MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

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

AGGREGATE REVENUE REQUIREMENT AND RETAIL SUPPLY TARIFF ORDER FOR FY 2020-21

Petition No. 49/2019

PRESENT:

Mukul Dhariwal, Member
Shashi Bhushan Pathak, Member

IN THE MATTER OF:

Determination of Aggregate Revenue Requirement (ARR) and Retail Supply Tariff for FY 2020-21 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	Aerial Bunched
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	Compound Annual Growth Rate
CEA	Central Electrical Authority
CERC	Central Electricity Regulatory Commission
CFA	Cash Financial Assistance
CGS	Central Generating Station
CHPS	Chambal Hydro Power Scheme
COD	Commercial Date of Operation
CPP	Captive Power Plants
CSD	Consumer Security Deposit
CSS	Cross Subsidy Surcharge
CTPS	Chandrapur Thermal Power Station
CWIP	Capital Works in Progress
DA	Dearness Allowance
DISCOM	Distribution Company
DSM	Demand Side Management
DTPS	Durgapur Thermal Power Station
DTR	Distribution Transformer
DVC	Damodar Valley Corporation
EA 2003	Electricity Act, 2003
EHT	Extra High Tension
ER	Eastern Region
FCA	Fuel Cost Adjustment
FY	Financial Year
GAAP	Generally Accepted Accounting Principles
GC	Group Captive
GFA	Gross Fixed Asset
GoI	Government of India
GoMP	Government of Madhya Pradesh
GPP	Gas Power Plant
GST	Goods and Service Tax
GTIS	Group Term Insurance Scheme
HP	Horse Power

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

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

A1: ORDER

(Passed on this 17th Day of December, 2020)

1.1 This order is in response to the petition No. 49 of 2019 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, (Second Amendment) Regulations 2015 {RG-35 (II) of 2015), notified on 14th November, 2019 which have been published in the Gazette notification dated 15th November, 2019. (Hereinafter referred to as the Tariff Regulations or Regulations).

1.2 In accordance with the Tariff Regulations, the Distribution Licensees were required to file their respective petition(s)/proposal(s) for the determination of Aggregate Revenue Requirement (ARR) and Retail Supply Tariff for FY 2020-21 latest by the 30th November, 2019.

1.3 MPPMCL and Distribution Licensees jointly filed the Petition (No.49/2019) on 29th November, 2019.

1.4 The motion hearing on the Petition was held by the Commission on 11th December, 2019 vide which the Commission admitted the Petition and directed the Petitioners to submit the compliance to directives issued to the Petitioner in Retail Supply Tariff Order for FY 2019-20. Next hearing was held on 3rd January, 2020, wherein the Petitioners sought two week's time to comply with the directions of the Commission issued in the Tariff Order for FY 2019-20. The Commission accepted the plea of the Petitioners and extended the timeline for submission by two weeks. Subsequently, the compliance report was submitted by the Petitioners.

1.5 Further, the Petitioners also made additional submission vide their letter dated 23rd January, 2020, which were taken on record by the Commission. Subsequently, the Commission directed the Petitioners to publish the public notice in Hindi and English in the prominent newspapers latest by 14th February, 2020, for inviting objections /comments/suggestions from the stakeholders on the subject petition by 07th March, 2020. Accordingly, the Petitioner published the public notice in prominent newspaper on 14th February, 2020.

1.6 In response of the public notice the Commission received 80 comments (East DISCOM: 22, Central DISCOM: 19, West DISCOM: 39) from different stakeholders. The Commission scheduled the public hearings on 17th March, 2020, 23rd March, 2020 and 27th March, 2020 at DISCOM's headquarters namely Indore, Bhopal and Jabalpur, respectively. However, due to outbreak of the COVID-19 pandemic, nationwide lockdown was imposed and accordingly, the Commission cancelled the public hearings on aforesaid dates.

1.7 Subsequently, in view of the public safety and to maintain social distancing requirements, instead of public hearings, the Commission decided to seek the suggestions/comments through electronic mode only. Therefore, the Commission vide its Public Notice dated 13th May, 2020, allowed additional time to all the Stakeholders for submission of Suggestions/Comments upto 30th May, 2020.

1.8 MPPMCL and Distribution Licensees through their initial petition filed before the Commission on 29th November, 2019 have submitted the ARR and prayed to recover a gap of Rs 2000 Crore through a tariff hike of 5.09%. Gist of the initial petition is given below:

Table 1 : Snapshot of the Petition for FY 2020-21 (Rs. Crore)

Particulars	East	West	Central	State
Revenue from sale of power as per existing tariff	11,624	15,422	12,286	39,332
Aggregate Revenue Requirement	12,220	16,199	12,913	41,332
Revenue gap in Income and Expenditure for FY 2020-21	**596**	**777**	**627**	**2,000**

1.9 On the basis of the scrutiny of the Petition, the Commission vide letter dated 19th May, 2020 sought certain information / data, based on the data gaps / discrepancies in the petition submitted by the licensees. The petitioner was also directed to submit the revised sales and revenue projections along with the revised revenue gap for FY 2020-21 considering the impact of country wide lockdown imposed due to spread of pandemic COVID-19.

1.10 The Petitioners vide letter dated 1st June, 2020, requested the Commission for extension of timeline for submission of reply upto 20th June, 2020. Subsequently, the Petitioners submitted their reply on 20th June, 2020, wherein the Petitioners submitted the information sought by the Commission and revised their ARR and revenue projections considering the impact of COVID-19 and prayed to recover a gap of Rs 2,169 Crore through a tariff hike of 5.73%. Gist of the revised ARR and revenue gap submitted by the Petitioners is as given below:

Table 2 : Snapshot of the revised submission for FY 2020-21 (Rs. Crore)

Particulars	East	West	Central	State
Revenue from sale of power as per existing tariff	11,205	14,808	11,834	37,847
Aggregate Revenue Requirement	11,876	15,588	12,552	40,016
Revenue gap in Income and Expenditure for FY 2020-21	**671**	**779**	**718**	**2,169**

1.11 The Petitioners have also filed additional submissions vide their letter dated 3rd March, 2020 and 9th July, 2020, respectively. Subsequently, the Petitioners have further submitted an additional submission on 04.11.2020. However, since these additional submissions were not published in the public domain due to receiving of these submissions post issuance of public notices, the Commission has not considered the submissions which have an impact on ARR / Revenue for FY 2020-21.

1.12 The Commission received written objections from various stakeholders. Details of objections received, response from the Petitioners and views of the Commission thereof are given in the chapter 'A7: Public Objections and Comments on petition' of this order.

1.13 The Commission has allowed the modified petition of the Distribution Licensees of the State and MPPMCL and determined the ARR and tariff as discussed in the relevant Chapters of this order.

State Advisory Committee

1.14 The Commission convened a meeting of the State Advisory Committee (SAC) on 4th August, 2020 through Video Conferencing and sought advice on the Petition. SAC members provided several valuable suggestions regarding sales projections, treatment of surplus energy, terms & conditions of tariff. SAC members also highlighted the plight of industrial consumers on account of lockdown imposed following the COVID-19 situation, by the State / Central Government. These issues have been duly taken in cognizance by the Commission while determining the ARR and Tariff for the FY 2020-21.

Energy Accounting, Meterisation and technical & commercial loss reduction

1.15 The Commission had emphasized 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 distribution, technical and other 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 metering 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 remaining area i.e. feeder/ DTR metering and consumer metering in rural area have not been found satisfactory. There appears to be substantial progress with regard to feeder meterisation, while meterisation of agricultural DTRs and individual un-metered domestic connections in rural areas remains neglected. The Commission has also observed that number of existing feeder meters are lying defective which needs 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 August, 2020 is given below:

Table 3: Status of meterisation of un-metered rural domestic consumers

DISCOMs	Domestic Rural		
	Total no. of connections	**No. of un- metered connections**	**Percentage (%) Un- metered**
East	3266808	409823	12.55%
West	2271421	2300	0.10%
Central	2044085	445400	21.79%
State Total	**7582314**	**857523**	**11.31%**

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	102788	8168	7.95%
West	163891	22094	13.48%
Central	230403	59351	25.76%
State Total	**497082**	**89613**	**18.00%**

1.16 The Commission would like to emphasize that directive for meterisation of agricultural predominant DTRs is an interim arrangement till meters on all individual agricultural 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 have got no incentive for energy saving by the consumers and it is also not possible to work out the real energy loss. The Commission has noted that the rate of meterisation of Agricultural DTRs is extremely slow and only 98 DTRs were provided with meters during the last quarter ending on 31st March, 2020, out of which all the 98 DTR's were provided with meters only in East DISCOM, whereas there was no progress made by Central and West Dsicoms during the quarter. The Commission, keeping in view of the fact that without the proper metering system in place it is not possible to assess the demand of the agriculture consumers. The Commission, therefore, directed the DISCOMs to expedite feeder meterisation and DTR meterisation on priority basis. There is also a need to segregate technical and commercial losses.

1.17 With regard to the Domestic unmetered consumers in rural area, 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 the energy at all stages including the Rural Domestic connections. The first step to do so is by meterise the connections. The energy accounting needs to be carried out on a system driven approach on regular basis.

1.18 In the earlier tariff orders, the Commission 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 doable targets. The loss reduction trajectory specified in the Tariff Regulations for a period from FY 2016-17 to FY 2020-21 is given in the following table:

Table 5: Distribution Loss Trajectory specified in the Regulations

DISCOMs	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
East	18%	17%	16%	16%	16%
Central	19%	18%	17%	17%	17%
West	16%	15.50%	15%	15%	15%

1.19 Against the aforesaid targets, the actual loss level for FY 2016-17 to FY 2019-20 reported by the DISCOMs in the tariff petition is as follows:

Table 6: Actual Distribution Loss for FY 2016-17to FY 2019-20

DISCOMs	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
East	22.64%	27.05%	30.57%	22.52%
Central	31.99%	37.51%	37.0%	28.0%
West	17.89%	16.63%	16.89%	11.10%

1.20 The Commission has observed that except for the West DISCOM, the loss level in other two DISCOMs are much higher than the loss trajectory specified. In the Central and East DISCOMs, the loss level above normative is not acceptable and needs immediate corrective steps. The stakeholders also pointed out and have shown concern over the high loss level of the DISCOMs in their objections. It was stated that the higher loss level is affecting the performance as well as services to be delivered by the DISCOMs. Although the Commission has allowed only normative losses in the tariff order, not to burden the consumers on account of the inefficiency of the distribution licensee, the high losses are adversely affecting the financial viability of the DISCOMs.

1.21 In order to bail out from high debt and to ensure financial turnaround of the DISCOMs, the Government of India launched Ujwal DISCOM Assurance Yojana (UDAY). Madhya Pradesh also participated in the UDAY and committed to reducing AT&C losses in a targeted and time bound manner. However, from the loss level reported by the DISCOMs it appears that the Central and East DISCOMs have failed in their commitment towards AT&C loss reduction.

1.22 For reduction in technical losses, the Commission has approved the capital investment programs of the DISCOMs in the past years, which includes the Feeder Separation project. Government of India is also providing financial support and technological intervention to the DISCOMs through various schemes. However, it appears that the DISCOMs are lacking in implementation of these schemes resulting in failure to reduce the distribution losses at desired level.

1.23 One of the reasons for high losses is unmetered connections and improper energy accounting. Large number of unmetered connections and stopped/ defective meters with slow pace of replacement is resulting in lower billing efficiency. Inadequate energy audit system at the feeder as well as DTR level is not allowing to fix the accountability and hence system is running as usual. In the last tariff order, the Commission had directed the DISCOMs to install meters on the remaining unmetered predominant agricultural DTRs for proper energy accounting and recording consumption by the agricultural pumps. However, the progress is this regard is still far from satisfactory. The DISCOMs also need to focus on meterisation of rural unmetered Domestic connections. The Commission draws the attention of the State

Government in this regard and emphasizes a need to make a concrete program to achieve the targeted loss level in a time bound manner for making DISCOM financially viable. In near future, the Commission would start the process of finalising loss reduction trajectory for the next MYT period for which comments from stakeholders will also be obtained.

Aggregate Revenue Requirement of DISCOMs

1.24 The Commission has determined the aggregate revenue requirement of the DISCOMs for FY 2020-21. The Commission has noted that the revenue from existing tariffs would not be sufficient to meet the ARR determined for FY 2020-21 thus to meet their revenue requirement a marginal tariff hike of 1.98% has been allowed in this Order.

1.25 The Petitioners through their submission on 26.06.2020 have conveyed that NTPC has provided a rebate of Rs. 147.08 Crore on capacity charges billed for the lockdown period due to COVID-19, which has been considered by them in capacity charges for revision of power purchase cost due to COVID-19. The Commission has taken cognizance of Ministry of Power GoI letter dated 10th June, 2020 which was made available by the Petitioners and has considered rebate of Rs. 67.97 Crore provided by PGCIL, Rs. 144.61 Crore provided by NTPC and other Central Generating Stations which amounts to Rs. 212.58 Crores as per the details in the following table, to be passed on to the Consumers of the State.

Table 7: Rebate allowed by Ministry of Power (Rs. Crore)

S. No.	CPSU under Ministry of Power	Rebate
1	NHPC Ltd	0.23
2.	NTPC Ltd	144.20
3.	PGCIL	67.97
4.	THDC Ltd	0.07
5.	SJVNL	0.11
6.	**Total**	**212.58**

1.26 The ARR admitted for the Petitioners is given below in the table:

Table 8: ARR admitted by the Commission for FY 2020-21 (Rs. Crore)

Particulars	East	West	Central	State
Power Purchase Cost **(including rebate from CGS)**	7,588.44	10,390.85	7,856.84	**25,836.12**
Inter State transmission charges **(including rebate from PGCIL)**	508.27	622.99	575.66	**1,706.92**
Intra state transmission charges including SLDC	822.69	1,054.24	876.37	**2,753.30**
O&M Expenses	1,803.90	1,807.24	1687.45	**5,298.59**
Depreciation	146.44	134.40	207.71	**488.55**
Interest & Finance Charges				
On Project Loans	187.86	117.57	251.09	**556.53**
On Working Capital Loans	75.27	52.71	65.56	**193.53**
On Consumer Security Deposit	34.82	53.82	40.24	**128.88**

Particulars	East	West	Central	State
Return on Equity	277.95	227.76	396.89	**902.60**
Bad & Doubtful Debts	2.00	2.00	2.00	**6.00**
Total Expenses admitted	**11,447.64**	**14,463.57**	**11,959.81**	**37,871.02**
Less: Other income + Non Tariff Income	270.32	132.97	317.01	**720.30**
Truing Up of MPPTCL Transmission Order FY 2017-18	156.11	200.04	166.30	**522.45**
Total ARR	**11,333.43**	**14,530.65**	**11,809.10**	**37,673.17**

1.27 The Commission has continued with the prescribed mechanism for recovery of Fuel Cost Adjustment (FCA) on quarterly basis so that uncontrollable costs on account of variations in the variable charges of thermal generating stations are adjusted timely in accordance with the provisions of the Electricity Act, 2003. The Commission has made suitable provisions to fulfil the Renewable Purchase Obligations (RPO) in the ARR of the DISCOMs as per relevant Regulations. The Petitioners are directed to fulfil their RPOs accordingly.

1.28 The Commission has determined the ratio of average billing rate to the voltage wise cost of supply for various consumer categories on the proposals submitted by the DISCOMs. It may be mentioned here that the data/ information for working out the voltage wise cost of supply needs to be further validated to get a fair and correct picture. The voltage wise cost of supply vis-a-vis cross subsidy percentage worked out in this tariff order is only indicative in nature in absence of requisite data. This is in compliance of directives given in the judgment by Hon'ble APTEL.

Implementation of the order

1.29 In view of unforeseen COVID-19 Pandemic situation and extended lockdown, the Commission in order to project the sales and other related projections reasonably thought it appropriate to gather the data of consumption for various category of consumers from the licensees which was impacted due to the lockdown and also give ample opportunity to the Stakeholders to submit their objections following the COVID-19 situation. The Commission intended to issue the instant order within 120 days of filing of petition by the Licensees, however in view of nationwide lockdown following the Pandemic situation of COVID-19 and providing due opportunity to all the Stakeholders to put forth their objections and subsequent implementation of model code of conduct due to assembly by-elections in the State the tariff order could not be issued earlier.

1.30 The Distribution Licensees must take immediate steps to implement this order after giving seven (7) days Public Notice in prominent newspapers having state vide 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 be applicable from 26th December, 2020, until amended or modified by an order of this Commission.

1.31 The detailed order provides for the grounds and reasons of determining the ARR, discusses the functional and financial performance of the three Distribution licensees and includes a section dealing with the status report on the compliance of the Commission's Directives as well as the responses of the Distribution Licensees thereto along with the Commission's observations on the suggestions and comments received from the stakeholders on the ARR and the tariff proposal. The Commission directs Petitioners that this order be implemented along with directions given and conditions mentioned in the detailed order and in the schedules of this order. It is further ordered that the licensees are permitted to issue bills to the consumers in accordance with the provisions of this tariff order and applicable Regulations.

(Shashi Bhushan Pathak)
Member

(Mukul Dhariwal)
Member

A2: AGGREGATE REVENUE REQUIREMENT FOR PETITIONERS

Sales forecast as projected by the Petitioners

2.1 The Petitioners have submitted that for projection of sales for FY 2020-21, category wise and slab wise actual data of the sales, number of consumers, connected/contract load, etc. of the previous four years i.e. FY 2015-16, FY 2016-17, FY 2017-18 and FY 2018-19 and revised estimate for preceding year FY 2019-20 based on the available data till month of August 2019 have been used.

2.2 The Petitioners have further submitted that the approach being followed is to analyse 3 years and 2 years Compound Annual Growth Rates (CAGRs) and year on year growth rate of each category and its sub-categories in respect of urban & rural consumers separately. After analysis of the data, appropriate / reasonable growth rates have been assumed for future consumer forecasts from the past CAGRs of the Category/Sub-category by the three DISCOMs. The past CAGR on sales per consumer, sales per kW and connected load has been applied while forecasting the connected load and sales in each category/sub-category. The use of specific consumption i.e., consumption per consumer and / or consumption per unit load is the basic forecasting variable and is widely used in load and energy sales forecasting.

2.3 The Petitioners have submitted that the projections for urban domestic connections in un-metered category have been considered as nil, since all the domestic consumers in urban areas have been metered. Further, the Petitioners have submitted that additionally with the introduction of the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA scheme) additional 19.82 lakhs domestic households have been connected with the DISCOMs by October 2018. Therefore, over and above the normal growth, additional connections released under the SAUBHGYA scheme has been considered for computing the revised estimate for FY 2019-20 and projections for FY 2020-21.

2.4 Further, for Temporary Metered and Permanent Metered Connections under LV-5 category, estimation of Consumers and Load has been carried out on monthly basis instead of directly applying the growth rate to annual figures. For un-metered temporary agriculture consumers category, assessed consumption is considered as per the norms stipulated by the Commission in the Tariff order for FY 2019-20.

2.5 Further, the petitioners have signed a contract with Railways for on-demand supply of electricity for the currently under-development corridor between Itarsi and Katni. With the electrification of Railway Section between Itarsi-Pipariya-Bankhedi-Gadarwada, one new connection under Central DISCOM is expected. Similarly, with the electrification of the Railway Line between Gadarwara-Kareli-Katni, a new connection is expected under East DISCOM. There is no expectation of sales to Railways from West DISCOM. Accordingly, the East and Central DISCOMs have projected approximately 55 MU sales each for FY 2020-21 under this category.

2.6 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 2020-21 (MU)

Consumer Categories	East DISCOM	West DISCOM	Central DISCOM	Total for the State
LT				
LV-1: Domestic	5,170	4,815	5,624	15,609
LV-2: Non Domestic	1,173	1,273	1,079	3,525
LV-3: Public Water Works & Street Light	390	570	386	1,346
LV4: LT Industrial	418	708	311	1,437
LV 5.1: Agriculture Irrigation Pumps	7,264	9,573	7,066	23,903
LV-5.2: Agriculture related Use	6	2	5	13
LV-6: Electrical Vehicle	1	1	1	3
LT Sales (MU)	**14,424**	**16,943**	**14,470**	**45,837**
HT				
HV-1: Railway Traction	55	0	55	110
HV-2: Coal Mines	466	0	28	494
HV-3.1: Industrial	1,928	3,131	2,863	7,922
HV-3.2: Non-Industrial	261	457	419	1,137
HV-3.3: Shopping Mall	0	59	55	114
HV-3.4: Power Intensive Industries	983	1,422	585	2,990
HV-4: Seasonal	9	16	2	27
HV-5.1: Public Water Works and Irrigation	131	862	259	1,252
HV-5.2: Other than Agricultural	16	10	12	39
HV-6: Bulk Residential Users	275	32	145	452
HV-7: Synchronization/ Start-up Power	1	15	2	18
HV-8: Electrical Vehicle	2	3	3	8
HT Sales (MU)	**4,126**	**6,007**	**4,430**	**14,563**
Total LT + HT Sales (MU)	**18,550**	**22,951**	**18,900**	**60,400**

Note: The Commission observed a typographical error in the petition wherein HV 5.1 category sales has been wrongly shown in HV 5.2 category. The same is correctly shown here above.

2.7 Because of the spread of pandemic COVID-19 (Corona Virus), nationwide lockdown was imposed by State / Central Government in the country with effect from 24th March, 2020 in many parts of the country including the State of Madhya Pradesh. The Commission acknowledged that this lockdown has an impact on the sales projections submitted by the Petitioners in the Petition for approval of ARR and Retail Supply Tariff for FY 2020-21. Accordingly, the Commission vide letter dated 19th May, 2020 directed the Petitioner to submit the revised sales projections for FY 2020-21.

2.8 In reply dated 26th June, 2020, the Petitioners submitted that prevailing situation has led to temporary closing of the industries and commercial activities, thereby leading to reduction in energy sales for Non-Domestic, LT Industrial and HT Industrial categories for about four Months i.e. from April, 2020 to July, 2020. As the initial months of the financial year has begun in the lockdown, the demand for electricity will remain sluggish in the first quarter of the FY 2020-21, thereby resulting in lower consumption of electricity in the following categories of consumers:

a) LV-2: Non-domestic

b) LV-4: LT Industrial

c) HV-3.1: HT Industries

d) HV-3.2: HT Non-Industrial

e) HV-3.3: HT Shopping Malls

f) HV-3.4: HT Power Intensive Industries

2.9 The Petitioners submitted the revised projections for aforesaid category considering the actual sales for April 2020 and revised projections for the months of May 2020 to July 2020. The revised sales projection submitted by the Petitioner is as follows:

Table 10: Category wise sales projected by Petitioners for FY 2020-21 (MU)

Consumer Categories	East DISCOM	West DISCOM	Central DISCOM	Total for the State
LT				
LV-1: Domestic	5,170	4,815	5,624	15,609
LV-2: Non Domestic	1,036	1,134	1,003	3,173
LV-3: Public Water Works & Street Light	390	570	386	1,346
LV4: LT Industrial	378	633	290	1,301
LV 5.1: Agriculture Irrigation Pumps	7,264	9,573	7,066	23,903
LV-5.2: Agriculture related Use	6	2	5	13
LV-6: Electrical Vehicle	1	1	1	3
LT Sales (MU)	**14,245**	**16,729**	**14,374**	**45,348**
HT				
HV-1: Railway Traction	55	0	55	110
HV-2: Coal Mines	466	0	28	494
HV-3.1: Industrial	1,847	2,742	2,505	7,094
HV-3.2: Non-Industrial	230	404	362	996
HV-3.3: Shopping Mall	0	45	51	96
HV-3.4: Power Intensive Industries	667	1,214	470	2,351
HV-4: Seasonal	9	16	2	27
HV-5.1: Public Water Works and Irrigation	131	862	259	1,252
HV-5.2: Other Agricultural	16	10	12	38
HV-6: Bulk Residential Users	275	32	145	452
HV-7: Synchronization/ Start-up Power	1	15	2	18
HV-8: Electrical Vehicle	2	3	3	8
HT Sales (MU)	**3,698**	**5,343**	**3,895**	**12,936**
Total LT + HT Sales (MU)	**17,943**	**22,072**	**18,269**	**58,284**

Commission's Analysis

2.10 The Commission has observed that the Petitioners have not considered the actual sales for full FY 2019-20 for the projection of sales for FY 2020-21, as the same was not available at the time of filing the Petition. Also, it was observed that the Petitioner has considered consumption norm of 1650 units per HP per annum for some of permanent flat rate agricultural consumers against the norms of 1590 units per HP per annum approved by the Commission in the Tariff order for FY 2018-19 and FY 2019-20.

2.11 Accordingly, the Commission has reviewed the revised sales forecast submitted by the Petitioner and compared the same with the past trend i.e. actual sales for FY 2017-18 to FY 2019-20. Further, in order to ascertain the impact of the lockdown due to prevailing Pandemic, the Commission also analysed the monthly actual sales for the month of April, May and June 2020 (provisional). On analysis, it was observed that the monthly sales for non-domestic, LT industries and HT industries were severely impacted, whereas the sales for Domestic and Agriculture categories have increased as compared to sales in the corresponding month of FY 2019-20. This increase in sales of Domestic and Agriculture consumers with respect to previous year sales for the corresponding period matches with the projections made by the Petitioner in the Petition submitted by them. Accordingly, considering the actual sales for first quarter, the Commission has revised the sales for LV-2, LV-4, HV-3 categories for FY 2020-21 on lower side, as compared to their initial submissions, based on the actual data for this period. Further, the Commission has considered sales for Agriculture category considering the norms of 1590 units per HP per annum as approved in the tariff order for FY 2018-19 and FY 2019-20. Based on the above, the category-wise sales admitted by the Commission for FY 2020-21 is as shown in the Table below:

Table 11: Category wise sales admitted by the Commission for FY 2020-21 (MUs)

Consumer Categories	East DISCOM	West DISCOM	Central DISCOM	Total for the State
LV-1: Domestic	5,170	4,815	5,624	15,609
LV-2: Non Domestic	1,036	1,118	973	3,126
LV-3: Public Water Works & Street Light	390	570	386	1,346
LV4: LT Industrial	382	622	286	1,289
LV 5: Agriculture and allied activities	7,202	9,406	6,956	23,565
LV 6: Electric Vehicle	1	1	1	3
LT Sales (MU)	**14,181**	**16,532**	**14,225**	**44,938**
HV-1: Railway Traction	55	-	55	111
HV-2: Coal Mines	466	-	28	494
HV-3.1: Industrial	1,847	2,833	2,476	7,156
HV-3.2: Non-Industrial	230	388	348	965
HV-3.3: Shopping Mall	5	45	57	107
HV-3.4: Power Intensive Industries	667	1156	500	2,323
HV-4: Seasonal	9	16	2	27
HV-5.1: Public Water Works and Irrigation	131	862	259	1,252
HV 5.2 Other than Agriculture use	16	10	12	38
HV-6: Bulk Residential Users	275	32	145	451
HV-7: Synchronization/ Start-up Power	1	15	2	18

Consumer Categories	East DISCOM	West DISCOM	Central DISCOM	Total for the State
HV-8: Electric Vehicle	2	3	3	9
HT Sales (MU)	**3,703**	**5,359**	**3,888**	**12,951**
Total (LT + HT) Sales (MU)	**17,885**	**21,891**	**18,114**	**57,889**

Energy Balance

Petitioners' Submission

2.12 For projecting the energy requirement for FY 2020-21, the Petitioners have considered normative distribution losses specified by the Commission through 2nd amendment to MPERC Tariff Regulations, 2015, of 16.00%, 17.00% and 15.00% for East, Central and West DISCOM, respectively. Further, the Petitioners have submitted that they have considered the Intra-State Transmission Losses of 2.75% for FY 2018-19 as reported in Annual Report on Regulatory Compliance of MPPTCL, for projecting the energy requirement for FY 2020-21. For Western Region (WR), Northern Region (NR) and Eastern Region (ER), transmission losses of stations allocated to Madhya Pradesh have been considered as the actual transmission loss for past 52 weeks (14 October 2018 to 06 October 2019) of 3.00%, 3.46% and 1.78%, respectively for projecting the energy requirement for FY 2020-21.

2.13 Based on the above, the Petitioners had projected the energy requirement of 75,517 MU for catering the projected sales of 60,400 MU based on the normative losses. In the revised projections, the Petitioners have submitted revised projected sales of 58,284 MU which works out to an energy requirement of 72,918 MU for FY 2020-21. The Petitioners have projected energy requirement by grossing up the projected monthly sales by normative distribution losses and projected transmission losses which are as shown in the table below:

Table 12: Revised Energy requirement for FY 2020-21 as proposed by Petitioners

Particulars	Unit	East DISCOM	West DISCOM	Central DISCOM	MP State
LT Sales	MU	14,245	16,729	14,374	**45,348**
HT Sales	MU	3,698	5,343	3,895	**12,936**
Total Sales	MU	**17,943**	**22,072**	**18,269**	**58,284**
Distribution loss	%	16.00%	15.00%	17.00%	16.24%
Distribution loss	MU	3,418	3,895	3,742	11,055
Units Input at Distribution Interface	MU	21,361	25,966	22,011	69,339
Transmission loss	%	2.75%	2.75%	2.75%	2.75%
Transmission loss	MU	610	1017	623	2,251
Input at G-T interface	MU	21,971	26,984	22,634	71,589
WR-PGCIL Losses	%	3.00%	3.00%	3.00%	3.00%
NR-PGCIL Losses	%	3.46%	3.46%	3.46%	3.46%
ER-PGCIL Losses	%	1.78%	1.78%	1.78%	1.78%
External Losses	MU	405	498	426	1,329
Total Units to be Purchased	**MU**	**22,377**	**27,482**	**23,060**	**72,918**

Commission's Analysis

2.14 The distribution loss level trajectory as specified in the Tariff Regulations is given in the table below:

Table 13: Loss targets as per Regulations (in %)

DISCOM	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
East	18%	17%	16%	16%	**16%**
West	16%	15.5%	15%	15%	**15%**
Central	19%	18%	17%	17%	**17%**

2.15 The Commission has considered the distribution losses for FY 2020-21 as specified in the Tariff Regulations for projecting the energy requirement for FY 2020-21. For arriving at the total quantum of energy requirement, the Commission has considered annual sales grossed up by annual level of specified loss levels as per the calculations shown in subsequent paragraphs/ tables.

2.16 Further, the Commission observed that the actual PGCIL losses for FY 2019-20 are available. Accordingly, to work out the inter-State transmission losses, the Commission has considered the PGCIL losses separately for Eastern, Western and Northern Region generating stations based on the actual regional transmission losses for FY 2019-20. For Western Region generating stations, average transmission losses of 2.91% have been considered based on actual regional losses of FY 2019-20 (52-weeks data). Similarly, these losses have been considered as 1.73% for Eastern Region and 3.59% for Northern Region generating stations.

2.17 The Commission has also considered actual Intra-State transmission losses of 2.59% during FY 2019-20 as submitted by the Petitioners in reply to data gaps for computing the energy requirement for FY 2020-21. The Petitioners have submitted that the Intra State Transmission losses have been conveyed to them by the MP Power Transmission Company. The energy balance / power purchase requirement on the basis of the sales and losses admitted by the Commission for FY 2020-21 is presented in the following table:

Table 14: Energy requirement projected by the Commission for FY 2020-21

Particular	Unit	East DISCOM	West DISCOM	Central DISCOM	State
Total Sales	MU	17,885	21,891	18,114	57,889
Distribution loss	**%**	**16.00%**	**15.00%**	**17.00%**	**15.94%**
Distribution loss	MU	3,407	3,863	3,710	10,980
Input at T-D interface	MU	21,291	25,754	21,824	68,869
Transmission loss	**%**	**2.59%**	**2.59%**	**2.59%**	**2.59%**
Transmission loss	MU	566	685	580	1,831
Input at G-T interface	MU	21,857	26,438	22,404	70,700
PGCIL Losses					
WR- PGCIL Losses	**%**	**2.91%**	**2.91%**	**2.91%**	**2.91%**
ER- PGCIL Losses	**%**	**1.73%**	**1.73%**	**1.73%**	**1.73%**
NR-PGCIL Losses	**%**	**3.59%**	**3.59%**	**3.59%**	**3.59%**
PGCIL Losses	MU	387	469	397	1,254

Particular	Unit	East DISCOM	West DISCOM	Central DISCOM	State
Power Purchase Requirement	**MU**	**22,245**	**26,907**	**22,801**	**71,954**

Assessment of Energy Availability

Petitioners' Submission

2.18 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 the period FY 2019-20 and FY 2020-21 by MPPGCL, Central Sector, Joint venture and by Private players awarded through competitive bidding.

(c) Impact of generation capacity allocation in WR, ER and NR.

2.19 For projecting the availability from CGS, the latest allocation provided by Western Regional Power Committee (WRPC) in letter no. WRPC/Comml-I/6/Alloc/2019/948 dated 30th September, 2019 and from Eastern Region NTPC Kahalgaon 2 vide GoI MoP letter no. 5/31/2006-Th.2 dated 21st February, 2007 and Northern Region as per Northern Regional Power Committee letter No. NRPC/OPR/103/02/2018/6105-6103 dated 01st June, 2018 and communication held with their concerned offices have been considered for FY 2020-21.

2.20 MPPMCL has already decided to foreclose the PPAs for 400 MW from DVC (MTPS & CTPS) and 100 MW (DTPS) w.e.f., 01st March, 2018 and 15th May, 2017, respectively. The cost of such plants has not been considered while calculating the power purchase cost for FY 2020-21. However, in case the PPAs with DVC remains in force in FY 2019-20 & 2020-21, MPPMCL will be obligated to pay fixed charges for these stations.

2.21 During FY 2019-20, power from Essar, BLA and Sugen Torrent Generating Stations has been scheduled following MoD whereas in the Tariff Order for FY 2019-20 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 2019-20. For FY 2020-21, the availability from these plants has been considered as the PPAs with these plants remain in force.

