMs*
3. *DISCOMs to ensure that the ACS-ARR gap follows a downwards trajectory on quarter-to-quarter basis and it must not increase again after meeting the target set under REF of RDSS*

5.12 The Ministry of Power has issued the draft Electricity (Amendment) Rules, 2022 vide its notification no. 23/2/2022-R&R dated 12th August, 2022, to amend the Electricity Rules, 2005. The Rule 14 of the said draft proposes that the appropriate Commission shall within 90 days of publication of these Rules, specify a price adjustment formula for recovery of costs, arising on account of the variation in the price of fuel, or power purchase costs. The impact in the cost due to such variation shall be automatically passed through in the consumer tariff, on a monthly basis, using the formula. Such monthly automatic adjustment shall be trued up on an annual basis by the appropriate Commission.

5.13 Further, the MoP in the said draft Rules has also defined that variation in Fuel and Power Purchase costs shall mean the increase in cost of power, supplied to consumers, due to change in Fuel cost, power purchase cost and transmission charge with reference to cost of supply approved by the State Commission. As the existing FAC recovery mechanism is not in tandem with the above-mentioned Rules, the same need to be modified.

5.14 In view of the above submission and taking cognizance of MoP letter dated 9th November 2021, Electricity (Timely Recovery of Costs due to Change in Law) Rules, 2021, SOPs under RDSS and draft Electricity (Amendment) Rules, 2022 the Petitioners requested the Commission to modify the existing FCA recovery mechanism.

5.15 Since, from now on the generating or transmission companies will be raising bills on monthly basis considering the automatic impact of change in law claims, hence, the Petitioner proposes that the FCA charges shall also be calculated on monthly basis for timely recovery of the legitimate costs.

5.16 The FCA charges associated with say ‘n’ month shall be calculated in the immediate next month after receiving all the power purchase bills. The calculated FCA shall then be automatically levied to retails consumers in ‘n+2’ month. After completion of say ‘n quarter’, the Licensee shall submit the details of FCA calculations incorporating the monthly FCA computation of ‘n quarter’ to the Commission for its post facto approval. Any adjustment subsequent to post facto approval of FCA by the Commission would be adjusted in the next corresponding billing month. This provision will help DISCOMs to pass on the variations power purchase costs \ to the consumers as quickly and as practically possible.

5.17 Further, as demarcated by the Hon’ble APTEL in the judgement dated 11.11.2011 in Appeal No. 1 of 2011 and also in National Tariff Policy that the fuel and power purchase cost are uncontrollable in nature and all power purchase costs need to be considered legitimate. Further, taking cognizance of draft Electricity (Amendment) Rules, 2022, the formula for FCA should cover all power purchase costs including variable as well as fixed charge components.

5.18 The Petitioners submitted modified provisions under Regulation 9 of MYT Regulations, 2021 for towards recovery of FCA in the Petition and requested the Commission to exercise the power conferred under Regulation 51 and 52 of the MYT Regulations, 2021 to provide necessary amendments in FCA recovery mechanism as proposed by the Petitioners in the petition.

Commission's analysis

5.19 For timely recovery of Power Purchase Cost by Distribution Licensees, the Commission has notified on 17th March, 2023 the First Amendment to MYT Regulations, 2021 and specified the methodology and formula for Fuel and Power Purchase Adjustment Surcharge (FPPAS) in terms of Section 62(4) of the Electricity Act, 2003. As per the provisions of the aforesaid Regulations FPPAS shall be computed and billed to consumers automatically, without going through regulatory approval process, on a monthly basis, subject to true-up on annual basis.

5.20 The Distribution Licensees shall submit necessary details within 7 days of FPPAS computation on monthly basis for the information to the Commission.

5.21 The Distribution Licensees shall publish all details including the FPPAS formula, calculation of monthly FPPAS and recovery of fuel and power purchase adjustment surcharges (separately for automatic and approved portions) on its website.

5.22 In view of Regulation 9 of the MYT Regulations, 2021 and amendments thereof the Commission directs the Petitioners to implement provision of the Regulations along with its associated mechanism /modalities as specified in the MYT Regulations, 2021 and amendments thereof.

5.23 Further, Petitioners shall show the FPPAS charge separately in the consumer bills.

A6: RETAIL TARIFF DESIGN

Legal Position

6.1 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 and Tariff for FY 2023-24 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 available to the Commission. 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

6.2 ARR for FY 2023-24 is determined on the basis of distribution loss level trajectory specified in the MYT Regulations, 2021 and amendments thereof and uniform tariff has been determined for all the three DISCOMs.

Linkage to Average Cost of Supply

6.3 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.

6.4 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.

6.5 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 with attempt 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.

6.6 The Commission agrees with the Petitioners' submission that determination of voltage-wise losses would require detailed technical studies of the distribution network and directs them to conduct such studies within definite timeframe. 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 and amendments thereof for FY 2023-24 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.

6.7 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 97 : Computation of voltage-wise cost of supply for the State for FY 2023-24

State	Units	EHT System (400 kV, 220 kV, 132 kV & 66 kV)	33 KV System	11 KV + LT System	Total
Sales admitted	MU	5,923.80	9,844.72	56,367.95	72,136.47
Technical and Commercial losses	%	3.53%	4.17%	11.28%	19.80%
Energy input admitted	MU	6,140.28	10,649.04	73,159.29	89,948.62
Energy lost admitted (Technical up to 33kV and 11 kV + LT- technical and commercial)	MU	216.49	804.33	16,791.34	17,812.15

State	Units	EHT System (400 kV, 220 kV, 132 kV & 66 kV)	33 KV System	11 KV + LT System	Total
Commercial loss assumed as 50% of 11kV and LT overall losses	MU			8,395.67	
Commercial losses apportioned for all voltage in proportion to voltage wise sales admitted	MU	689.45	1,145.79	6,560.43	8,395.67
Net Energy Loss admitted	MU	905.93	1,950.11	14,956.10	17,812.15
Net energy input for Computing VCoS	MU	6,829.73	11,794.83	71,324.06	89,948.62
Power Purchase Costs - allocated based on voltage-wise losses net energy input	Rs. Crore	3,035.98	5,243.08	31,705.23	39,984.29
Other costs - allocated based on voltage-wise sales	Rs. Crore	600.12	1,036.40	6,267.16	7,903.68
Less: Other income - allocated based on voltage-wise sales	Rs. Crore	32.14	55.51	335.64	423.29
Recoveries of Past Years	Rs. Crore	116.02	200.36	1,211.61	1,527.99
Total Costs (ARR requirement) for FY 2023-24	**Rs. Crore**	**3,719.98**	**6,424.34**	**38,848.35**	**48,992.66**
VCoS	**Rs. /Unit**	**6.28**	**6.53**	**6.89**	**6.79**

6.8 Consumer category-wise approximate cross-subsidy, computed based on voltage-wise cost of supply for FY 2023-24 is shown in the table below:

Table 98: Cross-subsidy based on voltage-wise cost of supply for FY 2023-24 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	6.89	6.49	94%
LV-2: Non-Domestic	6.89	9.45	137%
LV-3: Public Water Works & Street Light	6.89	6.98	101%
LV-4 LT Industries	6.89	8.99	130%
LV 5: Agriculture and Allied Activities	6.89	6.02	87%
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	6.89	6.79	99%
HV-1: Railway Traction	6.28	5.42	86%
HV-2: Coal Mines	6.41	8.73	136%
HV-3.1: Industrial	6.46	7.86	122%
HV-3.2: Non Industrial	6.62	9.07	137%
HV-3.3: Shopping Malls	6.55	8.40	128%
HV-3.4: Power Intensive Industries	6.41	5.48	86%
HV-4: Seasonal & Non Seasonal	6.60	8.42	128%
HV-5: Irrigation, Public Water Works and Other than Agricultural	6.43	7.85	122%
HV-6: Bulk Residential Users	6.56	7.57	115%
HV-7: Synchronization and Start-Up Power	6.39	10.95	171%
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	6.53	6.79	104%
HV 9: Metro Rail	6.28	6.79	108%
Total	**6.79**	**6.79**	**100%**

6.9 While determining the tariffs for FY 2023-24, the Commission has given due consideration to the provision of the Electricity Act, 2003 that consumer tariffs should reflect the cost of supply. The average cost of supply for FY 2023-24 works out to Rs. 6.79 per unit as against Rs. 6.68 per unit for FY 2022-23. The table below shows the cost coverage (Average realization as percentage of Average cost of supply) on account of tariff for FY 2023-24, as compared to the cost coverage in the Tariff Order for FY 2022-23:

Table 99: Comparison of tariff v/s overall average cost of supply

Category/ Sub-category	Average Realisation as % of Average CoS FY 2022-23 (as per Tariff Order)	Average Realisation as % of Average CoS FY 2023-24 (Achieved as per this Tariff Order)	Average Billing Rate (ABR) (Rs. /Unit)	Average Cost of Supply (ACoS) (Rs. /Unit)
LV- Categories				
LV-1: Domestic	95%	96%	6.49	
LV-2: Non-Domestic	137%	139%*	9.45	
LV-3: Public Water Works & Street Light	104%	103%	6.98	
LV-4 LT Industries	144%	132%	8.99	
LV 5: Agriculture and Allied Activities	88%	89%	6.02	
LV 6: E-Vehicle/ E-Rickshaws Charging Stations	90%	100%	6.79	
Total LT	**96%**	**96%**	**6.54**	
HV- Categories				
HV-1: Railway Traction	78%	80%	5.42	
HV-2: Coal Mines	131%	128%	8.73	
HV-3.1: Industrial and Industrial and HV-3.4: Power Intensive Industries	112%	109%	7.40	**6.79**
HV-3.2: Non Industrial and HV-3.3: Shopping Malls	139%	133%	9.01	
HV-4: Seasonal & Non Seasonal	109%	124%*	8.42	
HV-5: Irrigation, Public Water Works and Other than Agricultural	109%	116%*	7.85	
HV-6: Bulk Residential Users	104%	111%*	7.57	
HV 8: E-Vehicle/ E-Rickshaws Charging Stations	97%	100%	6.79	
HV 9: Metro Rail	-	100%	6.79	
Total HT	**114%**	**112%**	**7.61**	
Total (LT + HT)	**100%**	**100%**	**6.79**	

Note:- ** Average Realisation as % of ACoS is increasing as compared to pervious year mainly because growth in the connected load/ demand outnumbers growth in Sales resulting in increase in revenue from fixed charges.*

6.10 Hon'ble APTEL in its Judgment dated 9th January, 2017 in the matter of Appeal No.134 of 2015 observed that the State Commissions while issuing the Retail Supply Tariff Orders and for purpose of avoiding tariff shocks to the consumers, should 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.

6.11 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 2023-24. Main features of the tariff design are detailed in following paragraphs:

i. **Minimum Charges:** For LV-1: Domestic Consumers minimum charges have been abolished.

ii. **Norms for flat rate Agricultural Consumers:-** The consumption norms for the flat rate Agricultural Consumers have been retained.

iii. **Online Payment Rebate:** Rebate of 0.50%, without any ceiling on maximum rebate amount for eligible LV-1: Domestic consumers has been retained. The Consumers bill paid by consumers through RTGS/NEFT transaction shall also be eligible for the online bill payment rebate.

iv. **Tariff for E-vehicles/E-Rickshaw charging stations**: The tariff for E-vehicles / E-rickshaw charging stations has been modified from Two-Part Tariff to Single Part tariff in accordance with the MoP notification No. 12/2/2018-EV (Comp No. 244247) dated 14th January 2022 regarding "Charging infrastructure for Electric Vehicle (EV) – the revised consolidated Guidelines & Standards".

v. **Introduction of peak period in ToD slots:-** The Commission introduced peak period ToD slots in the Tariff order for facilitating banking of energy.

vi. **Introduction of Separate Tariff Category for Metro Rail:** The Commission has introduced a separate tariff category for Metro Rail.

vii. **Incentive for advance payment:** Incentive for advance payment for LT and HT Consumer category has been linked with annual interest rate of working capital.

viii. **Metering Charges:** No metering charges are levied.

ix. **Green Energy Charges/Tariff:** The Commission has determined Green Energy Charges for consumers availing Green Energy from Distribution Licensee only for the purpose of reducing their carbon footprint and seeking Certification to this effect of Rs.0.97/kWh and Green Energy Charges for consumers availing Green Energy from Distribution Licensee as per MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof at Rs. 0.25/ kWh for Wind, Rs. 3.10/ kWh for HPO and Rs. 0.96/ kWh for Other, which shall be over and above the normal tariff of respective consumer category as per this Tariff Order.

x. **Rebate to existing HV 3 category consumers (all sub-categories):** The rebate for incremental consumption for HV -3 category consumers (Industrial, Non -industrial, Shopping Malls and Power Intensive) has been extended at Rs. 1 per unit for the incremental consumption.

xi. **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 2023-24.

A7: COMPLIANCE OF DIRECTIVES ISSUED IN TARIFF ORDER FOR FY 2022-23

The response submitted by DISCOMs on the directives issued by the Commission in the Retail Supply Tariff Order for FY 2022-23 and the Commission's observations/directions thereon are given below:

7.1 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. 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.

East DISCOM Submission:

The meterisation of DTRs is not covered in any ongoing/sanctioned scheme. Due to difficult financial condition of the company and in absence of financial assistance from any financial institution/Govt, the required progress could not be achieved on the matter. However, under recently launched RRRDS scheme, the meterisation of non-Agriculture DTRs have been covered and the action is being taken to implement the scheme as soon as possible. The Quarterly report (March, 2022) of Agricultural predominant DTR is submitted to the Commission vide letter no. EZ/WS/949 dated 20.06.22. The quarterly report is being submitted to Commission regularly.

As on 31st March, 2022 only 3,11,497 unmetered DLF (Domestic Light and Fan) connections are remaining to be metered. In view of the installation of smart meters, the plan of providing meters on unmetered DLF connections is as given below-

Balance unmetered DLF connections as March 2022	Qtr. wise meterisation plan for FY 2022-23			
	Q-1	Q-2	Q-3	Q-4
3,11,497	10,000	10,000	10,000	25,000 no's to be taken up under RDSS scheme through installation of smart meters.

Central DISCOM Submission:

The Petitioner submitted that due to paucity of fund the meterisation of Rural Domestic unmetered consumers have not been completed. Under RDSS smart meter project approx. 9.57 Lacs meters shall be replaced. After replacement of the old meters with smart meters, these will be re-issued for installation on domestic Unmetered category in Rural areas. Provision for meterisation of

Agriculture DTR is made in RDSS which will be achieved as per timeline of the scheme.

West DISCOM Submission:

As on date following is the status of DTR Meterisation:

DISCOMs	Total No. of DTs	Metered DTs (Till 31.03.2022)	Unmetered DTs (Till 31.03.2022)	% of Metering
MPPKVVCL	2,95,166	57,956	2,37,210	20%
Urban	36,311	16,034		
Rural	2,58,855	41,922		

Total back log of unmetered DTR as follows:

MPPKVVCL	Total Non-Agriculture DTR		Total Agriculture DTR	
	No. of DTRs	Metered DTRs	No. of DTRs	Metered DTRs
	1,07,863	37,676	1,87,303	13,997

In accordance with the Gazette Notification no. 18/1/BEE/DISCOM/2021 dated 06.10.2022 the DISCOM has to complete the meterisation of DTRs as per the following road map.

Targets for functional meters

Meter	FY 2022-23	FY 2023-24	FY 2024-25
DT Metering	90%	95%	98%

At present a scheme RDSS has got underway in the MPPKVVCL, Indore in the phased manner i.e., phase I (up to March 2023) and Phase II (up to December 2023). Accordingly, after commissioning of smart meters with AMI feature and their networking, the manual intervention free energy audit report at all voltage level will be generated and submitted to the BEE, New Delhi and SDA (MPUVN, Bhopal). Also as provisioned in the Gazette Notification no. 18/1/BEE/DISCOM/2021 dated 06.10.2022, annual energy audit report will be submitted in time to all recipients. The Petitioner submitted that the 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. Metering provisions have generally been there in earlier schemes also. DISCOMs have not given details of DTR mandatory under previous scheme. The Commission directs the DISCOMs to expedite DTR meterisation. Further, the Commission observed that simply providing meters is not the total solution, DISCOMs need to have a complete energy auditing solution in order to monitor the energy pilferage. Therefore, DISCOMs shall continue submitting the quarterly progress reports on DTR meterisation along with the energy Audit. It is mandatory to conduct energy audit in accordance with Bureau of Energy Efficiency (BEE) (Manner and Intervals for Conduct of Energy Audit in Electricity Distribution Companies) Regulations, 2021. Except West DISCOM other two DISCOMs have not submitted any details in this regard. East and Central DISCOMs are directed to have energy audit mechanism in place so as to submit annual energy audit report to all recipients in time as per BEE Regulations.

As regard to submission of action plan the Commission observed that Petitioners have not submitted the Action Plan. **Therefore, Petitioners are directed to submit an action plan within 3 months of issuance of this Order.**

7.2 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. 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.

East DISCOM Submission:

A detailed report in this regard for Q3 and Q4 of FY 22 is already submitted to the Commission vide letter no. MD/EZ/CGM(Comm.)/591 dtd 28.07.2022. The net impact of the incentive and surcharge are adding advantages to consumers thereby increasing DISCOMs business. From the detailed analysis it can be seen that the incentives not only help DISCOM in growth of energy sales but also in retaining/addition of High valued consumers from obtaining open access.