2.22 Further, the Petitioners have submitted that following new Central Generating stations are scheduled to commence generation during the FY 2019-20 and FY 2020-21 as follows:

Table 15: Upcoming Stations and Technical Parameters

Sr. No.	Particulars	Capacity (MW)	MP Share		CoD
			(%)	(MW)	
1	NTPC Gadarwara STPS, Unit-1	1x800	50%	400	Jun-2019
2	NTPC Gadarwara STPS, Unit-2	1x800	50%	400	Jan-2020
3	NTPC Lara STPS, Raigarh Unit -1	1x800	11%	85	Oct-2019
4	NTPC Lara STPS, Raigarh Unit -2	1x800	8%	64	Feb-2020
5	NTPC Khargone STPS, Unit-1	1x660	50%	330	Nov-2019
6	NTPC Khargone STPS, Unit-2	1x660	50%	330	Mar-2020
7	**TOTAL**	**4520**		**1609**	

2.23 Following table shows MPPMCL allocated existing stations as well as the new capacity additions which are expected to become operational till end of FY 2019-20:

Table 16: MPPMCL allocated stations submitted by the Petitioners for FY 2020-21

Sr.no.	Particulars	Region	Capacity (MW)	FY 2020-21 (Proj)	
				%	MW
I	**Central Sector**		**33,996**		**5,684**
1.	NTPC Korba	WR	2,100	22%	466.67
2.	NTPC Korba III	WR	500	14%	69.59
3.	NTPC Vindyachal I	WR	1,260	34%	430.35
4.	NTPC Vindyachal II	WR	1,000	31%	308.32
5.	NTPC Vindyachal III	WR	1,000	24%	235.32
6.	NTPC Vindyachal IV	WR	1,000	27%	270.59
7.	NTPC Vindyachal V Unit 1	WR	500	27%	134.73
8.	NTPC Sipat I	WR	1,980	16%	311.08
9.	NTPC Sipat II	WR	1,000	18%	177.79
10.	NTPC Mouda I	WR	1,000	17%	165.15
11.	NTPC Mouda II Unit 1	WR	660	35%	230.32
12.	NTPC Kawas GPP	WR	656	21%	140.16
13.	NTPC Gandhar GPP	WR	657	18%	117.18
14.	NTPC Solapur STPS, Unit-1	WR	1,320	16%	210
15.	NTPC Gadarwara STPS, Unit-1	WR	800	50%	400
16.	NTPC Gadarwara STPS, Unit-2	WR	800	50%	400
17.	NTPC Lara STPS, Raigarh, Unit I	WR	800	11%	85.05
18.	NTPC Lara STPS, Raigarh, Unit II	WR	800	8%	63.8
19.	NTPC Khargone STPS, Unit-I	WR	660	50%	330
20.	NTPC Khargone STPS, Unit-II	WR	660	50%	330
21.	TAPP Tarapur	WR	1,080	21%	230.68
22.	KAPP Kakrapar	WR	440	25%	111.06
23.	RAPP Rawatbhata	NR	440	0.21%	1.85
24.	NAPP Narora	NR	440	0.25%	1.1
25.	NTPC Auraiya GPP	NR	663	0.26%	1.72
26.	NTPC Dadri GPP	NR	830	0.27%	2.24
27.	NTPC Anta GPP	NR	419	0.27%	1.13
28.	NTPC Firoz Gandhi Unchahar I	NR	420	0.08%	0.34
29.	NTPC Firoz Gandhi Unchahar II	NR	210	0.26%	0.55

Sr.no.	Particulars	Region	Capacity (MW)	FY 2020-21 (Proj)	
				%	MW
30.	NTPC Firoz Gandhi Unchahar III	NR	420	0.23%	1.13
31.	NTPC Firoz Gandhi Unchahar IV	NR	500	0.13%	1.3
32.	NTPC Rihand I	NR	1,000	0.22%	2.2
33.	NTPC Rihand II	NR	1,000	0.24%	2.4
34.	NTPC Rihand III	NR	1,000	0.27%	2.7
35.	NTPC NCTP Dadri II	NR	980	0.11%	2.25
36.	NTPC Singrauli	NR	2,000	0.22%	4.4
37.	NTPC IGPS I Jhajjar	NR	1,500	0.13%	1.95
38.	NTPC Kahalgaon II	ER	1,500	5%	74
II	**MP Genco-Thermal & Hydel**		**6,586**	96%	**6,317**
39.	Amarkantak TPS Ph-III	State	210	100%	210
40.	Satpura TPS Phase III	State	830	100%	830
41.	Satpura TPS Ph-IV	State	500	100%	500
42.	SGTPS Ph-I & II	State	840	100%	840
43.	SGTPS Ph-III	State	500	100%	500
44.	Shri Singaji STPS Phase 1& 2	State	1,200	100%	1200
45.	Shri Singaji STPS Phase-3	State	1,320	100%	1320
46.	Rani Awanti Bai Sagar, Bargi HPS	State	90	100%	90
47.	Bansagar Ph I HPS (Tons)	State	315	100%	315
48.	Bansagar Ph-II HPS (Silpara)	State	30	100%	30
49.	Bansagar Ph-III HPS (Deolond)	State	60	100%	60
50.	Bansagar Ph-IV HPS (Jhinna)	State	20	100%	20
51.	Birsinghpur HPS	State	20	100%	20
52.	Marhikheda HPS	State	60	100%	60
53.	Rajghat HPS	State	45	50%	22.5
54.	Gandhisagar HPS	State	115	50%	57.5
55.	Ranapratap Sagar HPS	State	172	50%	86
56.	Jawahar Sagar HPS	State	99	50%	49.5
57.	Pench HPS	State	160	67%	106.7
III	**JV Hydel & Other Hydel**		**9,892**	**25%**	**2,475**
58.	NHDC Indira Sagar HPS	State	1,000	100%	1000
59.	NHDC Omkareshwar HPS	State	520	100%	520
60.	Sardar Sarovar HPS	WR	1,450	57%	826.5
61.	SJVN Rampur HPS	NR	412	0.16%	0.66
62.	SJVN Jhakri HPS	NR	1,500	0.18%	2.7
63.	Tehri HPS	NR	1,000	0.18%	1.8
64.	Koteshwar HPP	NR	400	0.18%	0.72
65.	Parbati III	NR	520	0.27%	1.4
66.	NHPC Chamera II	NR	300	0.32%	0.96
67.	NHPC Chamera III	NR	231	0.27%	0.62
68.	NHPC Dulhasti	NR	390	0.27%	1.05
69.	NHPC Dhauliganga	NR	280	0.27%	0.76
70.	NHPC Sewa II	NR	120	0.26%	0.31
71.	NHPC Uri II	NR	240	0.27%	0.65
72.	NHPC Kishanganga	NR	330	0.26%	0.86
73.	NTPC Koldam HPP I	NR	800	0.12%	0.96
74.	NTPC Singrauli Small HPP	NR	8	0.25%	0.02
75.	Rihand HPS	NR	300	15%	45
76.	Matatila HPS	NR	31	33%	10

Sr.no.	Particulars	Region	Capacity (MW)	FY 2020-21 (Proj)	
				%	MW
77.	MTOA (5 years) from RVPNL (Hydel)	WR	60	100%	60
IV	**IPPs**		**10,318**	33%	**3,427**
78.	Torrent Power	WR	1,148	7%	75
79.	Lanco Amarkantak TPS Unit 1	WR	300	100%	300
80.	Reliance UMPP, Sasan	WR	3,960	38%	1485
81.	Jaiprakash Power STPS, Nigri	WR	1,320	38%	495
82.	MB Power STPS	WR	1,200	35%	420
83.	Jhabua Power STPS, Unit-1	WR	600	35%	210
84.	BLA Power	State	90	35%	31.5
85.	Jaypee Bina Power	State	500	70%	350
86.	Essar Power STPS	State	1,200	5%	60
V	**Renewables**				**3977.15**
87.	Solar	State			1545.75
88.	Other than Solar	State			2396.65
89.	Mini/Micro Hydel	State			34.75
	Total		**60,791**		**21,880**

2.24 The Petitioners have submitted that after meeting the requirement of the State and selling power on the power exchange, the Petitioners still have to back-down plants partially so as to save on the variable costs being incurred. The Petitioners have applied month-wise merit order dispatch principles on the basis of projected variable costs for FY 2020-21, after considering all generating stations allocated to MPPMCL. The Petitioners have considered the provisional data for FY 2018-19 & FY 2019-20 (till August 19) for calculating normative availability including backing down of power for FY 2020-21.

2.25 The Petitioners have projected to partially backing down of units/stations, which are higher up in the MoD by an average rate of energy sale at IEX during past 30 month, i.e. Rs. 3.28/kWh for FY 2020-21, during those periods when their running is not required to meet the demand in that period and the market rates do not justify their running either. This addresses demand fluctuations and ensures that power procured from cheaper sources is fully utilized and avoids procurement of power from costlier sources. The resultant benefit of reduced power procurement cost or sell at a higher rate, whichever the case maybe, is in turn passed on to the consumers.

2.26 The following table shows the stations which are considered by the Petitioners for partial/full back down:

Table 17: Stations which are considered by the Petitioners for partial /full back down (MU)*

Sr. No.	Particulars	Normative Availability	Back Down of Power	Net Availability
1	NTPC Mouda I	1,229	1,229	0
2	NTPC Auraiya GPP	12	12	0
3	NTPC Gandhar GPP	601	601	0
4	NTPC Solapur STPS, Unit-1	2,208	2,208	0
5	NTPC Gadarwara STPS, Unit-1	2,887	2,887	0
6	NTPC Gadarwara STPS, Unit-2	2,756	2,756	0

Sr. No.	Particulars	Normative Availability	Back Down of Power	Net Availability
7	NTPC Khargone STPS, Unit-I	2,316	2,316	0
8	NTPC Khargone STPS, Unit-II	2,185	2,185	0
9	NTPC Dadri GPP	15	15	0
10	NTPC NCTP Dadri II	16	16	0
11	NTPC IGPS I Jhajjar	13	13	0
12	Torrent Power	384	384	0
13	BLA Power	69	69	0
14	Jaypee Bina Power	2,372	2,372	0
15	Essar Power STPS	421	421	0
16	**Total**	**17,483**	**17,483**	**0**

*Note: In reply to data gap the Petitioner submitted revised projection of back down power as 19,848.60 MU based on the revised sales estimate.

2.27 The following table shows the overall availability of all the stations after application of merit order dispatch and back-down for the period FY 2020-21 as submitted by the Petitioners:

Table 18: Total Availability of Energy submitted by the Petitioners for FY 2020-21 (MU)

Particulars	Energy Availability
Energy available from all Stations allocated to MPPMCL	106,272
Less: Energy backed down	17,483
Total	**88,789**

Commission's Analysis

2.28 The Commission has considered the CGS allocation for FY 2020-21 as provided by Western Regional Power Committee in their letter No. WRPC/Comml-I/6/Alloc/2019/948 dated 30th September, 2019 and from Eastern Region NTPC Kahalgaon 2 vide GoI MoP letter no. 5/31/2006-Th.2 dated 21st February, 2007 and Northern Region as per Northern Regional Power Committee letter No. NRPC/OPR/103/02/2018/6105-6103 dated 01st June, 2018. 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, Energy Deptt. Govt. of Madhya Pradesh. The Commission has further distributed the generating capacities among the DISCOMs as per their energy requirement.

2.29 The Commission in order to project energy availability for FY 2020-21 has analysed the following:

(i) Actual average scheduled energy for previous three years i.e. FY 2017-18 to FY 2019-20 as per State Energy Account;

(ii) Actual availability of Central Generating Stations as per Regional Energy Account for FY 2018-19 and FY 2019-20;

(iii) Availability submitted by the Petitioner based on availability in FY 2018-19 and FY 2019-20 (till August);

(iv) Projections made by NHDC, NVDA and MPPGCL for FY 2020-21.

2.30 With regard to energy availability from Central Thermal Power Generating Stations, the Commission observed that the actual availability for FY 2019-20 is in line with the average of the scheduled energy in previous three years and with the Petitioner submission. Accordingly, the Commission has considered the availability for these stations as per actual plant availability in FY 2019-20.

2.31 Further, the Commission has considered energy availability from the Central Hydro Generating Stations as per the actual plant availability in previous years given in the Hydro Performance Review 2018-19 published by CEA.

2.32 For NPCIL generating stations, the Commission has considered energy availability based on the following:

(i) Kakrapar Nuclear Power Plant: As the plant was not operational due to shutdown for last few years and started operation in September, 2018 only, the energy availability data for previous three years is not available. Hence, the Commission has considered the projected energy availability for FY 2020-21 as submitted by the Petitioner as the same is in line with the actual scheduled energy from September 2018 to March 2020.

(ii) Tarapur Nuclear Power Plant: Based on Petitioner submission as the same is in line with average of the actual scheduled energy for previous three years;

(iii) Narora and Rawatbhata Nuclear Power Plant: As the share in these plants has been allocated to MPPMCL in FY 2018-19 only, the availability from these generating stations have been considered same as projected by the Petitioner, which is in line with the actual energy scheduled after its allocation to MPPMCL.

2.33 The Commission has considered the energy availability of MPPGCL thermal generating stations and hydro generating stations for FY 2020-21 based on the actual availability of the MP Genco power plants during FY 19-20. Further, it is observed that the MPPGCL is not scheduling any energy from Satpura Phase-III considering decommissioning proposal of the plant by the MP Genco sent to the State Govt. Accordingly, the Commission has also not considered availability from the said generating station for FY 2020-21. Availability, if any, from Satpura Phase-III generating stations may be considered at actual at the time of truing up of FY 2020-21. It is also observed that MPPGCL has not submitted the availability from Rana Pratap Sagar HPS, as it is being operated by Rajasthan Authority. Therefore, in absence of the details of past availability, the Commission has considered the energy availability as submitted by the Petitioner from Gandhi Sagar and Rana Pratap Sagar hydro.

2.34 As regard availability projections in respect of Indira Sagar Power Station (ISPS), Omkareshwar (OSP) and Sardar Sarovar Project (SSP), the Commission has considered the projections submitted by NHDC and NVDA for FY 2020-21 based on the actual availability for previous years.

2.35 With regard to new NTPC Stations i.e. Gadarwara, Lara and Khargone Thermal Power Stations, the Commission directed the Petitioner to submit the present status of their

COD. In reply to which the Petitioner submitted the revised details of the CODs for these stations. Subsequently, the Commission had enquired the status of the aforesaid generating plants from the concerned authorities, accordingly, the Commission has projected the energy availability from these generating stations based on the revised COD and net availability on the basis of the norms specified in the CERC (Terms and Conditions of Tariff) Regulations, 2019, on case to case basis.

2.36 In view of the Commission's orders dated 22 May, 2015 and 25 July, 2015 in Petition Nos. 16/2014 and 36/2015, respectively, the Commission has been disallowing the availability and the cost of power procured from Unit No. 1 of M/s BLA Power. In Appeal no. 201 of 2017, Hon'ble APTEL vide order dated 19.04.2018 remanded the matter to the Commission for determination of tariff for Unit no. 1 of BLA power plant for FY 2016-17 to FY 2018-19. The aforesaid order has been challenged by the Commission before the Hon'ble Supreme Court in Civil Appeal No. 5733 of 2018 and the same has been admitted and presently sub-judice before the Hon'ble Supreme Court. The petition for determination of tariff for Unit no. 2 of M/s BLA Power plant was filed by M/s BLA Power before the Commission, however the proceeding in the aforesaid petition was adjourned since one of the issues related to fuel supply arrangement in this petition has been commonly sub-judice in the aforesaid Civil Appeal. M/s BLA Power has approached the Commission in March 2020 for determination of tariff for Unit 2 of its power plant in light of certain subsequent development related to provisional allocation of coal linkage under Para B(ii) of SHAKTI Policy of Government of India. After admission on 05.11.2020, this Petition is now under detailed examination with the Commission. In view of aforesaid status, the availability and the cost of generation from Unit No. 1&2 of M/s BLA Power plant as filed by the Petitioner has not been considered in this order.

2.37 Further, the 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 as proposed by the petitioners for FY 2020-21 has not been considered in this order. Also, the Commission has not considered the availability and the cost there on for the Sugen Torrent Generating Station. However, the petitioner is at liberty to approach the Commission with a separate petition in these regards.

2.38 Month wise and generating station wise details of projected availability for FY 2020-21 is indicated in the following table:

Table 19 : Month wise energy availability projection for FY 2020-21 (MUs)

Sr. No.	Generating Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Total
	Central Generating Stations													
1	NTPC Korba	306	296	291	290	279	251	276	283	267	274	264	314	**3,391**
2	NTPC Korba III	44	45	46	38	36	38	43	43	43	43	40	43	**502**
3	NTPC Vindyachal I	262	264	251	247	239	220	254	276	261	250	221	242	**2,988**
4	NTPC Vindyachal II	207	193	99	106	196	185	191	214	195	196	188	192	**2,163**
5	NTPC Vindyachal III	159	167	155	158	163	129	160	143	126	141	128	132	**1,760**
6	NTPC Vindyachal IV	160	199	193	187	126	153	185	190	174	161	157	176	**2,060**
7	NTPC Vindyachal V Unit 1	97	106	105	95	101	90	92	100	87	73	66	88	**1,099**
8	NTPC Sipat I	211	176	159	185	189	180	193	178	193	206	184	205	**2,257**
9	NTPC Sipat II	120	125	112	122	111	105	104	121	119	97	90	107	**1,332**
10	NTPC Mouda I	80	113	204	131	124	96	125	113	105	113	84	77	**1,365**
11	NTPC Mouda II Unit 1	116	167	285	144	89	125	171	136	110	127	121	106	**1,698**
12	NTPC Kawas GPP	53	81	31	40	43	105	102	75	32	45	46	64	**718**
13	NTPC Gandhar GPP	54	61	24	56	54	70	58	33	45	35	77	34	**601**
14	NTPC Auraiya GPP	0.00	0.01	1.04	0.06	2.55	1.19	4.05	2.48	0.00	0.05	0.37	0.07	**12**
15	NTPC Dadri GPP	0.91	1.26	3.77	0.16	0.52	2.06	0.82	0.40	0.96	0.50	1.67	2.40	**15**
16	NTPC Anta GPP	0.01	0.79	2.10	0.00	0.00	0.38	0.37	3.07	0.00	0.56	0.52	0.00	**8**
17	NTPC Kahalgaon 2	36	34	50	35	44	33	45	56	54	44	42	47	**519**
18	KAPP Kakrapar	61	61	61	61	61	61	61	61	61	61	61	61	**728**
19	TAPP Tarapur	126	126	122	126	126	126	126	126	126	126	126	126	**1,512**
20	RAPP Rawatbhatta	1	1	1	1	1	1	1	1	1	1	1	1	**13**
21	NAPP Narora	1	1	1	1	1	1	1	1	1	1	1	1	**8**
22	NTPC Solapur STPS, Phase-1	181	188	181	188	188	181	188	181	188	188	169	188	**2,208**
23	NTPC Gadarwara STPS, Unit-1	268	268	268	268	268	268	268	268	268	268	268	268	**3,221**
24	NTPC Gadarwara STPS, Unit-2	-	-	-	-	-	-	240	240	240	240	240	240	**1,442**
25	NTPC Lara STPS, Raigarh, Unit I	50	50	50	50	50	50	50	50	50	50	50	50	**605**
26	NTPC Lara STPS, Raigarh, Unit II	-	-	-	-	-	-	37	37	37	37	37	37	**221**
27	NTPC Firoz Gandhi Unchahar I	0.22	0.23	0.22	0.23	0.23	0.22	0.23	0.22	0.23	0.23	0.21	0.23	**3**
28	NTPC Firoz Gandhi Unchahar II	0.37	0.38	0.37	0.38	0.38	0.37	0.38	0.37	0.38	0.38	0.34	0.38	**4**
29	NTPC Firoz Gandhi Unchahar III	1	1	1	1	1	1	1	1	1	1	1	1	**10**
30	NTPC Firoz Gandhi Unchahar IV	1	1	1	1	1	1	1	1	1	1	1	1	**10**
31	NTPC Rihand I	1	1	1	1	1	1	1	1	1	1	1	1	**16**
32	NTPC Rihand II	1	1	1	1	1	1	1	1	1	1	1	1	**18**
33	NTPC Rihand III	2	2	2	2	2	2	2	2	2	2	2	2	**23**
34	NTPC NCTP Dadri II	1	1	1	1	1	1	1	1	1	1	1	1	**17**
35	NTPC Singrauli	3	3	3	3	3	3	3	3	3	3	2	3	**32**
36	NTPC IGPS I Jhajjar	1	1	1	1	1	1	1	1	1	1	1	1	**15**
37	NTPC Khargone STPS, Unit-I	221	221	221	221	221	221	221	221	221	221	221	221	**2,657**

Sr. No.	Generating Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Total
38	NTPC Khargone STPS, Unit-II	177	177	177	177	177	177	177	177	177	177	177	177	**2,123**
39	**Sub-Total**	**3,005**	**3,132**	**3,106**	**2,939**	**2,903**	**2,885**	**3,387**	**3,346**	**3,194**	**3,191**	**3,075**	**3,212**	**37,373**
	State Generating Stations													
40	Amarkantak TPS Ph-III	137	147	136	62	142	137	135	134	142	140	131	133	**1,577**
41	Satpura TPS Ph-IV	339	301	184	228	218	219	213	328	362	336	325	352	**3,406**
42	SGTPS Ph-I & II	497	456	326	369	376	318	334	328	439	485	461	433	**4,823**
43	SGTPS Ph-III	278	201	297	289	199	255	297	326	290	278	272	297	**3,279**
44	Shri Singaji STPS, Ph-I	547	546	457	443	468	481	435	661	898	734	832	601	**7,102**
45	Shri Singaji Phase-2, Unit-1	232	299	585	335	136	38	0	138	496	579	575	502	**3,914**
46	Shri Singaji Phase-2, Unit-2	232	299	585	335	136	38	0	138	496	579	575	502	**3,914**
47	Rani Awanti Bai Sagar, Bargi HPS	24	27	14	35	61	66	54	38	27	36	27	27	**438**
48	Bansagar Ph I HPS (Tons)	62	46	33	34	99	109	76	55	61	56	46	43	**718**
49	Bansagar Ph-II HPS (Silpara)	11	9	5	5	1	6	11	11	13	12	10	9	**101**
50	Bansagar Ph-III HPS (Deolond)	3	6	33	30	8	24	36	0	0	0	0	0	**141**
51	Bansagar Ph-IV HPS (Jhinna)	7	5	3	2	1	6	8	10	12	11	10	9	**83**
52	Birsinghpur HPS	0	0	1	6	14	11	4	0	0	0	0	1	**37**
53	Marhikheda HPS	0	0	0	0	6	20	9	9	8	7	6	6	**71**
54	Rajghat HPS	0	0	0	0	3	7	5	7	4	4	6	2	**40**
55	Gandhisagar HPS	0	0	1	1	1	2	1	7	11	12	10	9	**56**
56	Ranapratap Sagar & Jawahar Sagar HPS	0	0	0	0	4	20	32	52	50	67	45	31	**302**
57	Pench HPS	7	8	0	5	5	31	48	12	13	10	7	5	**150**
58	**Sub-Total**	2,375	2,350	2,660	2,180	1,879	1,788	1,696	2,255	3,322	3,347	3,337	2,962	**30,152**
	JV Hydel & Other Hydel													
59	NHDC Indira Sagar HPS	85	113	45	85	211	370	230	125	127	119	103	143	**1,757**
60	NHDC Omkareshwar HPS	49	62	22	59	114	155	118	68	67	64	57	81	**916**
61	Sardar Sarovar HPS	47	41	23	105	247	364	257	172	191	162	133	79	**1,821**
62	Rihand HPS	4	4	3	6	6	9	11	3	9	11	9	7	**82**
63	Matatila HPS	0.16	1.16	0.00	0.00	0.35	1.37	2.62	2.79	1.71	1.50	1.84	1.27	**15**
64	SJVN Rampur HPS	0.23	0.23	0.41	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	**3**
65	SJVN Jhakri HPS	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	**11**
66	Tehri HPS	0.41	0.41	0.30	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	**5**
67	Koteshwar HPP	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	**2**
68	Parbati III	0.29	0.29	0.42	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	**4**
69	NHPC Chamera II	0.35	0.35	0.66	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	**4**
70	NHPC Chamera III	0.21	0.21	0.38	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	**3**
71	NHPC Dulhasti	0.38	0.38	0.43	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	**5**
72	NHPC Dhauliganga	0.22	0.22	0.39	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	**3**
73	NHPC Sewa II	0.11	0.11	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	**1**
74	NHPC Uri II	0.22	0.22	0.45	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	**3**
75	NHPC Kishanganga	0.24	0.24	0.46	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	**3**
76	NTPC Koldam HPP I	0.28	0.28	0.46	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	**4**

Sr. No.	Generating Stations	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Total
77	NTPC Singrauli Small HPP	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.14**
78	MTOA (5 years) from RVPNL (Hydel)	25	23	26	39	75	72	50	42	39	39	33	34	**500**
79	**Sub-Total**	**215**	**249**	**124**	**298**	**658**	**975**	**673**	**418**	**438**	**401**	**342**	**350**	**5,141**
	IPPs													
80	Jaypee Bina Power	188	274	320	142	148	164	255	230	182	187	142	147	**2,378**
81	Lanco Amarkantak TPS Unit 1	194	200	185	155	120	99	172	164	193	189	186	180	**2,038**
82	Reliance UMPP, Sasan	909	892	868	788	782	835	857	902	914	923	847	932	**10,450**
83	Jaiprakash Power STPS, Nigri	325	344	325	211	260	282	345	323	254	293	242	278	**3,483**
84	MB Power STPS	244	290	303	250	242	173	184	279	197	252	276	265	**2,956**
85	Jhabua Power STPS, Unit-1	57	72	123	67	47	64	70	109	82	94	96	99	**979**
86	**Sub-Total**	**1,917**	**2,073**	**2,124**	**1,613**	**1,600**	**1,617**	**1,883**	**2,007**	**1,822**	**1,939**	**1,790**	**1,900**	**22,285**
	Renewables													
87	Solar	214	221	214	221	221	214	221	214	221	221	200	221	**2,601**
88	Other Mini Micro	1	1	1	2	3	3	2	2	2	2	1	1	**19**
89	Other than Solar & Mini Micro	387	400	387	400	400	387	400	387	400	400	361	400	**4,704**
90	**Sub-Total**	**602**	**622**	**602**	**622**	**623**	**603**	**622**	**602**	**622**	**622**	**562**	**622**	**7,325**
91	**Grand Total**	**8,113**	**8,426**	**8,615**	**7,651**	**7,663**	**7,868**	**8,261**	**8,628**	**9,399**	**9,499**	**9,106**	**9,046**	**1,02,276**

Assessment of Power Purchase Cost

Petitioners' Submission

2.39 Details of the fixed cost and variable charges of MPPMCL allocated stations as submitted by the Petitioner are mentioned in the table below:

Table 20 : Fixed cost and Variable charges of MPPMCL allocated stations submitted by the Petitioners for FY 2020-21

Sr. no.	Particulars	Fixed Charge for MP allocation (Rs Crore)	Basis for Fixed Charges	Variable Charge (Rs/kWh)	Basis for Energy Charges
I	**Central Sector**				
1.	NTPC Korba	221.51	CERC Order 24-02-2017	1.39	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
2.	NTPC Korba III	66.69	CERC Order 03-03-2017	1.37	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
3.	NTPC Vindyachal I	248.67	CERC Order 24-02-2017	1.86	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
4.	NTPC Vindyachal II	149.61	CERC Order 06-02-2017	1.89	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
5.	NTPC Vindyachal III	171.90	CERC Order 24-02-2017	1.76	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
6.	NTPC Vindyachal IV	295.86	CERC Order 10-03-2017	1.75	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
7.	NTPC Vindyachal V Unit 1	155.81	CERC Order 31-08-2016	1.79	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
8.	NTPC Sipat I	281.38	CERC Order 29-03-2017	1.35	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
9.	NTPC Sipat II	153.52	CERC Order 21-03-2017	1.39	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
10.	NTPC Mouda I	188.77	CERC Order 01-02-2017	3.31	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
11.	NTPC Mouda II Unit 1	255.73	CERC Order 05-04-2017	3.08	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
12.	NTPC Kawas GPP	86.91	CERC Order 24-03-2017	2.84	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
13.	NTPC Gandhar GPP	89.92	CERC Order 10-04-2017	3.82	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)

Sr. no.	Particulars	Fixed Charge for MP allocation (Rs Crore)	Basis for Fixed Charges	Variable Charge (Rs/kWh)	Basis for Energy Charges
14.	NTPC Solapur STPS, Unit-1	314.19	Total Fixed charges as per past 12 months Bills (Sep-18 to Aug-19)	4.47	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
15.	NTPC Gadarwara STPS, Unit-1	442.73	Fixed charges proportionate to Weighted Average of past 3 months Bills (June-19 to Aug-19)	3.80	Variable charges proportionate to Weighted Average of past 3 months Bills (June-19 to Aug-19)
16.	NTPC Gadarwara STPS, Unit-2	590.31	Considered same as NTPC Gadarwara STPS, Unit-1	3.80	Considered same as NTPC Gadarwara STPS, Unit-1
17.	NTPC Lara STPS, Raigarh, Unit I	97.21	Proportionately calculated on the basis of NTPC Mouda Unit 1	2.41	As per MoD of Oct-19
18.	NTPC Lara STPS, Raigarh, Unit II	53.13	Proportionately calculated on the basis of NTPC Mouda Unit 1	2.41	Considered same as NTPC Lara STPS, Unit-1
19.	NTPC Khargone STPS, Unit-I	487.00	Proportionately calculated on the basis of Gadarwara	3.80	Considered same as NTPC Gadarwara STPS, Unit-1
20.	NTPC Khargone STPS, Unit-II	487.00	Proportionately calculated on the basis of Gadarwara	3.80	Considered same as NTPC Gadarwara STPS, Unit-1
21.	TAPP Tarapur	-	Total Fixed charges as per past 12 months Bills (Sep-18 to Aug-19)	3.11	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
22.	KAPP Kakrapar	-	Total Fixed charges as per past 12 months Bills (Sep-18 to Aug-19)	2.48	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
23.	RAPP Rawatbhata	-	Total Fixed charges as per past 12 months Bills (Sep-18 to Aug-19)	4.05	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
24.	NAPP Narora	-	Total Fixed charges as per past 12 months Bills (Sep-18 to Aug-19)	3.20	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
25.	NTPC Auraiya GPP	0.64	CERC Order 18-04-2017	3.91	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
26.	NTPC Dadri GPP	0.95	CERC Order 01-02-2017	3.83	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
27.	NTPC Anta GPP	0.59	CERC Order 19-09-2017	3.28	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
28.	NTPC Firoz Gandhi Unchahar I	0.23	CERC Order 22-03-2017	3.21	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)

Sr. no.	Particulars	Fixed Charge for MP allocation (Rs Crore)	Basis for Fixed Charges	Variable Charge (Rs/kWh)	Basis for Energy Charges
29.	NTPC Firoz Gandhi Unchahar II	0.46	CERC Order 19-04-2017	3.18	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
30.	NTPC Firoz Gandhi Unchahar III	0.69	CERC Order 31-03-2017	3.19	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
31.	NTPC Firoz Gandhi Unchahar IV	0.94	Total Fixed charges as per past 12 months Bills (Sep-18 to Aug-19)	3.19	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
32.	NTPC Rihand I	1.29	CERC Order 23-08-2016	1.35	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
33.	NTPC Rihand II	1.19	CERC ORDER 01-12-2016	1.34	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
34.	NTPC Rihand III	2.75	CERC ORDER 06-12-2017	1.35	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
35.	NTPC NCTP Dadri II	2.12	CERC ORDER 02-05-2017	3.67	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
36.	NTPC Singrauli	1.99	CERC Order 28-07-2016	1.39	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
37.	NTPC IGPS I Jhajjar	2.04	CERC ORDER 09-03-2017	3.44	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
38.	NTPC Kahalgaon 2	56.35	CERC Order 21-01-2017	2.12	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
II	**MP Genco- Thermal & Hydel**				
39.	Amarkantak TPS Ph-III	211.32	MPERC Order 14-07-2016	1.59	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
40.	Satpura TPS Phase III	407.73	MPERC Order 14-07-2016	2.72	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
41.	Satpura TPS Ph-IV	672.84	MPERC Order 14-07-2017	2.26	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
42.	SGTPS Ph-I & II	360.28	MPERC Order 14-07-2016	2.15	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
43.	SGTPS Ph-III	385.99	MPERC Order 14-07-2016	1.99	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
44.	Shri Singaji STPS Phase 1& 2	1,176.14	MPERC Order 14-07-2017	2.78	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
45.	Shri Singaji STPS Phase-3	1,192.44	MPERC Order 07-03-2019 and MPERC Order 18-06-2019	2.64	Variable charges as per Weighted Average of past 5 months Bills (Apr-19to Aug-19)

Sr. no.	Particulars	Fixed Charge for MP allocation (Rs Crore)	Basis for Fixed Charges	Variable Charge (Rs/kWh)	Basis for Energy Charges
46.	Rani Awanti Bai Sagar, Bargi HPS	13.80	MPERC Order 14-07-2016	0.64	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
47.	Bansagar Ph I HPS (Tons)	124.78	MPERC Order 14-07-2016	0.78	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
48.	Bansagar Ph-II HPS (Silpara)	-	0	0.83	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
49.	Bansagar Ph-III HPS (Deolond)	-	0	1.61	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
50.	Bansagar Ph-IV HPS (Jhinna)	15.40	MPERC Order 14-07-2016	1.06	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
51.	Birsinghpur HPS	4.62	MPERC Order 14-07-2016	0.97	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
52.	Marhikheda HPS	32.67	MPERC Order 14-07-2016	2.17	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
53.	Rajghat HPS	6.17	MPERC Order 14-07-2016	1.73	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
54.	Gandhisagar HPS	5.52	MPERC Order 14-07-2016	0.77	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
55.	Ranapratap Sagar HPS	4.66	As per Tariff Order for FY 2018-19 Considered same as Gandhi Sagar	1.51	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
56.	Jawahar Sagar HPS	-	0	1.51	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
57.	Pench HPS	11.63	MPERC Order 14-07-2016	0.47	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
III	**JV Hydel & Other Hydel**				
58.	NHDC Indira Sagar HPS	502.78	CERC Order 31-05-2016	1.72	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
59.	NHDC Omkareshwar HPS	395.45	CERC Order 26-05-2016	2.67	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
60.	Sardar Sarovar HPS	205.20	MPERC Order dated August 62013 in P.No.18 of 2013	1.18	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
61.	SJVN Rampur HPS	0.96	CERC Order Dated 15-02-2017	1.78	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
62.	SJVN Jhakri HPS	3.08	CERC Order Dated 15-03-2017	1.15	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)

Sr. no.	Particulars	Fixed Charge for MP allocation (Rs Crore)	Basis for Fixed Charges	Variable Charge (Rs/kWh)	Basis for Energy Charges
63.	Tehri HPS	4.04	CERC Order Dated 29-03-2017	1.61	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
64.	Koteshwar HPP	1.49	CERC Order Dated 09-10-2018	1.57	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
65.	Parbati III	0.31	As no tariff Order issued after FY 13-14. For FY 13-14 AFC was approved for 7 days for all units. So same has been prorated for 366 days	1.84	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
66.	NHPC Chamera II	0.90	CERC Order Dated 17-06-2016	1.01	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
67.	NHPC Chamera III	1.08	CERC Order Dated 06-02-2017	2.12	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
68.	NHPC Dulhasti	2.85	CERC Order Dated 30-08-2016	2.56	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
69.	NHPC Dhauliganga	0.70	CERC Order Dated 26-04-2016	1.22	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
70.	NHPC Sewa II	1.08	CERC Order Dated 27-01-2017	2.17	Variable charges proportionate to Weighted Average of past 5 months Bills (Apr-18 to Aug-19)
71.	NHPC Uri II	1.11	CERC Order Dated 22-07-2016	2.37	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
72.	NHPC Kishanganga	0.92	CERC Order Dated 27-01-2017	1.84	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
73.	NTPC Koldam HPP I	1.94	CERC ORDER 05-04-2018	2.54	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
74.	NTPC Singrauli Small HPP	-	Total Fixed charges as per past 12 months Bills (Sep-18 to Aug-19)	5.31	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
75.	Rihand HPS	-	As per actual Bills from Sept -15 to Aug-16	0.40	As per actual Bills from Sept -15 to Aug-16
76.	Matatila HPS	-	As per actual Bills from Sept -15 to Aug-16	0.40	As per actual Bills from Sept -15 to Aug-16
IV	**IPPs**				
77.	Torrent Power	62.49	Total Fixed charges as per past 12 months Bills (Sep-18 to Aug-19)	5.46	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)

Sr. no.	Particulars	Fixed Charge for MP allocation (Rs Crore)	Basis for Fixed Charges	Variable Charge (Rs/kWh)	Basis for Energy Charges
78.	Lanco Amarkantak TPS Unit 1	247.00	Total Fixed charges as per past 12 months Bills (Sep-18 to Aug-19)	2.55	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
79.	Reliance UMPP, Sasan	166.58	Total Fixed charges as per past 12 months Bills (Sep-18 to Aug-19)	1.41	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
80.	Jaiprakash Power STPS, Nigri	709.17	MPERC Order in Petition No.7 of 2018 dated 29-11-2018	0.49	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
81.	MB Power STPS	409.06	MPERC Order dated 29-07-2015	2.30	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
82.	Jhabua Power STPS, Unit-1	166.50	MPERC Order 30-11-2018	2.52	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
83.	BLA Power	14.98	For BLA I total Fixed Charges as per past 6 months Bills (Mar-19 to Aug-19) and for BLA II total Fixed Charges as per past 1 Month Bill (July-19)	3.67	for BLA I,Variable Charges as per Weighted Average of past 6 months Bills (Mar-19 to Aug-19) and for BLA II Variable Charges proportionate to Weighted Average of past 1 Month Bill (July-19)
84.	Jaypee Bina Power	504.75	MPERC Order 08-08-2016	3.45	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
85.	Essar Power STPS	-	Total Fixed charges as per past 12 months Bills (Sep-18 to Aug-19)	3.95	Variable charges as per Weighted Average of past 12 months Bills (Sep-18 to Aug-19)
V	**Renewables**				
86.	Solar	-		5.00	
87.	Other than Solar	-		5.54	
88.	Mini/Micro Hydel	-		2.49	

2.40 The Merit Order Dispatch (MOD) applied for FY 2020-21 as submitted by the Petitioners is given in the following table:

Table 21 : MOD for FY 2020-21 as submitted by the Petitioners

Sr.no	Particulars	Variable Charge (Paisa/kWh)	Availability (MUs)
1	KAPP Kakrapar	248	728
2	TAPP Tarapur	311	1,512
3	RAPP Rawatbhata	405	13
4	NAPP Narora	320	8
5	Solar	500	2,601
6	Mini/Micro Hydel	249	19
7	Other than Solar	554	4,704

Sr.no	Particulars	Variable Charge (Paisa/kWh)	Availability (MUs)
8	Rihand HPS	40	82
9	Matatila HPS	40	15
10	Pench HPS	47	127
11	Jaiprakash Power STPS, Nigri	49	3,208
12	Rani Awanti Bai Sagar, Bargi HPS	64	309
13	MTOA (5 years) from RVPNL (Hydel)	73	500
14	Gandhisagar HPS	77	159
15	Bansagar Ph I HPS (Tons)	78	797
16	Bansagar Ph-II HPS (Silpara)	83	78
17	Birsinghpur HPS	97	31
18	NHPC Chamera II	101	7
19	Bansagar Ph-IV HPS (Jhinna)	106	70
20	SJVN Jhakri HPS	115	19
21	Sardar Sarovar HPS	118	956
22	NHPC Dhauliganga	122	5
23	NTPC Rihand II	134	17
24	NTPC Sipat I	135	2,183
25	NTPC Rihand I	135	15
26	NTPC Rihand III	135	19
27	NTPC Korba III	137	488
28	NTPC Sipat II	139	1,248
29	NTPC Singrauli	139	30
30	NTPC Korba	139	3,243
31	Reliance UMPP, Sasan	141	10,422
32	Ranapratap Sagar HPS	151	176
33	Jawahar Sagar HPS	151	126
34	Koteshwar HPP	157	5
35	Amarkantak TPS Ph-III	159	1,424
36	Tehri HPS	161	12
37	Bansagar Ph-III HPS (Deolond)	161	90
38	NHDC Indira Sagar HPS	172	1,831
39	Rajghat HPS	173	33
40	NTPC Vindyachal IV	175	1,899
41	NTPC Vindyachal III	176	1,652
42	SJVN Rampur HPS	178	5
43	NTPC Vindyachal V Unit 1	179	947
44	Parbati III	184	10
45	NHPC Kishanganga	184	6
46	NTPC Vindyachal I	186	2,916
47	NTPC Vindyachal II	189	2,164
48	SGTPS Ph-III	199	3,499
49	NTPC Kahalgaon 2	212	519
50	NHPC Chamera III	212	4
51	SGTPS Ph-I & II	215	4,686
52	Marhikheda HPS	217	70

Sr.no	Particulars	Variable Charge (Paisa/kWh)	Availability (MUs)
53	NHPC Sewa II	217	2
54	Satpura TPS Ph-IV	226	3,406
55	MB Power STPS	230	2,728
56	NHPC Uri II	237	4
57	NTPC Lara STPS, Raigarh, Unit I	241	597
58	NTPC Lara STPS, Raigarh, Unit II	241	431
59	Jhabua Power STPS, Unit-1	252	979
60	NTPC Koldam HPP I	254	7
61	Lanco Amarkantak TPS Unit 1	255	2,033
62	NHPC Dulhasti	256	7
63	Shri Singaji STPS Phase-3	264	8,234
64	NHDC Omkareshwar HPS	267	855
65	Satpura TPS Phase III	272	3,924
66	Shri Singaji STPS Phase 1& 2	278	7,530
67	NTPC Kawas GPP	284	718
68	NTPC Mouda II Unit 1	308	1,616
69	NTPC Firoz Gandhi Unchahar II	318	4
70	NTPC Firoz Gandhi Unchahar IV	319	9
71	NTPC Firoz Gandhi Unchahar III	319	8
72	NTPC Firoz Gandhi Unchahar I	321	2
73	NTPC Anta GPP	328	8
74	NTPC Mouda I	331	1,229
75	NTPC IGPS I Jhajjar	344	13
76	Jaypee Bina Power	345	2,372
77	BLA Power	367	69
78	NTPC NCTP Dadri II	367	16
79	NTPC Gadarwara STPS, Unit-1	380	2,887
80	NTPC Gadarwara STPS, Unit-2	380	2,756
81	NTPC Khargone STPS, Unit-I	380	2,316
82	NTPC Khargone STPS, Unit-II	380	2,185
83	NTPC Gandhar GPP	382	601
84	NTPC Dadri GPP	383	15
85	NTPC Auraiya GPP	391	12
86	Essar Power STPS	395	421
87	NTPC Solapur STPS, Unit-1	447	2,208
88	NTPC Singrauli Small HPP	531	0.14
89	Torrent Power	546	384
	Total		**1,06,272**

2.41 The table below shows the details of the fixed costs and variable costs generating station wise for FY 2020-21 as submitted by the Petitioner.

Table 22 : Fixed cost and Variable cost as filed for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Fixed Charge	Variable Charge	Total
I	**Central Sector**	**5,075**	**3,777**	**8,667**
1	NTPC Korba	222	452	673
2	NTPC Korba III	67	67	133
3	NTPC Vindyachal I	249	543	791
4	NTPC Vindyachal II	150	408	558
5	NTPC Vindyachal III	172	291	462
6	NTPC Vindyachal IV	296	333	629
7	NTPC Vindyachal V Unit 1	156	169	325
8	NTPC Sipat I	281	294	575
9	NTPC Sipat II	154	174	327
10	NTPC Mouda I	189	-	189
11	NTPC Mouda II Unit 1	256	3	258
12	NTPC Kawas GPP	87	17	104
13	NTPC Gandhar GPP	90	-	90
14	NTPC Solapur STPS, Unit-1	314	-	314
15	NTPC Gadarwara STPS, Unit-1	590	-	590
16	NTPC Gadarwara STPS, Unit-2	590	-	590
17	NTPC Lara STPS, Raigarh, Unit I	97	144	241
18	NTPC Lara STPS, Raigarh, Unit II	71	104	175
19	NTPC Khargone STPS, Unit-I	487	-	487
20	NTPC Khargone STPS, Unit-II	487	-	487
21	TAPP Tarapur	-	470	470
22	KAPP Kakrapar	-	181	181
23	RAPP Rawatbhatta	-	5	5
24	NAPP Narora	-	2	2
25	NTPC Auraiya GPP	1	-	1
26	NTPC Dadri GPP	1	-	1
27	NTPC Anta GPP	1	-	1
28	NTPC Firoz Gandhi Unchahar I	0	-	0
29	NTPC Firoz Gandhi Unchahar II	0	-	0
30	NTPC Firoz Gandhi Unchahar III	1	-	1
31	NTPC Firoz Gandhi Unchahar IV	1	-	1
32	NTPC Rihand I	1	2	3
33	NTPC Rihand II	1	2	3
34	NTPC Rihand III	3	3	5
35	NTPC NCTP Dadri II	2	-	2
36	NTPC Singrauli	2	4	6
37	NTPC IGPS I Jhajjar	2	-	2
38	NTPC Kahalgaon 2	56	110	166
				-

Sr. No.	Particulars	Fixed Charge	Variable Charge	Total
	MP Genco-Thermal & Hydel	**4,626**	**5,363**	**9,989**
39	Amarkantak TPS Ph-III	211	227	438
40	Satpura TPS Phase III	408	420	827
41	Satpura TPS Ph-IV	673	769	1,442
42	SGTPS Ph-I & II	360	1,008	1,368
43	SGTPS Ph-III	386	695	1,081
44	Shri Singaji STPS Phase 1& 2	1,176	516	1,692
45	Shri Singaji STPS Phase-3	1,192	1,531	2,723
46	Rani Awanti Bai Sagar, Bargi HPS	14	20	34
47	Bansagar Ph I HPS (Tons)	-	63	63
48	Bansagar Ph-II HPS (Silpara)	-	7	7
49	Bansagar Ph-III HPS (Deolond)	125	14	139
50	Bansagar Ph-IV HPS (Jhinna)	15	7	23
51	Birsinghpur HPS	5	3	8
52	Marhikheda HPS	33	15	48
53	Rajghat HPS	6	6	12
54	Gandhisagar HPS	6	12	18
55	Ranapratap Sagar HPS	5	27	31
56	Jawahar Sagar HPS	-	19	19
57	Pench HPS	12	6	18
	JV Hydel & Other Hydel	**1,124**	**584**	**1,708**
58	NHDC Indira Sagar HPS	503	315	818
59	NHDC Omkareshwar HPS	395	100	495
60	Sardar Sarovar HPS	205	113	318
61	SJVN Rampur HPS	1	1	2
62	SJVN Jhakri HPS	3	2	5
63	Tehri HPS	4	2	6
64	Koteshwar HPP	1	1	2
65	Parbati III	0	2	2
66	NHPC Chamera II	1	1	2
67	NHPC Chamera III	1	1	2
68	NHPC Dulhasti	3	2	5
69	NHPC Dhauliganga	1	1	1
70	NHPC Sewa II	1	0	2
71	NHPC Uri II	1	1	2
72	NHPC Kishanganga	1	1	2
73	NTPC Koldam HPP I	2	2	4
74	NTPC Singrauli Small HPP	-	-	-
75	Rihand HPS	-	3	3
76	Matatila HPS	-	1	1

Sr. No.	Particulars	Fixed Charge	Variable Charge	Total
77	MTOA (5 years) from RVPNL (Hydel)	-	37	37
78	ISP**	-	-	-
79	OSP**	-	-	-
80	SSP**	-	-	-
81	ISP NVDA**	-	-	-
82	Bargi NVDA**	-	-	-
	DVC	**-**	**-**	**-**
83	DVC MTPS	-	-	-
84	DVC CTPS	-	-	-
85	DVC DTPS	-	-	-
	IPPs	**2,281**	**3,017**	**5,297**
86	Torrent Power	62	-	62
87	Lanco Amarkantak TPS Unit 1	247	519	766
88	Reliance UMPP, Sasan	167	1,466	1,632
88	Jaiprakash Power STPS, Nigri	709	157	866
89	MB Power STPS	409	628	1,037
90	Jhabua Power STPS, Unit-1	167	246	413
90	BLA Power	15	-	15
91	Jaypee Bina Power	505	-	505
92	Essar Power STPS	-	-	-
	Renewables			
93	Solar	-	1,300	1,300
94	Other than Solar	-	2,605	2,605
95	Mini/Micro Hydel	-	5	5
	Total*	**13,105.79**	**16,650.18**	**29,570.50**

Note: * In reply to data gaps the Petitioner submitted that the revised Power Purchase Cost as Rs. 28,399.48 Crore (Fixed Charges: 12,793.50 Crore & Energy Charges: 15,605.97 Crore)

** The Petitioner has not shown the Fixed and Variable costs for these generating stations

Commission's Analysis

Determination of Variable Cost

Central, State and other Generating Stations

2.42 The Commission has considered variable charges for FY 2020-21 on the basis of actual energy charges for second half of the FY 2019-20 submitted by the MPPMCL in reply to data gaps.

Renewable sources

2.43 For renewable sources, the Commission has considered power purchase from Solar and Non-solar sources at weighted average rate of Rs 4.83/ kWh and Rs 5.45/ kWh for existing capacities on the basis of actual energy charges for the FY 2019-20 submitted by the MPPMCL in reply to data gaps.

New/ other generating stations

2.44 For new/ other generating stations, the Commission has considered the variable charges on case to case basis as shown in the following Table.

Determination of Fixed Cost

Central, State and other Generating Stations

2.45 For Central/Inter-State Generating Stations (Thermal and Hydel), the Commission has considered latest available tariff orders issued by CERC for individual stations.

2.46 Fixed costs of the MPPGCL stations w.e.f. 1st April, 2019, have been considered in accordance with Orders issued by the Commission for various generating stations read with applicable MPERC MYT Regulations.

Power Purchase from Captive Power Plants (CPP)

2.47 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, provides 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."

2.48 The Commission has observed that the Petitioner has not projected any availability of power from Captive Power Plants for FY 2020-21. 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 and its cost from CPP at the time of truing up.

New/ other generating stations

2.49 For new/ other generating stations, the Commission has considered the fixed charges on case to case basis.

2.50 The basis of Fixed and Energy Charges is shown in the table below:

Table 23: Basis of Fixed and Variable charges for the generating stations during FY 2020-21

Sr. No.	Generating Stations	Fixed Charges as per latest Tariff Orders (Rs. Crore)	Basis	Energy Charges (Paisa/kWh)	Basis
	Central Sector				
1	NTPC Korba I & II	1,001.93	CERC Order 24-02-2017 in P.no. 323/GT/2014 for 01-04-2014 to 31-03-2019	150	As per actual for 2nd half of FY 2019-20
2	NTPC Korba III	489.17	CERC Order 03-03-2017 in P.no. 340/GT/2014 for 01-04-2014 to 31-03-2019	147	As per actual for 2nd half of FY 2019-20
3	NTPC Vindyachal I	732.34	CERC Order 24-02-2017 in P.no. 338/GT/2014 for 01-04-2014 to 31-03-2019	185	As per actual for 2nd half of FY 2019-20
4	NTPC Vindyachal II	488.20	CERC Order 06-02-2017 in P.no. 327/GT/2014 for 01-04-2014 to 31-03-2019	191	As per actual for 2nd half of FY 2019-20
5	NTPC Vindyachal III	736.33	CERC Order 24-02-2017 in P.no. 342/GT/2014 for 01-04-2014 to 31-03-2019	190	As per actual for 2nd half of FY 2019-20
6	NTPC Vindyachal IV	1,104.99	CERC Order 10-03-2017 in P.no. 339/GT/2014 for 01-04-2014 to 31-03-2019	186	As per actual for 2nd half of FY 2019-20
7	NTPC Vindyachal V Unit 1	583.42	CERC Order 31-08-2016 in P.no. 234/GT/2015 for 30-10-2015 to 31-03-2019	191	As per actual for 2nd half of FY 2019-20
8	NTPC Sipat I	1,824.04	CERC Order 29-03-2017 in P.no. 337/GT/2014 for 01-04-2014 to 31-03-2019	158	As per actual for 2nd half of FY 2019-20
9	NTPC Sipat II	874.45	CERC Order 21-03-2017 & 15-12-2017 in P.no. 322/GT/2014 & P.no. 28/RP/2017 for 01-04-2014 to 31-03-2019	163	As per actual for 2nd half of FY 2019-20
10	NTPC Mouda I	1,314.77	CERC Order 01-02-2017 in P.no. 328/GT/2014 for 01-04-2014 to 31-03-2019	529	As per actual for 2nd half of FY 2019-20
11	NTPC Mouda II Unit 1	693.36	CERC Order 05-04-2019 in P.no. 142/GT/2016 for COD to 31-03-2019	449	As per actual for 2nd half of FY 2019-20
12	NTPC Kawas GPP	406.91	CERC Order 24-03-2017 in P.no. 341/GT/2017 for 01-04-2014 to 31-03-2019	238	As per actual for 2nd half of FY 2019-20
13	NTPC Gandhar GPP	516.44	CERC Order 10-04-2017& 19-02-2019 in P.no. 325/GT/2014 & P.no. 32/RP/2017 for 01-04-2014 to 31-03-2019	283	As per actual for 2nd half of FY 2019-20
14	NTPC Auraiya GPP	309.10	CERC Order 18-04-2017 in P.no. 285/GT/2014 for 01-04-2014 to 31-03-2019	352	As per actual for 2nd half of FY 2019-20
15	NTPC Dadri GPP	350.88	CERC Order 27-01-2017 in P.no. 308/GT/2014 for 01-04-2014 to 31-03-2019	316	As per actual for 2nd half of FY 2019-20
16	NTPC Anta GPP	218.36	CERC Order 19-09-2016 in P.no. 287/GT/2014 for 01-04-2014 to 31-03-2019	342	As per actual for 2nd half of FY 2019-20

Sr. No.	Generating Stations	Fixed Charges as per latest Tariff Orders (Rs. Crore)	Basis	Energy Charges (Paisa/kWh)	Basis
17	NTPC Kahalgaon 2	1,149.46	CERC Order 21-01-2017 in P.no. 283/GT/2014 for 01-04-2014 to 31-03-2019	214	As per actual for 2nd half of FY 2019-20
18	KAPP Kakrapar	-	-	249	As per actual for 2nd half of FY 2019-20
19	TAPP Tarapur	-	-	307	As per actual for 2nd half of FY 2019-20
20	RAPP Rawatbhatta	-	-	469	As per actual for 2nd half of FY 2019-20
21	NAPP Narora	-	-	320	As per actual for 2nd half of FY 2019-20
22	NTPC Solapur STPS, Phase-1	1,005.39	CERC Order dated 06.01.2020 in P. No. 178/GT/2017	362	As per actual for 2nd half of FY 2019-20
23	NTPC Gadarwara STPS, Unit-1	1,149.05	As per Petitioner Submission	371	As per actual for 2nd half of FY 2019-20
24	NTPC Gadarwara STPS, Unit-2	1,149.05	As per Petitioner Submission	371	As per Gadarwara STPS Unit-1
25	NTPC Lara STPS, Raigarh, Unit I	1,149.05	Equal to Gadarwara Unit-1.	255	As per actual for 2nd half of FY 2019-20
26	NTPC Lara STPS, Raigarh, Unit II	1,149.05	Equal to Gadarwara Unit-1	255	As per Lara STPS Unit-I
27	NTPC Feroze Gandhi Unchahar I	281.18	CERC Order dated 22.03.2017 & Corrigendum dated 26-05-2017 in P. No. 319/GT/2014	343	As per actual for 2nd half of FY 2019-20
28	NTPC Feroze Gandhi Unchahar II	257.08	CERC Order dated 31.03.2017 in P. No. 289/GT/2014	346	As per actual for 2nd half of FY 2019-20
29	NTPC Feroze Firoz Gandhi Unchahar III	178.69	CERC Order dated 19.04.2017 in P. No. 373/GT/2014	344	As per actual for 2nd half of FY 2019-20
30	NTPC Feroze Gandhi Unchahar IV	551.44	CERC Order dated 06.12.2019 in P. No. 197/GT/2017	324	As per actual for 2nd half of FY 2019-20
31	NTPC Rihand I	586.40	CERC Order dated 23.08.2016 in P. No. 291/GT/2014	136	As per actual for 2nd half of FY 2019-20
32	NTPC Rihand II	496.61	CERC Order 01-12-2016 in P.no. 318/GT/2014 for 01-04-2014 to 31-03-2019	137	As per actual for 2nd half of FY 2019-20
33	NTPC Rihand III	1,019.13	CERC Order 06-02-2017 in P.no. 372/GT/2014 for 01-04-2014 to 31-03-2019	143	As per actual for 2nd half of FY 2019-20

Sr. No.	Generating Stations	Fixed Charges as per latest Tariff Orders (Rs. Crore)	Basis	Energy Charges (Paisa/kWh)	Basis
34	NTPC NCTP Dadri II	924.62	CERC Order 02-05-2017 in P.no. 324/GT/2014 for 01-04-2014 to 31-03-2019	419	As per actual for 2nd half of FY 2019-20
35	NTPC Singrauli	906.53	CERC Order 28-07-2016 in P.no. 290/GT/2014 for 01-04-2014 to 31-03-2019	136	As per actual for 2nd half of FY 2019-20
36	NTPC IGPS I Jhajjar	1,709.41	CERC Order 09-03-2017 in P.no. 266/GT/2014 for 01-04-2014 to 31-03-2019	344	As per Petitioner submission
37	NTPC Khargone STPS, Unit-I	947.97	Proportionately computed based on AFC for Gadarwara Unit-1	447	As per actual for 2nd half of FY 2019-20
38	NTPC Khargone STPS, Unit-II	947.97	Proportionately computed based on AFC for Gadarwara Unit-2	447	As per Khargone STPS Unit-I
	MP Genco Power Station				
39	Amarkantak TPS Ph-III	211.32	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	168	As per actual for 2nd half of FY 2019-20
40	Satpura Phase III	407.73	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	310	As per actual for 2nd half of FY 2019-20
41	Satpura TPS Ph-IV	693.44	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	242	As per actual for 2nd half of FY 2019-20
42	SGTPS Ph-I & II	448.83	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	214	As per actual for 2nd half of FY 2019-20
43	SGTPS Ph-III	403.56	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	189	As per actual for 2nd half of FY 2019-20
44	Shri Singaji STPS, Ph-I	1,301.35	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	284	As per actual for 2nd half of FY 2019-20
45	Shri Singaji Phase-2, Unit-1	662.47	MPERC Order dated 7.03.2019 Petition No. 31 of 2018 and IA No. 7 of 2018	287	As per actual for 2nd half of FY 2019-20
46	Shri Singaji Phase-2, Unit-2	662.47	MPERC Order dated 18.06.2019 in IA no. 1 of 2019	287	As per actual for 2nd half of FY 2019-20
47	Rani Awanti Bai Sagar, Bargi HPS	16.34	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	0	As per Commission approach in previous year
48	Bansagar Ph I HPS (Tons)	140.23	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	0	As per Commission approach in previous year
49	Bansagar Ph-II HPS (Silpara)		MPERC Order dated 14.07.2016 in P. No. 08 of 2016	0	As per Commission approach in previous year

Sr. No.	Generating Stations	Fixed Charges as per latest Tariff Orders (Rs. Crore)	Basis	Energy Charges (Paisa/kWh)	Basis
50	Bansagar Ph-III HPS (Deolond)		MPERC Order dated 14.07.2016 in P. No. 08 of 2016	0	As per Commission approach in previous year
51	Bansagar Ph-IV HPS (Jhinna)	14.61	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	0	As per Commission approach in previous year
52	Birsinghpur HPS	5.73	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	0	As per Commission approach in previous year
53	Marhikheda HPS	29.55	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	0	As per Commission approach in previous year
54	Rajghat HPS	12.83	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	0	As per Commission approach in previous year
55	Gandhisagar HPS	13.76	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	0	As per Commission approach in previous year
56	Ranapratap Sagar & Jawahar Sagar HPS	13.76	As per Tariff Order for FY 2018-19 taken same as Gandhisagar as any information not available.	0	As per Commission approach in previous year
57	Pench HPS	25.22	MPERC Order dated 14.07.2016 in P. No. 08 of 2016	0	As per Commission approach in previous year
	JV Hydel & Other Hydels				
58	NHDC Indira Sagar HPS	528.6	CERC order dated: 31.5.2016, Petition No.265/GT/2014	0	As per Commission approach in previous year
59	NHDC Omkareshwar HPS	398.43	CERC order dated: 26.5.2016, Petition No.264/GT/2014	0	As per Commission approach in previous year
60	Sardar Sarovar HPS	355.96	MPERC Order dated August 6,2013 in P. No. 18 of 2013	0	As per Commission approach in previous year
61	Rihand HPS	3.25	As per Tariff Order for FY 2019-20	0	As per Commission approach in previous year
62	Matatila HPS	0.72		0	As per Commission approach in previous year

Sr. No.	Generating Stations	Fixed Charges as per latest Tariff Orders (Rs. Crore)	Basis	Energy Charges (Paisa/kWh)	Basis
63	SJVN Rampur HPS	696.50	CERC Order dated 26.06.2019 in P. No. 315/GT/2018	0	As per Commission approach in previous year
64	SJVN Jhakri HPS	1,345.42	CERC Order dated 19.06.2019 in P. No. 314/GT/2018 for FY 2014-15 to FY 2018-19	0	As per Commission approach in previous year
65	Tehri HPS	1,288.57	CERC Order dated 29.03.2017 in P. No. 178/GT/2015 for 2014-15 to FY 2018-19	0	As per Commission approach in previous year
66	Koteshwar HPP	465.52	CERC Order dated 4.6.2019 in RP No. 47/RP/2018 in P. No. 117/GT/2018	0	As per Commission approach in previous year
67	Parbati III	519.52	CERC Order dated 23.04.2019 in P. No. 6/GT/2017	0	As per Commission approach in previous year
68	NHPC Chamera II	262.05	CERC Order dated 17.6.2016 in P. No. 233/GT/2014	0	As per Commission approach in previous year
69	NHPC Chamera III	375.31	CERC Order dated 29.01.2020 in P. No. 321/GT/2018	0	As per Commission approach in previous year
70	NHPC Dulhasti	911.62	CERC Order dated 30.8.2016 in P. No. 231/GT/2014	0	As per Commission approach in previous year
71	NHPC Dhauliganga	239.76	CERC Order dated 26.4.2016 in P. No. 230/GT/2014	0	As per Commission approach in previous year
72	NHPC Sewa II	187.90	CERC in Order dated 27.01.2017 in P. No. 251/GT/2014 had directed that the tariff determined for period FY 2010 to FY 2014 shall remain applicable till the revised tariff approved by the Commission. Therefore considered tariff for FY 2013-14 without escalation.	0	As per Commission approach in previous year
73	NHPC Uri II	411.79	CERC Tariff Order 05.02.2020 in P. No. 308/GT/2018	0	As per Commission approach in previous year
74	NHPC Kishanganga	498.38	CERC Tariff Order 28.10.2019 in P. No. 43/GT/2018	0	As per Commission approach in previous year

Sr. No.	Generating Stations	Fixed Charges as per latest Tariff Orders (Rs. Crore)	Basis	Energy Charges (Paisa/kWh)	Basis
75	NTPC Koldam HPP I	1,310.38	CERC order dated 05.04.2018 in P. No. 107/GT/2015 upto FY 2018-19	0	As per Commission approach in previous year
76	NTPC Singrauli Small HPP	0.02	As per Petitioner submission	0	As per Commission's approach in previous year
77	MTOA (5 years) from RVPNL (Hydel)			73	As per Petitioner Submission
	IPPs				
78	Torrent Power	-	Not considered as per Commission's view	-	Not considered as per Commission's view
79	BLA Power	-	Not considered as per Commission's view	-	Not considered as per Commission's view
80	Jaypee Bina Power	721.07	MPERC Order dated 08.08.2016 in P. No. 05 of 2016	334	As per actual for 2nd half of FY 2019-20
81	Lanco Amarkantak TPS Unit 1	223.81	As per Petitioner submission	242	As per actual for 2nd half of FY 2019-20
82	Reliance UMPP, Sasan	444	As per Petitioner submission	138	As per actual for 2nd half of FY 2019-20
83	Essar Power STPS	-	Not considered as per Commission's view	-	Not Considered as per Commission's view
84	Jaiprakash Power STPS, Nigri	1,923.42	MPERC Order in Petition No. 44 of 2019 dated 26.11.2020	65	As per actual for 2nd half of FY 2019-20
85	MB Power STPS	1,610.45	MPERC Order dated 01.12.2017 in Petition No. 68 of 2016 and MPERC order dated 29.11.2018 in Petition No. 10 of 2018	213	As per actual for 2nd half of FY 2019-20
86	Jhabua Power STPS, Unit-1	859.52	MPERC review Order dated 27.12.2019 in Petition No. 12 of 2019	273	As per actual for 2nd half of FY 2019-20
	Renewables				
87	Solar	-		483	As per actual for FY 2019-20
88	Other Mini Micro	-		525	As per Petitioner submission

Sr. No.	Generating Stations	Fixed Charges as per latest Tariff Orders (Rs. Crore)	Basis	Energy Charges (Paisa/kWh)	Basis
89	Other than Solar & Mini Micro	-		545	As per actual for FY 2019-20

2.51 With regard to cost of power purchase from renewable energy sources, the Commission sought details of the actual source wise energy purchase for FY 2019-20, which were submitted by the Petitioner. Accordingly, based on the same, the Commission has considered the weighted average cost of power purchase of FY 2019-20 from existing Renewable sources which is shown in the table below. Further, scheduling of Renewable energy sources would be governed by the appropriate Regulations amended from time to time.

Generating Stations	Rate (Paisa /kWh)
Renewable Energy Solar	483
Renewable Energy Non-Solar	545
Others (Mini Micro)	525

2.52 For determination of power purchase expenses, the Commission has applied the principles of Merit Order Dispatch (MOD) on the basis of variable charge for all generating stations for FY 2020-21, as shown in the table below:

Table 24 : MOD on allocated generating stations for FY 2020-21

Sr. No.	Generating Stations	Dispatch Type (1 Must Run, 0 Others)	Variable Charges (Paise / kWh)
1	KAPP Kakrapar	1	249
2	TAPP Tarapur	1	307
3	RAPP Rawatbhatta	1	469
4	NAPP Narora	1	320
5	Rani Awanti Bai Sagar, Bargi HPS	0	0
6	Bansagar Ph I HPS (Tons)	0	0
7	Bansagar Ph-II HPS (Silpara)	0	0
8	Bansagar Ph-III HPS (Deolond)	0	0
9	Bansagar Ph-IV HPS (Jhinna)	0	0
10	Birsinghpur HPS	0	0
11	Marhikheda HPS	0	0
12	Rajghat HPS	0	0
13	Gandhisagar HPS	0	0
14	Ranapratap Sagar & Jawahar Sagar HPS	0	0
15	Pench HPS	0	0
16	NHDC Indira Sagar HPS	0	0
17	NHDC Omkareshwar HPS	0	0

Sr. No.	**Generating Stations**	**Dispatch Type (1 Must Run, 0 Others)**	**Variable Charges (Paise / kWh)**
18	Sardar Sarovar HPS	0	0
19	Rihand HPS	0	0
20	Matatila HPS	0	0
21	SJVN Rampur HPS	0	0
22	SJVN Jhakri HPS	0	0
23	Tehri HPS	0	0
24	Koteshwar HPP	0	0
25	Parbati III	0	0
26	NHPC Chamera II	0	0
27	NHPC Chamera III	0	0
28	NHPC Dulhasti	0	0
29	NHPC Dhauliganga	0	0
30	NHPC Sewa II	0	0
31	NHPC Uri II	0	0
32	NHPC Kishanganga	0	0
33	NTPC Koldam HPP I	0	0
34	NTPC Singrauli Small HPP	0	0
35	Solar	1	483
36	Other Mini Micro	1	525
37	Other than Solar & Mini Micro	1*	545
38	Jaiprakash Power STPS, Nigri	0	65
39	MTOA (5 years) from RVPNL (Hydel)	0	73
40	NTPC Singrauli	0	136
41	NTPC Rihand I	0	136
42	NTPC Rihand II	0	137
43	Reliance UMPP, Sasan	0	138
44	NTPC Rihand III	0	143
45	NTPC Korba III	0	147
46	NTPC Korba	0	150
47	NTPC Sipat I	0	158
48	NTPC Sipat II	0	163
49	Amarkantak TPS Ph-III	0	168
50	NTPC Vindyachal I	0	185
51	NTPC Vindyachal IV	0	186
52	SGTPS Ph-III	0	189
53	NTPC Vindyachal III	0	190
54	NTPC Vindyachal V Unit 1	0	191
55	NTPC Vindyachal II	0	191
56	MB Power STPS	0	213
57	NTPC Kahalgaon 2	0	214
58	SGTPS Ph-I & II	0	214

Sr. No.	Generating Stations	Dispatch Type (1 Must Run, 0 Others)	Variable Charges (Paise / kWh)
59	NTPC Kawas GPP	0	238
60	Satpura TPS Ph-IV	0	242
61	Lanco Amarkantak TPS Unit 1	0	242
62	NTPC Lara STPS, Raigarh, Unit I	0	255
63	NTPC Lara STPS, Raigarh, Unit II	0	255
64	Jhabua Power STPS, Unit-1	0	273
65	NTPC Gandhar GPP	0	283
66	Shri Singaji STPS, Ph-I	0	284
67	Shri Singaji Phase-2, Unit-1	0	287
68	Shri Singaji Phase-2, Unit-2	0	287
69	Satpura Phase III	0	310
70	NTPC Dadri GPP	0	316
71	NTPC Feroze Gandhi Unchahar IV	0	324
72	Jaypee Bina Power	0	334
73	NTPC Anta GPP	0	342
74	NTPC Feroze Gandhi Unchahar I	0	343
75	NTPC Feroze Gandhi Unchahar III	0	344
76	NTPC IGPS I Jhajjar	0	344
77	NTPC Feroze Gandhi Unchahar II	0	346
78	NTPC Auraiya GPP	0	352
79	NTPC Solapur STPS, Phase-1	0	362
80	NTPC Gadarwara STPS, Unit-1	0	371
81	NTPC Gadarwara STPS, Unit-2	0	371
82	NTPC NCTP Dadri II	0	419
83	NTPC Khargone STPS, Unit-I	0	447
84	NTPC Khargone STPS, Unit-II	0	447
85	NTPC Mouda II Unit 1	0	449
86	NTPC Mouda I	0	529

* In accordance with the Seventh Amendment to MPERC (Cogeneration and Generation of Electricity from Renewable Sources of Energy) (Revision-I) Regulations, 2010, or subsequent amendments if any.

2.53 The Commission directs the Petitioners to not unduly restrict supply to any category of consumers during the tariff period.