Central DISCOM Submission:

In line with the provisions of Tariff Order rebates/incentives are provided to HT consumers (Industrial/Non-Industrial) on monthly basis. The FY-Wise amount is tabulated as below:

Type of Rebate/ Incentives	FY2021-22	FY 2022-23 (up to Sep-2022)
	Amount (in Rs crore)	Amount (in Rs crore)
TOD-Rebate	143.02	39.57
Incremental unit Rebate	91.67	47.94
Captive Rebate	57.55	26.72
Greenfield Rebate	10.01	4.65
NSC Rebate	10.33	10.14
Online payment rebate	1.68	0.76
Prompt payment rebate	2.12	0.95
advance payment rebate	0.01	0.01
Subsidy	43.66	10.58

West DISCOM Submission:

The Summary of incentive/surcharge for consumers given during the FY 2021-22 and FY 2022-23 up to (July, 2022) is as under:

Particulars	Total Amount in Rs Crore	
	FY 2021-22	FY 2022-23 (Up to July 22)
Surcharge recovered from consumer (Rs. Crore)		
Power Factor Surcharge	594.39	146.37
Late Payment Surcharge	260.09	70.83
Total surcharge Recovered	**854.48**	**217.21**
Rebate/Incentive provided to consumer (Rs. Crore)		
Power Factor Incentive	224.10	89.89
Load Factor Incentive	5.04	2.06
Time of Day Incentive	203.52	45.90
Prompt Payment Incentive	3.09	1.45
Captive Incentive	49.83	16.42
Green Field/NSC Rebate	123.15	49.07
Advance Payment Incentive	3.07	2.38
Incremental Rebate	94.17	40.12
Online Payment Rebate	11.92	4.88
Total Rebate	**717.88**	**252.17**

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. The Commission has extended applicability of various rebates in this Order. The Commission observed that the Petitioners have not submitted proper analysis to ascertain the impact of various incentive/rebate/surcharge being allowed by the Commission in tariff order. Therefore, the Commission once again directs the Petitioners to undertake study and analysis to ascertain the impact of various incentive/rebate/surcharge being allowed by the Commission in tariff order and submit the above study accompanied by analysis before next petition filling.

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

Commission's Directives:

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

East DISCOM Submission:

Comprehensive study report on Technical and Commercial loss segregation at sub transmission and distribution level using GIS asset mapping is already submitted to Commission vide letter No. EZ/CGM/Comml/Trac/214 Jabalpur dtd. 20.05.2022.

Central DISCOM Submission:

The petitioner submits that the study shall be carried out through third party agency to ascertain voltage wise cost of supply, and after that company shall be providing the information to Commission.

West DISCOM Submission:

As per the Gazette Notification no. 18/1/BEE/DISCOM/2021 dated 06.10.2022 the MPPKVVCL, Indore would be able to get annual energy audit done with the services of accredited energy auditor, once the meterisation of consumer/ DTRs and feeders is complete under RDSS scheme. The periodic as well as annual energy audit report covers up voltage wise energy losses, account in respect of MPPKVVCL, Indore. As per the schedule of proposed RDSS works, it is expected that meterisation will be completed by December 2023. So, annual energy audit report would be available from FY 2023-24 onwards. The petitioner further submits that consulting agency PWC was directed to conduct a study on sample basis considering the directives of the Commission. Consultant has submitted its draft Report and the same is being submitted to the Commission in soft copy separately. Here, it is noteworthy to mention that results in the aforesaid study are based on sample feeder selected and these results may vary from the actual technical losses in the entire network of DISCOM on the account of following factors:

- Length of the feeder
- Overloading of the feeder
- Power factor
- Conductor type
- DTR type
- Loading during season and off season of agricultural feeders.

Commission's Observations/ Directions:

The Commission has noted the submissions of DISCOMs. However, the Commission observed that the study reports are not accordance with Regulation 26.7 of the MYT Regulations, 2021 and amendments thereof. In view of above, Commission directs the Petitioners to submit the comprehensive study as per Regulations 26.7 of the MYT Regulations, 2021 and amendments thereof along with the next tariff petition. Further, the Petitioners are directed to submit methodology of the study and get it approved by the Commission within 2 months of issuance of this Order.

7.4 Transfer of Funds to Pension & Terminal Benefit Trust Fund

Commission's Directives:

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 11th May, 2021. Further, the Petitioners are also directed to deposit the amount which has been allowed in the previous orders.

East DISCOM Submission:

The Commission in its tariff order for FY 22-23 allowed Rs.70 Crore to be deposited against Terminal Benefit Trust fund. In this regard it is submitted that the details of amount deposited in TBT Fund for the month of April 2022 to June 2022 has already been submitted to Hon'ble Commission vide MD/EZ/CGM(Comml.)/591 dated. 28.07.22.

Central DISCOM Submission:

It is submitted that the desired information shall be submitted to the Commission separately within short period of time.

West DISCOM Submission:

The Company is transferring the funds to Pension & Terminal Benefits trust Fund on regular basis. Whenever the company receives funds from MP Power Management Company to deposit the same in Pension & Terminal Benefit Trust Fund as per Cash Flow Management of Company, the same is transferred in the TBT Fund. The Company has deposited an amount of Rs. 273 Crore from 12.07.2019 to 23.08.2022 in Pension & Terminal Benefit Trust Fund. In future also whenever the Company will receive fund from MP Power Management Company to deposit in Pension & Terminal Benefit Trust Fund, the same shall be deposited in time in the TBT Fund.

Commission's Observations/ Directions:

The Commission has noted the submission 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 11th May, 2021. Further, the Petitioners are also directed to deposit the amount which has been allowed in the previous orders.

7.5 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.

East DISCOM Submission:

Quarterly Report (June 21 to June 22) of stopped/defective meters is has already been submitted to Commission vide letter no. MD/EZ/CGM(Comml.)/1132 dated 03.11.22.

Central DISCOM Submission:

It is submitted that the desired information shall be submitted to Commission separately within short period of time.

West DISCOM Submission:

The petitioner submits that the progress report is being submitted regularly to the Commission through the quarterly MIS.

Commission's Observations/ Directions:

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

7.6 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 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.

East DISCOM Submission:

Month wise, Tariff Wise R15 (Jan 22 to Sep 22) along with old and new R15 statement has been submitted to Commission vide letter no. MD/EZ/CGM (Comml) /1132 dated 03.11.22.

Central DISCOM Submission:

The Petitioner submitted that the guidelines of the Commission shall be followed.

West DISCOM Submission:

The Petitioner submitted that the compliance in this regard has been submitted before the Commission vide letter No. 9967 Indore dated 13.07.2022. As directed by the Commission petitioner would submit the R-15 statement on quarterly, half yearly and annual basis regularly.

Commission's Observations/ Directions:

The Commission has taken note of the Petitioners submission. The Commission observed that R-15 statement submitted by the Petitioners for the projections of Sales, Connected load and No. of Consumers are not aligned with the tariff schedule. In view of the above, the Commission once again directs the Petitioners to completely align R-15 report with the tariff schedule approved by the Commission and submit the R-15 report for FY 2022-23 and FY 2023-24 (upto September) in next tariff petition.

7.7 Capital Expenditure and Capitalisation details

Commission's Directives:

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.

East DISCOM Submission:

Scheme wise information for FY 2021-22 and capitalization details has already been submitted to the Commission vide letter no. MD/EZ/CGM(Comml)/1207 dated 16/11/2022.

Central DISCOM Submission:

It is submitted that the desired information shall be submitted to the Commission separately within short period of time.

West DISCOM Submission:

The Petitioner submits that company has already provided the Fixed Asset Register upto FY 2020-21 in a format prescribed by the Commission. Also, the company has submitted the details of quantity of Assets upto FY 2020-21 separately. Further, the company is in process of maintaining all details of assets separately from the FY 2021-22. As directed by the Commission the Fixed Asset Register in the prescribed format shall be submitted at time of True up of FY 21-22.

Commission's Observations/ Directions:

The Commission has observed that the Petitioners have submitted Fixed Assets Registers upto FY 2021-22. 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 it is observed that the Petitioners have not been able to link the individual asset details with its cost in years prior to FY 2021-22 in Fixed Asset Registers. The Petitioners have provided the quantity against the assets in cumulative manner, separately. The Commission once again directs the Petitioners to submit the Fixed Asset Register as per format specified by the Commission in next tariff petition.

7.8 Submission of report to ascertain the Consumption of Agricultural 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:

As regards the ascertainment of the consumption of irrigation pumps, the East DISCOM already submitted a detailed report of Study Conducted for Narsinghpur Circle to the Commission vide letter dated 12.11.2021.

However, the Commission has given a direction in Tariff Order for FY 2022-23 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 the claim in the next tariff filing/ true-up i.e., Tariff Petition for FY 2023-24 to the satisfaction of the Commission.

East DISCOM submitted that Commission convened a meeting with East DISCOM on 6th September 2022 for the status of the compliance to the directives issued in the Tariff Order for FY 2022-23.

As agreed in the meeting, Commission suggested for conducting the detailed study to ascertain the consumption of irrigation pumps with reference to Study conducted in Maharashtra State. It was directed to form a committee comprising Nodal Officer each from the Commission, DISCOMs and MPPMCL for this purpose. In this regard, East DISCOM appointed Mr. Kuldeep Kumar Dubey, DGM (Energy audit) O/o CGM (Commercial) as Nodal officer for assistance during the study as instructed by the Commission 19/09/2022. Copy of the letter no. 1183 dated 10.11.2022 vide which nodal officer has been appointed has also been forwarded to the Commission.

Central DISCOM Submission:

The petitioner submitted that the study as per the Commission shall be carried out through third party agency for which a joined committee shall be formed with members from all the three DISCOMs, MPPMCL, and GOMP Energy Department. A nodal officer has been appointed by Central DISCOM as per Commission's directive.

West DISCOM Submission:

The Petitioner submitted that a study considering the data of 1632 Nos. agriculture feeders of 15 districts under West DISCOM jurisdiction for FY 2020-21 has been submitted to the Commission vide letter No. 2763 Indore dated 23.02.2022.

Commission's Observations/ Directions:

It is observed that East and Central DISCOMs have appointed nodal officer for the study, whereas West DISCOMs has resubmitted the report of earlier study conducted by them. Therefore, the Commission once again directs the Petitioners to submit report to ascertain the consumption of agriculture pumps based on representative samples of 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.

7.9 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. 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 the Commission 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.

East DISCOM Submission:

In the company area in last five years i.e since FY'18 to FY'22, following main infrastructure has been created as per the capex plan to provide uninterrupted and quality power supply to all categories of consumers:

S.N.	Particulars	Unit	FY'18	FY'19	FY'20	FY'21	FY'22
1	33/11KVS/S	Nos	15	95	8	12	15
2	Addl/Aug PTR	Nos	39	242	89	40	35
3	33 KV Line	Km	507	698	477	212	224
4	11 KV Line	Km	10303	21857	3399	891	649
5	LT AB Cable	Km	4091	18153	865	345	185
6	DTR	Nos	17531	41387	9332	2411	3214

Regarding increase of Distribution losses, it is to mention that by carrying out system strengthening works technical losses has been definitely reduced. However, due to increase in LT line for supply of rural households under various schemes, the technical losses have increased. Further line loss reduction plan can be referred from RDSS scheme guidelines dated 17.03.2022.

Central DISCOM Submission:

The Central DISCOM has participated in RDSS Scheme of GoI. The DISCOM has to take up the following works:-

1. Replacement of Electronic Meter to Smart Meters in Urban areas having loss more than 40%
2. DT meterization of urban areas having loss more than 40%.
3. Augmentation of DTR and PTRs.
4. Augmentation of Conductor of 33 & 11 KV lines.
5. Construction of New Substations.
6. Installation of New Capacitor Bank on 11 KV feeders.
7. LT underground cabling etc.

The above works shall be executed under RDSS Scheme in phased manner for reduction of line losses.

West DISCOM Submission:

It is submitted that the West DISCOM has achieved the distribution loss level of 12.71% in the FY 2020-21 and 11.61% in FY 2021-22 against the normative distribution loss of 15.00% and 14.00% respectively, as allowed in the Tariff Regulations. DISCOM is making continuous efforts to reduce 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 much above loss level trajectory specified by the Commission. East and Central DISCOMs progress is far from satisfactory and there is a huge gap between the targeted losses and actual losses. These DISCOMs are incurring high financial loss against due to high distribution 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 sub-optimal performance of the DISCOMs. Further, Commission observed that East and Central DISCOMs have referred to RDSS Scheme for reduction of losses. In view of the above, the Commission directs the Petitioners to submit loss reduction achievement of DISCOMs on quarterly, half yearly and an annual basis against the targeted loss levels.

7.10 Meterisation of agriculture predominant DTR and domestic consumers

Commission's Directives:

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.

East DISCOM Submission:

Regarding meterization of unmetered domestic connection of rural area continuous efforts are being made to provide the meters on unmetered connection. At the end of December, 2021 only 3,22,268 unmetered domestic connections were remaining which has further reduced to 3,11,497 at the end of March, 2022. The figures given above are of R-15 of the corresponding month. The meterization of agricultural DTRs is not covered in any ongoing/sanctioned scheme. Plan for

100% predominant Agricultured DTR will be provided after sanction of loan assistance from Financial institutions of any Govt. Scheme. The Quarterly report of agriculture predominant DTR for March, 2022 has already been submitted to the Commission vide letter no. EZ/WS/949 dated 20.06.2022.

Central DISCOM Submission:

Central DISCOM submitted that due to paucity of fund the meterisation of Rural Domestic unmetered consumers has not been completed. Under RDSS smart meter project approx 9.57 Lacs meters shall be replaced. After replacement of the old meters these will be re-issued for installation on domestic Unmetered category in Rural areas. Provision for meterisation of Agriculture DTR is made in RDSS which will be achieved as per time line of the scheme.

West DISCOM Submission:

West DISCOM has achieved 100% meterisation in Domestic Urban Consumers. However, due to Covid 19 pandemic the set target for meterisation of Rural Domestic Consumers could not be achieved. It has now been targeted to achieve 100% meterisation by end of March, 2022-23. The action plan for 100% meterisation is as below:

Total-Rural Domestic Unmetered Connections (As per R-15 July, 22)	Plan for Meterization						
	Sept.22	Oct.22	Nov.22	Dec.22	Jan23	Feb23	March23
25763	3683	3680	3680	3680	3680	3680	3680

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.

The Petitioner submits that the meterisation of predominately agriculture DTRs has already been incorporated in the Capex plan. The said work for DTR meterisation shall be executed depending upon the availability of the funds.

Commission’s Observations/ Directions:
The Commission has taken note of the submission of the DISCOMs. It has been observed that all three DISCOMs have not achieved meterisation for rural domestic consumers and agriculture DTR meterisation. The Petitioners are directed to complete these works in timebound manner and report the status of compliance to the Commission after 1 month of deadline given in RDSS.

7.11 Policy and procedure for identification of bad debts and writing off the same

Commission’s Directives:

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.

East DISCOM Submission:

As submitted by East DISCOM, the draft policy is under discussion and will be submitted to the Commission after finalization.

Central DISCOM Submission:

The Central DISCOM has prepared the draft policy for adjustment mechanism of Bad and doubtful debts. The legal and financial evaluation of draft policy is under vetting. The DISCOM requests the Commission to provide time extension of one month for submission of policy.

West DISCOM Submission:

The Petitioner submits that the status of compliance in this regard has been submitted before the Commission vide letter No. 9967 Indore dated 13.07.2022.

Commission's Observations/ Directions:

The Commission has taken note of the submission made by East and Central DISCOMs submission and directs East and Central DISCOMs to submit draft policy and procedure for identification of bad debts and writing off. MPPMCL may submit a uniform policy for three DISCOMs within three months to get approval of the same from the Commission.

7.12 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*

asper Minimum Charges for last five years.

iii. *Category / Sub-category wise billed revenue from Fixed and Energy Charges during last five years*

East DISCOM Submission:

The Commission vide email dated 01.07.2022, circulated the format for collection of category-wise minimum charges, billed recovery against the Minimum charges and number of consumers who have been billed minimum charges during the FY 2020-21 & FY 2021-22 and category-wise actual consumption for which billing has been done as per minimum charges.

The analysis carried out for all the consumer categories for FY 2020-21 & FY 2021-22. As regard to FY 2017-18, FY 2018-19, and FY 2019-20, the TMM analysis is prepared only for HT Categories, due to limitations of availability of data of LT categories because of migration to new billing system in the DISCOM.

In accordance with data availability and format provided by the Commission, category-wise minimum charges, billed recovery against the Minimum charges and number of consumers who have been billed minimum charges during the last five years has already been shared with Commission vide letter no.MD/EZ/CGM (Comml.)/1132 dated 03.11.2022.

Central DISCOM Submission:

It is submitted that the desired information shall be submitted to Commission separately within short period of time.

West DISCOM Submission:

As directed, desired information is being submitted separately to Commission in the soft copy.

Commission's Observations/ Directions:

The Commission has done away with minimum charges for LT domestic consumers. The Commission has noted the submission of the Petitioner and directs the Petitioners to submit details of FY 2022-23 with regard to minimum charges in next tariff petition.

7.13 Introduction of kVAh billing

Commission's Directives:

The Petitioners have proposed to implement kVAh billing initially for HT consumers considering awareness about advantages of maintaining PF among HT consumer groups. The Commission has observed that the Petitioners have applied 0.934 conversation factor for all HT categories of the consumers which is not substantiated with supporting data.

During the public hearing, the Commission received mixed response from the stakeholders where some stakeholders submitted that appropriate time may be given to consumers to adopt to change in methodology of billing. Even some stakeholders, who welcomed the Petitioners proposal, requested the Commission to defer the implementation of kVAh billing upto next year.

In view of the above, the Commission directs the petitioners to carry out impact assessment study within 6 months of this tariff order on transition from kWh billing to kVAh billing considering yearly average power factor for each category of HT consumers based on last three years data. Further, the Petitioners are directed to conduct consumer awareness programs across the State to explain the concept of kVAh billing and its implications to consumers of relevant categories such that the consumers are prepared and kVAh based billing may be implemented upon HT consumers in next tariff order.

7.14 Use of Electric Furnace in Power intensive industries such as Mini Steel Plants under HV 3.4 tariff category

Commission's Directives:

With regard to applicability of HV 3.4 category (Power Intensive Industries) Petitioners in their tariff proposal have requested that for the purpose of smelting and heating of iron and steel only electric furnaces be allowed. The Commission has observed that Petitioners have not submitted any details with regard to existing power intensive consumers in the State in terms of types of furnaces and their consumption pattern etc. The Petitioners are directed to furnish such details along with analysis and comments in this matter in the next tariff petition.

A8: PUBLIC SUGGESTIONS AND COMMENTS ON LICENSEES' PETITIONS

8.1 After admission of the ARR and Tariff proposals for FY 2023-24 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 comments/objections/suggestions. Names of the Stakeholders who had filed the comments/objections/suggestions on the ARR /Tariff Proposal for FY 2023-24 are given in **Annexure-I**.

8.2 Public Notice, comprising the gist of the ARR and Tariff proposal were published by Petitioners in the following Hindi and English newspapers, seeking stakeholders' comments/objections/suggestions latest by 16th January, 2023.