2.54 After fulfilment of the energy requirement and meeting demand of consumers, it has been observed that 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 this surplus power. The Commission directs the Petitioners to sell this remaining surplus power through power exchanges, bilateral arrangements or through bidding in order to maximize the revenue. Details of available and surplus energy has been shown in the Table below:

Table 25: Total Availability of Energy worked out by the Commission for FY 2020-21

Particulars	MU
Energy Available from all Stations allocated to MPPMCL	1,02,276
Less: Energy backed down having variable rate above Rs 3.01/Unit *	17,186
Total Energy Available for Scheduling (including for sale on the Exchange)	**85,089**

**Basis for considering Rs 3.01/Unit has been detailed in Section "Management of surplus power"*

Fixed Cost

2.55 The fixed costs of all generating stations allocated among DISCOMs on energy requirement basis is given in the following table:

Table 26 : Total fixed costs of all generating stations allocated among DISCOMs (Rs Crore)

Sr. No.	Generating Stations	East	West	Central	Total
1	Rani Awanti Bai Sagar, Bargi HPS	4.73	5.65	4.84	**15.22**
2	Bansagar Ph I HPS (Tons)	27.52	32.94	28.17	**88.62**
3	Bansagar Ph-II HPS (Silpara)	4.02	4.90	4.13	**13.04**
4	Bansagar Ph-III HPS (Deolond)	5.36	6.40	5.49	**17.25**
5	Bansagar Ph-IV HPS (Jhinna)	4.70	5.70	4.81	**15.22**
6	Birsinghpur HPS	1.55	1.79	1.58	**4.92**
7	Marhikheda HPS	9.12	10.71	9.25	**29.08**
8	Rajghat HPS	1.93	2.28	1.95	**6.16**
9	Gandhisagar HPS	1.35	1.63	1.38	**4.36**
10	Ranapratap Sagar & Jawahar Sagar HPS	1.93	2.30	1.95	**6.18**
11	Pench HPS	4.48	5.34	4.59	**14.41**
12	NHDC Indira Sagar HPS	169.31	201.62	173.24	**544.17**
13	NHDC Omkareshwar HPS	137.83	164.90	141.33	**444.06**
14	Sardar Sarovar HPS	93.57	110.49	95.16	**299.22**
15	Rihand HPS	0.13	0.15	0.13	**0.41**
16	Matatila HPS	0.05	0.06	0.05	**0.16**
17	SJVN Rampur HPS	0.37	0.45	0.38	**1.21**
18	SJVN Jhakri HPS	0.82	0.99	0.84	**2.66**
19	Tehri HPS	0.76	0.92	0.78	**2.46**
20	Koteshwar HPP	0.27	0.32	0.28	**0.87**
21	Parbati III	0.39	0.47	0.40	**1.25**
22	NHPC Chamera II	0.28	0.34	0.28	**0.90**
23	NHPC Chamera III	0.32	0.39	0.33	**1.04**
24	NHPC Dulhasti	0.77	0.93	0.79	**2.50**
25	NHPC Dhauliganga	0.21	0.25	0.21	**0.67**
26	NHPC Sewa II	0.16	0.20	0.17	**0.52**
27	NHPC Uri II	0.36	0.44	0.37	**1.18**
28	NHPC Kishanganga	0.36	0.43	0.37	**1.16**

Sr. No.	Generating Stations	East	West	Central	Total
29	NTPC Koldam HPP I	0.52	0.64	0.54	**1.70**
30	NTPC Singrauli Small HPP	0.00	0.00	0.00	**0.00**
31	Jaiprakash Power STPS, Nigri	178.00	216.09	182.94	**577.03**
32	NTPC Singrauli	0.62	0.75	0.63	**1.99**
33	NTPC Rihand I	0.40	0.48	0.41	**1.29**
34	NTPC Rihand II	0.37	0.45	0.38	**1.19**
35	Reliance UMPP, Sasan	51.41	62.35	52.81	**166.58**
36	NTPC Rihand III	0.85	1.03	0.87	**2.75**
37	NTPC Korba III	20.94	25.41	21.51	**67.87**
38	NTPC Korba	68.60	83.30	70.55	**222.45**
39	NTPC Sipat I	88.19	106.92	90.66	**285.77**
40	NTPC Sipat II	47.89	58.10	49.21	**155.21**
41	Amarkantak TPS Ph-III	65.29	79.05	66.97	**211.32**
42	NTPC Vindyachal I	77.12	93.54	79.22	**249.89**
43	NTPC Vindyachal IV	92.08	111.83	94.61	**298.51**
44	SGTPS Ph-III	116.27	140.95	119.42	**376.64**
45	NTPC Vindyachal III	53.39	64.77	54.88	**173.05**
46	NTPC Vindyachal V Unit 1	48.51	58.83	49.86	**157.21**
47	NTPC Vindyachal II	46.35	56.11	47.59	**150.05**
48	MB Power STPS	149.56	180.67	152.90	**483.14**
49	NTPC Kahalgaon 2	17.59	21.17	17.95	**56.71**
50	SGTPS Ph-I & II	119.38	144.23	122.06	**385.68**
51	NTPC Kawas GPP	26.77	32.60	27.54	**86.91**
52	Satpura TPS Ph-IV	214.50	259.54	219.40	**693.44**
53	Lanco Amarkantak TPS Unit 1	69.23	83.79	70.79	**223.81**
54	NTPC Lara STPS, Raigarh, Unit I	37.62	45.54	38.49	**121.65**
55	NTPC Lara STPS, Raigarh, Unit II	13.95	16.91	14.28	**45.14**
56	Jhabua Power STPS, Unit-1	79.73	96.63	81.49	**257.86**
57	NTPC Gandhar GPP	28.47	34.44	29.14	**92.05**
58	Shri Singaji STPS, Ph-I	345.05	417.00	351.90	**1113.96**
59	Shri Singaji Phase-2, Unit-1	172.92	208.82	176.61	**558.35**
60	Shri Singaji Phase-2, Unit-2	172.80	208.62	176.93	**558.35**
61	NTPC Dadri GPP	0.29	0.35	0.30	**0.95**
62	NTPC Firoz Gandhi Unchahar IV	0.22	0.27	0.23	**0.72**
63	Jaypee Bina Power	145.05	175.13	148.52	**468.70**
64	NTPC Anta GPP	0.18	0.22	0.19	**0.59**
65	NTPC Firoz Gandhi Unchahar I	0.07	0.09	0.07	**0.23**
66	NTPC Firoz Gandhi Unchahar III	0.12	0.15	0.13	**0.40**
67	NTPC IGPS I Jhajjar	0.69	0.83	0.70	**2.22**
68	NTPC Firoz Gandhi Unchahar II	0.21	0.25	0.21	**0.67**
69	NTPC Auraiya GPP	0.25	0.30	0.25	**0.80**
70	NTPC Solapur STPS, Phase-1	74.02	89.37	75.79	**239.17**
71	NTPC Gadarwara STPS, Unit-1	182.69	220.57	187.05	**590.31**
72	NTPC Gadarwara STPS, Unit-2	91.09	109.98	93.27	**294.35**

Sr. No.	Generating Stations	East	West	Central	Total
73	NTPC NCTP Dadri II	0.32	0.39	0.33	**1.04**
74	NTPC Khargone STPS, Unit-I	146.69	177.10	150.19	**473.98**
75	NTPC Khargone STPS, Unit-II	145.48	175.65	148.96	**470.09**
76	NTPC Mouda II Unit 1	74.69	90.18	76.48	**241.35**
77	NTPC Mouda I	67.02	80.92	68.62	**216.56**
78	**Total**	**3806.10**	**4595.31**	**3897.11**	**12298.52**

Variable Cost

2.56 Variable costs computed on the basis of scheduled energy for DISCOMs, is shown below in the table:

Table 27: Station wise admitted variable cost of scheduled energy for DISCOMs (Rs. Crore)

Sr. No.	Generating Stations	East	West	Central	Total
1	KAPP Kakrapar	55.93	67.74	57.43	**181.10**
2	TAPP Tarapur	143.41	173.70	147.26	**464.36**
3	RAPP Rawatbhatta	1.85	2.24	1.89	**5.98**
4	NAPP Narora	0.75	0.91	0.77	**2.43**
5	Rani Awanti Bai Sagar, Bargi HPS	0.00	0.00	0.00	**0.00**
6	Bansagar Ph I HPS (Tons)	0.00	0.00	0.00	**0.00**
7	Bansagar Ph-II HPS (Silpara)	0.00	0.00	0.00	**0.00**
8	Bansagar Ph-III HPS (Deolond)	0.00	0.00	0.00	**0.00**
9	Bansagar Ph-IV HPS (Jhinna)	0.00	0.00	0.00	**0.00**
10	Birsinghpur HPS	0.00	0.00	0.00	**0.00**
11	Marhikheda HPS	0.00	0.00	0.00	**0.00**
12	Rajghat HPS	0.00	0.00	0.00	**0.00**
13	Gandhisagar HPS	0.00	0.00	0.00	**0.00**
14	Ranapratap Sagar & Jawahar Sagar HPS	0.00	0.00	0.00	**0.00**
15	Pench HPS	0.00	0.00	0.00	**0.00**
16	NHDC Indira Sagar HPS	0.00	0.00	0.00	**0.00**
17	NHDC Omkareshwar HPS	0.00	0.00	0.00	**0.00**
18	Sardar Sarovar HPS	0.00	0.00	0.00	**0.00**
19	Rihand HPS	0.00	0.00	0.00	**0.00**
20	Matatila HPS	0.00	0.00	0.00	**0.00**
21	SJVN Rampur HPS	0.00	0.00	0.00	**0.00**
22	SJVN Jhakri HPS	0.00	0.00	0.00	**0.00**
23	Tehri HPS	0.00	0.00	0.00	**0.00**
24	Koteshwar HPP	0.00	0.00	0.00	**0.00**
25	Parbati III	0.00	0.00	0.00	**0.00**
26	NHPC Chamera II	0.00	0.00	0.00	**0.00**
27	NHPC Chamera III	0.00	0.00	0.00	**0.00**
28	NHPC Dulhasti	0.00	0.00	0.00	**0.00**
29	NHPC Dhauliganga	0.00	0.00	0.00	**0.00**
30	NHPC Sewa II	0.00	0.00	0.00	**0.00**

Sr. No.	Generating Stations	East	West	Central	Total
31	NHPC Uri II	0.00	0.00	0.00	**0.00**
32	NHPC Kishanganga	0.00	0.00	0.00	**0.00**
33	NTPC Koldam HPP I	0.00	0.00	0.00	**0.00**
34	NTPC Singrauli Small HPP	0.00	0.00	0.00	**0.00**
35	Solar	387.87	469.81	398.33	**1256.01**
36	Other Mini Micro	3.12	3.73	3.19	**10.05**
37	Other than Solar	791.20	958.33	812.53	**2562.06**
38	Jaiprakash Power STPS, Nigri	69.86	84.81	71.80	**226.48**
39	MTOA (5 years) from RVPNL (Hydel)	11.37	13.57	11.62	**36.56**
40	NTPC Singrauli	1.34	1.62	1.38	**4.34**
41	NTPC Rihand I	0.67	0.82	0.69	**2.18**
42	NTPC Rihand II	0.74	0.90	0.76	**2.41**
43	Reliance UMPP, Sasan	444.92	539.56	457.00	**1441.49**
44	NTPC Rihand III	1.00	1.22	1.03	**3.25**
45	NTPC Korba III	22.73	27.58	23.35	**73.66**
46	NTPC Korba	156.81	190.41	161.28	**508.51**
47	NTPC Sipat I	110.20	133.61	113.29	**357.10**
48	NTPC Sipat II	66.80	81.03	68.64	**216.47**
49	Amarkantak TPS Ph-III	82.05	99.34	84.16	**265.55**
50	NTPC Vindyachal I	170.97	207.37	175.62	**553.96**
51	NTPC Vindyachal IV	118.43	143.83	121.68	**383.94**
52	SGTPS Ph-III	191.62	232.30	196.82	**620.74**
53	NTPC Vindyachal III	103.42	125.46	106.31	**335.19**
54	NTPC Vindyachal V Unit 1	64.68	78.44	66.47	**209.58**
55	NTPC Vindyachal II	127.80	154.69	131.21	**413.69**
56	MB Power STPS	195.16	235.76	199.52	**630.44**
57	NTPC Kahalgaon 2	34.45	41.46	35.16	**111.06**
58	SGTPS Ph-I & II	319.49	386.00	326.66	**1032.15**
59	NTPC Kawas GPP	52.65	64.13	54.18	**170.96**
60	Satpura TPS Ph-IV	254.45	307.88	260.27	**822.61**
61	Lanco Amarkantak TPS Unit 1	152.68	184.80	156.11	**493.60**
62	NTPC Lara STPS, Raigarh, Unit I	47.67	57.72	48.78	**154.17**
63	NTPC Lara STPS, Raigarh, Unit II	17.40	21.09	17.81	**56.31**
64	Jhabua Power STPS, Unit-1	82.65	100.17	84.48	**267.30**
65	NTPC Gandhar GPP	52.63	63.67	53.86	**170.15**
66	Shri Singaji STPS, Ph-I	625.03	755.37	637.44	**2017.84**
67	Shri Singaji Phase-2, Unit-1	347.73	419.93	355.17	**1122.83**
68	Shri Singaji Phase-2, Unit-2	347.49	419.54	355.80	**1122.83**
69	Satpura Phase III	0.00	0.00	0.00	**0.00**
70	NTPC Dadri GPP	0.00	0.00	0.00	**0.00**
71	NTPC Feroze Gandhi Unchahar IV	0.00	0.00	0.00	**0.00**
72	Jaypee Bina Power	0.00	0.00	0.00	**0.00**
73	NTPC Anta GPP	0.00	0.00	0.00	**0.00**
74	NTPC Feroze Gandhi Unchahar I	0.00	0.00	0.00	**0.00**

Sr. No.	Generating Stations	East	West	Central	Total
75	NTPC Feroze Gandhi Unchahar III	0.00	0.00	0.00	**0.00**
76	NTPC IGPS I Jhajjar	0.00	0.00	0.00	**0.00**
77	NTPC Feroze Gandhi Unchahar II	0.00	0.00	0.00	**0.00**
78	NTPC Auraiya GPP	0.00	0.00	0.00	**0.00**
79	NTPC Solapur STPS, Phase-1	0.00	0.00	0.00	**0.00**
80	BLA Power	0.00	0.00	0.00	**0.00**
81	NTPC Gadarwara STPS, Unit-1	0.00	0.00	0.00	**0.00**
82	NTPC Gadarwara STPS, Unit-2	0.00	0.00	0.00	**0.00**
83	Essar Power STPS	0.00	0.00	0.00	**0.00**
84	NTPC NCTP Dadri II	0.00	0.00	0.00	**0.00**
85	NTPC Khargone STPS, Unit-I	0.00	0.00	0.00	**0.00**
86	NTPC Khargone STPS, Unit-II	0.00	0.00	0.00	**0.00**
87	NTPC Mouda II Unit 1	0.00	0.00	0.00	**0.00**
88	NTPC Mouda I	0.00	0.00	0.00	**0.00**
89	Torrent Power	0.00	0.00	0.00	**0.00**
90	**Total**	**5659.03**	**6850.53**	**5799.76**	**18309.34**

Renewable Purchase Obligation (RPO)

Petitioners' Submission

2.57 The Petitioners have submitted that in view of the RPO targets as specified under Fifth Amendment to MPERC (Co-generation and generation of electricity from Renewable sources of energy) (Revision-I) Regulations, 2010 [ARG-33(I)(v) of 2015] vide notification dated 02nd October, 2015 & Tariff Policy, 2016, they had made an arrangement under various PPA for its compliance. However, the Commission in the Sixth Amendment to MPERC (Co-generation and generation of electricity from Renewable sources of energy) (Revision-I) Regulations, 2010 defined a percentage of RPO excluding hydro sources of power. As a result, there was a surplus situation of availability from solar during FY 2018-19 & FY 2019-20 and deficit during FY 2020-21 for complying with RPO targets. However, there was deficit in non-solar for FY 2018-19, FY 2019-20 & FY 2020-21.

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

Table 28: Renewable Purchase Obligation for FY 2020-21

Renewable Purchase Obligation Computations	Units	FY 2020-21
Solar	%	6.00%
Other than Solar	%	8.50%
Ex-bus renewable energy requirement to fulfill RPO		
Solar	MU	4,025
Other than Solar	MU	5,701
Total	MU	**9,726**
Energy Available from existing Renewable Sources		
Solar	MU	2,601

Renewable Purchase Obligation Computations	Units	FY 2020-21
Other than Solar	MU	4,724
Total	MU	**7,325**
Shortfall		
Solar	MU	1,424
Other than Solar	MU	978
Total	MU	**2,401**
Extra Surplus available after meeting RPO obligations	MU	**-**
IEX rate	Rs/unit	-
Additional revenue from sale of surplus due to RPO obligation	Rs Crore	-
Renewable Energy Purchase Rates		
Solar	Rs./unit	5.00
Other than Solar	Rs./unit	5.54
Additional Cost due to RPO Obligation		
Solar	Rs. Crore	244
Other than Solar	Rs. Crore	220
Net Additional Cost to be borne for shortage of RPO	**Rs. Crore**	**464**

Commission's Analysis

2.59 The Commission has notified MPERC (Co-generation and generation of electricity from Renewable sources of energy) (Revision-I) Regulation, 2010 [ARG-33(I) (v) of 2015] on 02nd October, 2015. Subsequently, the Commission has notified Sixth Amendment to the said Regulation as per which minimum purchase quantum of electricity from Renewable sources of energy is 6.00% from Solar and 8.50% from Non-Solar sources for FY 2020-21. Accordingly, the Commission has computed the quantum of solar and non-solar power purchase requirement based on the total energy requirement admitted for FY 2020-21 excluding consumption met through hydro sources of power, as shown in the table below:

Table 29: Renewable Purchase Obligation computed by the Commission

Particulars	East	West	Central	State
RPO Solar (%)	6.00%	6.00%	6.00%	**6.00%**
RPO Non-Solar (%)	8.50%	8.50%	8.50%	**8.50%**
Energy Requirement for computation of RPO (MU)				
Energy Requirement	22245	26907	22801	**71954**
Energy Procurement from Hydro Sources	2115	2558	2168	**6840**
Energy Requirement (excluding hydro)	**20130**	**24350**	**20634**	**65113**
Ex-bus Renewable energy requirement to fulfill RPO (MU)				
RPO Solar	1,208	1,461	1,238	**3,907**
RPO Non-Solar	1,711	2,070	1,754	**5,535**
Total	**2,919**	**3,531**	**2,992**	**9,441**
Energy available from existing Renewable Sources (MU)				
Solar	804	973	824	**2,601**

Particulars	East	West	Central	State
Other than Solar (including Mini Micro Hydro power)	1460	1766	1497	**4724**
Total	**2,264**	**2,739**	**2,321**	**7,325**
Shortfall (MU)				
Solar	404	488	414	**1,306**
Other than Solar	251	303	257	**811**
Total	**654**	**792**	**671**	**2,117**

2.60 For fulfilment of RPO shortfall, purchase of Renewable energy from Solar sources by the Petitioners, the Commission has taken into cognizance price discovered of Rs. 2.51/kWh in recent competitive bid conducted by the SECI and accordingly decided to consider this rate for working out the power purchase cost from Solar energy. Similarly, for purchase of power through other than Solar sources the Commission has taken into cognizance price discovery of Rs. 2.83/kWh through recent bid by the SECI for wind energy projects and accordingly decided to consider this rate for working out the power purchase cost from other than Solar energy.

2.61 Accordingly, the cost of renewable energy power purchase has been worked out to fulfil RPO compliance which is shown in the table below:

Table 30: RE power purchase cost to fulfill RPO for FY 2020-21

Particulars	East	West	Central	State
Power Purchase Rate (Paise/kWh)				
Solar from existing sources	483	483	483	**483**
Non-Solar (including cost of Other Mini Micro)	545	545	545	**545**
A- RE Power Purchase Cost from existing sources to fulfill RPO (Rs Crore)				
Solar	388	470	398	**1256**
Non-Solar (including Mini Micro Hydro power)	795	962	815	**2,572**
Sub-Total	**1183**	**1432**	**1213**	**3828**
Power Purchase Rate (Paise/kWh) for additional requirement for RPO fulfiment				
Solar from new / other sources	251	251	251	**251**
Non-Solar from new / other sources	283	283	283	**283**
B- Additional Cost due to RPO Obligation to be met through purchase of Solar & Non-Solar power from new / other sources (Rs Crore)				
Solar	101	123	104	328
Non-Solar	71	86	73	230
Sub-Total	**172**	**209**	**177**	**558**
Total (A+B) (Rs Crore)	**1356**	**1640**	**1,390**	**4386**

Management of Surplus Energy
Petitioners' Submission

2.62 The Petitioners have submitted that as per the power supply position, the State is expected to have surplus energy in most of the months in the ensuing year. Currently, MPPMCL sells surplus power through Power Exchange (IEX) at prevailing rates.

2.63 The Petitioners have further submitted that the average IEX rate for the past thirty months (FY 2017-18, FY 2018-19 & FY 19-20 till Sept-19) is Rs 3.28 per unit. Hence, for the purpose of computation of revenue from surplus energy, the average rate has been considered as Rs 3.28 per unit.

2.64 The energy surplus for DISCOMs vis-à-vis overall energy availability and energy requirement as well as the details of revenue from sales of energy are shown in the table below. This revenue has been subtracted from the variable power purchase costs, while computing the total power purchase costs of the DISCOMs.

Table 31: Management of Surplus Energy*

Sr. No.	Particulars	FY 2020-21
1	Ex-Bus Availability (MU)	1,06,272
2	Back down of Power including Surplus Sale of Power (MU)	19,849
3	Energy Available after Back down (MU)	86,423
4	Ex-Bus Energy Required by DISCOM's (MU)	72,918
5	Ex-Bus Energy Required by DISCOM's including UI Adjustment (MU)	72,918
6	Surplus Units available for Sale (MU)	13,506
9	IEX Rate (Paisa/kWh)	328
10	Revenue from Sale of Surplus Power (Rs Crores)	4,436
11	Purchase Cost of Surplus Power Variable (Rs Crores) including Renewables	3,627
12	Total saving in variable cost of surplus energy from sale of surplus energy (Rs Crore)	809

***Note: As per the revised energy requirement submitted in reply to data gaps.**

Commission's Analysis

2.65 The Commission has considered the average rate of Rs. 3.01 per unit for sale of surplus power through IEX/ PXIL/bilateral arrangements/bidding arrived on the basis of the analysis of IEX monthly data for FY 2019-20. As sale of surplus energy has been considered at Rs 3.01 /kWh, stations having variable rate more than Rs 3.01/kWh have been considered to be backed-down. However, the Commission is of the view that the petitioners should make efforts to maximise the revenue from sale of surplus energy through other ways also e.g. bilateral contracts.

2.66 Further, the Commission has observed that the MPPMCL has entered into Bulk Power Supply agreement with MPIDC (Erstwhile MPAKVN) for supply of 50 MW power. Further, the MPIDC has been purchasing the remaining requirement of energy from MPPMCL only. As the projected requirement of MPIDC is presently not approved for FY 2020-21 in view of the delayed filing of the Petition by MPIDC, the Commission has presently considered the energy requirement of MPIDC to be met from surplus power. Any under /over recovery shall be adjusted at the time of truing up of FY 2020-21.

2.67 Accordingly, based on the above, the details of saving in power purchase cost through sale of surplus power has been shown in the table below:

Table 32 : Details of saving in power purchase cost through sale of Surplus energy

Sr. No.	Particulars	Unit	Reference	Admitted
1	Energy availability	MU	A	1,02,276
2	Additional power purchase from renewable energy for RPO fulfilment	MU	B	2,117
3	Total Energy Availability including additional availability after RPO fulfilment	MU	C=A+B	1,04,392
4	Total energy requirement of DISCOMs	MU	D	71,954
5	Total Surplus energy available	MU	E=C-D	32,439
6	Energy available for backdown at variable rate above Rs 3.01/kWh	MU	F	17,186
7	Surplus energy available for sale at variable rate below Rs 3.01/kWh	MU	G=E-F	15,252
8	Per unit cost of sale of surplus power	Rs. /kWh	H	3.01
9	Revenue from sale of surplus power	Rs. Crore	I=H*G/10	4,591
10	Variable cost of surplus energy having variable rate below Rs 3.01/kWh	Rs. Crore	J	3,604
11	**Total saving in fixed cost of surplus energy from sale of surplus energy (below Rs 3.01 per Unit)**	Rs. Crore	**K=I-J**	**987**

2.68 DISCOM-wise distribution of revenue from sale of surplus power (below Rs 3.01 per Unit) is shown in the table below:

Table 33 : DISCOM-wise distribution of revenue from sale of surplus power (below Rs 3.01 per Unit) (Rs. Crore)

Particulars	East	West	Central	Total
Revenue from sale of surplus power (below Rs 3.01 per Unit)	1,822.57	984.97	1,783.44	4,590.99

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

Inter State Transmission Charges associated with existing capacities

Petitioners' Submissions

2.70 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 2018-19 as per provisional figures from power purchase statement for FY 2018-19 and the same has been considered by them for FY 2019-20 and FY 2020-21.

2.71 The Petitioners have further submitted that the estimated Inter-state transmission charges for FY 2020-21 amounts to Rs. 1,774.83 Crore. Estimated Inter-state transmission costs have then been allocated to DISCOMs based on energy allocation from Central Generating Stations and availability at State Boundary as follows:

Table 34: Inter-state transmission charges filed by DISCOMs for FY 2020-21 (Rs. Crore)

Particulars	PGCIL Costs
East DISCOM	543.31
West DISCOM	560.40
Central DISCOM	671.12
Total	**1,774.83**

Commission's Analysis

2.72 PGCIL charges consist of charges to be paid for transmission systems of Western Region, Eastern Region and Northern Region. The Commission has reviewed inter-state transmission charges as per the actual bills available for FY 2018-19 submitted in retail supply true up Petition filed for FY 2018-19. The Commission has observed that the Petitioners have considered same inter State transmission charges paid for FY 2018-19 also for FY 2020-21. The Commission has noticed that the latest actual figures which are available through the DISCOMs are for FY 2018-19, thus the Commission has admitted the same for FY 2020-21 towards Inter State transmission charges. These charges have been further allocated amongst DISCOMs, based on actual interstate transmission charges billed for FY 2018-19 in the following Table:

Table 35: PGCIL charges admitted for FY 2020-21 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total
Inter-State Transmission charges	528	648	599	1,775

Intra State Transmission and SLDC Charges

Petitioners' Submission

2.73 The Petitioners have considered Intra-State Transmission Charges including SLDC Charges for FY 2018-19 as per the Orders of the Commission in Petition no(s) 70/2016 and 69/2016 both dated 26th April 2017 i.e. Rs. 2,501.16 Crores and Rs. 2,718.82

Crores respectively as per the methodology adopted by the Commission in its previous Tariff Order's. For FY 2019-20, in absence of Tariff Order on Intra-State Transmission Charges including SLDC Charges has been considered at the same level of FY 2018-19 i.e. Rs 2,718.82 Crores and for FY 2020-21 it has been escalated by a nominal growth rate of 2%.

2.74 As per the provisions of the regulations, the liability towards pension and other Terminal Benefits of the Pensioners and Personnel of the erstwhile Board and its Successor Entities shall comprise cash outflow in each financial year for making payment to all the Pensioners including Existing Pensioners subject to the provision of Regulation 3 (8) of MPERC (Terms and Conditions for Allowing Pension & Terminal Benefits Liabilities of Personnel of Board and Successor Entities) Regulations, 2012.

2.75 Further the Petitioners have allocated intra-state transmission charges including SLDC charges and terminal benefits for FY 2020-21 to three DISCOMs based on energy availability at State Boundary as indicated in the table below:

Table 36: Intra-State Transmission Charges including SLDC charges filed by Petitioners for FY 2020-21 (Rs. Crore)

Particulars	FY 2020-21
East DISCOM	845.20
West DISCOM	1,083.09
Central DISCOM	900.36
Total	**2,828.66**

Commission's Analysis

2.76 The Petitioners have projected the intra-state transmission charges (including SLDC charges) of Rs. 2828.66 Crore for FY 2020-21. However, the Commission has considered intra-state transmission charges of Rs. 2740.21 Crore as approved by the Commission in the MYT order of MPPTCL dated 10th June, 2016 read with order dated 26th April, 2017 in Petition No. 70/2016.

2.77 Towards levy and collection of SLDC charges for FY 2020-21, the Commission has considered Rs. 13.08 Crore from the latest available tariff order for FY 2020-21 dated 23.11.2020 in Petition No. 46 of 2019.

2.78 Accordingly, intra–state transmission charges for FY 2020-21 including SLDC charges have been admitted as given in the table below:

Table 37 : Intra State Transmission charges including SLDC charges admitted for FY 2020-21 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM	Total for State
Intra–State Transmission charges including SLDC charges and terminal benefits	823	1,054	876	2,753

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

MPPMCL Costs: Details and DISCOM wise Allocation

Petitioners' Submission

2.80 The Petitioners have submitted details of MPPMCL costs with estimated net expenses of Rs. (-) 238 Crore for FY 2020-21 and allocated the same to three DISCOMs based on total energy requirement at State boundary. Details of the expenses and costs allocated to DISCOMs are mentioned in the table below:

Table 38: Expenses of MPPMCL as filed for FY 2020-21 (Rs Crore)

Particulars	Amount
Purchase of Power from Other Sources	104.88
Inter State Transmission Charge	106.64
Depreciation & Amortization Expenses	8.43
Interest & Finance Charges	131.67
Repairs & Maintenance	3.19
Employee Costs	69.49
Administration & General Expenses	23.49
Other Expenses	3.87
Expenses	**451.66**
Less-Revenue Other Income	689.91
(Profit)/Loss for the Period	(238.25)

Table 39: MPPMCL Costs allocated to DISCOMs as filed for FY 2020-21 (Rs Crore)

Particulars	Amount
East DISCOM	(73)
West DISCOM	(90)
Central DISCOM	(75)
Total	**(238)**

Commission's Analysis

2.81 The Petitioners have filed Rs. 452 Crore as MPPMCL expenses for FY 2020-21. The Commission has observed that most of the expenses included in MPPMCL cost relates to power purchase. The Commission in previous tariff orders had directed the Petitioner to include power purchase expense booked under MPPMCL cost to be shown under DISCOMs power purchase expense. The Petitioner has submitted that the major cost under power purchase is towards payment of bills which could not be passed onto DISCOMs through monthly bills and open access charges paid for banking of power. However, from FY 2019-20 onwards all the bills are likely to be passed through the monthly bills to the DISCOMs, hence will be considered in ARR of DISCOMs.

2.82 The Commission has observed that MPPMCL has been doing exchange/banking of energy with third parties outside the State of Madhya Pradesh whereby during availability of surplus power in the State, energy is supplied to the parties having requirement of power and in case of power deficit in the State the banked energy is taken by the Company. It is also observed that MPPMCL has not been able to return the 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 does not involve any expense except the open access charges. As per the directions in previous tariff orders, these expenses are required to be booked under the head of power purchase of respective DISCOMs. Therefore, the Commission has not admitted power purchase expense under MPPMCL cost.

2.83 Further, the Commission has admitted expenses of Rs. 96.16 Crore towards O&M only and Rs. 689.91 Crore as other income, as filed by the Petitioners. Net MPPMCL cost admitted in this Order is Rs. (-) 593.75 Crore, which has been allocated among the DISCOMs as shown in the table below. The expenses related to power purchase, if any, incurred by MPPMCL would be appropriately considered at the time of truing up for FY 2020-21, after prudence check.

Table 40: MPPMCL Costs allocated to DISCOMs by the Commission for FY 2020-21 (Rs Crore)

Particulars	Amount
East DISCOM	(181.76)
West DISCOM	(224.52)
Central DISCOM	(187.47)
Total	**(593.75)**

Summary of Power Purchase Cost

Petitioners' Submission

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

Table 41: Revised Total Power Purchase Cost as filed by Petitioners for FY 2020-21

Sr. No.	Particulars	Units	East DISCOM	West DISCOM	Central DISCOM	State
A	Ex-bus Units to be Purchased	MU	22,377	27,482	23,060	**72,918**
B	Fixed Cost	Rs. Crore	3,944	4,791	4,058	**12,794**
C	Variable Cost	Rs. Crore	4,123	6,895	4,587	**15,606**
D	MPPMCL costs	Rs. Crore	(73)	(90)	(75)	**(238)**
E = B+C+D	Total Power Purchase Cost - Ex Bus	Rs. Crore	7,995	11,597	8,570	**28,161**
F=E/A*10	Rate of Power Purchase	Rs./kWh	3.57	4.22	3.72	**3.86**
G	External Losses	MU	405	498	426	**1,316**
H	Inter -State Transmission Cost	Rs. Crore	545	669	561	**1,775**
I = (A-G)	Energy to be Purchased at State Periphery	MU	21,971	26,984	22,634	**71,589**
J= (E+H)	Total Power Purchase Cost at State Boundary	Rs. Crore	8,539	12,265	9,131	**29,936**
K=J/I*10	Rate of Power Purchase at State Boundary	Rs./kWh	3.89	4.54	4.03	**4.18**

Sr. No.	Particulars	Units	East DISCOM	West DISCOM	Central DISCOM	State
L	Intra State Transmission Loss	MU	610	1,017	623	**2,251**
M	Intra State Transmission Cost – MPPTCL including SLDC	Rs. Crore	845	1,083	900	**2,829**
N= I-L	Total units purchased at DISCOM interface	MU	21,361	25,966	22,011	**69,339**
O = (J+M)	Total Power Purchase cost at DISCOM interface	Rs. Crore	9,384	13,349	10,032	**32,765**
P=O/N *10	Rate of Power Purchase at DISCOM Boundary	Rs./kWh	4.39	5.14	4.56	**4.73**

Commission's Analysis

1.32 The Petitioners through their submission on 26.06.2020 have conveyed that NTPC has provided a rebate of Rs. 147.08 Crore on capacity charges billed for the lockdown period due to COVID-19, which has been considered by them in capacity charges for revision of power purchase cost due to COVID-19. The Commission has taken cognizance of Ministry of Power GoI letter dated 10th June, 2020 which was made available by the Petitioners and has considered rebate of Rs. 67.97 Crore provided by PGCIL, Rs. 144.61 Crore provided by NTPC and other Central Generating Stations which totals to Rs. 212.58 Crores as per the details in the following Table, to be passed on to the Consumers of the State.

Table 42: Rebate allowed by Ministry of Power (Rs. Crore)

S. No.	CPSU under Ministry of Power	Rebate
1	NHPC Ltd	0.23
2.	NTPC Ltd	144.20
3.	PGCIL	67.97
4.	THDC Ltd	0.07
5.	SJVNL	0.11
6.	**Total**	**212.58**

2.85 Accordingly, based on the above, the total power purchase cost as admitted by the Commission is summarized in the following table:

Table 43 : Total Power Purchase cost admitted for FY 2020-21 (Rs Crore)

Particulars	East	West	Central	State
Ex-bus Energy Requirement	22,245	26,907	22,801	71,954
Total Fixed Charges	3,806.10	4,595.31	3,897.11	12,298.52
Total Variable Charges (including surplus energy cost)	5,659.03	6,850.53	5,799.76	18,309.34
Total Power Purchase cost	**9,465.13**	**11,445.85**	**9,696.88**	**30,607.86**
Additional RE cost for RPO compliance	172.39	208.52	176.70	557.61
less: Revenue from sale of surplus power	1,822.57	984.97	1,783.44	4,590.99
MPPMCL Cost/(Income)	(181.76)	(224.52)	(187.47)	(593.75)

Particulars	East	West	Central	State
Less: Relief on Fixed Charges by NTPC/NHPC/SJVN/THDC	*44.75*	*54.03*	*45.82*	*144.61*
Total Power Purchase cost	**7,588.44**	**10,390.85**	**7,856.84**	**25,836.12**
PGCIL Charges	528.49	647.77	598.56	1,774.82
Less: Relief on Inter-State Transmission Charges by PGCIL	20.22	24.78	22.90	67.90
MPPTCL Charges	822.69	1,054.24	876.37	2,753.30
Grand Total	**8,919.39**	**12,068.07**	**9,308.87**	**30,296.34**
Power purchase rate at ex-bus (Rs/Unit)	3.41	3.86	3.45	3.59
Power purchase rate at State Periphery (Rs/Unit)	3.71	4.18	3.77	3.91
Power purchase rate at DISCOM Periphery (Rs/Unit)	4.19	4.69	4.27	4.40
Power purchase per unit sales (Rs/Unit)	4.99	5.51	5.14	5.23

Pooled Power Purchase Cost

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

> *"5.* ***Eligibility and Registration for Certificates:***
> *(1)*
> *:*
> *:*
> *c. it sales the electricity generated either (i) to the distribution licensee of the area in which the eligible entity is located, at a price not exceeding the pooled cost of power purchase of such distribution licensee, or (ii) to any other licensee or to an open access consumer at a mutually agreed price, or through power exchange at market determined price.*
>
> ***Explanation.- for the purpose of these regulations 'Pooled Cost of Purchase' means the weighted average pooled price at which the distribution licensee has purchased the electricity including cost of self generation, if any, in the previous year from all the energy suppliers long-term and short-term, but excluding those based on renewable energy sources, as the case may be."***

2.87 Accordingly, the pooled power purchase cost has been computed considering ex-bus power purchase excluding renewable energy sources as mentioned in the table below:

Table 44 : Pooled Power Purchase cost for FY 2020-21

Particulars	FY 2020-21
Power Purchase Requirement excluding renewable energy sources (MU) Ex- Bus	62,512.20

Particulars	FY 2020-21
Total Power Purchase Cost excluding renewable energy sources (Rs Crore)	21,450.40
Pooled Power Purchase Cost (Rs/kWh)	**3.43**

Capital Expenditure Plans/ Capitalization of Assets
Petitioners Submission

Investments

2.88 The Petitioners have submitted that they are undertaking various projects in forthcoming years for system strengthening and reduction of distribution losses. The focus is on creation of new 33/11 kV sub-stations, bifurcation of overloaded 33 kV feeders, bifurcation of agricultural feeders at 11 kV level, Additional / Augmentation of PTRs, installation of DTRs, conversion of bare LT line into AB Cables, replacement of service lines, etc.

2.89 The Petitioners have further submitted that the overall distribution loss of the system is the sum of technical and commercial losses. The technical losses are mainly due to inadequate infrastructure which needs strengthening, renovation and upgradation of the capacity of lines, sub-stations and associated infrastructures. The commercial losses are mainly due to pilferage of energy which can also be reduced to a large extent by re-engineering of the system which requires capital investment and dedicated efforts. DISCOMs are working on both the issues and the distribution losses have considerably come down but not up to the normative loss levels.

2.90 Details of DISCOM wise capital expenditure plans under various schemes for FY 2020-21 as filed are indicated below:

Table 45 : Capital Investment plan for FY 2020-21 (Rs. Crore)

DISCOMs	Amount
East	636
West	947
Central	448
Total for the State	**2,031**

Capitalization and CWIP

2.91 DISCOM wise capitalization plan and the status of capital works in progress (CWIP) as filed by the Petitioners for FY 2020-21 are indicated below:

Table 46 : DISCOM wise proposed capitalization and bifurcation of CWIP (Rs. Crore)

Particulars	East	West	Central
Opening Balance of CWIP	2,859	3,357	3,582
Fresh Investment during the year	792	936	448
Investment capitalized	620	948	675
Closing Balance of CWIP	**3,031**	**3,345**	**3,355**

Commission's Analysis on Asset Capitalization

2.92 The DISCOMs need to obtain appropriate approval for their capital expenditure in accordance with guidelines for capital expenditure by licensees under the provision 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 indicating physical and financial achievement against various schemes for meeting the requirement of load growth, reduction in distribution losses, improvement in quality of supply, reliability, metering etc.

2.93 The capital investment plan shall show separately, ongoing projects that will spill over into the year under review and new projects (along with justification) that would commence during the tariff period and would be completed within or beyond the tariff period. The Commission observed that the Petitioners have not yet submitted their respective investment plan for FY 2020-21 for approval of the Commission. However, the Commission realises the importance of adequate capital expenditure for the upkeep of the network in an efficient manner and therefore, the Commission in this order has provisionally admitted the Capitalisation based on the average Capitalisation for past three years for FY 2020-21, which shall be subject to true up based on the outcome of the approval of the capital investment plan by the Commission.

2.94 The asset addition by the DISCOMs as per audited accounts from FY 2016-17 to FY 2018-19 are given in the Table below:

Table 47 : Asset capitalization during FY 2016-17 to FY 2018-19 (Rs. Crore)

Financial Year	East DISCOM	West DISCOM	Central DISCOM
2016-17	823.31	558.05	1201.70
2017-18	485.15	595.91	836.46
2018-19	963.44	1,106.90	625.96
Average	**757.30**	**753.62**	**888.04**

The addition of Assets is based on GAAP submitted by the Petitioners

2.95 For considering the asset addition for the DISCOMs, generally the Commission considers the lower value of average asset addition of the DISCOMs during the past years and the Petitioners claimed asset capitalisation. The Commission has observed that the Petitioners claim for additional capitalisation for FY 2020-21 is lower than the average capitalisation added during the past 3 years except for West DISCOM. Considering net asset capitalisation of Rs 1,106.90 Crore during FY 2018-19 by West DISCOM, the Commission has provisionally admitted the average capitalisation in previous three years i.e. Rs. 753.62 Crore for FY 2020-21. For East and Central DISCOMs, the Commission has considered the lower of the claimed and the average capitalisation for last three years as shown in the table below:

Table 48: Asset capitalization admitted for FY 2020-21 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM
Capitalization	620	753.62	675

Operations and Maintenance Expenses

Petitioners' Submission

2.96 The Petitioners have submitted that Operation and Maintenance (O&M) expenses are projected on the basis of the 2nd amendment to Tariff Regulations, 2015 notified on

14th November, 2019. Component wise O&M expenses have been discussed below.

Employee Expenses

2.97 The Petitioners have submitted that employee costs have been calculated as per the provisions of the Tariff Regulations. Petitioners have made following assumptions for calculation of Employee costs:

a) For the calculation of Employees Expenses excluding arrears, DA, terminal benefits and incentives, basic salary has been considered as per the norms specified in Tariff Regulations for FY 2020-21.

b) For computation of Dearness allowance, percentage increase has been considered as per the 7th Pay Commission for FY 2020-21, as shown in the table below:

Table 49: DA as a percentage of Basic Salary Proposed

Particulars (as per 7th Pay)	FY 2018-19	FY 2019-20	FY 2020-21
DA as percentage of Basic for 1st quarter - April to June	7%	12%	19%
DA as percentage of Basic for 2nd and 3rd quarters - July to December	9%	17%	21%
DA as percentage of Basic for 4th quarter - January to March	12%	19%	23%

c) Incentives/ Bonus to be paid to the employees have been considered as per the previous trend in the audited accounts.

d) Leave Encashment and Provident Fund (PF)/Cash Financial Assistance (CFA)/Group Term Insurance Scheme (GTIS)/ New Pension Scheme (NPS):

- MPPTCL is providing fund to DISCOMs, only to meet out Terminal Benefits liability of Gratuity, Pension and Commutation of pension.
- Other than these components, DISCOMs make payment of Leave Encashment and PF/CFA/GTIS/NPS. Hence, expenses incurred on account of Leave Encashment and PF/CFA/GTIS/NPS have been claimed separately in addition to the terminal benefits costs claimed as part of Intra-State Transmission Charges in the total Power Purchase Costs of DISCOMs.

e) The employee cost arising due to the eligibility of 3rd higher pay scale under assured career progression scheme cannot be ascertained at this stage. Hence expenditure on this account is not being considered in this petition. However, the same shall be accounted for in true-up petition.

2.98 Accordingly, employee expenses have been claimed as Rs 1,386 Crore, Rs 1,480 Crore and Rs 1,331 Crore by East, West and Central DISCOMs, respectively.

A&G Expenses

2.99 Petitioners have claimed the A&G expenses as per the Regulation 34.6 of the 2nd Amendment to Tariff Regulations, 2015 as Rs 206 Crore, Rs 171 Crore and Rs 120 Crore for East, West and Central DISCOMs, respectively. Petitioners have further submitted that norms of A&G expenses specified in the Tariff Regulations exclude fees paid to the MPERC and taxes payable to the Government. Accordingly, fees paid to the MPERC and taxes payable to the Government have been considered over and above the normative A&G expenses specified in the Tariff Regulations.

R&M Expenses

2.100 Petitioners have submitted that as per the provisions of Tariff Regulations, Repair and Maintenance (R&M) expenses are admissible @ 2.3 % of opening GFA. These expenses are projected as Rs. 220 Crore, Rs. 193 Crore and Rs. 263 Crore for East, West and Central DISCOMs, respectively for FY 2020-21.

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

Table 50: O&M expenses claimed for FY 2020-21 (Rs. Crore)

Particulars	East	West	Central	Total
Employee Cost (including arrears, DA and others)	1,386	1,480	1,331	4,197
A&G Expenses	206	171	120	497
R&M expenses	220	193	263	676
Total O&M expenses	**1,812**	**1,844**	**1,714**	**5,370**

Commission's Analysis on O&M Expenses

2.102 Tariff Regulations specify normative O&M Expenses for the DISCOMs. These expenses comprise Employee expenses, Repair and Maintenance (R&M) expenses and Administrative & General (A&G) expenses. The amount of employee expenses and A&G expenses for FY 2020-21 have been specified in the 2nd amendment to the Tariff Regulations, 2015 notified on 14th November, 2019. Accordingly, the same has been approved by the Commission for FY 2020-21. Further, Tariff Regulations provides for approval of R&M expenses as 2.3% of opening GFA for the FY 2020-21. These norms exclude pension, terminal benefits and incentive to be paid to employees, taxes payable to the Government and fee payable to MPERC.

2.103 It has been noted that various stakeholders have been demanding contribution towards fund for the Terminal Benefit (Pension, Gratuity and Leave Encashment) Trust as per Provision 3(6) of the MPERC (Terms and Conditions for allowing pension and terminal benefits liabilities of personnel of Board and successor entities) Regulations, 2012(G-38 of 2012), extract of the same is shown below:

"3(6) The liabilities in regard to the contribution to be made under sub-clause 2(iii) above shall be allowed in the tariff of respective Successor Entities in the relevant year limited to the extent to be decided by the Commission in the relevant tariff order..."

2.104 Considering the above, the Commission had allowed Rs. 530 Crore in Tariff Orders for FY 2017-18 to FY 2019-20 towards the Pension and Terminal Benefit Trust Fund (liabilities provision) which was to be contributed by the DISCOMs to the Registered Terminal Benefits Trust. Further, the Commission had also directed the Petitioner to file the mechanism along with detailed conditions with regards to management of funds. However, the Petitioners have still not complied with the directive of the Commission and have submitted that they are unable to contribute towards pension funds due to scarcity of funds.

2.105 The Commission has observed that separate proceedings in the said matter is already in process. Therefore, the Commission in this order in line with the approach followed by the Commission in previous orders has considered an amount of Rs. 210 Crore (Rs 70 Cr for each DISCOM) towards the Pension and Terminal Benefit Trust Fund (liabilities provision) which is to be contributed by the DISCOMs to the Registered Terminal Benefit Trust for FY 2020-21, which is same as allowed in the tariff order for FY 2018-19 and FY 2019-20.

2.106 Further, the Commission observed that GoMP has maintained the same DA @ 12% of the basic salary from April 2019 till date. Accordingly, the Commission has considered DA @ 12% of basic salary for April 2020 to December 2020 and projected the DA @ 17% for January 2021 to March 2021.

2.107 The Commission has admitted the PF/NPS liability for the employees being recruited after 2005 as proposed by the Petitioners except for Central DISCOM. The Commission observed that the PF/NPS liability projected by the Central DISCOM is on higher side as compared to actuals of previous years. Therefore, the Commission has projected the PF/NPS liability for Central DISCOM considering the actuals of the previous years.

2.108 The Commission has observed that the Petitioner has not claimed the 7th Pay arrear in accordance to the Tariff Order for FY 2018-19. However, the Commission in line with the view taken in Tariff Order for FY 2018-19 and FY 2019-20 has admitted the Arrear on account of the 7th Pay Commission as Rs. 164.67 Crore.

2.109 Accordingly, the admitted employee expenses for FY 2020-21 by the Commission is as shown in the table below:

Table 51: Employee Expenses as admitted for FY 2020-21 (Rs. Crore)

Particulars	East	West	Central	Total
Employee expenses				
Basic Salary	1,080	1,133	1,009	3,222
DA	143.10	150.12	133.69	426.92
Leave encashment	18.34*	31.50	33.48	83.32
NPS Employer Contribution	7.28	12.62	12.34	32.24
PF/CFA/GTIS/Annuity	17.47	8.91	9.79	36.17
7th Pay Commission Arrears	57.06	55.43	52.17	164.67
Total Employee expenses	**1,323.25**	**1,391.58**	**1,250.47**	**3,965.31**

**As per revised submission in reply to data gap*

2.110 The Commission has considered the A&G expenses as specified in the Tariff Regulations and has also approved the fees paid to the Commission as paid by the Petitioners in proportion to their sales. Details of A&G expenses and fees paid to the MPERC as admitted are given in the table below:

Table 52: A&G Expenses as admitted for FY 2020-21 (Rs. Crore)

Particulars	East	West	Central	Total
A&G expenses	205	157	118	480
MPERC fees	0.44	0.55	0.45	1.44
Total A&G expenses	**205.44**	**157.55**	**118.45**	**481.44**

2.111 The R&M expenses @ 2.3% of opening GFA of respective DISCOMs for the financial year have been considered, which is shown as follows:

Table 53: R&M Expenses as admitted for FY 2020-21 (Rs. Crore)

Particulars	East	West	Central	Total
Opening GFA as on 1st April, 2020	8,921.91	8,178.44	10,805.63	27,905.97
% as R&M of opening GFA as specified in Tariff Regulations	2.3%	2.3%	2.3%	2.3%
Total R&M expenses	**205.20**	**188.10**	**248.53**	**641.84**

2.112 Total O&M expenses admitted by the Commission for FY 2020-21, have been summarized in the table below:

Table 54: O&M Expenses as admitted for FY 2020-21 (Rs. Crore)

Particulars	East	West	Central	State
Employee Expenses	1,323.25	1,391.58	1,250.47	**3,965.31**
A&G Expenses (including MPERC Fee)	205.44	157.55	118.45	**481.44**
R&M Expenses	205.20	188.10	248.53	**641.84**
Terminal Benefits Provision	70.00	70.00	70.00	**210.00**
Total O&M expenses	**1,803.90**	**1,807.24**	**1,687.45**	**5,298.59**

Depreciation

Petitioners’ Submission

2.113 The Petitioners have submitted that they have carried out the detailed workings of depreciation based on rates specified by the Commission in Annexure-II of 1st Amendment to Tariff Regulations, 2015. The depreciation worked out for FY 2020-21 is shown in Table below:

Table 55: Depreciation claimed by Petitioners for FY 2020-21 (Rs. Crore)

Particulars	East	West	Central
Land under Lease	0	0	0
Building	2	5	5
Hydraulic Works	0	0	0
Other Civil Works	0	1	0
Plant and Machinery	113	113	116
Line Cable Networks etc.	225	147	166
Vehicles	0	0	0

Particulars	East	West	Central
Furniture and fixtures	0	0	0
Office Equipment's	10	3	9
RGGVY	0	46	0
Intangible Assets	19	2	3
Supervision Assets	0	0	19
Capital Stores & Spares	0	0	15
Total	**371**	**318**	**388**

Commission's Analysis of Depreciation

2.114 As per the Tariff Regulations, depreciation shall be calculated annually based on 'straight line method' and at the rates specified in Annexure II of the Regulations on the assets of distribution system declared in commercial operation as on 31^{st} March, 2020, provided that the remaining depreciable value as on 31^{st} March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

2.115 In case of existing projects, the Tariff Regulations specify that the balance depreciable value as on 1^{st} April, 2020 shall be worked out by deducting the cumulative depreciation including advance against depreciation as admitted by the Commission up to 31^{st} March, 2020 from the gross depreciable value of the assets. The rate of depreciation shall continue to be charged at the rate specified in Tariff Regulations 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%.

2.116 The Commission has considered the asset addition for FY 2020-21 as admitted in previous section. Further, Consumer contribution, grants and subsidies towards Capital Assets has been considered in proportion to the admitted GFA for the respective years. The Consumer contribution, grants and subsidies towards Capital Assets during the respective year have been reduced from GFA for arriving at net GFA for FY 2020-21. Net GFA has been considered for allowing depreciation for FY 2020-21 on the basis of opening GFA for FY 2020-21 plus half of asset addition during FY 2020-21 net of the consumer contribution.

2.117 The Commission has observed that the Asset Register submitted by the Petitioner in reply to data gaps lacks information related to date of commissioning of the asset, asset reaching 70% of the depreciation, applicable depreciation rate as per the Regulation and other technical details required to substantiate their claim of depreciation. The Commission directs the Petitioner to submit the proper Fixed Asset Register in the desired format along with the next tariff Petition. The Commission has therefore, considered the depreciation rates i.e. 2.44%, 2.81%, and 2.44% for East, West and Central DISCOMs for FY 2020-21, as considered in the tariff order for FY 2019-20. However, the Commission clarifies that the difference in depreciation amount as admitted by the Commission in this tariff order and the depreciation worked out on the basis of audited accounts for FY 2020-21 shall be duly considered at the time of truing up of the ARR for FY 2020-21 subject to scrutiny of Asset Register.

2.118 The depreciation admitted for FY 2020-21 is given in the following table:

Table 56: Depreciation admitted for FY 2020-21 (Rs. Crore)

Particular	East	West	Central	Total
Opening GFA as on 1st April, 2014	**4,268.10**	**3,136.31**	**4345.59**	**11,750.00**
Add: Addition during FY 2014-15	692.89	566.19	1164.71	2,423.79
Less: Consumer Contribution/Grants in FY 2014-15	350.92	248.81	278.07	877.80
Opening GFA as on 1st April, 2015	**4,610.06**	**3,453.69**	**5,232.23**	**13,295.98**
Add: Addition during FY 2015-16	134.63	487.79	897.06	1,519.48
Less: Consumer Contribution/Grants in FY 2015-16	134.63	458.87	213.56	807.06
Opening GFA as on 1st April, 2016	**4,610.06**	**3482.61**	**5915.73**	**14,008.40**
Add: Addition during FY 2016-17	823.30	558.05	1201.70	2,583.05
Less: Consumer Contribution/Grants in FY 2016-17	239.21	411.66	146.15	797.02
Opening GFA as on 1st April, 2017	**5194.15**	**3629.00**	**6971.28**	**15,794.43**
Add: Addition during FY 2017-18	485.17	595.91	836.46	1,917.54
Less: Consumer Contribution/Grants in FY 2017-18	245.09	517.45	201.38	963.92
Opening GFA as on 1st April, 2018	**5434.23**	**3707.46**	**7606.36**	**16,748.05**
Add: Addition during FY 2018-19	963.44	1,106.90	625.96	2,696.30
Less: Consumer Contribution/Grants in FY 2018-19	704.93	566.43	63.11	1,334.47
Opening GFA as on 1st April 2019	**5,692.74**	**4,247.93**	**8,169.21**	**18,109.88**
Add: Addition during FY 2019-20	481.03	548.72	675.00	1,704.75
Less: Consumer Contribution/Grants in FY 2019-20	331.19	141.30	605.18	1,077.67
Opening GFA as on 31st March 2020	**5,842.58**	**4,655.35**	**8,239.03**	**18,736.96**
Add: Addition during FY 2020-21	620.00	753.62	675.00	2,048.62
Less: Consumer Contribution/Grants in FY 2020-21	301.51	498.51	127.86	927.88
Closing GFA as on 31st March 2021	**6,161.07**	**4,910.45**	**8,786.17**	**19,857.70**
Average GFA	6,001.83	4,782.90	8,512.60	19,297.33
Rate of Depreciation	**2.44%**	**2.81%**	**2.44%**	
Depreciation	**146.44**	**134.40**	**207.71**	**488.55**

Interest and Finance Charges

Petitioner submission

2.119 The Petitioners have submitted that Regulation 31 of Tariff Regulations provides for the method of calculation of interest and finance charges on loan capital. The methodology adopted by the Commission in the tariff order for FY 2019-20 has been considered for projecting the interest and finance charges on project loans for FY 2020-21.

East DISCOM

2.120 East DISCOM has filed following details for working the interest on capital loans:

Table 57: Interest cost claimed by East DISCOM (Rs. Crore)

Particulars	Amount
Opening balance of GFA identified as funded through debt	**1,492**
70% of addition to net GFA considered as funded through Loan net of consumer contribution	223
Debt Repayment due during the year (equal to the depreciation claim)	371
Closing balance of GFA identified as funded through debt	**1,344**
Average of loan balances	**1,418**
Weighted average rate of interest (%) on all loans	**8.41%**
Total interest on project loans	**119**
Finance charge	22
Discount to consumer on timely repayment	**0**
Total Interest on Project loans & Finance Charge	**141**

West DISCOM

2.121 West DISCOM has filed following details for working the interest on capital loans:

Table 58: Interest cost claimed by West DISCOM (Rs. Crore)

Particulars	Amount
Opening balance of GFA identified as funded through debt	1,217*
70% of addition to net GFA considered as funded through Loan net of consumer contribution	653*
Debt Repayment due during the year (equal to the depreciation claim)	318*
Closing balance of GFA identified as funded through debt	1,553*
Average of loan balances	1,385*
Weighted average rate of interest (%) on all loans	**8.12%***
Total interest on project loans	**112.52***
Finance charge	25.54*
Discount to consumer on timely repayment	-
Total Interest on Project loans & Finance Charge	**138***

**Revised submission in reply to data gaps*

Central DISCOM

2.122 Central DISCOM has filed following details for working the interest on capital loans:

Table 59: Interest cost claimed by Central DISCOM (Rs. Crore)

Particulars	Amount
Opening balance of GFA identified as funded through debt	3,373
70% of addition to net GFA considered as funded through Loan net of consumer contribution	472
Debt Repayment due during the year (equal to the depreciation claim)	388
Closing balance of GFA identified as funded through debt	3,412
Average of loan balances	3,370
Weighted average rate of interest (%) on all loans	**7.53%**
Total interest on project loans	**254**
Finance charge	2.83
Discount to consumer on timely repayment	-
Total Interest on Project loans & Finance Charge	**257**

Commission's Analysis of Interest and Finance Charges

2.123 Tariff Regulations provide that interest charges to be considered as pass through in the ARR only for the loans for which the associated capital works have been completed and assets have been put to use.

2.124 Interest on loans for works under construction is considered as interest during construction (IDC) which shall be capitalized and added to the project cost at the time of asset capitalization. Therefore, such interest cost has not been considered as pass through in the ARR. The underlying principle for considering the capitalization instead of capital expenditure incurred during the year is that the consumer should bear the interest cost related to those assets only which are put to use. The asset under construction is not 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.

2.125 Regulation 21 of the Tariff Regulations 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.

2.126 Further, Regulation 30 of the Tariff Regulations provides that only such paid up share capital to be reckoned for computation of Return on Equity which has been actually utilised for meeting capital expenditure and forms part of approved financial package. On analysis of the balance sheet of the Petitioner, it is observed that the equity addition in most of the years have been on higher end as compared to 30% of the capital employed for capital expenditure. Whereas, the actual equity utilised for meeting capital expenditure is less than 30% of the capital employed. The reason for the same is that the Petitioners have received assistance from the State / Central Government under various ongoing schemes like Financial Restructuring Plan / UDAY etc. in the form of equity.

2.127 Accordingly, as per provision of the Tariff Regulations, the Petitioner is only eligible for return on equity actually utilised for capital expenditure. However, as the

Commission is already in process to finalise the true up from FY 2014-15 to FY 2018-19 in separate proceedings, this issue shall be considered by the Commission in the true up exercise of the concerned years.

2.128 The Commission in this order has allowed interest on loan and return on equity as per the approach followed by the Commission in previous orders. The approach adopted by the Commission for computation of interest cost for FY 2020-21 is as follows:

a) Net asset addition to GFA during the year is arrived by subtracting the consumer contribution received from total asset addition to GFA.

b) 30% of the net asset addition to GFA during the year has been considered as funded through the equity. Balance of net asset addition to GFA is considered as having been funded through debt and added to the total debt in GFA

c) 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.

d) Asset additions during the year have been treated as financed 70% through loan and 30% through equity.

e) The Commission has worked-out the weighted average rate of interest based on the revised submissions made by the Petitioners in Format 3a. As per Regulations, the Commission has considered the weighted rate of interest computed based on the actual outstanding loan during FY 2018-19.

f) Other finance costs for FY 2020-21 have been admitted as per actual from the audited accounts for FY 2018-19 submitted by the Petitioners.

g) Discount to consumers claimed as part of interest charges has not been considered as the same has been paid by the Distribution Licensee encouraging the consumers for timely payment at its own behest.

2.129 Accordingly, interest and finance charges admitted for FY 2020-21 are given in the following table:

Table 60: Interest and finance charges admitted for FY 2020-21 (Rs. Crore)

Particular	East DISCOM	West DISCOM	Central DISCOM	State
FY 2014-15				
Debt identified with GFA as on 1st April, 2014 (closing approved in last true up)	1,629.69	763.07	1,669.50	4,062.27
70% of addition to net GFA considered as funded through Loan net of Consumer Contribution	239.38	222.17	620.65	1,082.19

Particular	East DISCOM	West DISCOM	Central DISCOM	State
Debt repayment	108.31	92.59	116.85	317.75
Debt identified with GFA as on 31st March, 2015	1,760.76	892.65	2,173.30	4,826.70
FY 2015-16				
Debt identified with GFA as on 1st April, 2015	1,760.76	892.65	2,173.30	4,826.70
70% of addition to net GFA considered as funded through Loan net of Consumer Contribution	0.00	20.24	478.45	498.69
Debt repayment	112.49	97.46	136.01	345.95
Debt identified with GFA as on 31st March, 2016	1,648.27	815.44	2,515.74	4,979.45
FY 2016-17				
Debt identified with GFA as on 1st April, 2016	1,648.27	815.44	2,515.74	4,979.45
70% of addition to net GFA considered as funded through Loan net of Consumer Contribution	408.86	102.47	738.88	1,250.22
Debt repayment	119.61	99.92	157.22	376.75
Debt identified with GFA as on 31st March, 2017	1,937.52	817.99	3,097.41	5,852.92
FY 2017-18				
Debt identified with GFA as on 1st April, 2017	1,937.52	817.99	3,097.41	5,852.92
70% of addition to net GFA considered as funded through Loan net of Consumer Contribution	168.06	54.92	444.56	667.53
Debt repayment	129.67	103.08	177.85	410.59
Debt identified with GFA as on 31st March, 2018	1,975.91	769.84	3,364.11	6,109.87
FY 2018-19				
Debt identified with GFA as on 1st April, 2018	1,975.91	769.84	3,364.11	6,109.87
70% of addition to net GFA considered as funded through Loan net of Consumer Contribution	180.96	378.33	394.00	953.28
Debt repayment	135.75	111.77	192.46	439.98
Debt identified with GFA as on 31st March, 2019	2,021.12	1,036.39	3,565.65	6,623.16

Particular	East DISCOM	West DISCOM	Central DISCOM	State
FY 2019-20				
Debt identified with GFA as on 1st April 2019	2,021.12	1,036.39	3,565.65	6,623.16
70% of addition to net GFA considered as funded through Loan net of Consumer Contribution	104.89	285.19	48.87	438.95
Debt repayment	140.73	125.09	200.18	466.00
Debt identified with GFA as on 31st March, 2020	1,985.28	1,196.50	3,414.34	6,596.11
FY 2020-21				
Debt identified with GFA as on 1st April 2020	1,985.28	1,196.50	3,414.34	6,596.11
70% of addition to net GFA considered as funded through Loan net of Consumer Contribution	222.94	178.57	383.00	784.52
Debt repayment	146.44	134.40	207.71	488.55
Debt identified with GFA as on 31st March, 2021	2,061.78	1,240.67	3,589.63	6,892.08
Average debt	2,023.53	1,218.58	3,501.99	6,744.10
Weighted average rate of interest (%) on all loans as per Petitioner	8.44%	8.76%	7.03%	
Interest on Project Loans	170.75	106.69	246.15	523.60
Other Finance cost	17.11	10.88	4.94	32.93
Interest cost admitted on project loans	**187.86**	**117.57**	**251.09**	**556.53**

Interest on Working Capital

Petitioners Submission

2.130 The Petitioners have stated that the working capital requirement has been estimated based on the norms specified in the Tariff Regulations. The East, West and Central DISCOM have considered interest rate of 13.80%, 13.70% and 13.75%, respectively for the calculation of the interest on the working capital.

Table 61: Interest on Working Capital as filed for 2020-21 (Rs Crore)

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM
	For Wheeling Activity			
1	1/6th of annual requirement of inventory for previous year	14	1	15

Sr. No.	Particulars	East DISCOM	West DISCOM	Central DISCOM
2	O&M expenses			
2.1	R&M expenses	220	193	263
2.2	A&G expense	206	171	120
2.3	Employee expenses	1936	1,480	1,331
2.4	Total of O&M expenses	2362	1,844	1,714
2.5	1/12th of total O&M expenses	197	154	143
3	Receivables			
3.1	Annual Revenue from wheeling charges	0	11	1
3.2	Receivables equivalent to 2 months average billing of wheeling charges	0	2	0
4	Total Working capital (1+2.5+3.2)	211	156	158
5	Rate of Interest	13.80%	13.70%	13.80%
6	Interest on Working capital (Wheeling)	29	21	22
	For Retail Sales activity			
1	1/6th of annual requirement of inventory for previous year	1	0	4
2	Receivables			
2.1	Annual Revenue from Tariff and charges	11,624	15,422	12,286
2.2	Receivables equivalent to 2 months average billing	1,937	2,570	2,048
3	Power Purchase expenses	8,318	12,156	9,174
3.1	1/12th of power purchase expenses	693	1,013	765
4	Consumer Security Deposit	838	1,313	964
5	Total Working capital (1+2.2-3.1-4)	407	244	323
6	Rate of Interest	13.80%	13.70%	13.75 %
7	Interest on Working capital (Retail Sales)	56	33	44
	Net Interest on Working Capital	**85**	**55**	**66**

Commission's Analysis of Interest on Working Capital

2.131 Tariff Regulations specify that the total Working Capital shall consist of expenses towards working capital for the supply activity and wheeling activity. The parameters considered for computation of working capital for wheeling and supply activity have also been specified. Rate of interest on working capital shall be equal to the State Bank Advance Rate as on 1st April of the relevant year.

2.132 The Commission has considered the opening Gross block of FY 2020-21 for East, West and Central DISCOMs. One percent of opening Gross block 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 adopted in last tariff order. The consumer security deposit has been considered as discussed in the section on interest on consumer security deposit. Values of other elements of working capital have been recomputed for the expenses admitted by the Commission in the relevant sections of this order.

2.133 Tariff Regulations allow working capital interest to the DISCOMs at the rate equal to the State Bank of India (SBI) Advance Rate as on 1st of April of the relevant year. The SBI Advance Rate on 1 April, 2020 stands at 12.90%. Accordingly, the normative interest rate for working capital loans to DISCOMs would be limited to 12.90%. The interest on working capital admitted by the Commission for wheeling and retail sales activity combined together is shown in the table below:

Table 62: Interest on Working Capital admitted by the Commission (Rs. Crore)

For wheeling activity						
Sr. No.	**Particulars**	**Months**	**East DISCOM**	**West DISCOM**	**Central DISCOM**	**Total for State**
A)	1/ 6th of annual requirement of inventory for previous year	2	11.90	10.90	14.41	37.21
B) i)	Total of O&M expenses		1,803.90	1,807.24	1,687.45	5,298.59
B) ii)	1/12th of total O&M Expenses	1	150.32	150.60	140.62	441.55
C)	Receivables					
C) i)	Annual Revenue from wheeling charges		0.40	10.85	1.33	12.58
C) ii)	Receivables equivalent to 2 months average billing of wheeling charges	2	0.07	1.81	0.22	2.10
D)	Total Working capital (A+B (ii)+C (ii))		162.29	163.32	155.25	480.85
E)	Rate of Interest		12.90%	12.90%	12.90%	12.90%
F)	**Interest on Working capital**		**20.94**	**21.07**	**20.03**	**62.03**
For Retail Sales activity						
A)	1/6th of annual requirement of inventory for previous year	2	2.97	2.73	3.60	9.30
B)	Receivables					
B) i)	Annual Revenue from Tariff and charges		11,333.43	14,530.65	11,809.10	37,673.17
B) ii)	Receivables equivalent to 2 months average billing	2	1,888.90	2,421.77	1,968.18	6,278.86
C)	Power Purchase expenses		7,588.44	10,390.85	7,856.84	25,836.12
C) i)	1/12th of power purchase expenses	1	632.37	865.90	654.374	2,153.01
D	Consumer Security Deposit		838.33	1,313.30	964.11	3,115.74
E)	Total Working capital (A+B ii) - C i) - D)		421.18	245.30	352.94	1,019.41
F)	Rate of Interest		12.90%	12.90%	12.90%	12.90%
G)	**Interest on Working capital**		**54.33**	**31.64**	**45.53**	**131.50**
	Summary					
	For wheeling activity		20.94	21.07	20.03	62.03
	For Retail Sales activity		54.33	31.64	45.53	131.50
	Total Interest on working Capital		**75.27**	**52.71**	**65.56**	**193.53**

Interest on Consumer Security Deposit

Petitioners Submission

2.134 DISCOMs have submitted that interest on consumer security deposit is payable to the consumers according to relevant Regulations. They have further submitted that interest on consumer security deposit has been calculated for FY 2020-21 as per the RBI Bank Rate of 5.75%.

Table 63: Interest on Consumer Security Deposit as per Regulations for FY 2020-21 (Rs. Crore)

Particulars	East DISCOM	West DISCOM	Central DISCOM
Interest on Consumer Security Deposit	54	74	53

Commission's Analysis of Consumer Security Deposit

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

Table 64: Interest on Consumer Security Deposit (CSD) admitted for FY 2020-21 (Rs. Crore)

Particular	East	West	Central	Total for State
Interest on Consumer Security Deposit	**34.82**	**53.82**	**40.24**	**128.88**

Return on Equity

Petitioners submission

2.136 The Petitioners have submitted that the return on equity (RoE) for the period has been calculated as per the Tariff Regulations. Claims made by the DISCOMs are shown in the following table:

Table 65: Return on Equity for 2020-21 (Rs. Crore)

Particulars	East	West	Central
Opening balance of GFA identified as funded through equity	2,368	1,286	1,977
Normative additional equity (30% of Capitalisation net consumer contribution)	95	240	195
Closing balance of GFA identified as funded through equity	2,464	1,526	2,172
Average Equity	2,416	1,406	**2,075**
Return on Equity (16% on Average Equity)	**387**	**225**	**332**

Commission's Analysis of Return on Equity

2.137 Tariff Regulations specify that RoE shall be computed on pre-tax basis @ 16%. The paragraphs under the Commission's analysis of interest and finance charges in this order explain the approach for identification of debt and equity component related with completed assets. This approach results in the total equity identified with GFA as at the end of FY 2020-21. The return on equity is then determined by allowing the specified rate of 16% on the total equity identified which is allocated in proportion to GFA. The total equity identified along with RoE as admitted for FY 2020-21 is tabulated below.