Table 100 : List of Newspapers- Public Notice published by Petitioner

Newspaper	Language
Dainik Bhaskar, Jabalpur	Hindi
Dainik Bhaskar, Sagar	Hindi
Deshbandhu, Satna	Hindi
Hitvada, Jabalpur	English
Nai Duniya, Indore	Hindi
Times of India, Indore	English
Peoples Samachar, Bhopal	Hindi
Dainik Bhaskar, Bhopal	Hindi
Navbharat, Gwalior	Hindi
Raj Express, Gwalior	Hindi
Times of India, Bhopal	English

8.3 The Commission scheduled the public hearing on 23rd January, 2023 for East DISCOM, 24th January, 2023 for West DISCOM and 25th January, 2023 for Central DISCOM through video conferencing and heard the objections/ comments/ suggestions of the stakeholders.

8.4 Number of comments received on ARR/Tariff proposal are shown in the table below

Table 101 : Public Suggestions/Comments on the Petition

Sr. No.	Name of DISCOM	Number
1.	East DISCOM, Jabalpur	44
2.	West DISCOM, Indore	63
3.	Central DISCOM, Bhopal	25
	Total	**132**

8.5 As a part of the tariff exercise, a meeting of the State Advisory Committee (SAC) was convened on 30th January, 2023, 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.

8.6 The comments/objections/suggestions received from various stakeholders have been given due consideration by the Commission. The salient comments/ objections/ suggestions related to the Tariff Petition have been grouped together according to the nature of the comments/objections/suggestions 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.

ISSUE No. 1: Tariff Hike

Issue Raised by Stakeholder

The proposed hike on fixed charges should not be considered instead reduced in wake of surplus power in State. Further, the proposed tariff hike in fixed charges shall result in increase of around 22 paisa per unit which shall be very high considering prevailing situation of industry and market due to various reasons like fuel price hike, COVID-19 Pandemic etc.

The Petitioners have simply proposed to increase tariff to recover gap and without working on other options to reduce overall expenses of the DISCOMs. Beside this, the stakeholders submitted that the fixed charge for HT consumer should not be increased as fixed charges are already high in Madhya Pradesh in comparison with Other States.

Petitioner's Response

Petitioners submitted that the 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. Further, 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 licensees in its supply and distribution business. However, due to historically tariff structure followed, recovery of fixed cost through fixed charges from the consumer is only about 20%.

Commission's View

The Commission has determined the Retail Supply Tariff for various consumer categories in this order after giving due consideration to the relevant provisions of the Electricity Act, 2003, Tariff Policy, 2016, and MYT Regulations, 2021 and amendment thereof. The Commission has been consciously making efforts over the past several years to pass the efficient cost of supply after exercising prudence check on the submissions filed by the Petitioners and other documents placed on record by the Petitioners.

ISSUE No. 2: Incentive / Rebate / Surcharge

Issue Raised by Stakeholder

The stakeholders have made following requests / suggestions towards Incentive / Rebate / Surcharge.

The rebate of Rs. 2/- per unit on incremental consumption by Captive Power Plant consumers of HV-3 category should be increased to Rs 3/- per unit considering the huge investment made for developing such plants. Further, the incremental consumption rebate should be continued for at least next ten years.

Rebate of Rs.1/- per unit on incremental consumption of Open Access consumers for HV-3 should be allowed considering open access consumption of FY 2019-20.

The 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 stakeholders requested the Commission to grant load factor incentive above 50% to utilize more power, in view of surplus power available with the State.

The Power Factor incentive should be provided on total consumption including consumption through DISCOM, Open Access and CPP under Open Access.

The stakeholder requested for special treatment and rebate in H.T industry particularly for labor intensive industries.

The rebate should be same for new consumer and existing consumers because the market condition is same for new consumer as well as existing consumer.

The stakeholder submitted that as per Hon'ble APTEL order in APPEAL NO. 70 of 2019 & IA No. 1640 of 2019 & IA NO. 828 of 2020, which has held that Power Factor incentive are applicable on entire power consumed by consumer. Therefore, it is suggested that power factor should be calculated on entire power consumed by consumer irrespective of power availed through DISCOM and Open Access, in case kWh billing is continued.

Petitioner's Response

The Petitioners submitted that any increase in the rebate for Captive Power Plant will further burden the other category consumers thus proposal lacks merit. The Petitioners have requested the Commission to provide list of documents for verification of ownership of captive generating plant for determination of ownership of various types of captive plant.

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.

The Petitioners also submitted that no surcharge is being levied for consumption during peak hours. In addition to this, 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.

Regarding rebate for existing and new HT connections, the Petitioners submitted that in line with the previous tariff order rebate for existing HT connections & new HT connections has been proposed to be extended for one year in instant petition. Further, the proposal for equal rebate for existing and new HT connection lacks merit.

Regarding power factor incentive on energy consumed through Open Access, the energy charges are not being billed on energy consumed through Open Access hence proposal of any concession (i.e., PF incentive) on such unbilled energy charges lacks merit.

Further, submission of stakeholder that incentive should be provided on total consumption including consumption through DISCOM Open Access and CPP power under Open Access lacks merit.

Commission's View

The Commission has noted the submission of stakeholders and reply submitted by the Petitioners. The Commission in this order has continued various rebates/ incentives/surcharges which have been detailed in tariff schedule chapter of this order.

ISSUE No. 3:**Abolition of Fuel Cost Adjustment (FCA) Charges.**

Issue Raised by Stakeholder

The stakeholder submitted that MPPMCL shall make a profit of Rs 1,635 Crore from sale of surplus power and accordingly FCA Charges may be abolished.

The proposed increase in energy charges seems to be not in order as the power cost is revised every three months by way of FCA charges as the power purchase cost is more than 80 % of the total ARR.

Petitioner's Response

The proposal and rational behind Fuel & Power Purchase Cost Adjustment (FPPCA) has been duly provided in the petition. The stakeholder is requested to refer the chapter A 17 of the petition.

The mechanism of FCA is meant for recovery of increased power purchase cost with respective to cost allowed in the tariff order of respective year. Therefore, submission of stakeholders lacks merit.

Commission's View

Pursuant to the Electricity (Amendment) Rules, 2022 issued by Ministry of Power, Govt. of India, the Commission has amended the MYT Regulation, 2021 and revised the formula for recovery of Fuel and Power Purchase Adjustment Surcharge (FPPAS). Accordingly, the Petitioners are directed to comply with the provision of Regulation 9 of the MYT Regulations, 2021 and its amendment thereof.

ISSUE No. 4: Cross Subsidy and Additional Surcharge

Issue Raised by Stakeholder

The Petitioners proposal to increase Additional Surcharge from Rs. 1.21 to Rs. 1.44 is very high and the power purchase for Open Access shall become unviable, which is not in line with motive of Open Access Policy. Further, no additional surcharge should be levied on Captive Power Plants and Renewable Power Plants.

As per MoP notification dated 29th December 2022 Clause 4. Cross Subsidy Surcharge shall not exceed twenty per cent of the average cost of supply.

RPO obligation is increasing every year to promote Green Power. Therefore, the Commission is requested to calculate CSS and Additional Surcharge separately for purchase of RE Power from third party within the State. In present petition there is no difference in calculation in Cross Subsidy & Additional Surcharge for purchasing RE Power. Further, CSS and Additional surcharges on purchase of RE power should be reduced or eliminated.

Govt of India has laid down in the Tariff Policy that the cross subsidies to be brought down to within the range of ± 20% of the average cost of supply but it has been observed that this limit has not been introduced till last year and many categories are paying the charges more than 30% of average cost of supply. Therefore, the Commission is requested to bring the Cross subsidy within the range of ± 20% of the average cost of supply in this tariff order.

Some of the stakeholders 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.

The consumers of the DISCOM pay demand charges even while availing power through open access. These demand charges account for some part of the fixed cost borne by the Licensee and ought to be considered while working out the power purchase fixed cost obligation attributable to the open access consumers. Therefore, it is vital to deduct this amount from the amount of additional surcharge in order to avoid double collection of revenue by DISCOM from the embedded open access consumers on account of additional surcharge and also to maintain the balance of competition between the Licensee and open access consumers as also iterated in the Tariff Policy, 2016. Further, Others SERCs like Gujarat, Telangana and Punjab while computing additional surcharge adjust the effective demand charges paid by the embedded open access consumers while determining additional surcharge.

Petitioner's Response

Additional Surcharge is being levied as per provisions of Section 42 (4) of the Electricity Act 2003. The Act provides no exemption on the Consumption from renewable energy sources from levy of additional surcharge. On issue of additional surcharge on captive consumption is subject matter of judicial proceedings. Further determination of captive status is not the subject matter of instant petition.

The Petitioners submitted that the Cross Subsidy Surcharge and Additional Charge cannot be abolished for Open Access consumer. The Hon'ble Supreme Court in the case of SESA Sterlite Limited Orissa Electricity Regulatory Commission (2014) 8 SSC 444 has provided detailed rational of imposing the Cross Subsidy Surcharge.

Further, CSS needs to be recovered from the open access consumers for their open access consumption. Otherwise, not levying CSS will burden honest paying consumers by way of unattended recovery of cross subsidy provided to cross subsidized consumers.

The Petitioners submitted that the Commission has been consciously making efforts over the past several years to reduce the cross- subsidy levels across all consumer categories. However, there are several variables which need to be taken into consideration i.e., change of cost structure, tariff shocks to any particular tariff category etc. Further, Cross Subsidy surcharge is being determined by the Commission in accordance with the provision of Electricity Act 2003, MYT Regulations and Tariff Policy.

The Petitioners have submitted the detailed calculations of Additional Surcharge, based on the actual energy surrendered due to Open Access energy derived from the 15 min time block of period from Sept-21 to Aug-22 to the Commission. The summary of the calculations is submitted in Table No. 250 of the Tariff Petition. Hence, requested the Commission to consider the Additional Surcharge determined by the petitioners.

The Petitioners submitted that Open Access Consumers, being consumer of DISCOMs, have to pay the applicable charges of respective category as per Tariff Order issued by the Commission. The applicable charges such as Demand charges, Energy charges are applicable to consumers of the DISCOMs. The Demand charges are collected to meet out the cost of DISCOMs which are fixed in nature such as Power Purchase, Depreciation, Interest Payments etc. The cost attributable to Open Access, as stranded capacity of the DISCOMs only pertains to fixed cost of power purchase. Hence, the Petitioners disagree with the view of the stakeholder in this regard since it is irrelevant and the suggestion of the stakeholder can be rejected by the Commission.

Commission's View

The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The methodology for computation of Additional Surcharge has been detailed in relevant section of this order.

The Commission has been consciously making efforts over the past several years to reduce the CSS level across all consumer categories taking cognizance of the facts that there should not be any tariff shocks to consumers as such. Further, in pursuance to the Electricity (Amendment) Rules, 2022 issued by Ministry of Power , Govt. of India, the Commission has amended Regulation 47 of MYT Regulation, 2021 whereby it is now specified that Cross-Subsidy surcharge shall not exceed 20% of the average cost of supply to the category of the consumers seeking open access.

ISSUE No. 5: Green Energy Tariff

Issue Raised by Stakeholder

The stakeholder submitted that the Green Energy Tariff must be reduced. Further, separate tariff should be mentioned for Solar and Non-Solar.

The stakeholders have suggested to lower the green power consumption from 100% to 10%-20% Renewable Energy from Distribution Licenses. Further, the stakeholder requested the Commission that flexibility should be allowed to the consumers who want less renewable energy instead of 100% and for the partial period during the month.

Petitioner's Response

Petitioners submitted that they have given additional submission in regard to Green Energy Tariff to the Commission. Further, the petitioners have noted the objection and the Commission may take appropriate view in this regard.

Commission's View

The Commission has taken cognizance of stakeholders suggestions and Petitioners reply as per the provisions of MPERC (Co Generation and Generation of Electricity from Renewable Sources of Energy) (Revision-II) Regulations 2021 and amendments thereof. The Commission has dealt the issue of Green Energy Tariff in comprehensive manner in the relevant section of this Order.

ISSUE No. 6: Distribution 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.

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 and such losses are borne by the Licensee only.

The Petitioners 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.

Commission's View

The Commission has been repeatedly directing 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. 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. Besides, the Government of India has also provided financial and technological support to the DISCOMs through various schemes. The Commission appreciates the performance of West DISCOM for achieving lower Distribution losses. However, the loss level in other two DISCOMs are much higher than the loss trajectory specified and needs immediate corrective action.

There is a need to implement a concrete program by the DISCOMs to achieve the targeted loss level in a time bound manner for making the DISCOMs financially viable and sustainable operations.

The Commission has approved the ARR for the Petitioners considering the normative distribution losses for FY 2023-24 approved in the MYT Regulations, 2021 and its amendments, thereby not allowing pass through of higher losses and its associated costs on account of inefficiency of the Petitioners to the consumers.

ISSUE No. 7: Depreciation

Issue Raised by Stakeholder

The stakeholder submitted that the 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.

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.

Commission's View

The Commission has approved the depreciation as per the provisions of MYT Regulation, 2021 and amendments thereof which is inline with the approach adopted by the Commission in its

MYT order. The details have been discussed in ARR chapter of this Order.

ISSUE No. 8:Tariff Minimum Charges

Issue Raised by Stakeholder

The Tariff Minimum charges for all HT/LT consumers categories should be abolished and actual consumption should be considered, as the actual consumption in 90% of industries is very high and more than the Tariff Minimum charges. This will be helpful to small industrial/non-industrial consumers. The average cost of unit to such small HT consumers are ranging from Rs 15 to 20 per unit and such type of consumers are less than 1% of total HT consumers.

Petitioner's Response

The Petitioners submitted that 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 are not sufficient to recover the fixed cost of the licensee. Therefore, unless the fixed charges are increased to that level so as to sufficient to recover the fixed cost of supply, Tariff Minimum charges cannot be abolished.

Further Regulation 41 of the MYT Regulations, 2021 clearly stated that Tariff Minimum charges shall be included in tariff income.

Commission's View

Tariff Minimum Charges are intended to ensure guaranteed recovery of fixed costs of the DISCOMs and are levied only when consumption of any consumer falls below guaranteed minimum consumption for a month subject to adjustment of units consumed at end of financial year. The Commission has abolished tariff minimum charges for LT Domestic category and continued with the existing provisions of Tariff Minimum Charges for other tariff categories of consumers.

ISSUE No. 9: Seasonal Consumers

Issue Raised by Stakeholder

The stakeholder submitted that 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 Tariff Minimum 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.

Further, the off-season period for seasonal consumer should be 4 months instead of 6 months.

Petitioner's Response

In accordance with the methodology given in 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 is this regard lacks merit.

Further special concessional tariff is provided to the seasonal consumer only on the ground that they operate only part of the year. If submission of the stakeholder regarding off season of 4 month is accepted there should not be any special tariff for seasonal consumers. Thus, proposal of the stakeholder in this regard lacks merit.

Commission's View

The Commission has taken note of the stakeholder's suggestion and modified the terms and conditions for seasonal consumers in LT and HT categories keeping the time frame for seasonal consumers as the same.

ISSUE No. 10: Supply for temporary purpose in existing HT consumers premises

Issue Raised by Stakeholder

The stakeholder submitted that 10% of the sanctioned load is allowed to be used for construction for expansion/ renovation/ modification from existing HT connections on the same tariff applicable for the permanent connection. However, presently the consumers are facing challenges due to overzealous checking by the Licensee. Like in any industry, frequent small construction and modification are always required as 10% of load of contract for such activity should be allowed.

Petitioner's Response

The Petitioners submitted that billing for temporary connections is done as per Clause 1.19 of General Terms and Conditions for HT Tariff of the tariff Order.

Commission's View

The Commission has decided to retain the existing provisions in this Tariff Order.

ISSUE No. 11: Bad and Doubtful Debts

Issue Raised by Stakeholder

The stakeholder submitted that 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.

Petitioner's Response

The Petitioners have claimed Bad & Doubtful Debts as per provision of MYT Regulations, 2021, wherein it has been mentioned that it is to be allowed up to the maximum of 1% of yearly revenue, which is well within aforesaid limit prescribed in the Regulation.

Commission's View

The Commission has not considered any bad and doubtful debt in this order. Further, the Commission has directed the petitioner to prepare draft policy and procedure for identification of bad debts in this order.

ISSUE No. 12: Introduction of KVAH tariff for HT categories

Issue Raised by Stakeholder

The stakeholders submitted that change in methodology in billing for HT/EHT Consumers from kWh to kVAh billing will result in increase in tariff by 7%-13% as rate of Energy Charges have not been reduced accordingly. Further, change in tariff structure will adversely affect the industries.

The stakeholders submitted that the proposal is against MYT principle as prescribed in Section 61 (h) of the Electricity Act, 2003, Tariff Policy, 2016 and MYT Regulation 2021. Further, kVAh billing should not be accepted considering the prevailing situation of industry and market due to fuel price hike, COVID-19 pandemic etc.

Some stakeholders welcomed the Petitioners proposal and few stakeholders requested the Commission to differ the implementation of kVAh billing upto next year.

Petitioner's Response

The Petitioners submitted that while proposing the kVAh billing for the consumers i.e., in designing kVAh Tariff, the Petitioners have adopted the principle of revenue neutrality so that both the licensee as well as consumers are not burdened unnecessarily. Further, many States have already adopted KVAh billing in India. The prime objective of the KVAh billing is to encourage the consumers to maintain near unity Power factor to achieve loss reduction, improve system stability, power quality and improve voltage profile.

Further, submitted that the Petitioners have not proposed any reduction in tariff rates. The Petitioners have proposed a uniform hike in tariff of around 3.20% across categories based on the revised ARR and past True-up gap. The tariff (in kWh) so estimated for FY 2023-24 after considering above hike for categories including HT industry is represented in equivalent kVAh tariff for applicable categories on the basis of revenue neutralized conversion factor as already explained in detail at Chapter A13 of Petition.

The kVAh billing provides inbuilt incentive mechanism, which will automatically take care of power factor incentive and disincentive for the high and low power factor respectively. Hence, it has been proposed to abolish separate provision for power factor incentives and disincentives. Further, while proposing the kVAh billing, i.e., in designing KVAh Tariff, the Petitioners have adopted the principle of revenue neutrality so that both the licensee as well as consumers are not burdened unnecessarily. Hence, even if the tariff is proposed in kVAh, there will be no additional impact on consumers had the same would have proposed in kWh.

Commission's View

The Commission has noted the submissions made by stakeholders and reply submitted by the Petitioners. The Commission has not considered the Petitioners proposal of implementing kVAh based billing in this Order and given appropriate directive in the Compliance to Directive chapter of this Order.

ISSUE No. 13:Classification of Telecom towers

Issue Raised by Stakeholder

The Stakeholder submitted that Telecom tower should be placed under Industry or under lower tariff category as it's a public service utility or sperate tariff category may be provided for telecom.

Further, submitted that MERC after taking into consideration the IT/ITeS policy of the Government of Maharashtra specifically categorized Telecommunication Towers in the Industry Tariff vide its order dated 30.03.2020 in Case No. 322 of 2019.

Petitioner's Response

The Petitioners submitted that Section 62(3) of Electricity Act, 2003 provides stipulation for creation of any categories and hence tariff for such category. Taking cognizance of the Section and considering the nature and purpose for which the supply is required, Industrial category was introduced in the State of Madhya Pradesh wherein there is "manufacturing and processing" involved. In other word the raw material is being processed into finished product through manufacturing process and other such activities. However, no activity of manufacturing/processing is being carried out in the telecom towers hence, present classification in the non-domestic category is appropriate and therefore it cannot be considered under industrial category.

As far as categorization of telecom towers under industrial category in Maharashtra State is concerned, it is submitted that IT/ITeS policy of the Government of Maharashtra has categorically mentioned the applicability of Industrial tariff to Telecommunication Towers. As no such provision has been specified in the Madhya Pradesh IT, ITeS & ESDM Investment Promotion Policy. Also, the applicability of provisions of IT/ITES policy of Government of Maharashtra is confined to the State of Maharashtra and therefore, its provision is not necessarily applicable to the matters subjected to the State of Madhya Pradesh.

It is submitted that different State have different policy and tariff categories/tariffs which are based on their specific requirement, demography, consumption pattern and various other social/economic/financial factors. There is no binding on any State to compulsory adopt the provision of other State or have same provision as that of others.

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. The Commission has been allowing Industrial tariff to the industries where raw material is processed into finished product through manufacturing process and other such activities. The telecom tower connections are covered under LV Non- Domestic and HV Non- Industrial categories as the case may be.

ISSUE No. 14:Applicability clause for category HV 3.4

Issue Raised by Stakeholder

The stakeholder requested the Commission that the plant using all electric furnace like induction furnace, crucible furnace, cupola furnace and electric arc furnace shall be continued to be covered under HV-3.4 Tariff category.

Petitioner's Response

The Petitioners submitted that the intent behind the proposal is to exclude, the mini steel plant (MSP) with rerolling mills/ sponge iron plants in the same premises and ferro Alloy plants, operating with thermal furnaces (i.e other than electrical furnace). The Petitioners have noted the stakeholder suggestion and requested the Commission to take appropriate view on this issue.

Commission's View

The Commission has decided to retain the existing provisions in this Order.

ISSUE No. 15: Enhancement of Contract Demand for 33 KV consumer

Issue Raised by Stakeholder

The stakeholder submitted that the limit of contract demand for 33 kV consumer should be increased from 10 MW to 20 MW for existing and new connection. Further, the additional charges applicable at 2% should be withdrawn for the consumers as it will increase the consumption and the Petitioners shall generate more revenue from the consumers.

Petitioner's Response

The Petitioners submitted that the limit is applicable as per MP Electricity Supply Code, 2021.

Commission's View

The Commission has decided to retain the existing provisions.

ISSUE No. 16:Return on equity (ROE)

Issue Raised by Stakeholder

The stakeholder has submitted that the MYT Tariff Regulation, 2015 is in violation of Section 123 of Companies Act, 2013 regarding payment of Return on Equity as this is collected to pay dividend to stakeholders. Further, the stakeholder submitted that the stakeholder have confirmed before ROC Gwalior that DISCOMs are not paying any dividend to shareholders but claiming RoE as allowed by MYT Tariff Regulation. Therefore, end use of ROE collected is not known and should be kept in separate bank account as per Section 124 of Companies Act 2013, if dividend is not paid.

Further, the Stakeholders submitted that DISCOMs have collected nearly Rs 10,000 Crore in the name of ROE from consumers for last several years and confirming that no dividend is being paid to Shareholders. The use of this Rs 10,000 Crore is not monitored by Commission and no order is being passed regarding end use of Rs 10,000 Crore by the Petitioners. Therefore, recovery of RoE, is being made from public without declaring the end use of the RoE.

The stakeholder submitted that the Petitioners has claimed Rs 687 Crore against the RoE in the Petition. Hence, the Commission is requested to check it is as per Regulation.

Petitioner's Response

The petitioners have claimed RoE in accordance with the Regulation 31 of the Tariff Regulations, 2021, which allows the petitioners to claim 14% RoE on equity capital of the respective year.

This 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, 2013, after due public/shareholder consultation process. Hence, the claim of the petitioners does not violate any provisions of Electricity Act, 2003 and Tariff Regulations.

As regards to RoE being collected for payment of dividend and can't be retained, the petitioner submitted that utilization of RoE is at the discretion of DISCOMs. The 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. Hence, the claim of RoE by the Petitioners is legally valid. Therefore, the contention of the stakeholder in this regard is entirely misplaced and not tenable.

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. Methodology adopted for approval of Return on Equity has been detailed in ARR chapter of this Order.

ISSUE No. 17:Tariff Proposal for Metro Rail

Issue Raised by Stakeholder

The stakeholder disagreed with the tariff proposed for Metro Rail in the Petition. Further, the stakeholder proposed Metro Rail tariff of Rs 335 per kW/Month as fixed charges and Rs. 355/kVAh as energy charges similarly as of Kochi and Ahmedabad Metro.

The stakeholder requested the Commission to create sperate category for Metro Rail and provide exemption of charges such as State/Local taxes and duties/levies and tariff be provided at the least possible tariffs on "no-profit-no-loss basis"

Petitioner's Response

The Petitioners submitted that one should not merely compare the tariff in terms of energy charges and or demand charges on standalone basis rather the resultant Tariff, i.e., ABR need to be compared as it is the ABR which represent the actual landed cost per unit of energy consumption a consumer need to pay. The Petitioners submitted that while the Energy Charges and Demand Charges as approved for Gujarat-GMRCL Metro Rail appears to be substantially low, the ABR for Gujarat-GMRCL Metro Rail is substantially higher. This is because of the higher Fuel Adjustment Charges (FPPPA) and other charges which are not shown in the stand alone Tariff approved for Gujarat-GMRCL Metro Rail. The same can be validated from the Table 8-8 of Tariff Order Case No. 2033 of 2021 22 issued by GERC.

Commission's View

The Commission has created seperate tariff category for Metro Rail and determined tariff which has been detailed in Tariff Schedule of this Order.

ISSUE No. 18:Power Purchase Cost

Issue Raised by Stakeholder

The stakeholders submitted that the availability of power is much more against the requirement of power in spite of additional capacity created by the DISCOMs. Further, total backdown of power to the extent of 25,792 MUs needs to be properly scrutinized. Whether such backing down is in the State interest or whether such surplus power can be used in other State without any financial losses. The 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 stakeholders submitted that the surplus power should be offered to Railway on attractive rate and these rates will be greater than proposed rate of IEX. Further, night rebate for use of excess power by HT /EHT industries should be increased to 25% throughout the year. Thus, the surplus power during night hours will be utilized in State itself and the Petitioners shall earn additional revenue from Sale of Surplus power, which will reduce the revenue gap in ARR.

Further, the stakeholder submitted that there is huge power surplus in Madhya Pradesh and hence back down charges of around Rs 4,000 Crores are being paid to power generating station every year. Furthermore, the banking of power also causes payment of transmission charges and line losses.

In addition to above, the stakeholder submitted that MPPMCL is regularly adding PPAs to purchase non-conventional renewable energy more than requirement of RPO and high cost of thermal power purchase PPA from Adani Power has also been signed despite surplus power available with Petitioners while low-cost power from Reliance Power Chitrangi project is not being purchased which is against the public interest.

Petitioner's response:

The Petitioner submitted that the basis of the projections of the power purchase cost has been duly provided in the petition.

Based on the historical data, Petitioners have made forecasts of sales and have estimated energy requirement of Discoms by grossing up the sales with normative loss level as specified by the Commission. The energy requirement of DISCOMs has been further grossed up win Intra-state Transmission losses and Inter-state Transmission losses to arrive at the Ex-bus requirement. Similarly, the petitioners have also estimated the availability of energy. Considering the above estimations, the Petitioners have envisaged an energy surplus scenario Whereas during actual operation the demand projections of the licensees made for every 15 minutes block interval also varies from hour to hour, day to day, season to season basis and so do the loss level of the licensee. Further during actual operations, the availability of generators as considered in the ARR petition may or may not be available due to many reasons which are beyond the control of the distribution licensee. Further the actual energy requirement may remain more than what has been projected in the petition. 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 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. Hence 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 the Regulations of the Commission. However, we appreciate the view of stakeholder to consume more electricity from the licensees for more production and ToD rebate being provided in the tariff order is nothing but a special night tariff.

Further, the Petitioners submitted that they have taken the IEX rate of Rs.4.70 per unit for estimation of revenue calculation which is the result of weighted average of electricity sold on the exchange in the last 24 months only for those time blocks where power has actually taken under consideration which power was sold on the exchange at rates higher than the scheduled power rate for estimation of revenue from surplus energy. If there is a downward trend in the rates on IEX and it is anticipated that the rates received on IEX will be less than the prescribed power rate, then MPPMCL has to surrender the power to avoid any possible DSM penalty.

Petitioners submitted that the availability of surplus power depends on the factors such as demand situation of MP-State in MW, availability of surplus energy with MPPMCL in MW in time blocks, Demand-Supply position in the power sector etc. Hence, there may be surplus in some time blocks and deficit in some time block. Therefore, when there is no requirement of power, the generating stations are backdown. Further, it is noteworthy to mention that Petitioners does not have control over the availability of power generating stations and demand of the consumers.

As regard to purchase of renewable energy for RPO Obligation, it is submitted that DISCOMs are only following the applicable Rules, Regulations and Orders of the Ministry of Power, Commission and State and Central Government in this regard.

Regarding the Reliance Power, the petitioners hereby submits that MPPMCI, carried out the bidding process in FY 2006-07, under the Case-1 of Bidding Guidelines and Standard bidding document issued by Ministry of Power-Government of India. Reliance Power Limited (RPL) participated in the bidding process and agreed after negotiation for levelised tariff of Rs. 2.45 per unit. Accordingly, LOI was issued on 09th May, 2008. However, no PPA has been signed with RPL and the tariff of RPL could not be adopted by the Commission under section 63 of Electricity Act, 2003 for want of mainly execution of PPA with RPL Although, RPL was to setup a power plant in Chitrangi, in present Singrauli District of Madhya Pradesh but the same was not set up. It is felt that any objection about a power plant which has not been set up, at all, appears to be irrelevant.

Commission's View

The Commission after carrying out due diligence of the details submitted by the Petitioners and applying the merit order dispatch principle as per the provisions of MYT Tariff Regulations, 2021 has approved the Power Purchase Cost which has been detailed in ARR chapter of this order.

ISSUE No. 19:Estimation of Sales

Issue Raised by Stakeholder

The stakeholders submitted that the 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 pervious years data, which will indicate the difference in submission, proposed and actual sales.

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. Further, many consumers are under unmetered or stop defective meters and if actual consumption is considered the projection under this head shall result in addition of consumption. itself should add more. Moreover, the Petitioners position of DTR metering and metering of unmetered connections is very alarming.

The stakeholders submitted that the Petitioners have not considered any provisional sales to Metro Rail.

Petitioner's Response

Petitioners submitted that the basis of the projections of the sales are duly provided in the petition.

Commission's View

The Commission has analyzed the petitioners submission in regards to past years sales trends and growth rate and accordingly estimated the sales projections for FY 2023-24.The methodology adopted for projection of sales has been detailed in ARR chapter of this Order.

ISSUE No. 20:Determination of Category wise Cost of Supply

Issue Raised by Stakeholder

The Petitioners submitted that the consumer availing supply on EHT and HT only contribute 4 to 5% of the system losses, but their tariff are decided on average distribution losses. This cause unjustified burden on EHT and HT category of consumers. Therefore, its requested that the Commission decide the tariff on the basis of actual losses, contributed by that category of consumer.

Petitioner's Response

The "Determination of Category wise Cost of Supply" is addressed to the Commission. The Commission may provide appropriate views in this regard.

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 made available 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. 21:Interest and Finance Charges

Issue Raised by Stakeholder

The stakeholders submitted that interest and finance charges for project loans are to be claimed on Capital projects undertaken in the MYT period by the Petitioners and only approved CAPEX should be considered for allowing interest charges under this expenditure head.

The stakeholder submitted that more avenues for arranging competitive finance should be explored by the Petitioners for Interest and finance charges for working Capital. One such option could be inviting consumers to deposit electricity bill in advance for ensuing months also under the current provision of accepting advance at per prevailing interest on such deposits.

Petitioner's Response

The Petitioners submitted that that Interest and finance charges are approved as per CAPEX plan. Further, the Commission may provide appropriate views with regard to Interest on Working Capital.

Commission's View

The Commission has admitted the interest and finance charges as per the provision of MYT

Tariff Regulation, 2021 in this order and detailed the approach for approval of Interest & Finance Charges in ARR chapter of this order.

ISSUE No. 22:O&M Expenses of DISCOMs

Issue Raised by Stakeholder

The stakeholders submitted that DISCOMs are increasing unnecessary expenses in renting of vehicles ,increasing salary of employees etc. This can be reduced and burden of these should not be passed on agricultural consumers.

Further, the DISCOMs has demanded excess of Rs. 600 Crore towards Repair & maintenance expenses. Therefore, it is requested to the Commission that the proposed O&M Expenses, Employee Costs, Administrative & General Expenses, Repair and Maintenance Expenses, Capital Investment Plan, Scheme Wise Capitalization, CWIP, Fixed Assets Addition etc. needs to be verifying from other agency for its correctness.

Petitioner's Response

Petitioners submitted that the Operational and Maintenance Expenses in the petition have been claimed as per Regulation 36 of MYT Regulation, 2021.

Further, the estimation of R&M expenses is linked to the opening of Gross Fixed Assets (GFA) as per the Regulation 36.4 of the MYT Regulation, 2021. Further, the petitioners has estimated the revised R&M expenditure accordingly.

Commission's View

The Commission has allowed the O&M Expenses in accordance to the norms stipulated in the MYT Regulations, 2021 and its amendments thereof, which has been detailed in ARR chapter of this Order.

ISSUE No. 23:Increase in interest rates on Security Deposits of Consumers

Issue Raised by Stakeholder

The Petitioners have revised the interest rate on Security Deposits since last 2 years from 6.50% to 4.50%. The financial assistances availed by the industries from any financial institution ranging from 10% to 13%. The DISCOM's must be getting finance from different financial institutions at around the same rate of 10 to 13%. Therefore, its requested that the Commission should review and provide equal justice to Consumers & DISCOM's and revise the interest payable by DISCOM's on security deposits to around 10%.

Petitioner's Response

The Petitioners submitted that the rate of Interest on Security Deposit is governed by Madhya Pradesh Electricity Regulatory Commission (Security Deposit) (Revision-1) Regulations, 2009 and its amendment, therefore. As per the amendment dated 20 July, 2018, the interest on security deposit is to be paid as per Bank Rate prevailing as on 1" April. Further, the Petitioner does not have material control on the rate of interest on Security Deposits of the consumers.

Hence, the request of the stakeholder cannot be entertained by the Petitioners.

Commission's View

The Commission has considered the interest rate on security deposit as per the provision of MYT Tariff Regulations, 2021 read with MPERC (Security Deposit) (Revision-1) Regulations, 2009 and its amendment.

ISSUE No. 24:Rebate for LV-4 industrial Consumers

Issue Raised by Stakeholder

The stakeholder submitted that under LV-4 category, the rebate of 30% on fixed and energy charge should be extended for contract demand upto 25 HP-35HP, presently which is upto 20 HP. Further, requested the Commission to revoke the conditions of FY 2016-17 tariff order in view to provide support to micro and small-scale industries.

Petitioner's Response

The Petitioners submitted that the proposed alternation in the tariff category will have substantial financial impact on the DISCOMs.

Commission's View

The Commission has decided to continue with existing rebate of 30% on fixed and energy charges upto 20 HP load under LV-4 Tariff Category.

ISSUE No. 25:Reduction in Minimum Demand Charges from 100KVA to 50 KVA FOR 33 KV Consumer in HV3.1 Category

Issue Raised by Stakeholder

The stakeholder submitted 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.

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.

Petitioner's Response

The Petitioners submitted 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 100kVA to Max. 1000kVA. Further, the Petitioner disagree that the good & stable voltage is not available to HT Consumers. Furthermore, the stakeholders submission is related to amendment in Supply Code and not related to present proceedings for determination of tariff for FY 2023-24. The Commission may provide appropriate views in this regard.

Commission's View

The matter raised by the stakeholder pertains to the provision under the MPERC Supply Code, 2021 and is to be dealt in accordance to the provision of the said Regulations.

ISSUE No. 26:Domestic LV 1.1

Issue Raised by Stakeholder

The stakeholder suggested that at present there are no consumers in Domestic LV 1.1. If any such consumers are present, the Petitioners do not bill according to tariff schedule under this category. Therefore, the Commission is requested to direct petitioner to remove this category.

Petitioner's Response

Petitioners submitted that in the Tariff Policy / National Electricity Policy issued by the central government has provisions related to special concession on consumption upto 30 units to economically weaker consumers. LV 1.1 category.

Commission's View

The Commission has retained the existing tariff category and provisions in this Order in accordance with Tariff Policy / National Electricity Policy.

ISSUE No. 27: Fixed charges for Domestic consumers

Issue Raised by Stakeholder

The fixed charges for Domestic consumers are considered every 15 units of consumption per month or part thereof equal to 0.1 KW of load. This should be changed to per unit consumption.

Further, according to the current slab if consumption during the month is 150 Units the consumer has to pay Rs. 125, if the Unit consumption increases by 1 unit i.e., 151 Units per month the Consumer has to pay Rs 297. This one unit is costing fixed charge of Rs 172 which is unviable. And stakeholder requested the Commission to revise this slab.

Further, the fixed charges on domestic consumers should be abolished, because only 25 % of home appliances are used.

Petitioner's Response

The Petitioners submitted that they are billing the consumers as per tariff order. Further, suggested the stakeholder to refer note no.2 written under LV 1.2 tariff category where the instruction has been given regarding billing of fixed charges. Further, submitted that the billing of fixed charges on per unit basis is not justified as per the concept of two-part tariff.