Table 66: Return on Equity admitted for FY 2020-21 (Rs. Crore)

Particular	East	West	Central	Total
FY 2014-15				
Total Equity identified with GFA as on 31st March, 2013 (Closing from last True-up)	1217.05	929.53	1230.47	3377.04
30% of addition to net GFA considered as funded through equity net of consumer contribution	102.59	95.21	265.99	463.80
Total Equity identified with GFA as on 31st March, 2015	1319.64	1024.74	1496.46	3840.83
FY 2015-16				
30% of addition to net GFA considered as funded through equity net of consumer contribution	0.00	8.68	205.05	213.73
Total Equity identified with GFA as on 31st March, 2016	1319.64	1033.42	1701.51	4054.56
FY 2016-17				
30% of addition to net GFA considered as funded through equity net of consumer contribution	175.23	43.92	316.66	535.81
Total Equity identified with GFA as on 31st March, 2017	1494.86	1077.33	2018.17	4590.37
FY 2017-18				
30% of addition to net GFA considered as funded through equity net of consumer contribution	72.02	23.54	190.52	286.09
Total Equity identified with GFA as on 31st March, 2018	1566.89	1100.87	2208.70	4876.45
FY 2018-19				
30% of addition to net GFA considered as funded through equity net of consumer contribution	77.55	162.14	168.86	408.55
Total Equity identified with GFA as on 31st March, 2019	1644.44	1263.01	2377.55	5285.00
FY 2019-20				
30% of addition to net GFA considered as funded through equity net of consumer contribution	44.95	122.22	20.95	188.12
Total Equity identified with GFA as on 31st March, 2020	1689.39	1385.24	2398.50	5473.13
FY 2020-21				
30% of addition to net GFA considered as funded through equity net of consumer contribution	95.55	76.53	164.14	336.22
Total Equity identified with GFA as on 31st March, 2021	1784.94	1461.77	2562.64	5809.35
Average Equity	1737.17	1423.50	2480.57	5641.24
RoE @16% of FY 2020-21	**277.95**	**227.76**	**396.89**	**902.60**

Other items of ARR

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

Bad and doubtful debts

Petitioners' submission

2.139 The Petitioners have submitted that the Tariff Regulations, 2015 and its amendment provides methodology for computation of Provision for Bad and Doubtful Debts, wherein it is stated that it is allowed to the maximum of 1% of revenue. The Bad & doubtful debt claimed by the Petitioner for FY 2020-21 is as follows:

Table 67: Provision for Bad and Doubtful Debts for FY 2020-21 as per Regulations (Rs Crore)

Particulars	East	West	Central
Bad and Doubtful Debts	25	57	24

Commission's Analysis on Bad and Doubtful debts

2.140 Tariff Regulations specify that bad and doubtful debts in the ARR shall be allowed based on actually written off bad debts in the past as per the available latest audited financial statements to the extent Commission considers it appropriate and shall be trued up during the true up exercise for the relevant year subject to a maximum limit of 1% of the yearly revenue.

2.141 Tariff Regulations stipulates that the delayed payment surcharge is not an income therefore, the amount written off against it shall also not be considered as an expense. The Commission has also not considered principal amount written off under any scheme as it has been waived off at the behest of the company to attract recovery of arrears.

2.142 DISCOMs have neither stated the efforts they made for recovery of the principal amount nor given any reasoning for such waiver except that waiver has been made under some scheme. The Commission is therefore, not inclined to admit expenses against such waivers by the DISCOMs so that the regular paying consumers are not loaded with this burden.

2.143 Accordingly, the Commission admits the expenses against the bad and doubtful debts to the tune of Rs 2 Crore for each DISCOM as per the approach adopted by the Commission in previous orders, subject to true up.

Other Income

Petitioners' submission

2.144 The Petitioners have submitted that main components of non-tariff income are meter rent, wheeling charges, supervision charges, sale of scrap and miscellaneous charges from consumers. Miscellaneous charges have been projected as a percentage of tariff income.

2.145 The Petitioner have projected their Other Income & Non-Tariff Income for FY 2020-21 based on some percentage increase in line item including adjustment for the income received during the previous years. Accordingly, the Other Income & Non-Tariff Income as filed by the Petitioners is as shown below:

Table 68: Other Income for FY 2020-21 (Rs Crore)

Particulars	East	West	Central	Total
Income from Investment, Fixed Deposits	13	258	75	**346**
Interest on loans and Advances to staff	0	0	0	**0**
Interest on Advances to Suppliers / Contractors	7	6	0	**13**
Income/Fee/Collection against staff welfare activities	0	0	0	**0**
Miscellaneous receipts	36	2	40	**78**
Misc. charges from consumers (meter rent, etc.)	46	0	13	**59**
Deferred Income (Consumer Contribution)	131	0	120	**251**

Particulars	East	West	Central	Total
Wheeling charges	0	11	1	**12**
Income from Trading other than Power (i.e. sale of scrape, tender form)	19	147	24	**190**
Supervision charges	13	85	20	**118**
Recovery against theft cases	23	0	0	**23**
Meter Rent	46	277	40	**363**
Others	74	0	0	**74**
Total	**362**	**509**	**293**	**1164**

Commission's Analysis on Other Income

2.146 The Commission has issued MPERC (Recovery of expenses and other charges for providing electric line or plant used for the purpose of giving supply) Regulations, (Revision-I) 2009 (Seventh Amendment) on 07th September 2020, vide which the Commission has notified metering and other charges. As per the Regulation, metering charges only be levied upto the effective period of the Retail Supply Tariff Order for FY 2019-20 and thereafter, metering charges shall be applicable in accordance with the respective provisions under retail supply tariff order issued by the Commission from time to time. The relevant extract of the Regulation is as follows:

> ***"5.0 Other Charges to be recovered from consumers: -***
>
> *5.1.1 As provided for in section 45(3)(b) of the Electricity Act, 2003 (No. 36 of 2003), the Distribution Licensee may charge from the consumers a rent or other charge in respect of any electric Meter or Electrical Plant provided by the distribution Licensee. Accordingly, the Commission notifies schedule of metering charges and other charges as mentioned in Annexure I appended to this Regulation. However, metering charges prescribed in the Annexure I appended to this regulation shall be levied up to the effective period of the retail supply tariff order for FY 2019-20. Thereafter, metering charges (if any) shall be applicable in accordance with the respective retail supply tariff order issued by the Commission from time to time."*

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

2.148 The actual other income of the distribution licensee excluding meter rent as per audited accounts for the previous years is as shown in the table below:

Table 69: Total actual other income as per audited accounts (Rs Crore)

DISCOMs	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
East DISCOM	209.05	169.90	162.72	336.12
West DISCOM	303.56	202.06	137.59	107.78
Central DISCOM	231.74	204.48	126.14	458.86

2.149 Based on the above actual other income received as per audited accounts for FY 2015-16 to FY 2018-19, the Commission has considered other income which includes interest on deposits, sale of scrap, other miscellaneous receipts etc but excludes meter rent for assessment of other income for FY 20-21. The admitted other income for FY 2020-21 by the Commission excluding metering charges is as tabulated below, which shall be subjected to true up on the basis of actuals:

Table 70: Other Income admitted for FY 2020-21 (Rs. Crore)

Particulars	**East**	**West**	**Central**	**State**
Other Income	270.32	132.97	317.01	**720.30**

2.150 The ARR as admitted for FY 2020-21 is presented in the following table:

Table 71: Aggregate Revenue Requirement (ARR) as admitted (Rs Crore)

Particulars	**East**	**West**	**Central**	**State**
Power Purchase Cost (including rebate from CGS)	7,588.44	10,390.85	7,856.84	**25,836.12**
Inter State transmission charges (including rebate from PGCIL)	508.27	622.99	575.66	**1,706.92**
Intra state transmission charges including SLDC	822.69	1,054.24	876.37	**2,753.30**
O&M Expenses	1,803.90	1,807.24	1687.45	**5,298.59**
Depreciation	146.44	134.40	207.71	**488.55**
Interest & Finance Charges				
On Project Loans	187.86	117.57	251.09	**556.53**
On Working Capital Loans	75.27	52.71	65.56	**193.53**
On Consumer Security Deposit	34.82	53.82	40.24	**128.88**
Return on Equity	277.95	227.76	396.89	**902.60**
Bad & Doubtful Debts	2.00	2.00	2.00	**6.00**
Total Expenses admitted	**11,447.64**	**14,463.57**	**11,959.81**	**37,871.02**
Less: Other income + Non Tariff Income	270.32	132.97	317.01	**720.30**
Truing Up of MPPTCL Transmission Order FY 2017-18	156.11	200.04	166.30	**522.45**
Total ARR	**11,333.43**	**14,530.65**	**11,809.10**	**37,673.17**

Segregation of admitted ARR between Wheeling and Retail Sales activities

2.151 Tariff Regulations provide that the DISCOMs should file their ARR in three parts, viz. for power purchase activity, for wheeling (distribution) activity and for retail sales activity. The Regulations clearly list out the items of fixed costs (i.e. other than power purchase) that should be included in wheeling and retail sales activities. The purpose of segregating the total distribution expenses into wheeling and retail sales activities is to establish the wheeling charges that are to be recovered from open access customers.

2.152 DISCOMs have complied with the Tariff Regulations to the extent that they have filed the ARR segregated among expenses for power purchase, wheeling and retail sales activities. DISCOMs have considered normative interest on working capital, bad debts and interest on consumer security deposits in retail sales activity. All other items have been considered entirely as part of wheeling activity.

2.153 The Commission allocates the fixed costs related to wheeling and retail sales activities in the following manner:

Wheeling activity shall include:

(a) O&M expenses
(b) Depreciation
(c) Interest on project loans
(d) Interest on working capital loans – for normative working capital for wheeling activity
(e) Return on Equity
(f) Other miscellaneous expenses
(g) Less: Other Income as attributed to wheeling activity

Retail sales activity shall include:

(a) Interest on working capital loans – for normative working capital for retail sales activity
(b) Interest on Consumer Security Deposits
(c) Bad and Doubtful debts
(d) Less: Other Income as attributed to retail sales activity

2.154 On the basis of above, the ARR for FY 2020-21 for all the three DISCOMs is segregated as under:

Table 72: Total ARR as admitted (Rs. Crore)

Particulars	East	West	Central	Total
Power Purchase Cost including MPPMCL cost	7588.44	10390.85	7856.84	25836.12
PGCIL charges	508.27	622.99	575.66	1706.92
Transco Charges (MP TRANSCO) including Terminal Benefits	822.69	1054.24	876.37	2753.30
Truing Up of MPPTCL Transmission Order for FY 2017-18	156.11	200.04	166.30	522.45
(A) Sub Total- Power Purchase Cost	**9075.50**	**12268.11**	**9475.17**	**30818.79**
Wheeling Activity				
O&M cost	1803.90	1807.24	1687.45	5298.59
Depreciation	146.44	134.40	207.71	488.55
Interest on Project Loans	187.86	117.57	251.09	556.53
Return on Equity	277.95	227.76	396.89	902.60
Interest on Working Capital – Wheeling	20.94	21.07	20.03	62.03

Particulars	East	West	Central	Total
(B) Sub Total- Wheeling ARR for FY 2020-21 as approved	**2437.09**	**2308.03**	**2563.17**	**7308.29**
Retail Activity				
Bad and Doubtful Debts	2.00	2.00	2.00	6.00
Interest on Consumer Security Deposit	34.82	53.82	40.24	128.88
Interest on Working Capital – Retail	54.33	31.64	45.53	131.50
Less: Other Income - Retail	270.32	132.97	317.01	720.30
(C) Sub Total- Retail ARR for FY 2020-21 as approved	**(179.17)**	**(45.50)**	**(229.24)**	**(453.91)**
Total ARR for FY 2020-21 (A+B+C)	**11333.43**	**14530.65**	**11809.10**	**37673.17**

Revenue from existing tariffs and Gap/Surplus

Petitioners' Submission

2.155 The Petitioners have submitted that there has been no substantial hike for FY 2014-15 and FY 2015-16 which have severely affected the financial health of the DISCOMs. For FY 2016-17 to FY 2019-20, the Commission has approved tariff hike of 8.40%, 9.48%, 0% and 7.00%, respectively. The DISCOMs are finding it very difficult to sustain its operation at the present tariff levels because of intrinsic rise in expenditure due to inflationary pressures, and consistent rise in power and energy demands, an ambitious normative loss reduction trajectory and benchmarks set by the Hon'ble Commission, and obligations to be met under the policy objectives of the State and Central governments. 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.

2.156 The revenue from existing tariff for FY 2020-21 is as follows:

Table 73: Revenue at Existing Tariff submitted by Petitioner for FY 2020-21

Consumer Categories	East DISCOM		West DISCOM		Central DISCOM		Total for the State	
	Sales (MU)	Revenue (Rs. Crore)	Sales (MU)	Revenue (Rs. Crore)	Sales (MU)	Revenue (Rs. Crore)	Sales (MU)	Revenue (Rs. Crore)
LV-1: Domestic	5,170	3,196	4,815	3,119	5,624	3,493	15,609	9,808
LV-2: Non Domestic	1,173	983	1,273	1,163	1,079	955	3525	3101
LV-3: Public Water Works & Street Light	390	241	570	365	386	256	1346	861
LV4: LT Industrial	418	367	708	651	311	194	1437	1213
LV 5: Agriculture and allied activities	7,270	3,948	9,575	5,348	7,071	3,965	23,916	13,261
LV 6: Electric Vehicle	1	1	1	1	1	1	3	2
Total LT	**14,424**	**8,735**	**16,943**	**10,647**	**14,470**	**8,863**	**45,837**	**28,245**
HV-1: Railway Traction	55	27	-	-	55	27	111	54
HV-2: Coal Mines	466	401	-	-	28	25	494	426
HV-3.1: Industrial	1,928	1,242	3,131	2,725	2,863	2,246	9,445	6,213
HV-3.2: Non-Industrial	261	242	457	411	419	405	1,091	1058
HV-3.3: Shopping Mall	-	-	59	52	55	43	114	95
HV-3.4: Power Intensive Industries	983	677	1,422	912	585	383	2,990	1,972
HV-4: Seasonal	9	9	16	14	2	2	27	25
HV-5: Public Water Works and Irrigation & Other Agricultural	147	108	872	622	272	188	1,291	918
HV-6: Bulk Residential Users	275	182	32	22	145	100	452	304
HV-7: Synchronization/ Start-up Power	1	-	15	14	2	2	18	16
HV-8: Electric Vehicle	2	1	3	2	3	2	8	5
Total HT	**4,126**	**2,889**	**6,007**	**4,774**	**4,430**	**3,424**	**14,563**	**11,087**
Total (LT + HT)	**18,550**	**11,624**	**22,951**	**15,422**	**18,900**	**12,286**	**60,400**	**39,332**

2.157 In view of the impact on the sale projection submitted by the Petitioner due to lockdown to contain spread of COVID-19, the Commission had directed the Petitioner to submit the revised sales projections for FY 2020-21. The Petitioner in compliance submitted the revised sales and revenue from existing tariff for FY 2020-21 as follows:

Table 74: Revised Revenue at existing tariff for FY 2020-21

Consumer Categories	East DISCOM		West DISCOM		Central DISCOM		Total for the State	
	Sales (MU)	Revenue (Rs. Crore)	Sales (MU)	Revenue (Rs. Crore)	Sales (MU)	Revenue (Rs. Crore)	Sales (MU)	Revenue (Rs. Crore)
LV-1: Domestic	5,170	3,196	4,815	3,119	5,624	3,493	15,609	9,808
LV-2: Non Domestic	1,036	884	1,134	1,050	1,003	901	3,173	2,835
LV-3: Public Water Works & Street Light	390	241	570	365	386	256	1,346	861
LV4: LT Industrial	378	337	633	594	290	194	1,301	1,125
LV 5: Agriculture and allied activities	7,270	3,948	9,576	5,348	7,071	3,965	23,916	13,261
LV 6: Electric Vehicle	1	0.61	1	0.56	1	1	3	1.77
Total LT	**14,245**	**8,606**	**16,729**	**10,477**	**14,374**	**8,809**	**45,348**	**27,891**
HV-1: Railway Traction	55	27	-	-	55	27	110	54
HV-2: Coal Mines	466	402	-	-	28	25	494	426
HV-3.1: Industrial	1,847	1,081	2742	2,448	2,505	1,971	7,094	5,499
HV-3.2: Non-Industrial	230	211	404	372	362	357	996	940
HV-3.3: Shopping Mall	-	-	45	42	51	40	96	82
HV-3.4: Power Intensive Industries	667	578	1,214	795	470	312	2,351	1,685
HV-4: Seasonal	9	8	16	14	2	2	27	25
HV-5: Public Water Works and Irrigation & Other Agricultural	147	108	872	622	272	188	1,291	918
HV-6: Bulk Residential Users	275	182	32	22	145	100	452	304
HV-7: Synchronization/ Start-up Power	1	1	15	14	2	2	18	16
HV-8: Electric Vehicle	2	1.32	3	2.15	3	2	9	5.36
Total HT	**3,698**	**2,599**	**5,343**	**4,332**	**3,895**	**3,025**	**12,936**	**9,955**
Total (LT + HT)	**17,943**	**11,204**	**22,072**	**14,808**	**18,269**	**11,834**	**58,284**	**37,847**

2.158 On the basis of the above, the projected revised revenue gap /surplus submitted by the Petitioner in reply to data gaps is as follows:

Table 75: Gap/Surplus for FY 2020-21 as submitted by the Petitioner (Rs. Crore)

Particulars	East	West	Central	State
Total ARR for FY 2020-21 (A)	**11,876.01**	**15,587.80**	**12,552.42**	**40,016.23**
Revenue at existing Tariffs (B)	11,204.63	14,808.42	11,834.16	37,847.21
Uncovered Gap/Surplus (A-B=C)	**671.38**	**779.39**	**718.26**	**2,169.02**
Revenue at Proposed Tariffs (D)	11,876.01	15,587.80	12,552.42	40,016.23

Particulars	East	West	Central	State
Uncovered Gap/Surplus (A-D=E)	**0.00**	**0.00**	**0.00**	**0.00**

Commission Analysis

2.159 The consumer category wise revenue including rebate/incentives at existing tariff, admitted for FY 2020-21 is presented in the table below:

Table 76: Revenue including rebate/incentives at existing tariffs in FY 2020-21 (Rs. Crore)

Consumer Categories	East Discom		West Discom		Central Discom		Total for the State	
	Sales (MU)	**Revenue (Rs. Crore)**	**Sales (MU)**	**Revenue (Rs. Crore)**	**Sales (MU)**	**Revenue (Rs. Crore)**	**Sales (MU)**	**Revenue (Rs. Crore)**
LV-1: Domestic	5,170	3,130	4815	3030	5,624	3493	15,609	9,652
LV-2: Non Domestic	1,036	928	1118	1098	973	953	3,126	2,979
LV-3: Public Water Works & Street Light	390	241	570	365	386	256	1,346	862
LV4: LT Industrial	382	340	622	594	286	281	1,289	1,216
LV 5: Agriculture and allied activities	7202	3,919	9406	5261	6,956	3731	23,565	12,911
LV 6: Electric Vehicle	1	1	1	1	1	1	3	2
Total LT	**14,181**	**8,559**	**16,532**	**10349**	**14,225**	**8714**	**44,938**	**27,621**
HV-1: Railway Traction	55	30	0	0	55	30	111	61
HV-2: Coal Mines	466	390	0	0	28	27	494	416
HV-3.1: Industrial	1847	1080	2833	2244	2,476	1892	7,156	5,217
HV-3.2: Non-Industrial	230	211	388	334	348	322	965	868
HV-3.3: Shopping Mall	5	3	45	39	57	43	107	85
HV-3.4: Power Intensive Industries	667	527	1156	618	500	258	2,323	1,402
HV-4: Seasonal	9	8	16	14	2	2	27	24
HV-5: Public Water Works and Irrigation & Other Agricultural	147	111	872	609	272	182	1,291	902
HV-6: Bulk Residential Users	275	198	32	22	145	105	451	325
HV-7: Synchronization/ Start-up Power	1	1	15	15	2	3	18	18
HV-8: Electric Vehicle	2	1	3	2	3	2	9	5
Total HT	**3,703**	**2,559**	**5,359**	**3896**	**3,888**	**2,867**	**12,951**	**9,322**
Total (LT + HT)	**17,885**	**11,118**	**21,891**	**14245**	**18,114**	**11,580**	**57,889**	**36,943**

2.160 On the basis of the above, details of total ARR as admitted by the Commission and the revenue income including rebate/incentives at existing tariff for FY 2020-21 is as shown in the table below:

Table 77: Final ARR and revenue from existing tariffs for FY 2020-21 (Rs Crore)

Particulars	East	West	Central	State
Total ARR for FY 2020-21 (A)	**11333.43**	**14530.65**	**11809.10**	**37673.17**
Revenue at existing Tariffs (B)	**11,117.96**	**14,244.97**	**11,580.40**	**36,943.34**
Uncovered Gap/Surplus (A-B=C)	**215.46**	**285.68**	**228.70**	**729.84**
Revenue at Approved Tariffs (D)	**11333.42**	**14530.65**	**11809.10**	**37673.17**
Uncovered Gap/Surplus (A-D=E)	**0.0**	**0.0**	**0.0**	**0.0**

A3: WHEELING CHARGES, CROSS SUBSIDY SURCHARGE AND ADDITIONAL SURCHARGE

Determination of "wheeling cost"

3.1 The Commission allocates the fixed costs of distribution (i.e., other than power purchase) for wheeling activity in the following manner, for the purpose of determining wheeling cost:

Wheeling activity shall include:

(a) O&M expenses
(b) Depreciation
(c) Interest on project loans
(d) Interest on working capital loans – on normative working capital for wheeling activity
(e) Return on Equity
(f) Other miscellaneous expenses
(g) Less: Other Income as attributed to wheeling activity

3.2 On the basis of the admitted ARR for FY 2020-21, the expenditure towards wheeling activity for all the DISCOMs is Rs. 7,308.29 Crore, as admitted in previous section.

Segregation of costs among voltage levels

3.3 The costs of distribution attributable to wheeling activity may further be distributed among the two voltage levels of distribution, i.e., 33 kV and below 33 kV. Though, the EHT consumers (i.e. at voltages above 33 kV) are consumers of the DISCOMs, they are not directly connected to the distribution system. Certain costs related with metering, billing and collection are associated with EHT consumers. At this juncture, the Commission is not inclined to get into those details, primarily on account of data unavailability.

3.4 The Distribution Licensees in the State, presently, do not maintain account of their costs on voltage-wise basis. Similar is the case with other Government owned Distribution Licensees operating in most of the States in India.

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

3.6 The data used for this exercise for the value of the asset base is as follows:

Table 78 : Voltage-wise Cost Break-up of Sub transmission & Distribution Lines

Voltage level of Lines	East (ckt-kms)	West (ckt-kms)	Central (ckt-kms)	State (ckt-kms)	Per unit cost (Lakh Rs. /ckt-km)	Total Cost of lines (Rs. Crore)
33KV	19,954.00	17,451.00	18,911.94	56,316.94	13.95	7,855.05
Below 33 KV						
(a) 11 KV	1,63,933.00	1,35,696.00	1,57,296.31	45,6,925.31	13.23	60,449.16
(b) LT	1,46,849.50	1,70,800.00	1,36,652.13	4,54,301.63	6.99	31,735.29

Voltage level of Lines	East (ckt-kms)	West (ckt-kms)	Central (ckt-kms)	State (ckt-kms)	Per unit cost (Lakh Rs. /ckt-km)	Total Cost of lines (Rs. Crore)
(c) Sub-Total	3,10,782.50	3,06,496.00	2,93,948.44	9,11,226.94		92,184.45
Total	**3,30,736.50**	**3,23,947.00**	**3,12,860.37**	**9,67,543.87**		**100,039.50**

Table 79 : Total cost of transformer voltage level

Transformer Voltage Level	East (MVA)	West (MVA)	Central (MVA)	State (MVA)	Per unit cost (Lakh Rs./MVA)	Total Cost (Rs. Crore)
33/11KV Transformer	11,001.00	12,305.08	12,382.25	35,688.33	43.55	15,542.27
11/0.4KV Transformer	10,617.55	15,836.25	15,669.63	42,123.43	3.04 per 100 KVA	12,805.52
Total	**21,618.55**	**28,141.33**	**28,051.88**	**77,811.75**		**28,347.79**

3.7 Data for length of lines and transformation capacity expected to be added during FY 2020-21 are taken as provided in the Petition.

3.8 In order to identify the asset values at different voltage levels, it is necessary to "assign" the interface transformers to either 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 11kV network and the power transformers of 33/11 kV to be a part of the 33kV network. Based on this method, the asset values at different voltage levels work out to:

Table 80 : Identification of value of network at each voltage level (Rs. Crore)

Voltage level	Cost of Lines	Cost of Transformation	Total Cost
33KV	7,855.05	15,542.27	23,397.32
Below 33 KV	92,184.45	12,805.52	1,04,989.97
Total	**1,00,039.50**	**28,347.79**	**1,28,387.29**

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

Table 81 : Identification of network expenses (wheeling cost) at different voltage levels

Voltage level	Assets value (Rs. Crore)	Assets value Ratio (%)	Total wheeling cost (Rs Crore)	Allocation of Wheeling Cost (Rs Crore)
33KV	23,397.32	18.22%	7308.29	1,331.86
Below 33 KV	104,989.97	81.78%		5976.43
Total	128,387.29	100.00%		7,308.29

Sharing of Wheeling costs

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

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

Table 82 : Allocation of wheeling cost over distribution system users

Sr. No.	Particulars	Units	Amount
A	Wheeling Cost at 33 kV	Rs. Crore	1,331.86
B	Sales at 33 kV	MU	7,182.89
C	Total Sales {excluding EHV System}	MU	52,910.66
D	Proportion of 33 kV sales to total sales	%	13.58%
	Cost allocation		
E	**Wheeling cost of 33 kV allocated to 33 kV users only (A*D)**	**Rs. Crore**	**180.81**

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

Table 83 : Wheeling Charges

Voltage	Wheeling Cost allocated (Rs. Crore)	Sales (MU)	Wheeling charges (Rs. /kWh)
EHT	-	-	-
33 kV	180.81	7,182.89	0.25

Applicability of wheeling charges under different scenarios

3.13 Various scenarios of location of Open Access generators and their consumers and the consequent applicability of transmission and wheeling charges shall be as below:

a) Scenario 1: Generator is connected to Transmission network (EHT voltages), while the consumer is connected to the distribution network at 33 kV of Distribution Licensee: The scenario shall attract both transmission and wheeling charges since power required by the open access consumer will flow downstream from the transmission network through distribution network up to the consumer's connection.

b) Scenario 2: Generator is connected to distribution network at 33 kV of Distribution licensee, while the consumer is connected to the transmission network (132 kV or above): In this scenario, the consumer's requirement will be met by power flow over transmission network alone. The power generated by the open access generator will be locally consumed within the DISCOM and will not flow upstream to the open access consumer. Hence, such transactions shall attract only the transmission charges.

c) Scenario 3: Both Generator and consumer are connected to the transmission network (132 kV or above): Only transmission charges shall apply, since there is no usage of distribution network.

d) Scenario 4: Both generator and consumer are connected to the distribution system of any of the Distribution Licensee at 33 kV: The power generated by the open access generator will be consumed within the DISCOMs under the conditions of uniform retail tariff throughout the MP and hence it will contribute to meeting the demand of the open access consumer. Therefore, there is no additional usage of transmission network in this transaction. Hence, such transactions shall attract only the wheeling charges.

3.14 The Commission has determined the applicability of above charges for encouraging open access. Above formulations also conform to the principle that power flows on the network by displacement method.

Determination of Cross-Subsidy Surcharge

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

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

8.5.1 …

….

Surcharge formula:

S= T – [C/ (1-L/100) + D+ R]

Where

S is the surcharge

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

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

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

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

R is the per unit cost of carrying regulatory assets.

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

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

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

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

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

3.16 Accordingly, the cost of supply to the consumer may be computed on the basis of the weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation.

3.17 The weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation works out as below:

Table 84 : Weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation

Generating Stations	Requirement (MU)	Total cost (Rs. Crore)	Wt. Average rate of power purchase (Rs./unit)
Dispatched	71,953.65	25,836.12	3.59

3.18 Tariff Policy specifies 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 85 : Voltage-wise losses

Voltage Level	Loss level (L)
EHT (transmission system) including External losses	1.00%
33 kV (only 33 kV system)	5.06%

3.19 The cost of transmission shall be uniformly spread over all consumers at every voltage level, as the transmission network is utilized by all consumers. Therefore, similar to wheeling costs, the admitted transmission charges for FY 2020-21 are worked out as under:

Table 86 : Transmission Charges

Particulars	Unit	Quantity
PGCIL Charges	Rs. Crore	1,706.92
MPPTCL Charges	Rs. Crore	2,753.30
Total Charges	**Rs. Crore**	**4,460.22**
Units to be handled by MPPTCL	MU	71,953.65
Transmission Charges	**Rs/kWh**	**0.62**

3.20 Finally, the term in the Tariff Policy formula 'T', Average Tariff for each category, is derived from their expected revenue for FY 2020-21.

3.21 As per the MPERC (Open Access) Regulations, 2005, the consumers with contract demand of 1 MW and above are allowed open access w.e.f. 1st October, 2007. These consumers are to be connected at 33 kV or above as per Madhya Pradesh Electricity Supply Code, as amended from time to time.

3.22 In accordance with the above, the total cost (Rs/unit) for various categories of HT consumers having contract demand of 1 MW and above at 132 kV/33 kV, under various scenarios, is worked out as detailed in the table below ("scenario wise cost"). The Cross-Subsidy Surcharge shall be the difference of average tariff and the total cost (Rs/unit) for the particular category at particular voltage. The category wise average tariff, as per Tariff Order for FY 2020-21, is given in the table below ("category wise average tariff"). However, Cross-Subsidy surcharge shall not exceed 20% of the average tariff applicable to the category of the consumers seeking open access. In case where cross-subsidy surcharge, based on above methodology, works out as negative, the same shall be considered as zero for billing purposes.

3.23 Aforementioned wheeling charges and cross subsidy surcharges shall be applicable to consumers availing open access from renewable source of energy as per the provisions of the MPERC (Co-generation and generation of Electricity from Renewable sources of energy) (Revision-I) Regulations, 2010 [ARG-33(I)(v) of 2015], as amended from time to time.

Table 87 : Scenario wise cost (Rs. per unit)

Scenario	Wt. Average rate of power purchase (Rs. /unit)	Cost of Power grossed up for distribution losses (5.06%)	Cost of Power grossed up for transmission losses (1.0%)	Transmission charges (Rs. per unit)	Wheeling charges (Rs. per unit)	Total Charges [C/(1-L/100) + D+R]
1	3.59	3.78	3.82	0.62	0.25	4.69
2	3.59		3.63	0.62		4.25
3	3.59		3.63	0.62		4.25
4	3.59	3.78	3.82		0.25	4.07

Table 88 : Category wise Cross Subsidy Surcharge (Rs. per unit)

Illustration as per Scenario 1				
Category of HT/EHT consumers	**Average Tariff' 'T' (Rs Per Unit)**	**Ceiling 20% (Rs/Unit)**	**CSS (Rs/Unit)**	**Applicable CSS (Rs/Unit)**
HV- 1: Railway Traction*	5.47	1.09	1.23	1.09
HV- 2: Coal Mines	8.58	1.72	3.88	1.72
HV- 3.1: Industrial	7.45	1.49	2.76	1.49
HV- 3.2: Non-Industrial	9.19	1.84	4.50	1.84
HV-3.3: Shopping Malls	8.07	1.61	3.37	1.61
HV-3.4: Power Intensive Industries	6.14	1.23	1.45	1.23
HV-4: Seasonal	9.17	1.83	4.48	1.83
HV- 5: Public Water Works	7.15	1.43	2.46	1.43
HV- 6: Bulk Residential Users	7.32	1.46	2.62	1.46

* CSS for HV-1: Railway Traction is applicable as per Scenario-3

Note: Cross-Subsidy surcharge shall not exceed 20% of the average tariff applicable to the category of the consumers seeking open access

Determination of Additional Surcharge
Petitioners' submission

3.24 The Petitioners submitted that the Tariff Policy, 2016 provides for the determination of additional surcharge to be levied from consumers who are permitted open access.

3.25 The financial position of the DISCOM's are 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 DISCOM's have to bear the additional burden of capacity charges of stranded power to comply with its Universal Supply Obligation.

3.26 In other States also, separate orders for levy of additional surcharges have been passed by respective Commissions after considering the impact of shift by open access consumers and based on other data with due prudence check.

3.27 In light of the provisions specified in the Clause 5.8.3 of the National Electricity Policy, Section 42(4) of the Electricity Act 2003, besides relevant clause 13.1 of MPERC (Term & conditions for Open Access in MP) Regulations, 2005, the Petitioners determined additional surcharge on a yearly basis for Open Access consumers of the State in addition to levy of Cross subsidy surcharge specified in Tariff Policy, 2016 on the basis of latest data for previous 12 months commencing from September 2018 to August 2019.

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

Table 89 : Determination of additional surcharge by Petitioners

Month	Energy Entitlement (MU)	Energy Scheduled (MU)	Energy Surrendered (MU)	Effective Cost (Rs./kWh)	OA Consumption (MU)	Cost of Surrendered Energy due to OA (Rs. Crore)
	(1)=(2)+(3)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)=(5)*(4)/10**
Sep-18	6018.04	5064.46	953.58	1.20	14.88	1.79
Oct-18	6353.40	6118.53	234.87	1.18	9.23	1.09
Nov-18	6601.58	6193.31	408.27	1.50	21.91	3.28
Dec-18	6635.60	5996.38	639.23	1.51	27.34	4.14
Jan-19	7043.94	6050.19	993.74	0.95	28.98	2.77
Feb-19	6548.40	5395.87	1152.53	0.90	28.05	2.53
Mar-19	7386.80	6271.40	1115.40	1.24	33.10	4.09
Apr-19	6667.20	5867.70	799.50	1.22	26.30	3.22
May-19	6162.10	5800.10	362.00	1.08	25.92	2.80
Jun-19	5124.90	4602.80	522.10	1.37	25.53	3.50
Jul-19	5634.65	4988.27	646.39	1.10	22.43	2.47
Aug-19	4845.60	3847.60	998.00	1.03	22.20	2.29
Total	**75,022.22**	**66,196.61**	**8,825.61**		**285.86**	**33.96**
Additional Surcharge on OA Consumers (Rs./Unit) (6)/(5)*10						**1.19**

3.29 The Petitioners have thus claimed the additional surcharge of Rs 1.19 per unit on the power drawn by the Open Access consumers from the date of issuance or applicability of this Retail Supply Tariff Order by the Commission.

Commission's Analysis

3.30 The Commission has considered the submission made by the Petitioners and stakeholders in light of the provisions specified in the 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 specified in the Tariff Policy, 2016.