Commission's view
The Commission has decided to retain the existing provisions in this Tariff Order.

ISSUE No. 28: Abolishing Minimum charge for Temporary Domestic Connection

Issue Raised by Stakeholder
The Petitioners are recovering excess revenue from temporary connection. For construction of own house the consumer has to pay 25% extra from the regular tariff and Rs 1000/- per connection per month towards energy charges for temporary connection as Minimum Charges.

Further, for commercial temporary connection the consumer has to pay 25% extra from the regular tariff but there is no as such Rs 1000/- Minimum Charges. Therefore, this Minimum Charges should be abolished.

Petitioners' Response
The billing for temporary connection for construction of own building is being done as per tariff Order which is 1.2 times higher than the normal tariff. Further, billing of minimum charge for this type of connection is justified as at present the fixed charges are not sufficient to recover the fixed cost of the licensee.

Commission's view
The Commission has noted the submission made by stakeholders and reply submitted by the Petitioners. The Commission has abolished Tariff Minimum Charges for LT Domestic category in this Order.

ISSUE No. 29: Energy Charge and fixed charge for un-metered rural domestic connection

Issue Raised by Stakeholder
The stakeholder submitted that as per the computation, the consumption for 500 Watt works out to 48 units and 48 units slab is for urban and rural both but rural areas have less electricity consumption against urban area.

Petitioner's Response
The Petitioners Submitted that the slab of 75 units has been fixed by Commission which is justified on the basis of consumption. Further, it should be increased keeping in view the increase in consumption from time to time.

Commission's View
The Commission has decided to retain the existing slab and provisions in this Order.

ISSUE No. 30:Pension Terminal Benefit Fund

Issue Raised by Stakeholder
The stakeholder submitted that the Commission in order of P.No.13/2018, directed the DISCOMs to create an escrow account and to deposit the pension amount in Terminal Benefit Trust fund. Further, the Commission in tariff order FY 2022-23 directed DISCOMs to deposit

Rs 210 Crore in Pension and Terminal Benefit Trust Fund.

In the instant petition the Petitioners have not provided any details regarding deposition of amount proposed for FY 2023-24.

The stakeholders further submitted that Commission in order of P.No.13/2018, directed MPPTCL within three months from the date of issue of order to conduct an actuarial valuation to determine size of the Terminal Benefit Trust Fund required to make Terminal Benefit Trust self-sufficient for discharging the Pension and Terminal benefit liabilities in order to secure future of the pensioners as provided in the Transfer Scheme Rules but MPPTCL in filed P. No 84/2022 have not provided any details about actuarial valuation of Funds. Therefore, the Commission is requested to initiate panel action against MPPTCL and DISCOMs for non-compliance of orders of Commission to create and make sufficient pension fund.

Petitioner's Response

The Petitioners submitted that as directed by the Commission in tariff order for FY 2022-23, the Petitioners are depositing fund under TBT. 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 Petitioners submitted that presently, the actual Pension and Terminal Benefits of all the Companies, ie, unbundled entities of MPSEB, are being allowed in the MYT and True-up of MPPTCL on "Pay as you go" under the transmission charges. Further, the Petitioners submitted that MPPTCL shall be submitting the copy of actuarial valuation before the Commission and the Petitioners shall abide by the Order of the Commission.

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 FY 2023-24 which is detailed in ARR chapter of this Order. The Commission directs the Petitioners to deposit the amount against Terminal Benefit Trust Fund allowed in this Tariff Order.

ISSUE No. 31:Supply Affording Charges

Issue Raised by Stakeholder

The stakeholder submitted that the industrial consumers in LV-4 category while availing a new connection from DISCOM's are required to deposit the supply affording charges as directed in the Supply Code. Further, if contact demand reduces and thereafter once again increases the contract to the original level of earlier sanctioned contract demand, DISCOMs are desiring to deposit fresh supply affording charges for the increased contract demand. This duplicate deposit must be removed and if the new contract demand is above the original sanctioned contract demand it is acceptable to be paid.

Petitioner's Response

The Petitioners only follows the provision of Supply Code. Further, the above objection is related to amendment in supply code and not related to present proceedings for determination of Tariff for FY 2023-24.

Commission's View

The matter raised by the stakeholder pertains to the provision of MPERC Supply Code, 2021 and not to tariff determined in this order.

ISSUE No. 32: Cost of Transformer and line for LT connections

Issue Raised by Stakeholder

The stakeholder submitted that small and medium industries are being developed in the context of the developing industrial environment of the State. The cost of transformer and line is taken from the industry by the power companies on the application submitted by the low-tension power consumer or small-scale industry for expansion or for new connection. This expenditure is of lakhs of rupees, the transformer installed becomes the property of the electricity companies and many other electricity connections are given through it. It would be appropriate that this expenditure be adjusted in the bills for the next 12 months.

Petitioner's Response

The Petitioners submitted that the Regulation 3.9 of the Madhya Pradesh Electricity Regulatory Commission Recovery of Expenses and Other Charges for providing Electric Line or Plant used for the purpose of giving Supply) (Revision-II) Regulations, 2022 stipulates that Distribution Licensee have a right to use the network for supplying electricity to any other person by tapping unless such supply is detrimental to consumer who had borne the full cost of such network.

Commission's View

The matter raised by the stakeholder pertains to the provision under the Madhya Pradesh Electricity Regulatory Commission Recovery of Expenses and Other Charges for providing Electric Line or Plant used for the purpose of giving Supply), Regulations, 2022 and not to tariff determined in this order

ISSUE No. 33:Payment of Subsidy

Issue Raised by Stakeholder

The stakeholder submitted that Commission in P.No.54/2021 passed an order in which if advance subsidy is not provided by the State Government in accordance provisions under Section 65 of the Electricity Act, 2003 then DISCOM should issue the bill to consumers as per tariff order to avoid hardship of financial problem.

Further, in accordance with section 65 of the Electricity Act 2003, the Commission, against P.No. 54/2021 have made provision that in case of grant of subsidy on electricity supply to Consumer(s) the State Govt. have to pay timely subsidy amount and in case of default there is provisions for action in accordance under Section 142 of the Electricity Act, 2003.

Petitioner's Response

The Petitioners submitted that the issue raised by the stakeholder is not the subject matter of instant petition as instant petition has filed for determination of ARR and Tariff Proposal for FY 2023-24 under the tariff principles laid down in the MYT Regulations, 2021

Commission's View

The matter raised by the stakeholder pertains to the provision under the MPERC (Manner of payment of subsidy by the State Government) Regulation, 2007 and is to be dealt accordingly.

ISSUE No. 34:Rural Area / Agricultural Connection

Issue Raised by Stakeholder

The stakeholder submitted that DISCOMs are failing to provide quality electricity regularly, feeder separation work is incomplete still, there are voltage problem with tripping and conditions of transformer, poles, and wires are not upto mark. Further, the new connections are not provided by the Petitioners in rural area.

Petitioner's Response

The Petitioners submitted that the approved feeder separation work has been completed under the feeder separation scheme in rural areas and interruption in power supply in feeders is only due to faults or sudden excessive load increase. As soon as it comes to notice of the Petitioners the power supply is restored by doing rectification work or making alternative arrangement. Further, new connections have regularly been provided by DISCOM under various scheme.

Commission's View

Commission has allowed the capital expenditure for the DISCOMs for improvement in infrastructure works and the DISCOMs are required to ensure the adequate supply and services to consumers.

ISSUE No. 35:Applicability of order

Issue Raised by Stakeholder

The Stakeholder submitted that True -up order for FY 2021-22 is required to be passed by Commission before admission of ARR for Retail Supply Tariff of DISCOMSs for FY 2023-24. Further, the stakeholder has submitted that it is violation of APTEL direction.

Petitioner's Response

The Petitioners submitted that nowhere in the MYT Tariff Regulations, 2021 it has been specified that the true-up order is required to be passed first before admission of ARR Petition. The Regulation 7.2 of the MPERC (Terms and Conditions for Determination of Tariff for

Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 dated 03rd December 2021 mandate the DISCOMs to file a revised ARR Petition and Tarif Proposal for FY 2023-24 along with True-up of FY 2021-22. Further, in many States there is no sperate order for True-up, rather there is a single Tariff Order which capture True-up as well as Retail Supply Tariff for ensuing year. Hence, the argument of the stakeholder suffers from lack of understanding and does not hold any merit.

Further, the liabilities of past True-up need to be considered in the tariff determination of the ensuing year, as, non-consideration of the same will result in under-recovery 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 and unnecessary tariff burden on consumers on account of carrying cost over such unrecovered gap. The Bombay High Court in its Judgement in Maharashtra State Electricity Board Vs Maharashtra State Electricity Regulatory Commission reported in AIR 2004 Bombay 294, 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 past liabilities in the tariff determination of subsequent years. Therefore, the claim of the Petition is valid, and the contention of the Stakeholder does not hold any merit. The stakeholder has merely stated that the inclusion of True-up demand in ARR of ensuing year is in violation of APTEL judgement, however, the stakeholder has not provided the details of such APTEL judgement which has been violated by the Petitioners.

Commission's View

The Commission has noted the submission made by the stakeholder and reply submitted by the Petitioners. The Commission has determined the True-up of ARR for FY 2021-22 as per provision of MYT Regulations, 2015 and amendment thereof.

ISSUE No. 36:Withdrawal of Bill

Issue Raised by Stakeholder

The Stakeholder submitted that the DISCOMs have withdrawn the electricity bill of Rs 5,000 Crores for 89 lac consumers in October, 2020 vide Energy Ministry letter no. 6021/2020/13 dated 27th August, 2020 and were also not shown as arrear from November 2020 onwards. These bills along with arrear has not been shown as bad debts while filling this true-up petition and in earlier true-up petitions for FY 2019-20 & FY 2020-21, DISCOMs have suffered huge losses due to withdrawal of these electricity bills payable in October, 2020 and ultimately waived off in April, 2022.

Petitioner's Response

The Petitioners submitted that it has noted the submission of the stakeholder in this regard. Further, it is submitted that as per MYT Tariff Regulations actual bad debt write off is allowed to be considered in true-up of any year. Accordingly, the petitioner has filed a true-up petition wherein only actual bad debt write off has been shown. However, any provision made on account of bad debt is shown in the audited accounts of the Licensee.

Commission's View

The Commission has not considered any bad debt towards demand withdrawal, or any amount waived off under the government schemes in this order.

ISSUE No. 37: Theft of Electricity

Issue Raised by Stakeholder

The stakeholder submitted that DISCOMs have failed to reduce the theft of electricity, rather it has been observed that due to minor discrepancies cases of theft are made against small consumers.

Further the theft of electricity is never shown by the Petitioners in their submission. Therefore, it is requested to the Commission to direct the Petitioners to create separate item in the petition for losses on account of theft of electricity as the Petitioners are presently the adjusted these losses against the transmission and distribution loss, which is not appropriate.

Petitioner's Response

The Petitioners submitted that efforts are made by them to stop theft of electricity theft. Further, the Petitioners are providing incentive amount to the individuals for reporting of theft of electricity.

Commission's View

The Commission directs the petitioners to enhance its efforts towards reduction in commercial losses on account of theft of electricity and also to increase the billing efficiency.

Comments Received from Shri. Nirmal Lohia and Dr. P G Najpande

Compliance of the Order of Hon'ble Supreme Court

Issue Raised by Stakeholder

The stakeholder has stated that directions / order given by the Hon'ble Supreme Court in civil Appeal No. 1933/2022 on 23.11.2022 (at para 131) has not been complied by the Commission. Proceedings of Petition No. 84/2022 be stayed until the necessary Regulations are framed by the Commission.

Petitioner's Response

Petitioner Stated that the query pertain to the Commission.

Commission's View

The directions of Hon'ble Supreme Court in the matter are duly complied and relevant Regulations have been notified within the stipulated timeline.

Other Comments Received from Shri. Nirmal Lohia

ISSUE No. 1: Authorization letter not been filed by Shri. B.P Patel along with Petition

Issue Raised by Stakeholder

Stakeholder stated that Petition No. 84/2022 has been filed on 30.11.2022 and Shri. B.P Patel has no authority on this date 30.11.2022 to file and sign Petition before the Commission on behalf of East DISCOM. No authorization letter has been filed by Shri B.P Patel along with Petition.

Shri B.P Patel has been appointed OIC by the East DISCOM on 27.12.2022 for signing and filing of the Petition.

Shri Manoj Dubey is a senior Advocate therefore he cannot appear without associate/ junior Advocate. Further, any vakalatnama signed by unauthorised person / B.P Patel is also null and void.

Therefore, Stakeholder requested the Commission that Petition No. 84/2022 be dismissed with cost along with canceling public hearing held on 23rd , 24th and 25th of January, 2023.

Petitioner's Response

Petitioner stated that Shri BP Patel working as G.M (Commercial) II O/o CGM (Commercial) is authorized to act as OIC in the case.

Commission's View

The Commission has taken the cognizance on submission made by the Petitioner that Shri B.P Patel is working as G.M (Commercial) of the company and is duly authorized to act as OIC in this petition.

ISSUE No. 2: GoMP to implead as Non- Applicant

Issue Raised by Stakeholder

Stakeholder stated that GoMP is necessary party in the Petition, so Petitioners be directed to implead GoMP as non-Applicant.

As, Under Section 152 of Electricity Act, 2003 GoMP has power to amend only compound amount but unauthorizedly GoMP has given 100% rebate on interest amount and 20% to 50% rebate on tariff / billing amount from year 2010 onwards. So, rebate amount given from year 2010 to 2022 should be deducted. Power Management Company has not supplied the figure of rebate till today despite RTI Application filed on 26.12.2022.

Petitioner's Response

Petitioners have submitted no comments in this regard.

Commission's View

The issue raised by the stakeholder does not pertain to this tariff order.

ISSUE No. 3:Advertisement to Consumers

Issue Raised by Stakeholder

Stakeholder stated that there is no advertisement policy in East DISCOM, So expenses of advertisement by petitioner should not be accepted by The Commission. Further, the advertisement should be conveyed to consumers as per letter no. EZ/Comml./Rev/384. Jabalpur, dated 21.06.2022 of East DISCOM.

Petitioner's Response

Petitioner stated that the advertisement is for awareness of the consumers to get benefit out of the schemes and policies and to reach the end consumers. Hence in this regards the prudent advertisement cost needs to be allowed.

Further, the advertisements on behalf of the East DISCOM has been done as per direction of the Commission to avail the benefits of the policy to consumers/ any information to the consumers. The image provided by the objector is of advertisement for creation of awareness in public regarding consumer grievance redressal forum established by the discoms in line with the MPERC (Establishment of forum and electricity ombudsman for redressal of grievances of consumer) (revised) Regulations 2021.

Commission's View

The issue raised by the stakeholder does not pertain to this tariff order.

ISSUE No. 4:**Financial statement**

Issue Raised by Stakeholder

Stakeholder stated that Petition No. 84/2022 was filed before Commission on 30.11.2022. BOD of East DISCOM has not approved the financial statements of accounts till 30.11.2022.

Petitioner's Response

Petitioner stated that the ARR & Tariff Petition has been filed in accordance with MYT Regulations, 2021.

Commission's View

The Commission has allowed the ARR as per provisions of the MYT Regulations, 2021 and details submitted by the Petitioner.

ISSUE No. 5:**Appointment of MD**

Issue Raised by Stakeholder

Stakeholder stated that, all the Petitioner company MDs are appointed contrary to the provision of A.O.A., GoMP order dated 14.02.2020 and notice in WP No. 20148 of 2022 on 09.09.2022.

Petitioner's Response:

Petitioners have submitted no comments in this regard.

Commission's View

The issue raised by the stakeholder does not pertain to this tariff order.

ISSUE No. 6:Honest Consumers

Issue Raised by Stakeholder
Stakeholder stated that honest consumers cannot be punished.

Petitioner’s Response
Petitioners have submitted no comments in this regard.

Commission’s View
The issue raised by the stakeholder does not pertain to this tariff order.

ISSUE No. 7:Vacant Post in Commission

Issue Raised by Stakeholder
Stakeholder stated that One post of Member of Commission is vacant from 02.02.2023, inspite of GoMP has notified the vacant post on 19.09.2022.

Petitioner’s Response
Petitioners have submitted no comments in this regard.

Commission’s View
The issue raised by the stakeholder does not pertain to this tariff order.

ISSUE No. 8:Physical mode of hearing

Issue Raised by Stakeholder
Stakeholder stated that appeal can be heard through virtual mode but not Petition because Petition involves mixed of question of facts and law. Petitioner has to be cross examined. Further, stakeholder should be permitted to cross examine all the Petitioners.

Hon’ble APTEL has started physical mode of hearing from 01.07.2022. Therefore, the Commission should conduct stakeholder hearing through physical mode one by one and oblige.

Petitioner’s Response
Petitioners have submitted no comments in this regard.

Commission’s View
The Commission is of the opinion that technological set ups established during pandemic may be continued to facilitate and maximize participation of parties and stakeholders before the Commission.