3.31 The Commission has computed the additional surcharge by considering the average monthly fixed rate arrived based on daily least fixed rate of generating stations whose energy was surrendered due to open access consumers. The Commission worked-out additional surcharge as shown in the table below:

Table 90 : Determination of additional surcharge

Sr. No	Month	Energy Entitlement (MU)	Energy Scheduled (MU)	Energy Surrendered (MU)	Effective Cost (Rs./kWh)	OA Consumption (MU)	Cost of Surrendered Energy due to OA (Rs. Crore)
1	**2**	**3**	**4**	**5=3-4**	**6**	**7**	**8=(7*6)/10**
1	Sep-18	6018.04	5064.46	953.58	0.74	14.88	1.10
2	Oct-18	6353.40	6118.53	234.87	0.81	9.23	0.75
3	Nov-18	6601.58	6193.31	408.27	0.94	21.91	2.07
4	Dec-18	6635.60	5996.38	639.23	0.87	27.34	2.39
5	Jan-19	7043.94	6050.19	993.74	0.54	28.98	1.57
6	Feb-19	6548.40	5395.87	1152.53	0.56	28.05	1.56
7	Mar-19	7386.80	6271.40	1115.40	0.57	33.10	1.87
8	Apr-19	6667.20	5867.70	799.50	0.57	26.30	1.49
9	May-19	6162.10	5800.10	362.00	0.67	25.92	1.73
10	Jun-19	5124.90	4602.80	522.10	0.74	25.53	1.89
11	Jul-19	5634.65	4988.27	646.39	0.59	22.43	1.32
12	Aug-19	4845.60	3847.60	998.00	0.68	22.20	1.52
Total		**75,022.22**	**66,196.61**	**8,825.61**		**285.86**	**19.26**
Additional Surcharge on OA Consumers (Rs./Unit) (8)/(7)*10							**0.674**

3.32 The Commission has thus determined the additional surcharge of Rs 0.674 per unit in accordance to the applicable Regulations from the date of applicability of this Retail Supply Tariff Order.

A4: FUEL COST ADJUSTMENT CHARGE

Petitioners' submission

4.1 The Petitioners have submitted that 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.

4.2 They have further submitted that quantum of power purchase may not be restricted on the basis of normative loss levels, as the Petitioners have to meet the power demand of the consumers according to obligation to supply mandated under the Electricity Act, 2003. It is also submitted that in the given operating conditions of the power system, the quantum of energy and the power demand are more or less uncontrollable variables. It is submitted that for the purpose of tariff determination, the average power purchase cost per unit based on the prudent cost may be considered. The Petitioners have also submitted the interpretation that the cost based on the average power purchase cost per unit on the quantum of power based on normative loss should be passed on to the consumer and any cost in excess of that shall be borne by the Petitioners. It is also averred that the methodology of passing on full fixed cost element of the power purchase cost to consumers as a legitimate cost shall maintain proper balance between the interests of consumers and the Petitioners, since it is based in overall averaging method and impact of all the factors over an annual cycle are covered and distributed equitably.

4.3 The Petitioners have submitted that in view of the aforementioned facts and as per the Regulations, it will be more appropriate to design single formula for recovery of FCA charge simultaneously with incremental power purchase cost. The Petitioner submitted that average power purchase cost should be considered instead of the variable costs only, and proposed the following formula:

$$PPCA\ for\ billing\ quarter\ (\mathrm{p/u}) = \frac{\mathrm{APPC\ (Rs. Crore)x100}}{\mathrm{Normative\ Sale\ (MU)}}$$

Where,

APPC (Average Power Purchase Cost) = sum of (a) difference in per unit average cost actually billed by each power generator/sources and as allowed in the tariff order, multiplied by (b) units availed from each such generating station in the preceding quarter.,

Preceding Quarter = the period of preceding three months excluding the period of two months immediately preceding to the billing quarter,

Billing Quarter = the period of three months for which PPCA is to be billed and shall be a period commencing on first day to last day of quarter for the quarter commencing from 1st April ending 30th June and so on.

Normative Sale = the sale grossed down from the total actual ex-bus drawl from all sources (generators + other sources) during preceding quarter by the normative PGCIL, transmission and distribution losses for the months of the preceding quarter provided in the Tariff Order.

4.4 The Petitioners have submitted that PPCA charge shall be in the form of paisa per unit (kWh) rounded off to the nearest integer. For this purpose, fraction up to 0.5 shall be ignored and fraction higher than 0.5 shall be rounded off to the next higher integer. This charge shall be added to, or deducted from, as the case may be, the energy charges as per the existing tariff for the energy billed to every consumer and shall be treated as part of energy charge.

4.5 The PPCA charge shall be uniformly applicable to all categories of consumers of the DISCOMs. The PPCA charge shall also be uniformly applicable to all categories of open access consumers for the quantum of such supply as is availed by them from the DISCOMs.

4.6 Since on PPCA charge is a part of energy charge and uniformly applicable to all categories of consumers, average tariff will change to the tune of applicable PPCA charge. Therefore, it will be more appropriate to add per unit PPCA rate in the formula for determination of cross subsidy surcharge for various categories of consumers under the term “T” in CSS formula.

4.7 MPPMCL, Jabalpur is a holding company and has been authorized by the DISCOMs to procure power on behalf of them for retail supply to consumers. MPPMCL shall work out the rate of PPCA every quarter based on change in average cost of power purchase during the preceding quarter based on the bills received by them from the Generators. The information shall be prepared in the manner as decided by the Commission in the Tariff Order for every month of the “preceding quarter” and summated thereafter for the quarter.

4.8 MPPMCL shall workout “normative sale” based on normative PGCIL, transmission and distribution loss (percentage /quantum) for the months of preceding quarter, as provided in the Tariff Orders, and the total ex-bus power drawn during the preceding quarter.

4.9 PPCA charge shall be worked out by MPPMCL based on the formula provided by the Commission and the DISCOMs shall be advised by them from time to time to incorporate the PPCA charge for billing purposes for the billing quarter. This exercise should be completed at least 15 days before the commencement of the billing quarter. MPPMCL shall simultaneously submit all relevant details of calculations along with supporting details to the Commission within 7 days of the completion of the exercise.

4.10 If the Commission finds after reviewing the details submitted by the MPPMCL, any over or under recovery of PPCA charge, it may direct the MPPMCL and the DISCOMs to make required changes in PPCA charge billing and any further adjustments in consumer bills that it may consider appropriate. The DISCOMs shall commence billing of PPCA charge from the first day of the billing quarter.

Commission's analysis

4.11 The Commission has considered the submissions made by the Petitioners. The relevant Regulations have provision for allowing incremental power purchase costs in addition to the levy of FCA. However, at this juncture, the Commission is of the opinion that only FCA be allowed to be recovered and any further additional burden on the consumers during the tariff period may not be warranted. Any additional costs on this account would be considered after due prudence check at the time of true up. Moreover, a substantial portion on account of increases in power purchase costs is taken care of by levy of FCA. The Commission therefore decides to continue with levy of quarterly FCA charge only.

4.12 In view of Regulation 9 of the Tariff Regulations, 2015, as amended from time to time, the Commission hereby decides to continue with the FCA formula along with its associated mechanism/modalities as detailed in the following paragraphs.

4.13 FCA formula for deriving Fuel Cost Adjustment for recovery/adjustment of un-controllable costs due to increase or decrease in the cost of fuel in case of coal, oil, and gas based generating plants is as shown below:

$$\text{FCA for billing quarter (p/u)} = \frac{\text{IVC (Rs. Crore)x1000}}{\text{Normative Sale (MU)}}$$

Where,

IVC = sum of – (a) difference in per unit variable cost actually billed by each long term coal or gas based power generator and variable cost as allowed in the tariff order, multiplied by (b) units availed from each such generating station in the preceding quarter. Variable costs of Hydel Generating Stations shall not be considered for the purpose of working out the increase in variable Cost of Power Purchase.

Preceding Quarter = the period of preceding three months excluding the period of two months immediately preceding to the billing quarter,

Billing Quarter = the period of three months for which FCA is to billed and shall be a period commencing on first day to last day of quarter for the quarter commencing from 1st April ending 30th June and so on.

Normative Sale = the sale grossed down from the total actual ex-bus drawl from all sources (Generators + Other sources) during preceding quarter by the normative PGCIL, transmission and distribution losses for the months of the preceding quarter provided in the Tariff Order.

4.14 FCA shall have to be worked out on the basis of the normative parameters as per Tariff Orders of respective generating stations, as issued by the appropriate Commissions. Further variation, if any, shall need prior approval of the Commission.

4.15 FCA charge shall be in the form of paise per unit (kWh), rounded off to the nearest integer.

For this purpose, fraction up to 0.5 shall be ignored and fraction higher than 0.5 shall be rounded off to the next higher integer. This charge shall be added to or deducted from, as the case may be, the energy charges as per the existing tariff for the energy consumed to every consumer and shall be indicated separately in the electricity bills issued to the consumers, and shall be treated as part of energy charge.

4.16 FCA charge shall be uniformly applicable to all categories of consumers of the Distribution Companies in the State.

4.17 MPPMCL has been authorized by the DISCOMs to procure power on their behalf for retail supply to consumers. The responsibility of working out the rate of FCA every quarter shall rest with the MPPMCL.

4.18 MPPMCL shall workout change in variable cost of power purchase during the preceding quarter based on the bills received by them from the long-term coal, oil and gas-based Generators. The information shall be prepared in the following manner for every month of the "preceding quarter" and summated thereafter for the quarter:

Table 91: Format for FCA charge

Month/ quarter	Name of generating station/ other source	Power Drawn ex-bus	Variable cost incurred based on actual variable charges		Variable cost as per rates provided in tariff order		Increase in variable cost of power purchase
		(MU)	Rate (paise/unit)	Cost (Rs. Cr)	Rate (paise/unit)	Cost (Rs. Cr)	[5-7] (Rs. Cr)
1	2	3	4	5	6	7	8
Total							

4.19 MPPMCL shall workout "normative sale". For this purpose, normative PGCIL, transmission and distribution loss (percentage /quantum) for the months of preceding quarter, as provided in the Tariff Order, shall be subtracted from the total ex-bus power drawn during the preceding quarter to arrive at normative sale.

4.20 FCA charge shall be worked out by the MPPMCL based on the formula provided here in above and details shall be submitted to the Commission for verification at least 15 days before the commencement of the billing quarter. After approval of the Commission FCA charge shall be leviable for the following quarter.

4.21 The Distribution Companies shall commence billing of FCA charge from the first day of the billing quarter.

4.22 The rate and amount of FCA charge shall be shown separately in the consumer bills.

Following illustration is given for the purpose of understanding:

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

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

Table 92: Normative Losses - for PGCIL System, MPPTCL System and distribution losses

Month/Year	PGCIL Losses*		MPPTCL Losses**	Distribution Losses***
	Region	%	%	%
January-2020	W.R.	3.18%	2.71%	15.92%
	E.R.	1.90%		
	N. R.	3.58%		
February-2020	W.R.	3.18%	2.71%	15.92%
	E.R.	1.90%		
	N.R.	3.58%		
March-2020	W.R.	3.18%	2.71%	15.92%
	E.R.	1.90%		
	N.R.	3.58%		
April-2020	W.R.	2.91%	2.59%	15.94%
	E.R.	1.73%		
	N.R.	3.59%		
May-2020	W.R.	2.91%	2.59%	15.94%
	E.R.	1.73%		
	N.R.	3.59%		
June-2020	W.R.	2.91%	2.59%	15.94%
	E.R.	1.73%		
	N.R.	3.59%		
July-2020	W.R.	2.91%	2.59%	15.94%
	E.R.	1.73%		
	N.R.	3.59%		
August-2020	W.R.	2.91%	2.59%	15.94%
	E.R.	1.73%		
	N.R.	3.59%		
September-2020	W.R.	2.91%	2.59%	15.94%
	E.R.	1.73%		
	N.R.	3.59%		

Month/Year	PGCIL Losses*		MPPTCL Losses**	Distribution Losses***
	Region	**%**	**%**	**%**
October-2020	W.R.	2.91%	2.59%	15.94%
	E.R.	1.73%		
	N.R.	3.59%		
November-2020	W.R.	2.91%	2.59%	15.94%
	E.R.	1.73%		
	N.R.	3.59%		
December-2020	W.R.	2.91%	2.59%	15.94%
	E.R.	1.73%		
	N.R.	3.59%		
January-2021	W.R.	2.91%	2.59%	15.94%
	E.R.	1.73%		
	N.R.	3.59%		
February-2021	W.R.	2.91%	2.59%	15.94%
	E.R.	1.73%		
	N.R.	3.59%		
March-2021	W.R.	2.91%	2.59%	15.94%
	E.R.	1.73%		
	N.R.	3.59%		

* PGCIL Losses: % PGCIL loss is based on input separately from E.R., N.R. and W.R.

** Transmission Losses: M.P. Transmission losses are based on input at State periphery.

*** Distribution Losses: Distribution losses are based on input at DISCOMs periphery.

A5: RETAIL TARIFF DESIGN

Legal Position

5.1 In exercise of the powers vested under Section 61 and Section 62 of the Electricity Act, 2003, and all other powers enabling in this behalf, the Commission has determined the Aggregate Revenue Requirement and Tariff for FY 2020-21 for the Petitioners. Due consideration was given to the submissions made by Petitioners, Stakeholders, suggestions made by State Advisory Committee and all other relevant material. While determining tariff for various consumer categories, the Commission has given due consideration to the relevant provisions of the Electricity Act, 2003, Tariff Policy, 2016 and relevant Regulations.

Commission's Approach to Tariff Determination

5.2 As per advice of the Energy Department GoMP letter No. 8523/F-3-10/2020/13 dated 15th December, 2020, uniform retail supply tariffs for each consumer category in all the three DISCOMs shall be continued for FY 2020-21.

5.3 Aggregate Revenue Requirement is determined on the basis of distribution loss level trajectory specified in the Tariff Regulations.

Linkage to Average Cost of Supply

5.4 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 & IA Nos. 137 & 138 of 2010. In this regard, Petitioners have submitted that aforesaid judgement of the Hon'ble Appellate Tribunal for Electricity (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 Hon'ble APTEL.

5.5 Petitioners have submitted that the Tariff Regulations do not provide segregation of normative losses for the Distribution Licensees into voltage wise normative losses in respect of technical and commercial losses. Petitioners have further submitted that determination of voltage-wise losses would require detailed technical studies of the Distribution network. Therefore, for the purposes of illustrative computation of voltage-wise cost of supply, the Petitioners have assumed voltage-wise losses; the data therein is not duly verified and so, should not be relied upon.

5.6 In view of the above, the Commission has endeavoured to work out approximate category wise cross subsidy based on voltage wise cost of supply in-spite of constraints in segregation of voltage wise cost of losses and capital expenditure related costs. As can be seen from the foregoing, the Hon'ble APTEL has concluded that the mandate of the Tariff Policy to limit cross subsidies within (+/-) 20% of the overall average cost of supply can be applied to determine the category wise retail tariff. However, determination of voltage wise cost of supply is required to enable the Commission to evaluate cross subsidies prevalent at various voltages. The Commission would thus be guided by the voltage wise cost of supply in seeking to gradually reduce cross subsidies at various voltage levels.

In the absence of requisite data, the Hon'ble APTEL has further advised that the power purchase cost, which is the major component of the DISCOMs' costs, can be apportioned to different voltage levels in proportion to the sales and losses at the respective voltage levels. As regards the other costs such as Return on Equity, Interest on Loan, depreciation, Interest on Working Capital and O&M costs, etc., these costs can be pooled and apportioned equitably, on pro-rata basis to all voltage levels.

5.7 The Commission agrees with the Petitioners' submission that determination of voltage-wise losses would require detailed technical studies of the distribution network. As a first step in the direction of working out category wise cross subsidy based on voltage wise cost of supply, the Commission has attempted to determine the same based on the methodology proposed by the Petitioners. The voltage wise cross subsidy so worked out is indicative in nature and not accurate, as the base data for the same needs to be worked out on actual. The Commission has adopted 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 Tariff Regulations for FY 2020-21 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 DISCOM 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 DISCOM are allocated based on the sales to each voltage-level.
(vi) Voltage wise total cost derived has been divided by voltage wise sales for working out the voltage wise cost of supply

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

Table 93: Computation of voltage-wise cost of supply for the State

State	Units	EHT System (400 kV, 220 kV, 132 kV & 66 kV)	33 KV System	11 KV + LT System	Total
Sales	MU	4,978	7,183	45,728	57,889
Technical and Commercial losses submitted by the Petitioner	%	1.00%	5.06%	22.96%	19.55%

State	Units	EHT System (400 kV, 220 kV, 132 kV & 66 kV)	33 KV System	11 KV + LT System	Total
Energy input submitted	MU	5,029	7,566	60,323	72,918
Energy input admitted	MU	5,029	7,566	59,359	71,954
Energy lost admitted (Technical up to 33kV and 11 kV + LT- technical and commercial)	MU	50	383	13,631	14,065
Commercial loss assumed as 50% of 11kV and LT overall losses	MU			6,816	6,816
Balance 50% losses for all voltage in proportion to sales	MU	586	846	5,384	6,816
Net energy loss admitted	MU	636	1,229	12,200	14,065
Net energy input	MU	5,615	8,412	57,927	71,954
Power Purchase Costs - allocated based on voltage-wise net energy input	Rs. Crore	2,347	3,583	24,367	30,296
Other costs - allocated based on voltage-wise sales	Rs. Crore	664	913	5,998	7,575
Less: Other income - allocated based on voltage-wise sales	Rs. Crore	66	82	573	720
Recoveries of Past	Rs. Crore	45	65	413	522
Total Costs (ARR requirement)	Rs. Crore	2,990	4,479	30,204	37,673
Voltage-wise Cost of Supply	**Rs. /unit**	**6.01**	**6.24**	**6.61**	**6.51**

5.9 Consumer category wise approximate cross-subsidy, worked out based on voltage wise cost of supply, for FY 2020-21 is shown in the table below:

Table 94: Cross-subsidy based on voltage wise cost of supply for FY 2020-21 for the State

Category	VCoS (Rs /unit)	Average billing rate (Rs /unit)	Ratio of Average Billing Rate to Voltage-wise Cost of supply (%)
LV-Category			
LV-1: Domestic Consumers	6.61	6.29	95%
LV-2: Non Domestic	6.61	9.73	147%
LV-3: Public Water Works	6.61	6.55	99%
LV-4: Industrial	6.61	9.43	143%
LV-5. Agriculture	6.61	5.60	85%
LV-6 EV Charging Station	6.61	6.02	91%
HV-Category			
HV-1: Railway Traction	6.01	5.47	91%
HV-2: Coal Mines	6.14	8.58	140%
HV-3.1: Industrial	6.15	7.45	121%
HV-3.2: Non-Industrial	6.34	9.19	145%
HV-3.3 Shopping mall	6.26	8.07	129%
HV-3.4 Power Intensive	6.15	6.14	100%
HV-4 Seasonal & Non-seasonal	6.31	9.17	145%
HV-5: Irrigation, PWW and Agriculture & allied activities	6.16	7.15	116%
HV-6: Bulk Residential Users	6.27	7.32	117%
HV-7: Start-up Power to Generators	6.39	10.36	162%
HV-8 EV Charging Station	6.51	6.23	96%
Total	**6.51**	**6.51**	**100%**

5.10 While determining the tariffs for FY 2020-21, the Commission has given due consideration to the requirement of the Electricity Act, 2003 that consumer tariffs should reflect the cost of supply. The average cost of supply for FY 2020-21 works out to Rs. 6.51 per unit as against Rs. 6.59 per unit for FY 2019-20. The table below shows the cost coverage (Average realization in percentage of Average cost of supply) on account of tariff for FY 2020-21, as compared to the cost coverage in the tariff order for FY 2019-20:

Table 95: Comparison of tariff v/s overall average cost of supply

Category/ sub-category	Average realisation as % of Average CoS	
	FY 2019-20 (as per tariff order)	FY 2020-21 (achieved as per this tariff order)
LV categories		
Domestic	97%	97%

Category/ sub-category	Average realisation as % of Average CoS	
	FY 2019-20 (as per tariff order)	**FY 2020-21 (achieved as per this tariff order)**
Non-domestic	143%	149%
Public water works & Street Light	96%	101%
Industrial	133%	145%
Agriculture	85%	86%
HV categories		
Railways	74%	84%
Coal Mines	129%	132%
Industrial	119%	115%
Non-industrial	123%	141%
Irrigation, PWW and Other than agriculture	99%	110%
Bulk residential users	101%	112%

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

5.12 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 2020-21. Main features of tariff design are shown in following paragraphs:

i. **Tariff for LT Industrial:** The tariff for LT Industries (LV-4) has been retained at same level with no increase to benefit small industrial consumers.

ii. **Billing of LV 5.4 Agriculture flat rate consumers**: Taking into account subsidy for agriculture category, consumers having load upto 10 HP will be billed only at Rs. 750 per HP per annum. The consumers above 10 HP shall be billed at Rs. 1500 per HP per annum.

iii. **Tariff for E-vehicles/E-Rickshaw charging stations**: The tariff for LV and HV e-vehicles / e-rickshaw charging stations has been retained at same level with no increase.

iv. **Incentive for prompt payment:** Incentive for prompt payment for LT Consumer category has been retained at 0.5% of the billed amount for that month.

v. **Online Payment Rebate:** The bill paid through RTGS/NEFT transaction shall also be eligible for the online bill payment rebate.

vi. **Metering Charges:** The Commission has not allowed any Metering Charges to be billed to the consumers in this Tariff Order.

vii. **Prorating of consumption for billing:** The Commission has retained the provision of pro-rating the consumption for days when consumption recorded is for the duration other than the respective days of the month, so as to safeguard against the disadvantages due to slab-wise billing.

viii. **Tariff for HV 1 Railway Traction:** The tariff for HV-1 Railway Traction has not been changed.

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

x. **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 for FY 2020-21.

xi. **Tariff for HV 5 category consumers:** The tariff for HV 5 category has been rationalised.

xii. For HV consumers availing higher demand than the limit specified in the MP Supply Code, 2013, surcharge will be billed on incremental units, proportionate to enhanced recorded demand, and demand charge will be billed on the enhanced demand, at the rates specified in the General Conditions for HT consumers.

xiii. Simplification of tariff for Temporary connection for construction of own house.

A6: COMPLIANCE ON DIRECTIVES ISSUED IN TARIFF ORDER FOR FY 2019-20

The response submitted by DISCOMs on the directives issued by the Commission in the Retail Supply Tariff order for FY 2019-20 and the Commission's observations/directions thereon are given below:

6.1 Meterisation of unmetered connections

Commission's Directives:

The Commission has noted the submission of DISCOMs and has obtained the latest reports from the DISCOMs for Quarter ending March-2019. The Commission has observed that the progress of the DISCOMs regarding DTR meterisation for the FY 2018-19 is not satisfactory. The Commission further directs the DISCOMs to take all necessary steps to achieve 100% meterisation of pre-dominant Agricultural DTRs and submit the progress report to the Commission on quarterly basis. The Commission further directs the DISCOMs to expedite feeder meterisation and DTR meterisation on priority basis and submit the action plan by 30th November, 2019.

East DISCOM submission:

The Commission has directed to achieve 100% Meterisation of pre-dominant Agricultural DTRs. In this regard it is to state that the Company as on September, 2019 is having 1,01,264 Agricultural predominant DTRs catering supply to 9,86,101 agricultural consumers. Out of 1,01,264 agricultural predominant DTRs, 8070 DTRs have been provided with meters as on September, 2019.

The Meterisation of agricultural DTRs is not covered in any ongoing/sanctioned scheme. Plan for 100% predominant Agricultural Consumers will be provided after sanction of loan assistance from financial institutions or from any Govt. Scheme. The Quarterly reports of Ag. DTR Meterisation regularly being submitted before Hon'ble Commission.

Central DISCOM Submission:

The quarterly progress of meterisation of unmetered connections have already been submitted to the MPERC. The feeder meterisation have been completed and DTR meterisation is under progress. The total no. of unmetered pre-dominant agricultural DTRs are 1,62,476 as of October, 2019. The same shall be metered @ 9500 meters per month so that 100% Meterisation be done by March, 2021.

West DISCOM Submission:

The standing committee of West DISCOM in the meeting dated 20th March, 2019 has observed that the 100% meterisation of Agriculture pre-dominant DTR is challenging task due to scarcity of fund. Hence committee recommended a plan for sampling of DTR on Agriculture

Feeders.

The Standing committee has also recommended that in IPDS towns (excluding Indore city) around 2,000 DTRs be metered and in Indore city meters be provided on balance around 6,000 Nos. DTR. In rural area about few nos. of 11 KV feeders have been identified on which 2,500 no. DTR meters would have to be provided. Meterisation of these 10,500 DTR requires fund amounting to Rs. 2,310 Lakhs. This expenditure is proposed to be met out from Supply Affording Charges collected by DISCOM or any other fund if made available for this purpose. Out of 100 rural area feeders, 42 Nos Agriculture feeders has been identified on which 1365 Nos connected DTRs are catering agriculture load. Therefore, the West DISCOM has also prepared plan for meterisation of 1365 Nos agriculture DTR of 42 Feeders. For installation of 1365 Nos. of agriculture DTR approx. cost would be around Rs. 3.25 Crore.

The West DISCOM has contemplated to carryout DTR Meterisation on 10,500 DTRs on OPEX Model with provision of maintenance of DTR meters for five years and providing the meter reading to DISCOM by Turnkey contractor.

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 for the FY 2019-20 is not satisfactory. The Commission further directs the DISCOMs to expedite DTR meterisation. The Commission has observed that simply providing meters is not the total solution but the DISCOMs need to have a complete energy auditing solution in order to monitor the energy pilferage. The DISCOMs shall continue submitting the quarterly progress reports on DTR meterisation along with the energy Audit. The DISCOMs are directed to submit an action plan by the 30th January, 2021.

6.2 Issue of tariff card with first bill based on new tariff

Commission's Directives:

The Commission has noted the submission of DISCOMs and directs that the practice of providing tariff cards based on new tariff should be continued.

East DISCOM submission:

East DISCOM have got printed Tariff rates at the back side of monthly energy bills of bill month September, 2019 for LT Consumers and delivered tariff pamphlets to the areas where spot billing is being done.

Central DISCOM Submission:

The information related to tariff of different categories for FY 2019-20 has been provided to the consumers through tariff cards for LT Consumers and Tariff schedule booklets for all HT Consumers.

West DISCOM Submission:

The Petitioner hereby submit that the detailed information related to tariff of different LT Categories for FY 2019-20 was provided to the consumers. Further, HT tariff schedule is being distributed to HT consumers in the form of printed booklets.

Commission's observations/ directions:

The Commission has noted the submission of DISCOMs and with the expectation that the practice of providing tariff cards based on new tariff would be continued, the Commission has dropped this directive.

6.3 Accounting of rebates/incentives/surcharge

Commission's Directives:

The Commission has noted the submissions of DISCOMs and directs DISCOMs to submit a comprehensive report to the Commission by 30th November, 2019 including consumer wise and category wise increase / decrease in sales and revenue, for each rebate / incentives / surcharge based on new tariff structure with analysis of impact on consumer wise sales / revenue. A proper and meaningful information derived from the available data by using professional Data analytics should be submitted to the Commission.

East/Central/West DISCOM submission:

The work of preparation of desired comprehensive study has been assigned to the consultant of the DISCOM. The same shall be submitted soon before Hon'ble Commission.

Commission's observations/ directions:

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

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

Commission's Directives:

The Commission noted the submission of DISCOMs. The Commission is not satisfied with the progress made by DISCOMs towards carrying out the technical studies to ascertain voltage-wise cost of supply. As the Consultant has already submitted the report on segregation of technical and commercial losses to DISCOMs, the Commission directs the DISCOMs to submit the report on the subjected study taking into consideration the Consultant's report on segregation of losses by 30th November, 2019.

East/Central/West DISCOM submission:

A study of Distribution network for segregation of Technical & Commercial losses has been conducted by the DISCOMs through consultants and have submitted a comprehensive report for the perusal of the Commission. East DISCOM has also submitted a separate report analyzing their data by simulating through software. Once the Commission approves the methodology adopted in the reports, the DISCOMs shall be proposing their voltage wise cost of supply accordingly.

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

6.5 Transfer of Funds to Pension & Terminal Benefit Trust Fund

Commission's Directives:

The Commission is not satisfied by the submission of the DISCOMs as the fund has been allowed for TBT which is a part of ARR admitted by the Commission for FY 2017-18 and therefore the petitioners need to submit a compliance report on transfer of funds to the TBT in line with admitted ARR for 2017-18 latest by 30th Sept, 2018. The Commission has taken note of the submission and the separate proceedings are in progress on this matter.

East/Central/West DISCOM submission:

The MP Vidyut Mandal Abhiyanta Sangh had filed a petition (13/2018) before Hon'ble Commission. MPPMCL & DISCOM have filed their response before Commission. The matter is under adjudication before the Commission.

Commission's observations/ directions:

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

6.6 Replacement of Stopped and Defective Meters

Commission's Directives:

The Commission has taken note of the submission. The Commission directs the DISCOMs to submit the progress report to the Commission on quarterly basis and submit the action plan for 100% meterisation by 30th November, 2019.

East DISCOM submission:

The action plan and progress of Meterisation of Stopped/Defective and unmetered connection is given below. All efforts are being made by DISCOM to complete the Meterisation as per target.

Progress & Achievement against Stop / Defective and Un-metered Connections:										
Target	July'19	Aug'19	Sep'19	Oct'19	Nov'19	Dec'19	Jan'20	Feb'20	Mar'20	Achievement Up-to Oct'19
18,68,971	2,07,892	2,07,892	2,07,892	2,07,802	2,07,482	2,07,482	2,07,482	2,07,482	2,07,565	**4,82,590**

Central DISCOM Submission:

The quarterly progress of replacement of stopped and defective meters have already been submitted to the MPERC. The total number of balance stopped/defective meters as of October, 2019 are 7.50 lakhs. These shall be replaced @ 45,000 per month from November, 2019 so that 100% replacement be done by March, 2021.

West DISCOM Submission:

The Petitioner humbly submits before the Hon'ble Commission that the replacement of Stopped/defective meters is a continuous process. With regard to HT consumers, defective meter are negligible, and meters have got replaced as and when same is reported as defective. The following is the status of the stop defective meters of HT consumers in the last three year:

Year	Total HT consumer	No of Stop defective meters	% HT defective meters
FY 2016-17	3,101	3	0.09%
FY 2017-18	3,312	1	0.03%
FY 2018-19	3,504	0	0.00%
FY 2019-20 (upto Sept 2019)	3,590	17	0.47%

With regard to LT consumers the DISCOM is continuously replacing the defective meters. It is humbly submitted that the reason due to which meter have got defective may not be attributed solely to the licensee and many a time consumers are responsible for the same. Multiple schemes are being implemented by the DISCOM to strengthen the metering & meter reading process. The introduction of schemes like Smart Metering Scheme would enable the DISCOM to provide smart meters to the consumers. The task of replacement of stopped and defective meters is also covered under IPDS and DDUGJY schemes.

It is submitted that Hon'ble Commission in the tariff order of FY 2019-20 has separately issued a directive (7.12) regarding preparation of plan of meterisation of unmetered domestic connections. In order to draw a comprehensive loss reduction program along with a plan for meterisation of unmetered domestic connections, action plan for line loss reduction and meterisation of pre-dominantly agriculture DTRs and a system for monthly energy audit of the DTR meters, as per the directive of the Hon'ble Commission a Committee comprising the officers of the MPPMCL/DISCOM has been constituted vide MPPMCL order No. CGM (HR&A)/DGM (HR&A)/6073 Jabalpur dated 15th November, 2019. After submission of the report by the committee, same shall be finalised in consultation with MPPMCL and Government of Madhya Pradesh for onwards submission before Hon'ble Commission.

Commission's observations/ directions:

The Commission has noted the submission of the Petitioner. It is observed that the Petitioners have been submitting the quarterly progress report to the Commission. However, the Petitioners have failed to submitted the comprehensive plan to replace all the stopped and defective meters. Accordingly, in view of the higher distribution loss of the DISCOMs, the Commission directs the Petitioners to submit the comprehensive replacement plan of the defective/ stopped meters by 31st January,2021.

6.7 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 noted the Petitioners' submission and has observed that R-15 submitted by the Petitioners is still not aligned with categories, sub-categories and slabs in the tariff Schedule. The Commission hereby directs the Petitioners to align R-15 strictly with the categories, sub-categories and slabs of the Tariff Schedule as per the new Tariff structure at the time of filing next tariff petition.

East DISCOM submission:

The tariff wise R-15 is available on R-15 portal/website of the DISCOM. The reconciliation with conventional R15 along with fine tuning of the reports are in progress.

Central DISCOM Submission:

The alignment of R15 as per the tariff slabs defined in tariff schedule of retail supply tariff order for FY 2019-20 is in process. East DISCOM is acting as a nodal company for this task. The R-15 report aligned with the tariff order has already been designed and same is being verified/tested with the existing R-15 report to identify any anomaly.

West DISCOM Submission:

It is submitted that all three DISCOMs are working on the direction of the Hon'ble Commission. East DISCOM is acting as nodal company for this task. The R-15 report aligned with the tariff order is already been designed by IT team of the DISCOMs and same is being verified/tested with the existing R-15 report to identify any inconstancy or anomaly.

Commission's observations/ directions:

The Commission express its displeasure over casual approach of the DISCOMs in complying the directives provided by the Commission in this regard. It is observed that in absence of proper category / sub-category wise details, the sales projections are being made by the DISCOMs based on assumptions only. The Commission in tariff order for FY 2019-20 had directed to submit the R15 aligned with the rate scheduled approved by the Commission. However, the Petitioner following a lackadaisical approach has still not been able to submit the proper R15 monthly/annual report. The projection of proper estimate of sales, consumer addition and connected load cannot be completed without proper data for the past period. Therefore, the Commission directs the Petitioner to file R15 monthly report as per the rate schedule approved by the Commission for the complete FY 2019-20 and FY 2020-21 along with the tariff filing for FY 2021-22, failing which the Commission may take an appropriate view considering the non-compliance of the Commission's direction.

6.8 Capital Expenditure and Capitalisation details

Commission's Directives:

The Commission has noted the submissions of Petitioner. The Commission is not satisfied with the progress made by DISCOMs in preparing and updating the Fixed Asset Register in the format prescribed by the Commission. This issue was also discussed during the Technical Validation Session held on 27th July, 2019 during which the DISCOMs officials agreed that the Fixed Asset Register prepared by them is not in accordance with the format and the provisions of Tariff Regulations. The Commission once again directs the DISCOMs to prepare the Fixed Asset Register strictly in accordance with the format prescribed by the Commission and the provisions of Tariff Regulations and submit the same to the Commission by 30th November, 2019.

East DISCOM submission:

Assets Register generated from ERP System of the Company containing full details of class wise Assets duly tallied with Audited Account up to FY 2017-18 had already been submitted to the Commission at the time of submission of ARR of FY-2019-20. The Assets register up to FY 2018-19 shall be submitted shortly.

Central DISCOM Submission:

As directed by the Hon'ble Commission, necessary instructions have already been issued to the filed regarding maintenance of Fixed Asset cum Depreciation Register vide letter No.MK/05/Fin/R&A/2450 dated 15-11-18. The preparation of Asset Register in the format as prescribed by Hon'ble Commission is in progress and will be submitted in due course of time. Hon'ble Commission is therefore requested to kindly extend the time limit for submission of the Asset Register.

West DISCOM Submission:

Assets Register generated via ERP System of the Company, showing full details of Assets, according to assets class wise duly tallied with Audited Account up to FY 2016-17, has already been submitted to the Hon'ble Commission at the time of ARR of 2018-19. The Assets register up to FY 2017-18 shall be submitted as per the instructions of the Hon'ble Commission.

With regard to scheme wise detail of capital expenditure it is submitted that such bifurcated scheme wise detail is not available in the audited accounts. However, the format in which the Commission has desired assets register shall be submitted in further course of time. Thus, the preparation of Assets Register in the format of the Commission is in process.

Commission's observations/ directions:

The Commission expresses its displeasure over casual approach of the DISCOMs in complying the directives provided by this Commission. In order to reprimand the Petitioners, the Commission is not allowing the depreciation as per the rates prescribed in the MPERC Tariff Regulations which is subject to submission of Fixed Asset Registers along with the true up petition of FY 2020-21. Further, the Commission directs the Petitioner to submit the Fixed Asset Register upto FY 2019-20 along with the tariff Petition for FY 2021-22 in the format prescribed by the Commission, failing which the Commission may take an appropriate view considering the non-compliance of the Commission's direction.