Annexure-1 (List of Stakeholders)

LIST OF STAKEHOLDERS- EAST DISCOM

Sr. No.	Name & Designation	Address
1	Shri Ravidatt Singh, Pradesh Mahamantri	M/s. Rastriya Kisan Majdur Mahasangh, Sirmour Road, Near Khutehi Block Office, Panchvati Petrol Pump, Sirmour Road, Rewa
2	K.K Agrawal	Bhartiya Krishak Samaj
3	Shri Somnath Kushwaha	M/s. Rastriya Kisan Majdur Mahasangh,sambhag Rewa
4	Shri Om Narayan Kushwaha	M/s. Rastriya Kisan Majdur Mahasangh, Rewa
5	Shri D R Jeswani	M/s. Mahakaushal Udyog Sangh, 22, Industrial Area, Richhai, Jabalpur 482010
6	Jabir Khan Sr. GM (E&I)	M/s. Prism Johnson Ltd. Vill. Mankahari, P.O. Bathia, Distt. Satna 485111
7	Shri Deependra Sharma	M/s. Birla Corporation Ltd., Satna Cement Works, PO Birla Vikash, Satna
8	Shri Ashish Asopa	M/s. Jaykaycom (Cement) Ltd., Village Harduwakan, Teh. Amanganj, Dist. Panna
9	The Secretary	M.P. Rajya Vidyut Mandal Pensioners Association, H No. 21/329, Sant Kamvaram Ward, Sidhi Colony, Sagar, 470002, MP
10	Shri K K Agrawal	Flat no 101 , Paragati Tower , Mahanda Jabalpur, MP
11	Shri P.S. Yadav	M/s. M.P. Vidyut Mandal Pesioners Association, 139, JDA Scheme, 213, Nehru Nagar, Bajna Math, Jabalpur 482003, MP
12	Shri C.L. Swarnkar	Neha Nagar, Maroniya, Sagar, MP
13	Shri Anil Kumar Pandey	427, Ward No. 15, Saket Dham Colony, Makroniya Sagar, 470004, MP
14	Shri Devendra Mehta	1084, Sanjeevni Nagar, Jabalpur, MP
15	Shri Santosh Tiwari	Nayagaon Society, Rampur, Jabalpur, MP
16	Shri D.S. Chouhan	Chandni Enclave, HIG-1, 1605, South Civil Lines, Jabalpur, MP
17	Shri Shailendra Mahajan	A/6, Om Niketan, Shakti Nagar, Jabalpur, MP
18	Shri G.K. Mishra,	1308, Yadav Colony, Jabalpur, MP
19	Shri Amit Kumar Shrivastava	102, Rajul Flats, Barchul Nagar, Jabalpur, MP
20	Shri Santosh Shrivastava	1795Ratan Colony, Narmada Road, Jabalpur, MP
21	Shri Anand Kumar Tiwari	M.P. Power Generating Co. Ltd, Jabalpur, MP
22	Shri F.D. Thakur	11, Sudha Vihar, Rampur,
23	Smt. Ashabai Shrivastava	Jagriti Nagar, Gotegaon, Distt. Narsinghpur, MP
24	Smt. Mayabai Pagare	Rudra Ward Gotegaon, Distt. Narsinghpur, MP
25	Shri Abhay Khare	M.L. 8, Manavlok Society, Shakti Nagar, Jabalpur, MP
26	Shri Shyamlal Raghuvanshi	Kherapati Mandir Ke Pass, Shashtri Ward, Kareli, Distt. Narsinghpur, MP
27	Shri Arun Kumar Khare,	Near Shard Tent House, Housing Board Colony, Narsingpur 487001, MP
28	Shri G.P. Nayak,	Rudra Ward, Gotegaon, Distt. Narsinghpur, MP
29	Shri Vinay Kumar Bhikonde	93, Indrapuri Colony, Jabalpur, MP
30	Shri Shravan Kumar Namdeo	Ambedkar Ward, Kareli Distt. Narsinghpur, MP
31	Shri C L Kahar	Patel Ward, Gotegaon, Distt. Narsinghpur, MP
32	Shri Satish Gupta	H no. 23/119 Housing Board Colony, Trimuthy Nagar Narsingpur, MP
33	Moh. Iqbal sing patel	Shivaji Nagar, Mahendra war colony, district, narsinghpur. MP
34	Shri Harprasad Kahar	Thakur baba ward, Niranjan Singh colony nearby, Mote Gaon dist, Narsinghpur, MP
35	Shri ganesh ku. Chaturvedi	Shastri Ward, Bhirna Road Dist, Narsinghpur ,MP
36	Shri sudhir ku. Panday	884/7 Subheksha Shakti Nagar, Jabalpur, MP
37	Shri chunni lal Kurmi	Jagriti Nagar, Gotegaon, Distt. Narsinghpur, MP
38	Shri D L Chaudhary	Shastri ward district, Narsinghpur MP
39	Shri Sant Kumar Sharma	P.G. College ke Samne, Narsinghpur, MP
40	Dr. P G Najpande	Raj krishna Smriti, 842, North Civil Lines, Jabalpur, MP
41	Shri Rajendra Agrawal	1995/A, Gyan Vihar Colony, Narmada Road, Jabalpur 408068. MP
42	Shri.Nirmal Lohia, Advocate	Taldarbaja, Tikamgarh
43	Shri Mangalram mahavar	972 Mandala Road , Bilahari, Distt Jabalpur, MP
44	Shri Sitaram Kevat	Jabalpur, MP

LIST OF STAKEHOLDERS- WEST DISCOM

Sr. No.	Name & Designation	Address
1	Sri Ghanshyam Patel	Rashtriya Kisan Majdur Mahasangh, Division Indore
2	R C Somani on behalf of Association of Industries	M/s. Association of Industries, Dewas, 1/B/1, 1B/2A, I.S. Gajra Industrial Area, No. 1, A.B. Road, Dewas 455001
3	Shri Yogesh Mehta & R C Somani	M/s. Association of Industries, Udyog Bhawan, Pologround, Indore 455001
4	R C Somani on behalf of Oasis Distillries	M/s. Oasis Distillries Limited, H No. 102, B-2 Metro Towers, Vijay Nagar, Indore
5	R C Somani on behalf of Indra Industries	M/s. Indra Industires Ltd. 406 Airen Heights, Opp. Orbit Mall, AB Road, Indore
6	R C Somani on behalf of Kashyap Sweetner	M/s. Kasyap Sweetners Limited, Chetanya Gram, Badnawar, Dist. Dhar (MP) – 454 660.
7	R S Goyal on behalf of Mandi Vyapari Sangh	M/s. Mandi Vyapari Sangh, C/o Harman Cottex, Vyapari Vishranti Bhawan, Krishi Upaj Mandi Parisar, Bistan Road, Khargone, Distt. Khargone-451 001
8	R S Goyal on behalf of Diveel Cotton	M/s. Diveel Cotton Industires, Khetia, Pansemal Road, Distt. Barwani
9	R S Goyal on behalf of SMO Industries	M/s. S.M.O. Industries, Indore Road, Kasrawad, Tahsil - Kasrawad, Distt. Khargone 451 228
10	R S Goyal on behalf of Sancheti Cotton	M/s. Sancheti Cotex, Pansemal Road, Khetia, Distt. Barwani
11	R S Goyal on behalf of Madhyanchal Ginners & Traders Association	M/s. Madhyanchal Cotton Ginners & Traders Association, C/o. Harman Cotex, Opp. Dejla Devda Colony, Bisthan Road, Khargone
12	R S Goyal on behalf of Satyam Industries	M/s. Satyam Industries Ginning & Pressing Factory, Pati Bokrata Road, Khetia, 451881 Tah. Pansemal Distt. Barwani
13	Shri S.M. Jain, President	M/s. All India Induction Furnaces Association M.P. Chapter, C/o. Venus Alloys Pvt. Ltd., 67, Industrial Area, Mandsaur - 458001 (M.P.)
14	Shri Pawan Singhania and Shri Sandeep Jain	M/s. Rathi Iron & Steel Industries Ltd. 103, Laxmi Tower, 576, M.G. Road, Indore
15	Shri Pawan Singhania and Shri Sandeep Jain	1.M/s. Jaideep Ispat & Alloys Pvt. Ltd. 103, Laxmi Tower, 576, M.G. Road, Indore 452001
16	Shri Pankaj Bansal, Managing Director	M/s. Shivangi Rolling Mills Pvt. Ltd. 305-306 3rd Floor, Airen Heights, Bnear Pakiza, A.B. Road, Indore
17	Shri M.C. Rawat, Secretary	The Madhya Pradesh Textile Mills Association, Jal Sabhagrah, 56/1, South Tukoganj, Indore 452 001
18	Shri Hasmukh Jain Gandhi	M/s. Cold chain Industries Association M.P. Cold Storage Association, 211, Devdhar omplex, Chhavni, Indore 452 001
19	Shri Samarpan Mahajan Kalindi Fibers	M/s. Kalindi Fibers, Survey No. 151-152 Khaighat - Manawar Road, Dharampuri, Distt. Dhar
20	Shri M U Nagori	M/s. Vippy Industries, 28, Industrial Area, Dewas
21	Shri Sanjay Vyas	malwa oxygen & industrial gases pvt. Ltd.
22	Shri Pankaj Jain, Taparia Industries	M/s. Taparia Pvt. Ltd., Pandhana Road, Khandwa
23	Shri Hasmukh Jain Gandhi on behalf of Gandhi Fertilizers	M/s. Gandhi Fertilizeres P Ltd. 211, Devdhar omplex, Chhavni, Indore 452 001
24	Shri Ajay Porwal	M/s. Porwal Auto Components Ltd (Solar Division), Ploy No. 209, Sector-I, Pithampur District Dhar (MP)
25	Shri Ajay Porwal on behalf of Grasims Industries	M/s. Grasim Industries Ltd. (Chemical Div.) Nagda Ujjain 456 331
26	Shri Ajay Porwal on behalf Tirupati Starch & Chemicals	Tirupati starch & chemicals ltd.
27	Shri Ajay Porwal on behalf of M/s Vodaphone Idea	M/s. Vodaphone Idea Ltd., Electricity No Problem, Indore
28	Shri Sanjeev Jain on behalf of Airtel	M/s. Bharti Airtel Limited 3rd & 4th Floor, Scheme No. 54 A.B. Road, Metro Tower, Near Vijay Nagar Square, Indore- 452010 MP India
29	Lt Gen. Dr SP Kochhar	COAI, 14 Bhai Veer Singh Marg, New Delhi, 11001

Sr. No.	Name & Designation	Address
30	Shri Krishnkant Mandlia, Shri Ravindra Tiwari, Shri Yogesh Lodha	M/s. Indus Towers Limited,H-4th Floor, Metro Tower, Scheme No. 54, A.B. Road, Indore 452010
31	Shri Lakshman Singh Chouhan	M/s. Vidyut Mandal Pensioners Association, Urja Parisar, Pologround, Indore 452003
32	Shri K.D. Mishra	M.P. Vidyut Mandal Pensioners Association, Indore Kshetra, Indore Branch, Burhanpur
33	Shri Arjun singh sisodiya	Vidyut mandal pensioner association, Dhar
34	Shri K R Patel	Santosh Nagar, Khandwa
35	Shri Abdul Gani	Moghar Road, LG Showroom Near
36	Shri Mohd. Mansoor Ahmad	Imlipura Zulfikar Gali, Khandwa
37	Shri Chaukanta Soni	108 Krapakunj Srishti Jwelors, Khandwa
38	Shri Amin Ul Huq	Nagchun Road, Housing Board Colony, Khandwa
39	Shri Arun Kumar Borale	Vidyut Nagar , Khandwa
40	Shri Keshav Lal Gupta, Mahamantri	Bijli Karmchari Sangh, Mp
41	Shri Laxman Singh Chouhan	30 Kanchan Nagar Mandariya Khandwa
42	Shri Jagdish Prasad	B-9 Ramnagar Colony Jaswadi Road Khandwa
43	Shri Ashok Soni	Village Jaswadi Dist Khandwa
44	Shri Bhagirath Kushwaha	House No. 154 Shivpuram Phase 3 Khandwa
45	Shri Premchand Yadav	Santoshi Mata Mandir Campus Gali No. 5
46	Shri Kailashchand Soni	Kishor Nagar LIG 66 Khandwa
47	Shri Bhimsingh Chouhan	Aswathi Chowk Jail Road Khandwa
48	Shri Govind Tirole	Village Jaswadi Dist/Tehsil East Niward Khandwa
49	Shri S F Sisodiya	Mukam Post K Hazari Tehsil/Dist. Khandwa
50	Shri Pradeep Kumar Shukla	Pardeshipura Khandwa
51	Shri Gajraj Singh Darbar	316 Pranam City Phase 1 Khandwa
52	Shri Harbajan Singh Raghuvanshi	79 Raghuvanshi Niwas Ramnagar Jaswadi Road Khandwa
53	Shri Vijay Kumar Barol	LIG Colony Khandwa
54	Shri Manohar Amrit	Malviya Colony Khandwa
55	Shri Shiv Kumar Billore	152 Navkar Nagar Khandwa
56	Shri Lokha Yadav	Plot No. 8 Joshinagar Near Se Office Khandwa
57	Shri Tukdu Chouhan	Village Shukvi Tehsil Khalwa Dist. Khandwa
58	Shri M.R. Patidar	M.P. Vidyut Mandal Pensioners Association, Distt, Khargone
59	Shri Dilip Baglekar	108, Vidya Nagar, Anandnagar, Khandwa
60	Shri Parmanand Rathore	10, Vidya Nagar, Lal Chowki, Khandwa
61	Shri Balkrishan Verma,	Lig-103, Kishore Nagar, Khandwal
62	Shri Sanjay Agrawal	970, Manak Chowk, Mhow
63	Smt. Sandhya Agrawal	970 Manak Chowk Mhow

LIST OF STAKEHOLDERS- CENTRAL DISCOM

Sr. No.	Name & Designation	Address
1	Shri Neeraj Mandloi (I.A.S)	The Government Of MP, Urban Development & Housing Department, Room No. A-204, 2nd Floor, Vallabh Bhawan, Bhopal
2	The Commissioner, BMC, Bhopal	Municipal Corporation, Bhopal, Mata Mandir, Harshvardhan Complex, Bhopal
3	Shri Shobhit Tandon & Shri Manish Gangarekar	M/S. Madhya Pradesh Metro Rail Corporation Ltd. 2nd Floor, Smart City Development Corporation Building, Kalibadi Road, BHEL, Sector, A, Barkheda, Bhopal. MP
4	Shri Vipin Kumar Jain	M/S. M.P. Small Scale Industries Organisation, E-2/30, Mahavir Nagr, Arera Colony, 462 016
5	Shri Amarjeet Singh	M/S. Govindpura Industries Association, Association Complex, Industrial Area, Govindpura, Bhopal 462 023
6	Shri C B Malpani	M/S. Association Of All Industries, Mandideep, Plot No. AM-19, Sector-B, Industrial Area, Mandideep Distt. Raisen

Sr. No.	Name & Designation	Address
7	Dr. R S Goswami	M/S. Federation Of MP Chambers Of Commerce & Industry, Udyog Bhawan, 129 -A, Malviya Nagar, Bhopal 462003
8	Shri Anil Agrawal	M/S. Laghu Udyog Bharti, Special Industrial Area, Govindpura, Bhopal
9	Shri S Pal	M/S. Vardhman Textile Ltd. A1-A6, Industrial Area-II, Satlapur, Mandideep Distt. Raisen
10	The Director, Om Smelter, Gwalior	M/S. Om Smelters & Rollers Pvt. Ltd., Gram Bharthari, Tehsil Chinour, Jhansi Gwalior Road, Distt. Gwalior
11	The Director, Satrang Steels & Alloys	M/S. Satrang Steels & Alloys (P). Ltd., Plot No. 7, New Industrial Area No. 2, Mandiddep, Distt. Raisen
12	Shri Nitin Chansoria, Jio Reliance Ltd.	Jio Reliance Ltd. DB City Mall, 3rd Floor Office Block, MP Nagar, Bhopal 462011
13	Shri Tilak Raj Dua	M/S. Digital Infrastructure Providers Association, 2nd & 3rd Floor, 7 Bhai Veer Singh Marg, Gole Market, New Delhi
14	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
15	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
16	Er. V.K.S. Parihar	M/S. United Forum For Power Employees & Engineers, Bhopal
17	Shri Ashok Kumar Gupta,	M/S. Vidyut Pensioners Hit Rakshak Sangh H No. 20, Vardhman Green Park Colony, 80 Feet Road, Ashoka Graden Bhopal
18	Shri A.R. Sharma	C-21, Harishankarpuram, Laskar, Gwalior
19	Shri Ravi Bhushan	206, Lalchand Colony, Bahadurgarh, Bina
20	Shri A.K. Mishra,	G-2, Parle Paradise, 57- Scheme No. 8, Vashali Nagar, Jaipur 302021
21	Shri Mananak Ram Raghuvanshi	Sirpur
22	Shri Ramshankar Dogne	B-41, Aadi Parisar, Phase - 1, Bagsevania, Bhopal
23	Shri Mahesh Chandra Parnani	H No. 39 Premier Achenda Colony, Near People's Mall, Bhopal
24	Shri Rakesh Kumar Agrawal,	I-378, Sector, Beta-2, Grater Noida, UP
25	Shri L.N Saddawale	Shivpuri Mohalla

TARIFF SCHEDULES

Annexure-2 (Tariff Schedules for Low Tension Consumers)

ANNEXURE TO THE TARIFF ORDER PASSED BY MPERC FOR FINANCIAL YEAR 2023-24

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

Table of Contents

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

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	427	71 per connection	57 per connection
51 to 150 units	523	124 per connection	101 per connection
151 to 300 units	661	27 for each 0.1 kW load	24 for each 0.1 kW load
Above 300 units	680	27 for each 0.1 kW load	26 for each 0.1 kW load

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: 4th April 2023
Next Meter Reading: 10th May 2023
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
Total		**450**

(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	Energy Charge (paise per unit) Urban/ Rural areas	Monthly Fixed Charge (Rs.)	
		Urban areas	Rural areas
Temporary connection for social/ marriage purposes and religious functions.	850	77 for each one kW of sanctioned or connected or recorded load, whichever is highest, for each 24 hours duration or part thereof.	62 for each one kW of sanctioned or connected or recorded load, whichever is highest, for each 24 hours duration or part thereof.
Supply through DTR meter for clusters of Jhuggi/Jhopadi till individual meters are provided	355	NIL	NIL

(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 @ 530 per unit	112 per connection

Specific Terms and Conditions for LV-1 category:

a) No minimum charges are applicable to this category of consumers. .

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, load for such temporary purpose is allowed to be used from existing metered connection on the same tariff applicable for permanent connection subject to other terms and conditions of LT Domestic Tariff.

e) 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 **Mandatory** for Connected load above 10 kW	650	275 per kW or 220 per kVA of billing demand	235 per kW or 188 per kVA of billing demand

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 **upto 50 units**	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 **exceeds 50 units**	780	138 per kW	117 per kW
Demand based tariff (**Mandatory** 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)
LV 3			
Municipal Corporation/ Cantonment board /Municipality / Nagar Panchayat	568	357	No Minimum Charges
Gram Panchayat	540	169	

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) The tariff for temporary connection shall be 1.25 times the applicable tariff.

(c) 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	**Non seasonal consumers**			
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

*** 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	**Seasonal Consumers (**This tariff shall be applicable to such seasonal industries / consumers defined under this schedule**)**			
4.2 a	**During season**	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

<u>Terms and Conditions</u>:

(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. Method of billing of minimum charges for Non-Seasonal and Seasonal consumers shall be as per 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) The tariff for temporary connection for Non seasonal consumers shall be 1.25 times the applicable tariff.

(g) 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:

S. No.	Sub-Category	Monthly Fixed charges (Rs. per HP)	Energy charges (paise per unit)
LV- 5.1			
a) (i)	First 300 units per month	60	489
(ii)	Above 300 units up to 750 units in the month	76	592
(iii)	Rest of the units in the month	84	620
b)	Temporary connections	84	620
c)	DTR metered group consumers	Nil	469
LV-5.2			
a) (i)	First 300 units per month	60	489
(ii)	Above 300 units up to 750 units in the month	76	592
(iii)	Rest of the units in the month	84	620
b)	Temporary connections	84	620
LV-5.3			
a)	Up to 25 HP in urban areas	122 per HP	545
b)	Up to 25 HP in rural areas	91 per HP	528
c)	Demand based tariff (Contract demand up to 150 HP) (Mandatory above 25 HP) in urban areas	281 per kW or 225 per kVA of billing demand	620
d)	Demand based tariff (Contract demand up	150 per kW or 120 per	620

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	
LV-5.4		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**	
Type of Pump/ Motor	**Urban Area**	**Rural Area**
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:

Category	Energy Charge (Paise/unit)
Electric Vehicle/ Rickshaw charging installations	679

a) 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 25th March 2006 as may be amended from time to time. **Urban areas** mean all areas other than those notified by the GoMP as Rural Areas.

2. Tariff for Green Energy shall be inclusive of normal tariff as applicable to that category of consumer and Green Energy Charges as mentioned in Clause 12 of General Terms and Conditions of LT Tariff.

3. Rounding off: All bills will be rounded off to the nearest rupee i.e. up to 49 paisa shall be ignored and 50 paisa upwards shall be rounded off to next Rupee.

4. Billing Demand: In case of demand based tariff, the billing demand for the month shall be the actual maximum kVA demand of the consumer during the month or 90% of the contract demand, whichever is higher. The billing demand shall be rounded off to the nearest integer number i.e. fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored.

5. Fixed charges billing: Unless specified otherwise, fractional load for the purposes of billing of fixed charges shall be rounded off to nearest integer i.e. fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored. However, for loads less than one kW/HP, it shall be treated as one kW/HP.

6. **Method of billing of Minimum Charges:**

   A. **For agricultural consumers (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**:

      i. 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. However, for Seasonal consumers the annual minimum consumption shall be equally distributed during seasonal months and during off season only actual consumption shall be considered for billing subject to adjustment of actual cumulative consumption against cumulative minimum consumption.

      ii. 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.

      iii. Minimum consumption shall be adjusted in the month in which cumulative actual or billed monthly consumption exceeds cumulative monthly prorated minimum annual consumption. If actual cumulative consumption does not get fully adjusted in that month, adjustment shall continue to be provided in subsequent months of the financial year. The following example illustrates the procedure for monthly billing of consumption where prorated monthly minimum consumption is 100 kWh based on annual consumption of 1200 kWh.

Month	Actual cumulative consumption (kWh)	Cumulative minimum consumption (kWh)	Higher of 2 and 3 (kWh)	Already billed in the year (kWh)	To be billed in the month = (4-5) (kWh)
1	2	3	4	5	6
April	95	100	100	0	100
May	215	200	215	100	115
June	315	300	315	215	100
July	395	400	400	315	85
Aug	530	500	530	400	130
Sept	650	600	650	530	120
Oct	725	700	725	650	75
Nov	805	800	805	725	80
Dec	945	900	945	805	140
Jan	1045	1000	1045	945	100
Feb	1135	1100	1135	1045	90
March	1195	1200	1200	1135	65

7. **Additional Charge for Excess connected load or Excess Demand:** Shall be billed as per the following procedure:

   a) **For demand based tariff:** The consumers availing supply at demand based tariff shall restrict their actual maximum demand within the contract demand. However, in case the actual maximum demand recorded in any month exceeds 120% of the contract demand, the tariff in this schedule shall apply to the extent of 120 % of the contract demand only. The consumer shall be charged for demand recorded in excess of 120% of contract demand (termed as Excess Demand) at the following rates: -

      i. **Energy charges for Excess Load**: No extra charges are applicable on energy charges due to excess demand or excess connected load

      ii. **Fixed Charges for Excess Demand:** These charges shall be billed as per 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.

8. Incentives/Rebates:

(a) **Rebate on advance payment**: For advance payment made before commencement of consumption period for which bill is prepared, a rebate at one twelfth of annual interest rate in percentage applicable on working capital shall be given on the amount (excluding security deposit), which remains with the Distribution Licensee at the end of billing month. However, such amount shall be credited to the account of the consumer after adjusting any amount payable to the Distribution Licensee.

(b) **Incentive for prompt payment**: An incentive for prompt payment @ 0.50% of the bill amount (excluding security deposit, any subsidy given by Government and Government levies viz. Electricity Duty and Cess etc.) shall be given in case the payment is made at least 7 days in advance of the due date of payment where the current month billing amount is equal to or greater than Rs. Ten Thousand. The consumers in arrears shall not be entitled for this incentive.

(c) **Rebate for online bill payment:** 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 more than 86% or above, incentive shall be payable as follows:

Average Monthly Power Factor	Percentage incentive payable on billed energy charges
86%	0.5
87%	1.0
88%	1.5
89%	2.0
90%	2.5
91%	3.0
92%	3.5
93%	4.0
94%	4.5
95%	5.0
96%	6.0
97%	7.0
98%	8.0
99%	9.0
100%	10.0

For this purpose, the "average monthly power factor" shall have the same meaning as in Madhya Pradesh Electricity Supply Code, 2021, as amended from time to time.

Provided that this Incentive shall be billed on the basis of energy actually consumed during the month.

All the rebates/incentives shall be calculated on amount excluding Government Subsidy, if any.

9. Other Terms and Conditions:

(a) The Sanctioned Load / Connected Load (for sanctioned load based tariff) or Contract Demand (for demand based tariff), as the case may be, should not exceed 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. 150 plus applicable GST per cheque shall be levied in addition to delayed payment surcharge

(d) Other charges, wherever applicable shall be as specified in Madhya Pradesh Electricity Regulatory Commission (Recovery of Expenses and other Charges for providing Electric Line or Plant used for the purpose of giving Supply) Regulations, 2022 and amendments thereof.

(e) Existing LT power consumer (other than LV-1: Domestic Consumer) shall ensure that LT capacitor of proper rating is provided. In this regard, the Madhya Pradesh Electricity Supply Code, 2021, as amended from time to time may be referred for guidance. It shall be the responsibility of the consumer to ensure that overall average power factor during any month is not less than 0.8 (80%) failing which the consumer shall be liable to pay low power factor surcharge on the entire billed amount against energy charges during the month. Provided that such surcharge shall be billed on the basis of energy actually consumed during the month. Power factor surcharge shall be billed at the rates given below in e(1) and e(2):

e(1) For the consumer whose meter is capable of recording average power factor:

Power Factor	Percentage Surcharge payable on billed energy charges
79%	1%
78%	2%
77%	3%
76%	4%
75%	5%
74%	6.25%
73%	7.50%
72%	8.75%
71%	10.00%
Below 71%	10.00%

For this purpose, the “average monthly power factor” shall have the same meaning as in Madhya Pradesh Electricity Supply Code, 2021, as amended from time to time.

In case of billing or credit of minimum consumption such surcharge shall be billed with respect to energy actually consumed during the month.”

e(2) For the consumer other than e(1) above: The consumer (other than LV-1: Domestic Consumer) shall ensure that LT capacitors of proper rating are provided and are in good working condition. In this regard, the Madhya Pradesh Electricity Supply Code, 2021, as amended from time to time may be referred for guidance. In case of failure to meet the above criteria, the consumer would be levied a low power factor surcharge of 10% on the entire billed amount against energy charges during the month and would be continued to be billed till such time the consumer meets the above criteria.

In case of billing or credit of minimum consumption such surcharge shall be billed with respect to energy actually consumed during the month."

(f) Levy of power factor surcharge as indicated hereinabove shall be without prejudice to the rights of the Licensee to disconnect the consumer's installation, if steps are not taken to improve the power factor by installing suitable shunt capacitors.

(g) In case of any dispute on applicability of tariff on a particular LT category, the decision of the Commission shall be final.

(h) The tariff does not include any tax, cess or duty, etc. on electrical energy that may be payable at any time in accordance with any law then in force. Such charges, if any, shall also be payable by the consumer in addition to the tariff charges and applicable miscellaneous charges.

(i) **Delayed payment Surcharge for all categories:** Surcharge at the rate of 1.25 % per month or part thereof on the amount outstanding (including arrears) will be payable if the bills are not paid up to due date subject to a minimum of Rs.5/- per month for total outstanding bill amount up to Rs. 500/- and Rs 10/ per month for amount of bill more than Rs.500/. The part of a month will be reckoned as full month for the purpose of calculation of delayed payment surcharge. The delayed payment surcharge will not be levied for the period after supply to the consumer is permanently disconnected. However, for the temporary connection, if any, amount is outstanding after disconnection, Delayed Payment Surcharge at the rate of 1.25% per month or part thereof shall be applicable as per Madhya Pradesh Electricity Supply Code, 2021 as amended from time to time.

(j) In case of conversion of LT connection into HT connection, it is mandatory on the part of both the consumer and the licensee to get the HT agreement executed before availing supply at HT.

(k) Use of mix loads in one connection: Unless otherwise permitted specifically in the tariff category, the consumer using mix loads for different purposes shall be billed for the purpose for which the tariff is higher.

(l) Consumers in the notified Industrial Growth Centres/Industrial areas/Industrial parks receiving supply under urban discipline shall be billed urban tariff.

(m) No change in the tariff or the tariff structure including minimum charges for any category of consumer is permitted except with prior written permission from the Commission. Any action taken without such written permission of the Commission shall be treated as null and void and shall also be liable for action under relevant provisions of the Electricity Act, 2003.

(n) All conditions prescribed herein shall be applicable to the consumer notwithstanding if any contrary provisions exist in the agreement entered into by the consumer with the licensee.

(o) If any difficulty arises in giving effect to any of the provisions of this order, the Commission may, by general or special order, direct the Licensees to do or undertake things, which in the opinion of the Commission is necessary or expedient for the purpose of removing the difficulties.

10. Additional conditions for Temporary Supply at LT:

Temporary supply cannot be demanded by a prospective/ existing consumer as a matter of right but will normally be arranged by the Distribution Licensee when a requisition giving due notice is made. The temporary additional supply to an existing consumer also shall be treated as a separate service and charged subject to following conditions. However, service under Tatkal Scheme shall be made available within 24 hours subject to charges as specified in Madhya Pradesh Electricity Regulatory Commission (Recovery of Expenses and other Charges for providing Electric Line or Plant used for the purpose of giving Supply) Regulations, 2022 and amendments thereof.

(a) Fixed Charge and Energy Charge for temporary supply shall be billed at 1.25 times the normal charges as applicable to relevant category if not specified otherwise specifically.

(b) Estimated bill amount is payable in advance before serving the temporary connection subject to replenishment from time to time and adjustment as per final bill after disconnection. No interest shall be given to consumers for this advance payment.

(c) The Sanctioned load / connected load (for sanctioned load based tariff) or contract demand (for demand based tariff), as the case may be, shall not exceed 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 specified in Madhya Pradesh Electricity Regulatory Commission (Recovery of Expenses and other Charges for providing Electric Line or Plant used for the purpose of giving Supply) Regulations, 2022 and amendments thereof.

(f) Load factor concession shall not be allowed on the consumption for temporary connection.

(g) Power factor incentive/penalty shall be applicable at the same rate as applicable for permanent connection.

11. Consumers availing Green Energy from Distribution Licensee only for the purpose of reducing their carbon footprint and seeking Certification to this effect shall be required to pay Green Energy Charges at the rate of Rs. 0.97/kWh and such charges shall be applicable over and above the normal tariff for that category of consumers. This facility shall be available to consumers opting for meeting at least 25% of their monthly consumption of electricity and subsequently in steps of 5%

of monthly consumption over and above 25 % from Green Energy during any billing month. Further, such consumers may avail Green Energy for any number of days in a billing month subject to meeting consumption criteria as mentioned above.

12. The Consumers availing green energy from Distribution Licensee in accordance with provisions of MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof, shall be required to pay Green Energy Charges at Rs. 0.25/ kWh for Wind, Rs. 3.10/ kWh for HPO and Rs. 0.96/ kWh for Other, which shall be over and above the normal tariff of respective consumer category as per this Tariff Order.

13. Standby Charges:- Standby Charges for the purpose of Madhya Pradesh Electricity Regulatory Commission (Methodology for determination of Open Access charges and Banking charges for Green Energy Open Access consumers) Regulations, 2023 as amended from time to time, shall be 0.25 times of the tariff applicable to the consumer availing Green Energy Open Access, which shall be over and above the normal tariff of the respective consumer category.

14. The accounting and settlement for consumers availing net metering facility shall be as per Madhya Pradesh Electricity Regulatory Commission (Grid Interactive Renewable Energy System and Related Matters) Regulations, 2022 as amended from time to time.

15. Wherever, there is contradiction in general terms & conditions and specific terms & conditions 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 2023-24

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION
TARIFF SCHEDULES FOR HIGH TENSION CONSUMERS

Table of Contents

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	320	605

Note: A rebate of Rs. 2 per Unit in energy charges is applicable. This rebate shall be applicable up to FY 2023-24.

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 2023-24 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. 352 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. 480 per kVA

While doing so, other provisions of electricity tariff (such as tariff minimum charge etc.) will also be applicable on aforesaid excess demand.

(g) Power Factor Penalty:

i. If the average monthly power factor of a consumer falls to 89 percent or below but upto 85 %, penalty will be levied at the rate of one percent of total energy charges for the month for each one percent fall in the average monthly power factor below 90 percent. **For determination of power factor, lag only logic shall be used and no power factor penalty shall be levied if leading power factor is recorded.**

ii. If the average monthly power factor of a consumer falls to 84 percent or below, the consumer shall be levied a penalty of 5% (five percent) plus @ 2% (two percent) for each one percent fall in his average monthly power factor below 85 percent, on the 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" shall have the same meaning as in Madhya Pradesh Electricity Supply Code, 2021, as amended from time to time.

iv. Notwithstanding what has been stated above, if the average power factor of a new connection of the consumer is found to be 89% or less in any month during the first 6 (six) months from the date of connection, the consumer shall be entitled to a maximum period of six months to improve it to not less than 90% subject to following conditions:

- This period of six months shall be reckoned from the month in which the average power factor was found for the first time to be 89% or less.
- In all cases, the consumer will be billed penal charges for low power factor, but in case the consumer maintains the average power factor in subsequent three months (thus in all four months) to not less than 90%, the charges on account of low power factor billed during the said six months period, shall be withdrawn and credited in next monthly bills.

- The facility, as mentioned herein, shall be available not more than once to new consumer whose average power factor is 89% or less at any time during 6 months from the date of connection. Thereafter, the charges on account of low average power factor, if found 89% or less, shall be payable as by any other consumer.

(h) Emergency feed extension: Provided that if as a result of the emergency in the traction substation or in the transmission line supplying load or part thereof is transferred to an adjacent traction substation, the M.D. for the month for that adjacent traction substation shall be as the average of M.D. for previous three months during which no emergency had occurred.

(i) Other terms and conditions shall be as mentioned in the General Terms and Conditions of High Tension Tariff.

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)
Coal Mines			
11 kV supply	715	751	665
33 kV supply		743	644
132 kV supply		723	623
220 kV supply		701	601

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
For supply at 220 / 132 kV	1620
For supply at 33 / 11 kV	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 (ToD) Rebate:** This 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)
3.1	**Industrial**			
	11 kV supply	384	730	630
	33 kV supply	616	726	621
	132 kV supply	704	685	586
	220/400 kV supply	704	640	540
3.2	**Non-Industrial**			
	11 kV supply	348	770	680
	33 kV supply	501	753	655
	132 kV supply & above	593	705	595
3.3	**Shopping Malls**			
	11 kV supply	356	750	675
	33 kV supply & above	413	740	635
3.4	**Power intensive industries**			
	33 kV supply	627	565	565
	132 kV supply & above	766	541	541

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 132 kV & above	Rolling Mills	1200
	Educational institutions	720
	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 (ToD) Rebate:** This 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 2023-24 from the date of connection for such new projects for which agreements for availing supply from licensee are finalized during and after FY 2016-17.

Provided that no rebate shall be applicable for connections obtained by virtue of change in ownership in existing connection or by reconnection.

Provided also that new connection on the permanently disconnected premises shall only be eligible for such rebate, if, the application for new service connection on such premises is received not before the expiry of six months from the date of its permanent disconnection.

The consumer availing this rebate shall not be entitled for the rebate of incremental consumption under clause (d) above.

(f) **Rebate for Captive power plant consumers:**

Applicability: The rebate shall be applicable to consumers-

i. Who have been meeting their demand either fully or partially during FY 2016-17 and/or FY 2017-18 and/or FY 2018-19 and/or FY 2019-20 and/or FY 2020-21 and/or FY 2021-22 and/or FY 2022-23 through their captive power plants located in Madhya Pradesh.

ii. The rebate shall be applicable upto FY 2023-24 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 2023-24) 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 2022-23).
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 2023-24) compared to the same month in last year (FY 2022-23).
iii. The rebate shall be applicable from the date of request submitted by the consumer to the Licensee during FY 2023-24.
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 2022-23		FY 2023-24		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 2023-24. The rebate is applicable for FY 2023-24 for the units billed only after the commencement of HT Agreement during FY 2023-24.

(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.

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)
During Season			
11 kV supply	405	708	602
33 kV supply	448	688	583
During Off-Season			
11 kV supply	Rs. 405 on 10% of contract demand or actual recorded demand during the season, whichever is higher	850 i.e. 120% of seasonal Energy Charge	Not applicable
33 kV supply	Rs. 448 on 10% of contract demand or actual recorded demand during the season, whichever is higher	826 i.e. 120% of seasonal Energy Charge	Not applicable

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 to be equally distributed in seasonal months. The method of billing of minimum charges shall be as given in General Terms and Conditions of High Tension Tariff.

h) **Time of Day (ToD) Rebate:** This 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.

Tariff Schedule - HV - 5

IRRIGATION, PUBLIC WATER WORKS AND OTHER THAN AGRICULTURAL

Applicability:

This Tariff Category shall apply to supply of power to lift irrigation schemes, group irrigation, Public Utility Water Supply schemes, sewage treatment plants /sewage pumping plants and for energy used in lighting pump house.

This Tariff category shall also applicable to River link projects implemented by government or its agency provided that the supply of power is utilized for purposes covered under this category only.

Note: Private water supply scheme, water supply schemes run by institutions for their own use/employees/townships etc. will not fall in this category but billed under the appropriate tariff category to which such institution belongs. In case water supply is being used for two or more different purposes then the highest tariff shall be applicable.

This tariff category shall also apply to supply of power to other than agriculture pump connections i.e. the connection for hatcheries, fisheries ponds, poultry farms, cattle breeding farms, grasslands, vegetables/ fruits/ floriculture/ mushroom growing units etc. and dairy (for those dairy units where only extraction/collection of milk and its processing such as chilling, pasteurization etc. is done). However, in units where milk is processed to produce other end products of milk, billing shall be done under HV-3.1 (Industrial) category.

Tariff:

Sub-Category	Monthly Fixed Charge (Rs. / kVA of billing demand per month)	Energy Charge (paise per unit)
11 kV supply	384	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 (ToD) Rebate:** This 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 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 9th 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)
1	**For Tariff Sub-Category 6.1**			
	11 kV supply	362	637	572
	33 kV supply		622	552
	132 kV supply		600	530
2	**For Tariff Sub-Category 6.2**			
	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	1009

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:

Category	Energy Charge (Paise/unit)
HT Supply	696

Terms and Conditions:

a) Other terms and conditions shall be as specified under General Terms and Conditions for High Tension Tariff.

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Tariff Schedule - HV - 9

Metro Rail:

Applicability:

This Tariff shall apply to Metro Rail for Traction and Non-Traction loads.

Tariff:

S. No.	Category	Monthly Fixed Charge (Rs. per kVA of billing demand per month)	Energy Charge (paise / unit)
1	Sub-Urban Rail Transport (Metro Rail) at 132kV/220kV	310	570

Specific Terms and Conditions:

(a) **Additional Charge for Excess demand:** Shall be billed as given in General Terms and Conditions for High Tension tariff.

(b) Annual Minimum charges shall be based on minimum consumption of 1000 units (kWh) per kVA of Contract Demand, this being the first year of operation of Metro Rail project in the State. The method of billing of minimum charges shall be as given in General Terms and Conditions of High Tension Tariff.

(c) Other terms and conditions shall be as mentioned in the General Terms and Conditions of High Tension Tariff.

GENERAL TERMS AND CONDITIONS OF HIGH-TENSION TARIFF

The following terms and conditions shall be applicable to all HT consumer categories subject to Specific Terms and Conditions for that category as mentioned in the Tariff Schedule of respective category:

1.1 The contract demand shall be expressed in whole number only.

1.2 Tariff for Green Energy shall be inclusive of normal tariff as applicable to that category of consumer and Green Energy Charges as mentioned in Clause 1.26 of General Terms and Conditions of HT Tariff.

1.3 **Character of Service:** The character of service shall be as per the Madhya Pradesh Electricity Supply Code, 2021 as amended from time to time.

1.4 Point of Supply:

(a) The power will be supplied to the consumer ordinarily at a single point for the entire premises.

(b) In case of Railway Traction, the supply at each sub-station shall be separately metered and charged.

(c) In case of coal mines, the power will be supplied ordinarily at a single point for the entire premises. The power may, however, be supplied, on the request of the consumer, at more than one point subject to technical feasibility. In such cases, metering and billing will be done for each point of supply separately.

1.5 **Determination of Demand:** The **maximum demand** of the supply in each month shall be four times the largest number of kilovolt ampere hours delivered at the point of supply during any continuous 15 minutes during the month as per sliding window principle of measurement of demand.

1.6 **Billing demand:** The billing demand for the month shall be the actual maximum kVA demand of the consumer during the month or 90% of the contract demand, whichever is higher. In case power is availed through open access, the billing demand for the month shall be the actual maximum kVA demand during the month excluding the demand availed through open access for the period for which open access is availed or 90% of the contract demand, whichever is higher, subject to clause 3.4 of the M.P. Electricity Supply Code, 2021.

The provisions regarding additional charges for excess demand shall be applicable as per clause 1.16 of these conditions.

Note: The billing demand shall be rounded off to the nearest integer number i.e. the fraction of 0.5 or above will be rounded off to next integer figure and the fraction of less than 0.5 shall be ignored.

1.7 **Minimum charges shall be billed as follows:**

1) The consumer shall be billed for annual minimum charges based on consumption (kWh) number of units per kVA of contract demand specified for their category, irrespective of whether any energy is consumed or not during the year.

2) The consumer shall be billed one twelfth of annual minimum consumption (kWh) specified for their category each month in case the actual consumption is less than above mentioned minimum consumption. However, for Seasonal consumers the annual minimum consumption shall be equally distributed during seasonal months and during off season only actual consumption shall be considered for billing subject to adjustment of actual cumulative consumption against cumulative minimum consumption.

3) During the month in which actual cumulative consumption equals or greater than the annual minimum consumption, no further billing of monthly minimum consumption shall be done in subsequent months of the financial year.

4) Tariff minimum consumption shall be adjusted in the month in which cumulative actual or billed monthly consumption exceeds cumulative monthly prorated minimum annual consumption. If actual cumulative consumption does not get fully adjusted in that month, adjustment shall continue to be provided in subsequent months of the financial year. The following example illustrates the procedure for monthly billing of consumption where prorated monthly minimum consumption is 100 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

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)
Jan	1045	1000	1045	945	100
Feb	1135	1100	1135	1045	90
March	1195	1200	1200	1135	65

1.8 **Rounding off:** All bills will be rounded off to the nearest rupee i.e. up to 49 paisa shall be ignored and 50 paisa upwards shall be rounded off to next Rupee.

<u>Incentive/ Rebate / penalties</u>

1.9 **Power Factor Incentive:**

Power factor incentive shall be payable as follows:

Average Monthly Power Factor	Percentage incentive payable on billed energy charges on the basis of energy actually consumed
96%	1.0 (one percent)
97%	2.0 (two percent)
98%	3.0 (three percent)
99%	5.0 (five percent)
100 %	7.0 (seven percent)

For this purpose, the "average monthly power factor" shall have the same meaning as in Madhya Pradesh Electricity Supply Code, 2021, as amended from time to time.

1.10 **Load factor calculation**

1) The **Load Factor** shall be calculated as per the following formula:

$$\text{Load Factor (\%)} = \frac{\text{Monthly consumption X 100}}{\text{No. of hours in the billing month X Demand (KVA) X PF}}$$

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.

iv. 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.

1.11 **Incentive for advance payment:** For advance payment made before commencement of consumption period for which bill is prepared, an incentive at one twelfth of annual interest rate in percentage applicable on working capital shall be given on the amount (excluding security deposit), which remains with the Distribution Licensee at the end of billing month. However, such amount shall be credited to the account of the consumer after adjusting any amount payable to the Distribution Licensee

1.12 **Rebate for online bill payment:** Rebate of 0.5% on the total bill amount maximum up to Rs 1000 will be applicable for making online payment of bill.

1.13 **Prompt payment incentive**: An incentive for prompt payment @0.25% of bill amount (excluding, security deposit, meter rent and Government levies viz. Electricity Duty and Cess) shall be given in case the payment is made at least 7 days in advance of the due date of payment where the current month billing amount is equal to or greater than Rs. One Lakh. The consumers in arrears shall not be entitled for this incentive.

1.14 **Time of Day (ToD) 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., peak and off-peak period. The rebate on energy charges according to the period of consumption shall be as per following table:

Sr. No	Peak / Off-peak Period	Rebate on energy charges on energy consumed during the corresponding period
Months	**April to October**	
1.	Peak hours (6 AM to 9 AM and 5 PM to 10 PM)	No rebate
2.	Off peak hours (9 AM to 5 PM and 10 PM to 6AM next day)	No rebate (9 AM to 5 PM) Rebate of 10 % of Normal rate of Energy Charge (10 PM to 6AM next day)
Months	**November to March**	
1.	Peak hours (6 AM to 9 AM and 5 PM to 10 PM)	No rebate

Sr. No	Peak / Off-peak Period	Rebate on energy charges on energy consumed during the corresponding period
2.	Off peak hours (9 AM to 5 PM and 10 PM to 6AM next day)	No Rebate (9 AM to 5 PM) Rebate of 20 % of Normal rate of Energy Charge (10 PM to 6AM next day)

Note:

1. ToD rebate shall not be applicable on Fixed charges.
2. The above mentioned off-peak period and peak period shall also be applicable for the purpose of banking as per the provision of Madhya Pradesh Electricity Regulatory Commission (Methodology for determination of Open Access charges and Banking charges for Green Energy Open Access consumers) Regulations, 2023 and amendments thereof.

1.15 **Power Factor Penalty (For consumers other than Railway Traction HV-1)**

(i) If the average monthly power factor of the consumer falls to 89% or below, the consumer shall be levied a penalty @ 1% (one percent), for each one percent fall in his average monthly power factor below 90 percent, on total amount of bill under the head of "Energy Charges":

(ii) If the average monthly power factor of the consumer falls to 84% or below, the consumer shall be levied a penalty of 5% (five percent) plus @ 2% (two percent) for each one percent fall in his average monthly power factor below 85 percent on the 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 to below 69% or below, the Distribution Licensee reserves the right to disconnect the consumer's installation till steps are taken to improve the same to the satisfaction of the Distribution Licensee. This is, however, without prejudice to the levy of penalty charges for low power factor in the event of supply not being disconnected.

(iv) For this purpose, the "average monthly power factor" shall have the same meaning as in Madhya Pradesh Electricity Supply Code, 2021, as amended from time to time.

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 89% or less in any month during the first 6 (six) months from the date of connection, the consumer shall be entitled to a maximum period of six months to improve it to not less than 90% subject to following conditions:

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 89% or less.

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 89% or less in any month during 6 months from the date of connection. Thereafter, the charges on account of low average power factor, if found 89% or less, shall be payable as applicable to any other consumer.

1.16 **Additional Charges for Excess Demand**

i. The consumer shall at all times restrict their actual maximum demand within the contract demand. In case the actual maximum demand in any month exceeds 120% of the contract demand, the tariffs given in various schedules shall apply to the extent of the 120% of the contract demand only. The consumer shall be charged for excess demand computed as difference of recorded maximum demand and 120% of contract demand on fixed charges and while doing so, the other terms and conditions of tariff, if any, shall also be applicable on the said excess demand. The excess demand so computed, if any, in any month shall be charged at the following rates from all consumers except Railway Traction.

ii. **Energy charges for excess demand**: No extra charges are applicable on the energy charges due to the excess demand or excess connected load.

iii. **Fixed charges for Excess Demand: -** These charges shall be billed as per following:

1. **Fixed charges for Excess Demand when the recorded maximum demand is up to 130% of the contract demand:** Fixed charges for Excess Demand over and above the 120 % of contract demand shall be charged at 1.3 times the normal fixed charges.

2. **Fixed charges for Excess Demand when the recorded maximum demand exceeds 130% of contract demand**: In addition to fixed

charges in 1 above, recorded demand over and above 130 % of the contract demand shall be charged at 2 times the normal fixed charges.

Example for fixed charges billing for excess demand: If the contract demand of a consumer is 100 kVA and the maximum demand recorded in the billing month is 140 kVA, the consumer shall be billed towards fixed charges as under:-

a) Up to 120 kVA at normal tariff.

b) Above 120 kVA up to 130 kVA i.e. for 10 kVA at 1.3 times the normal tariff.

c) Above 130 kVA up to 140 kVA i.e. for 10 kVA at 2 times the normal tariff.

iv. The excess demand computed in any month will be charged along with the monthly bill and shall be payable by the consumer.

v. The billing of excess demand at higher tariff is without prejudice to the Licensee's right to discontinue the supply in accordance with the provisions contained in the Madhya Pradesh Electricity Supply Code, 2021 as amended from time to time.

1.17 **Delayed Payment Surcharge:** Surcharge at the rate of 1.25 % per month or part thereof on the amount outstanding (including arrears) will be payable if the bills are not paid up to due date. The part of a month will be reckoned as full month for the purpose of calculation of delayed payment surcharge. The delayed payment surcharge will not be applicable after supply to the consumer is permanently disconnected. However, for the temporary connection, if any, amount is outstanding after disconnection, Delayed Payment Surcharge at the rate of 1.25% per month or part thereof shall be applicable as per Madhya Pradesh Electricity Supply Code, 2021 as amended from time to time.

1.18 All the rebates/incentives shall be calculated on amount excluding Government Subsidy.

1.19 **Service Charge for Dishonoured Cheques:** In case the cheque(s) presented by the consumer are dishonoured, a service charge at the rate of Rs. 1000/- plus applicable GST per cheque shall be levied in addition to delayed payment surcharge as per rules. This is without prejudice to the Distribution Licensee's rights to take action in accordance with any other applicable law.

1.20 **Temporary supply at HT:** The character of temporary supply shall be as defined in the M.P. Electricity Supply Code, 2021 as amended from time to time. If any consumer requires temporary supply then it shall be treated as separate service and charged subject to the following conditions.

(a) Fixed Charges and Energy Charges shall be charged at 1.25 times the normal tariff. The fixed charges shall be recovered for the number of days for which the connection is availed during the month by prorating the monthly fixed charges. Month shall be considered as the number of total days in that 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:

$$\text{Minimum consumption for additional supply for temporary period} = \frac{\text{Annual minimum consumption as applicable to permanent supply X No. of days of temporary connection}}{\text{No. of days in the year}}$$

(c) The billing demand shall be the demand requisitioned by the consumer or the highest monthly maximum demand during the period of supply commencing from the month of connection ending with the billing month, whichever is higher. For example:

Month	Recorded Maximum Demand (kVA)	Billing Demand (kVA)
April	100	100
May	90	100
June	80	100
July	110	110
August	100	110
September	80	110
October	90	110
November	92	110
December	95	110
January	120	120
February	90	120
March	80	120

(d) The consumer shall pay the estimated charges in advance, before serving the Temporary Connection subject to replenishment from time to time and adjustment as per final bill after disconnection. No interest shall be given on such advance payment.

(e) Connection and Disconnection Charges shall also be paid.

(f) In case existing HT consumer requires temporary supply for the purpose of addition and/or alteration within the premises of existing HT connection, then the consumer is allowed to avail the same through its existing permanent connection to the extent of its Contract Demand and such consumer shall be billed at applicable tariff for permanent connection. Excess demand, if any, shall be treated as per the provisions in clause 1.16 above.

(g) Power factor incentives/penalties and the condition for Time of Day rebate shall be applicable at the same rate as for permanent connection.

Other Terms and Conditions:

1.21 The existing 11 kV consumer with contract demand exceeding 300 kVA who want to continue to avail supply at 11 kV at his request, shall be required to pay additional charge at 3 %. This additional charge of 3% shall be applicable for enhanced maximum demand recorded for fixed charges and incremental units proportionate to enhanced maximum demand recorded for energy charges.

1.22 The existing 33 kV consumer with contract demand exceeding 10,000 kVA who want to continue to avail supply at 33 kV at his request, shall be required to pay additional charge at 2%. This additional charge of 2% shall be applicable for enhanced maximum demand recorded for fixed charges and incremental units proportionate to enhanced maximum demand recorded for energy charges.

1.23 The existing 132 kV consumer with contract demand exceeding 50,000 kVA who want to continue to avail supply at 132 kV at his request, shall be required to pay additional charge at 1%. This additional charge of 1% shall be applicable for enhanced maximum demand recorded for fixed charges and incremental units proportionate to enhanced maximum demand recorded for energy charges.

1.24 No Metering Charges shall be levied.

1.25 Consumers availing Green Energy from Distribution Licensee only for the purpose of reducing their carbon footprint and seeking Certification to this effect shall be required to pay Green Energy Charges at the rate of Rs. 0.97/kWh and such charges shall be applicable over and above the normal tariff for that category of consumers. This facility shall be available to consumers opting for meeting at least 25% of their monthly consumption of electricity and subsequently in steps of 5% of monthly consumption over and above 25 % from Green Energy during any billing month. Further, such consumers may avail Green Energy for any number of days in a billing month subject to meeting consumption criteria as mentioned above.

1.26 The Consumers availing green energy from Distribution Licensee in accordance with provisions of MPERC (Co-generation and generation of electricity from Renewable sources of energy) Regulations, 2021 and amendments thereof, shall be required to pay Green Energy Charges at Rs. 0.25/ kWh for Wind, Rs. 3.10/ kWh for HPO and Rs. 0.96/ kWh for Other, which shall be over and above the normal tariff of respective consumer category as per this Tariff Order.

1.27 **Standby Charges:-** Standby Charges for the purpose of Madhya Pradesh Electricity Regulatory Commission (Methodology for determination of Open Access charges and Banking charges for Green Energy Open Access consumers) Regulations, 2023 as amended from time to time, shall be 0.25 times of the tariff applicable to the consumer availing Green Energy Open Access, which shall be over and above the normal tariff of the respective consumer category.

1.28 The accounting and settlement for consumers availing net metering facility shall be as per Madhya Pradesh Electricity Regulatory Commission (Grid Interactive Renewable Energy System and Related Matters) Regulations, 2022 as amended from time to time.

1.29 The tariff does not include any tax or duty, etc. on electrical energy that may be payable at any time in accordance with any law then in force. Such charges, if any, shall be payable by the consumer in addition to the tariff charges.

1.30 No changes in the tariff or the tariff structure including minimum charges for any category of consumer are permitted except with prior written permission of the Commission. Any order without such written permission of the Commission will be treated as null and void and also shall be liable for action under relevant provisions of the Electricity Act, 2003.

1.31 In case a consumer, at his 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.

1.32 All consumers to whom fixed charges are applicable are required to pay fixed charges in each month irrespective of whether any energy is consumed or not.

1.33 If any difficulty arises in giving effect to any of the provisions of this order, the Commission may, by general or special order, direct the Licensees to do or undertake things, which in the opinion of the Commission is necessary or expedient for the purpose of removing the difficulties.

1.34 All conditions prescribed herein shall be applicable notwithstanding if any contrary provisions, exist in the agreement entered into by the consumer with the licensee.

1.35 Wherever, there is contradiction in general terms & conditions and specific terms & conditions given for any particular category, the specific terms and conditions shall prevail for that category.

1.36 In case any dispute arises regarding interpretation of this tariff order and/or applicability of this tariff, the decision of the Commission shall be final and binding.

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