6.9 Submission of report to ascertain the Consumption of irrigation pumps

Commission's Directives:

The Commission has observed that none of the DISCOMs has submitted the report to ascertain the consumption of irrigation pumps with the tariff Petition as per the direction of the Commission in the last tariff order. The Commission once again directs the Petitioner to submit the 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.

Central DISCOM Submission:

In compliance to directives of Hon'ble Commission, various feeders of circles of DISCOMs have been selected and agricultural consumption have been studied. The month-wise details of feeders studied are as follows:-

Nov.2018	-	574 feeders
Dec.2018	-	810 feeders
Jan.2019	-	621 feeders
Feb.2019	-	607 feeders
Mar.2019	-	421 feeders

It may be observed from the study that minimum value was found as 230 unit/HP/month.

West DISCOM Submission:

The standing committee of West DISCOM in the meeting dated 20th March, 2019 has observed that the 100% meterisation of Agriculture pre-dominant DTR is challenging task due to scarcity of fund. Hence committee recommended a plan for sampling of DTR on Agriculture Feeders.

The Standing committee has also recommended that in IPDS towns (excluding Indore city) around 2,000 DTRs be meterised and in Indore city meters be provided on balance around 6,000 Nos. DTR. In rural area about few nos. of 11 KV feeders have been identified on which 2,500 no. DTR meters would have to be provided. Meterisation of these 10,500 DTR requires fund amounting to Rs. 2,310 Lakhs. This expenditure is proposed to be met out from Supply Affording Charges collected by DISCOM or any other fund if made available for this purpose. Out of 100 rural area feeders, 42 Nos Agriculture feeders has been identified on which 1,365 Nos connected DTRs are catering agriculture load. Therefore the West DISCOM has also prepared plan for meterisation of 1365 Nos agriculture DTR of 42 Feeders. For installation of 1365 Nos. of agriculture DTR approx. cost would be around Rs. 3.25 Crore.

The West DISCOM has contemplated to carryout DTR Meterisation on 10,500 DTRs on OPEX Model with provision of maintenance of DTR meters for five years and providing the meter reading to DISCOM by Turnkey contractor.

It is further submitted that to generate the meaningful information work of consumer indexing is being carried out on the representative sample agriculture feeders in each circle. After such indexing work, the detail of the consumption of such agriculture feeders shall be submitted before Hon’ble Commission soon.

Commission’s observations/ directions:

The Commission has observed that none of the DISCOMs has submitted the report to ascertain the consumption of irrigation pumps with the tariff Petition as per the direction of the Commission in the last tariff order. 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, failing which the Commission may take an appropriate view considering the non-compliance of the Commission’s direction.

6.10 Action Plan for Line Loss reduction

Commission’s Directives:

The Commission directs that the DISCOMs, in consultation with the holding company, i.e., MPPMCL, and the State Government, should finalise a comprehensive loss reduction program *along with a plan for meterisation of unmetered domestic connections, action plan for line loss reduction and meterisation of pre-dominantly agricultural DTRs and a system for monthly energy audit of the DTR meters. The Commission would monitor this on a quarterly basis.*

East DISCOM submission:

For line loss reduction program a committee has been formed vide MPPMCL order no. 6073 dated. 15th November, 2019 which includes the officials of all three DISCOMs. The Committee will constitute a comprehensive plan for line loss reduction including meterisation of unmetered domestic connections, pre-dominant DTR meterisation and its monthly energy audit. The suitable actions will be taken accordingly as per the suggestions/observations given by Committee.

Central DISCOM Submission:

A Committee taking representatives from all the three DISCOMs has been formed by MPPMCL vide MPPMCL order no. CGM (HR&A)/DGM (HR&A)/6073 Jabalpur dated 15th November, 2019. The report prepared by the Committee shall be finalized in consultation with the GoMP. As the work involved in the exercise i.e. compilation and analysis of data may take much time, therefore it is requested to Hon'ble Commission to grant six-month time for the compliance.

West DISCOM Submission:

It is submitted that in order to draw a comprehensive loss reduction programme along with a plan for meterisation of unmetered domestic connections, action plan for line loss reduction and meterisation of pre-dominantly agriculture DTRs and a system for monthly energy audit of the DTR meters, as per the directive of the Hon'ble Commission a Line Loss Reduction Committee comprising the officers of the MPPMCL/DISCOM has been constituted vide MPPMCL order No. CGM (HR&A)/DGM (HR&A)/6073 Jabalpur dated 15th November, 2019. After submission of the report by the committee same shall be finalised in consultation with MPPMCL and Government of Madhya Pradesh.

It is submitted this exercise of preparation of desired plans is extensive and the compilation & analysis of the data may take some time. In view of this it is requested to the Hon'ble Commission to grant 6-month time to ensure the compliance of this directive.

Commission's observations/ directions:

The Commission appreciates the efforts made by the West DISCOM as they have surpassed the distribution loss targets and have achieved 11.10% for FY 2019-20. Whereas, the other two DISCOMs viz. East and Central's progress is far from satisfactory. There is a huge gap between the targeted losses and actual losses. These DISCOMs are losing huge amount against these losses as the Commission has been allowing only the normative losses to be passed on to the Consumers. The Commission opines that it is very necessary and expedient to go into the details of suboptimal performance of the DISCOMs. The Commission directs DISCOMs to arrange a separate exercise to perform Circle wise Energy Audits through an independent agency and submit an action plan to reduce the losses based on this Energy Audit Report to the Commission. The Commission also directs the DISCOMs to submit a quarterly progress reports on this matter.

6.11 Meterisation of unmetered agricultural and domestic consumers

Commission's Directives:

As regards urban flat rate unmetered consumers and urban agricultural consumers connected to a feeder other than separate feeder, the Petitioners are directed to complete the meterisation within FY 2019-20 only. No further extension will be granted for the same.

East DISCOM submission:

Meters have been provided on all unmetered domestic connections of urban area.

In urban area as on March, 2019 there were 52,902 irrigation unmetered connections which has reduced to 51,291 as on September, 2019 further it is to mention that balance unmetered irrigation connections of urban area will be metered in coming months.

The unmetered DLF connections of rural area have reduced from 5,49,355 as on March, 2019 to 5,08,704 as on September, 2019. Thus total 40,651 meters have been provided on unmetered domestic rural connections during 2019-20 up to September, 2019.

Central DISCOM Submission:

To ensure the compliance of the directives of the Commission, it is planned to complete the meterisation of urban agricultural consumers by March, 2020.

West DISCOM Submission:

It is submitted that the necessary instruction regarding identification and meterisation of the urban flat rate agriculture consumer has already been issued to the field offices. Further DISCOM has prepared a comprehensive meterisation plan and is working on the same to ensure the compliance of the directives of the Hon'ble Commission. Since the exercise of the meterisation of the flat rate urban agriculture consumers may take some time it is requested to the Commission that time line in this regard may please be extended to next tariff period.

Commission's observations/ directions:

The Commission is not satisfied with the progress so far achieved by the DISCOMs. The DISCOMs are directed to complete this work within six months and report compliance to the Commission.

6.12 Consumer category wise study of hourly consumption pattern

Commission's Directives:

The Petitioners are directed to undertake a detailed study of hourly consumption patterns of various consumer categories, based on ABT metering data, to identify which category is contributing how much to the peak consumption, which category can shift its consumption to off-peak hours, seasonal variation in the peak and off-peak consumption levels. Based on this study, the Petitioners should submit a comprehensive proposal to modify/upgrade the ToD tariff dispensation, along with its next Tariff Petition.

East/West/Central DISCOMs submission:
No submission

Commission's observations/ directions:
The Commission reiterates its directions given to the Petitioners to undertake a detailed study of hourly consumption patterns of various consumer categories, based on ABT metering data, to identify which category is contributing how much to the peak consumption, which category can shift its consumption to off-peak hours, seasonal variation in the peak and off-peak consumption levels. Based on this study, the Petitioners should submit a comprehensive proposal to modify/upgrade the ToD tariff dispensation, along with its next Tariff Petition.

A7: PUBLIC SUGGESTIONS AND COMMENTS ON LICENSEES' PETITIONS

7.1 After admission of the ARR and Tariff proposals for FY 2020-21 filed by MPPMCL and three DISCOMs, public notice was published in the prominent newspapers of the State to invite comments/objections/suggestions from various 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 final date to file suggestions/comments/objections. Names of the Stakeholders who had filed the suggestions/comments/objections on the DISCOMs ARRs/Tariff Proposals for FY 2020-21 are given in Annexure-I.

7.2 Public Notice, comprising the gist of the ARR and tariff proposals were published by Petitioners on 14th February, 2020, in the following Hindi and English newspapers requesting the stakeholder to file their objections/comments/suggestions latest by the 07th March, 2020.

Table 96 : List of Newspapers- Public Notice published by Petitioner

Newspaper	Language
The Hitvada, Jabalpur	English
The Times of India, Bhopal	English
Patrika, Indore	Hindi
Pradesh Today, Bhopal	Hindi
Nai Dunia, Gwalior	Hindi
Swadesh Jyoti, Sagar	Hindi
Dabang Dunia, Ujjain	Hindi
Dainik Bhaskar, Jabalpur	Hindi
Dainik Bhaskar, Bhopal	Hindi
Express News, Bhopal	Hindi
The Look, Bhopal	Hindi

7.3 The Commission had scheduled the public hearings on 17th March, 2020, 23rd March, 2020 and 27th March, 2020 at DISCOM's headquarters namely Indore, Bhopal and Jabalpur, respectively. However, due to outbreak of the pandemic COVID-19, nationwide lockdown was imposed and accordingly, the Commission cancelled the public hearings on the aforesaid dates.

7.4 Subsequently, in view of the public safety and to maintain social distancing requirement, instead of public hearings, the Commission decided to again seek the suggestions/comments/objections preferably through electronic mode. Therefore, the Commission vide its Public Notice dated 13th May, 2020, extended the deadline for submitting the Suggestions/Comments/objections by the Stakeholders upto 30th May, 2020.

7.5 The Public Notice were published by Commission on 13th May, 2020, in the prominent Hindi and English newspapers which are as follows:

Table 97 : List of Newspapers- Public Notice published by the Commission

Newspaper	Language
Dainik Bhaskar, Bhopal	Hindi
Dainik Bhaskar, Jabalpur	Hindi
Patrika, Indore	Hindi
Times of India, All MP Edition	English

7.6 Number of comments received on ARRs/Tariff proposals during Pre-COVID-19 and Post COVID-19 are shown in the table below:

Table 98 : Numbers of suggestions received Pre-COVID-19 and Post COVID-19

Sr. No.	Name of DISCOM	Number of suggestions received Pre-COVID-19	Number of suggestions received Post COVID-19
1.	West DISCOM, Indore	39	71
2.	Central DISCOM, Bhopal	19	117
3.	East DISCOM, Jabalpur	22	13
	Total	**80**	**201**

7.7 As a part of the tariff exercise, a meeting of the State Advisory Committee (SAC) was convened on 4th August, 2020 at the Commission's office to obtain views and suggestions of the members on the ARR/Tariff proposals of the Licensees. The issues raised and suggestions made by the members of SAC have been appropriately considered herein.

7.8 The suggestions/comments/objections received from various stakeholders have been given due consideration by the Commission, however, salient suggestions/comments/ objections related to the tariff petition have been grouped together according to the nature of the suggestions/comments/objections and are summarized in this Section separately for Pre-COVID-19 and Post-COVID-19. Some of the issues raised by the stakeholders which do not relate to tariff and ARR are not discussed in this chapter.

A. PRE-COVID

ISSUE No. 1: Sales Projection & Energy Requirement

Stakeholders Suggestions

The methodology adopted for estimation of sales as per petition para 3.1.3 are irrelevant as sales projection forecast should be based on actual values of FY 2019-20 upto February, 2020. The sales projections for the different categories are being worked out by taking different assumptions, without any solid basis. Further, actual sales for previous financial years has deviated significantly from the sales forecast approved in the Tariff Orders for the respective years, which indicates that Petitioners uses over projection of sales to justify revenue gap and PPAs for excess capacity signed by MPPMCL.

The Commission should reconcile the sales on the basis of actual growth and shall not be on the basis of the proposed sales by DISCOMs and MPPMCL. It is a deliberate attempt to get exaggerated energy purchase approval from the Commission to justify PPA based on arbitrary demand predictions.

Further, energy requirement for DISCOMs and energy availability from generating stations should be based on the actual data for FY 2019-20.

Petitioners' Response

The Petitioner has submitted the ARR and Tariff Petition for the Distribution & Retail Supply Business for FY 2020-21, in accordance with the applicable Regulations.

Further, for the projection of sales, the Petitioner has considered category wise and slab wise actual data of sale of electricity, number of consumers, connected / contracted load, etc. of the preceding four years i.e. FY 2015-16, FY 2016-17 and FY 2017-18 and FY 2018-19 and available data of FY 2019-20 i.e. up to the month of August, 2019.

Further, the forecast methodology adopted by the petitioner is based on specific consumption. This method tends to capture the growth of consumers and the variations in energy consumption patterns over growth cycle. The Petitioner has further submitted the finalized sale of FY 2019-20 before the Commission. Also, the sale forecast has been revised accordingly considering the impact of COVID-19.

Further, quantum of power purchase has been calculated considering the normative distribution loss approved in the Tariff Regulation.

<u>Commission's view</u>

The Commission appreciates the submission made by the Stakeholders. Subsequent to the onset of COVID-19 pandemic, the Commission had asked the Petitioners to submit the data required to analyse the impact of the same on the ARR for FY 2020-21 filed by the Petitioners. The Commission had also directed the Petitioners to submit the actual sales for FY 2019-20 and for first two months of FY 2020-21, for assessment of impact of pandemic on sales projections. Accordingly, after carrying out due diligence of the details submitted by the Petitioner, the Commission has revised the Sales, Power Purchase Cost among various other parameters. This has been detailed in the Chapter A2 of this order.

Further, the Commission has approved the energy requirement based on the actual transmission loss for FY 2019-20 and distribution loss as per the norms specified in the MPERC Tariff Regulations, this has been detailed in the Chapter A2 of this order.

ISSUE No. 2: Availability and Power Purchase Costs

<u>Stakeholders Suggestions</u>

The Power purchase data of FY 2019-20 actuals upto February, 2020 are sufficient for working out power purchase cost of FY 2020-21 along with likely agreements taken into account. Further, few other costs associated with power purchase have been based on assumed data. This data should be based on data of FY 2019-20 (actual). Also, MPPMCL Revenue and expenses for FY 2020-21 should be based on actual data for FY 2019-20 updated upto February 2020 and should not be estimated based on data for FY 2018-19 (Re-estimated).

The Commission should scrutinize the total surplus power available and cost of power provided by MPPMCL and should direct the same to terminate the agreement to save massive fixed costs associated with the same.

Additionally, the information regarding total connected load, total no. of connections in all categories has to be sought in the tariff petition.

Another stakeholder suggested that as a lot of work has been done on alternative energy sources in the State, due to which the cost of production of electricity has been reduced. Despite this, Petitioners' have been increasing the tariff every year.

Further, Petition shows that the total power requirement for FY 2020-21 is 75,517 MU and power availability is 1,06,272 MU. Thus, there is 30,755 MU of surplus power out of which 13,272 MU power is proposed to be sold in the market at the rate of Rs. 3.28 per unit. However, power availability of 1,06,272 MU is incorrect and actual power availability would be more than that. Further, the estimated power from Kakrapar atomic power station has not been considered.

In the past, DISCOMs have not able to sale surplus power of more than 3,000 MU, therefore, Petitioners proposal for selling 13,272 MU power in the market seems unachievable. Further, rate of Rs. 3.28 per unit for sale of power in market is very high considering the availability of power at Power Exchanges is around Rs. 2.80 per unit. Besides this, DISCOMs are required to pay Rs. 5,635 Crore against the purchase of surplus power from generators. Thus, various measures should be taken to reduce this cost.

It is mentioned in the Petition that power from JP Nigri power had not been purchased despite being very cheap, however, fixed charges are to be paid. Therefore, there is lack of planning while purchasing power from private power producers.

The three power purchase agreements executed on 05th January, 2011 has huge financial impact on the Petitioners. Further, the private generators are selling power to other parties in open market. Therefore, the Commission should examine the revenue generated by the private generators from selling of power to other parties and revenue generated from it should be shown separately in the ARR and Tariff petition.

Petitioners' Response

Power purchase cost has been considered as per provision of CERC/ MPERC orders issued for respective generating stations and power purchase bills of previous years. It is pertinent to mention that quantum of power purchase has been calculated considering the normative distribution loss approved in the Tariff Regulation.

The Commission only after scrutinizing all the relevant records/ information determines the ARR of the licensees. All detail/ information regarding calculation of power purchase costs is given in the Chapter A4, A5, A6 of the petition.

The tariff category wise number of connections and total connected load are shown in the formats attached to the petition. Also, after true-up petition, category wise information of all the consumers is given on actual basis.

As regards to projection of power availability and surplus power, assessment on availability of power by the Petitioners for the FY 2020-21 has been considered on the basis of the current and upcoming energy sources of the central sector whose capacity has been allocated to MP and MP Power sources along with other joint ventures, IPP and the sources of renewable energy from which M.P. Power Management Company have analyzed that it has power available of 1,06,272 MU on basis of power management contract in normative conditions. As the total energy requirement is based on the projected energy sales, which is 75,517 MU. Therefore, the power requirement to fulfill this demand under normative loss would be 87,802 MU and under actual loss the power requirement would be even more. Hence, the surplus power would be less than the assessment made in the petition. Beside this, it is expected to have surplus power in all the months of FY 2020-21. However, it depends upon the actual operational situation, which is uncertain as the actual availability of power from the plants may differ due to various reasons.

As regards to power from JP Nigri power, 100% of the available power schedules have been purchased by MPPMCL. The objections raised by the stakeholder is baseless.

The Petitioner has executed power purchase agreement on 05th January, 2011, to meet increasing demand of power and to promote investment in power sector in the State. Further, in accordance with Clause 4.3.3 of PPA, if the Procurer does not schedule the whole or part of the Available Capacity for any reason whatsoever, the Company shall be entitled to make available such Available Capacity not scheduled by the Procurer, to any other person without losing the right to receive the Capacity Charges from the procurer for such unscheduled Available Capacity. Moreover, during this period, the Company will continue to receive the Capacity Charges from the Procurer for any such third-party sale. Beside this, the Procurer are not required to pay any open access charges including losses, as may be applicable. However, the profit, if any, earned by the Generator (Company) is shared between the procurer and the Generator. Such profit is passed on to the procurer and compensates the Power purchase cost in the bill of the generator. Further, it's not shown separately in the ARR and tariff petition.

Commission's view

The Commission appreciates the submission made by the Stakeholders. The Commission while determining the energy availability from various sources of generation has considered the submission by the Petitioners, suggestions from various Stakeholders and has also assessed the actual availability from Generating plants for FY 18-19 and FY19-20, average scheduled energy for previous three years and projections submitted by NVDA, NHDC and MPPGCL. The Commission has accordingly worked out the availability for FY 2020-21 from various generating stations on case to case basis. The details have been discussed in Chapter A2 of this order.
Further, the Commission after carrying out due diligence of the details submitted by the Petitioners, and orders issued by appropriate Commissions has approved the Power Purchase Cost among various other parameters, which has been detailed in the chapter A2 of this order.

ISSUE No. 3: T&D and AT&C losses

Stakeholders Suggestions

As the actual T&D losses are very high as compared to the norms prescribed by the Commission, proper due diligence of the same need to be carried out. Additionally, a special surcharge should be levied on such region, where T&D losses are very high to bring down these losses. DISCOMs should also install Prepaid meters in areas with higher commercial loss to contain the same.

As all the DISCOMs have different levels of distribution losses, the Commission should adopt two type of tariff for different region as adopted by the MERC. Further, the Commission should allow differential tariff for all three DISCOMs so that the reason for their formation can be found.

HT Consumers are contributing to only 5.5% of T&D loss and they have to bear the whole T&D loss of the DISCOMs, which puts additional burdens on the HT consumers. Accordingly, the Petitioner should determine tariff for HT category of consumers considering the voltage wise cost of supply.

The main reason of T&D loss is due to low meterisation of agricultural pumps. Therefore, the DISCOMs should implement the normative distribution loss directives of the Commission.

The Commission should consider revising loss trajectory based on AT&C losses as it will take care of total health of distribution business.

Petitioners' Response

The Petition has been filed as per normative distribution losses as prescribed in the MPERC Tariff Regulations. Petitioners have been taking all actions as per provision of the Electricity Act, 2003 for preventing the electricity theft and thereby controlling losses. However, new domestic connections under various government scheme has resulted in higher AT&C losses.

Further as per provision of the Tariff Policy, 2016, the tariff is required to be determined based on the average cost of supply and not on the voltage wise cost of supply.

It is to be noted that, the East DISCOM has been able to reduce the distribution loss from 30.57% in FY 2018-19 to 22.52% in FY 2019-20.

As regards to revising loss trajectory based on AT&C losses, the determination of the tariff by the Commission is considering the 100% collection efficiency. Accordingly, the Commission considers the billed revenue as collected revenue. Hence, collection efficiency of the licensee has no impact on the tariff determination.

Commission's view

The Commission has taken note of the above submissions, and directs the Petitioners to take appropriate steps to curb theft of electricity and reduce distribution losses.

However, for the purpose of determination of ARR and tariff for FY 2020-21, the Commission has considered distribution losses at normative levels, as specified in MPERC Tariff Regulations, 2015, and its amendment thereof, thereby not allowing any impact of higher actual distribution losses on consumers.

ISSUE No. 4: Transmission Charges – Components & Optimization Possibility

Stakeholders Suggestions

Transmission charges have become significant portion of the power purchase cost. Therefore, the Commission should optimize transmission charges both at the ISTS level as well as the Intra State transmission system.

Petitioners' Response

The Intra-State transmission charges are approved by MPERC in transmission tariff orders of transmission utility and Inter-State Transmission Charges are paid to transmission utility in accordance with sharing of Transmission Charges Regulations, 2019 approved by the CERC from time to time.

Commission's view

The Inter-State transmission charges are being determined by CERC. The Inter State Transmission Charges have been considered by the Commission based on the actual charges paid by the Petitioner in previous years which are as per orders of CERC. Whereas the Intra-State transmission charges have been considered by the Commission based on the MYT order of MPPTCL dated 10th June, 2016 read with order dated 26th April, 2017 in Petition No. 70/2016. The details have been discussed in chapter A2 of this order.

ISSUE No. 5: Cancellation of Power Purchase Agreement

Stakeholders Suggestions

The power purchase agreements of the following power stations have to be reconsidered in view of the surplus power available with the Petitioners:

1) NTPC Aravali Vidyut Grah Unit, 40 MW executed in September,2019
2) Surrendering unallotted share of power from NTPC which is around 500 MW as other States like Gujarat and Chhattisgarh have surrendered unallotted share from NTPC.
3) The payment of Rs 250 Crore to M/s Lanco Amarkantak as a fixed charge are not accordance to the terms of agreement. Further, the agreement has not been approved by the Commission.
4) All pending power purchase agreements should be reconsidered or cancelled, wherever there is possibility.

Further, the Petitioners have purchased power from power stations situated in Jammu and Kashmir, Himachal Pradesh, Bihar States, which could have been avoided as it increases Inter-State transmission charges in addition to cost of power.

Petitioners' Response

The Commission approves the ARR based on the scrutiny of records submitted by the Petitioners. The demand of the State is not consistent throughout the year and peak demand appears during rabi season. Thus, the licensee has to enter into long term PPAs for providing Supply for agricultural feeder and 24 hours supply to other consumers and also to meet out peak demand during the rabi season. Accordingly, during off season, the availability of power from the plants is more compared to the demand in the State. Such excess power is usually backed down and the Petitioners have to pay the fixed costs to honor these long term PPAs.

As regards to reconsideration of PPA, the Petitioner has submitted that in order to optimize utilization of URS power, MoP vide letter dated 28th May, 2018 to CEA intimated about the decision to allocate 40 MW power from unallocated power pool of Northern Region (NR) to MP and directed that, the beneficiaries are required to sign PPAs and enter into commercial arrangement/maintain LC with the allocated power. Accordingly, MPPMCL has signed PPA on 27th September, 2019 with Aravali Power Company Pvt. Ltd. for supply of 2.02 MW power from IGSTPS (Jhajjar) which is very small out of 40 MW allocated from various generating station in NR. Such allocation is not firm allocation and the same could be discontinued at any time. Therefore, the basic purpose of accepting the unallocated share is to avail URS power from cheaper plants of NTPC in NR.

As per latest allocation of WRPC dated 27th February, 2020, MPPMCL has been allocated 164.94 MW power from NTPC in WR. The method used for allocation from unallocated share is to allocate power at average rate of all NTPC stations in WR from cheapest thermal power plants to the beneficiaries having allocation in higher cost power plants like Gadarwara & Solapur. If MPPMCL surrender this power, then Petitioners may lose cheaper power from Korba TPS & Vindyanchal TPS.

Further, with regards to power supply from M/s Lanco Amarkantak Power Pvt Ltd., it is submitted that the fixed and variable charges in accordance to Clause-2 of the settlement agreement dated 16th October, 2012 are to be determined as per the methodology provided in the applicable CERC Tariff Regulations. The capital cost informed by the M/s Lanco Amarkantak Pvt. Ltd for tariff is Rs. 1,236.40 Crores. Hence, fixed charge to M/s Lanco Amarkantak Power Pvt. Ltd. has been provisionally verified in accordance with amended settlement agreement and CERC Tariff Regulation 2014-19.

As regards to purchase of power from far States, MPPMCL have purchased very small quantum of power from the NR stations from unallocated share of 40 MW from NR Stations to facilitate utilization of URS power. In regard to this, MPPMCL has written a letter to Govt. of MP for requesting GoI requesting MoP to discontinue allocation of power from Hydro and Nuclear Power Plants totaling to 14.72 MW allocated to MPPMCL.

Commission's view

The Commission has taken cognizance of stakeholders' suggestions and Petitioners' reply, and has taken appropriate view in the matter, which has been detailed in the chapter A2 of this order.

ISSUE No. 6: Wrong estimation of Power Purchase Cost of Solar Power

Stakeholders Suggestions

The average power purchase cost from solar power generating stations in FY 2018-19 and FY 2019-20 were Rs. 4.64/kWh and Rs. 3.71/kWh, respectively. Further, 76% (555 MW, 1000 MU) of contracted share comes from the agreement with RUMSL at power purchase cost of Rs. 2.97/kWh. However, the Petitioner in their petition has provided average power purchase cost of Rs 5/kWh for the FY 2020-21, which has wide variation from actual figures and should be verified.

MPPMCL has entered into PSA for procurement of 900 MW of Solar Power for which MPPMCL must obtain approval for power procurement from MPERC through ARR filing. However, no approval was sought for procurement of power from the said project and there is no clarity as to power procurement from which solar projects are included in the said ARR and Tariff Proposal. As uncertain regulatory scenario prevailing in Solar industry it is difficult to secure capital without relevant regulatory approval needed for setting up solar power projects. The Commission should direct MPPMCL to seek a specific and separate approval for procurement of power for the aforesaid project with relevant details of projects so that any regulatory ambiguity regarding the projects can be cleared as soon as possible.

Petitioners' Response

The Petitioners has submitted the details of power purchase cost from all the solar plants and based on the same, the average power purchase cost from all the solar plants works out to be Rs 5/ kWh. The computation is based on the existing PPA's, were the total tied-up capacity of solar generators is 1,545. 75 MW. Further, on the basis of past performance of these plants the Petitioners, in their ARR petition for FY 2020-21, have considered total availability of 2,601.14 MU from Solar Generators. In addition, out of the total tied up capacity, the capacity of RUMSL is 600 MW from which the availability of 998. 64 MUs has been considered which is approximately 38% of the total availability from solar plants. Since some of the old PPAs of solar plants are having high rates, the average rate of all the solar plants for FY 2020-21 works out to Rs 5/ kWh. Therefore, it will not be rational to compare the average power cost of all the solar plants with that of RUMSL.

Commission's view

The Commission has considered the actual weighted rate of power purchase from Solar Power by DISCOMs in FY 2019-20 for projecting the power purchase cost for FY 2020-21, which has been detailed in chapter A2 of this order.

ISSUE No. 7: Renewable Purchase obligation (RPO)

Stakeholders Suggestions

Sixth amendment to MPERC (Cogeneration and Generation of electricity from renewable sources of energy) Regulations, 2010 have brought some major changes due to which it has been found out that MP's hydel consumption has been for several years more than RPO. State Government is thus requested to waive of Renewable Purchase obligation (RPO) for the year's FY 2019-20 and FY 2020-21.

In the petition, it is submitted that the existing renewable capacity in the State, including Solar, Non-Solar and other RE sources, is not sufficient to meet RPO for FY 2020-21. DISCOMs have proposed to buy additional RE power from the market at Rs. 537.78 Crore. This additional cost should not be passed on to the consumers and detailed study should be presented before the Commission to meet RPO for FY 2020-21 in view of existing RE capacity.

Petitioners' Response

Calculation of Renewable Purchase Obligation has been done considering the provision of MPERC (Cogeneration and Generation of electricity from Renewable sources of energy) Regulation 2010.

As per the provisions of MPERC (Cogeneration and Generation of Electricity from renewable sources of energy) (1st amendment) Regulations, 2010 and amendments issued from time to time, it is mandatory for the Open access consumer to comply with the RPO and Non-compliance of RPO may attract penal action.

Since the petition for the financial year FY 2020-21 was prepared on the basis of available data till the month of August 2019, the figures for the year FY 2020-21 were projected based on the data available till that time.

Commission's view

The Commission has taken cognizance of stakeholders' suggestions and Petitioners' reply and has allowed power purchase cost considering the compliance of RPO in accordance with Sixth amendment to Madhya Pradesh Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewable Sources of Energy) (Revision-I) Regulations, 2010 [ARG-33(I)(vi) of 2017]. The details regarding RPO compliance have been discussed in ChapterA2 in this order.

ISSUE No. 8: Management of Surplus Power

Stakeholders Suggestions

The petitioner has stated that the State is expected to have surplus energy in most of the months in ensuing FY 2020-21. The surplus power is proposed to be sold in IEX and the rate of sale of surplus power considered is based on last thirty months average, which is error apparently. The basis has to be the FY 2019-20 (actuals) updated upto February, 2020.

The petitioners despite the surplus availability of power has entered in to long term PPAs to purchase 96,600 MUs at an estimated amount of Rs. 17,700 Crore.

The surplus power should be offered to railway on attractive rate which may be higher than the proposed rate of sale of power in IEX. Further, in view of the surplus power, HT and LT industrial consumers should be incentivized by increasing the TOD rebate for night hours from 20% to 25%.

Petitioners' Response

MPPMCL's sale of power through IEX at an average rate based on 36 months average, which has rational of having impact of demand & supply variation occurring during past 36 month and that is also acceptable to the Commission as has been approved in the Tariff order of FY 2019-20. Considering the average rate of 12 month will be having the impact of demand & supply variation of very short period which is not rational.

The petitioners in their petition have already stated that "*the scheduling of generators considered in the MOD is theoretical, whereas during actual operating conditions the demand incident is an uncontrollable parameter and varies abruptly during the peak of Rabi seasons. Under such circumstances most of the surplus capacity that has been considered to be backed down is scheduled to meet the demand. Hence, there is a rational for having tied up surplus capacities*."

Various rebates are already in place to increase consumption from the DISCOM. The off-peak period rebate has been increased from 15% to 20% by the Commission in the Tariff Order of FY 2016-17. Further, no charge is being levied for consumption in peak period.

With regard to railway it is submitted that special rebate of Rs. 2/kWh has been proposed in the HV-1 tariff schedule to encourage the railway for procurement of power from the DISCOM.

Commission's view

After meeting the energy requirement of the Petitioners, the Commission has considered the sale of surplus power available in power exchange at average energy rate of Rs. 3.01/kWh. The energy exchange rate of Rs 3.01 is the average of price discovered in IEX during FY 2019-20. The Commission has also considered backing down of Costly power over Rs 3.01/kWh. Further, the Commission has also retained various rebates introduced for incentivizing the industrial consumers for encouraging incremental consumption, which has been detailed in tariff design chapter of this order.

ISSUE No. 9: Investment Plan

Stakeholders Suggestions

Investment made on account of system improvement has no oversight. It is emphasized that all investment for such should be based on actuals of FY 2019-20. An independent agency should be recruited for monitoring the benefits of such investment through improvement of the system.

Petitioners' Response

Cost related with the investment has been considered as per the MPERC (Terms and Conditions for determination of Tariff for distribution and Retail Supply of Electricity and Methods and Principles for Fixation of charges) Regulation, 2015.

Commission's view

The proceedings for approval of capital investment plan is being carried out separately. The Commission in this order has approved the provisional capital expenditure for FY 2020-21 based on the actuals of previous years, which shall be subject to approval of capital investment plan and true up.

ARR Components

ISSUE No. 10: Employee Cost

Stakeholders Suggestions

Increase in Employee Expense should be allowed to the extent of increase in inflation only. Any other expenditure pertaining to employees should be borne by the State Government.

All terminal liability for the period prior to formation of DISCOMs should be borne by State Government.

Petitioners should curtail their employee cost /miscellaneous cost paid to advocates and should work with its permanent and contractual employees only.

Petitioners' Response

The employee expenses proposed for FY 2020-21 are in accordance with MPERC Tariff Regulations, 2015 and amendment thereof.

As regards to curtailment of advocate fees, the petitioners adopt legal expenses only as and when required and its employees are recruited in view of administrative needs and are unsuitable for fulfilling legal needs.

Commission's view

The Commission has allowed Employee Expenses in accordance to the provision of the MPERC Tariff Regulations, which has been detailed in the chapter A2 of this order.

ISSUE No. 11: Employee & Pensioner Benefits

Stakeholders Suggestions

The DISCOMs are mandated to contribute an annual contribution towards the trust for the purpose of Terminal Benefits. The Commission did not allow the whole annual contribution to be part of ARR and directed the DISCOMs to file the mechanism along with detailed condition with regards to management of funds. But all three DISCOMs have not been depositing the total amount till date in the trust. Also, an appreciable amount is desirable in the ARR for FY 2020-21.

Further, the Commission is requested to introduce the tariff for departmental employees and pensioners so that any expenditure occurring on account to this can be passed through and permitted in the ARR of the DISCOM in line with the provision made by the Commission in order in Petition No. 264 of 2002.

Petitioners' Response

Issue of contribution of funds to pension and terminal benefit trust fund is under consideration of the Commission in Petition no 13/2018.

As regards to benefits of free electricity to departmental employees and Pensioners, Tariff is required to be determined as per provision of Section 61 and 62 of Electricity Act, 2003. Particularly, the provision of Section 62(3) is needed to be considered to introduce any new tariff category in the tariff order. In view of above statutory provision, issue of concessional electricity is not the subject matter of the tariff petition.

Commission's view

The Commission has taken the cognizance of stakeholders' suggestions and Petitioners' reply. As separate proceeding regarding Terminal Benefit Trust Fund is under consideration of the Commission, the matter would be appropriately dealt through the said Petition. However, the Commission directs the Petitioners to deposit the amount against the Terminal Benefit Trust Fund allocated in this Tariff Order on monthly basis.

ISSUE No. 12: O&M Expenses of DISCOMs

Stakeholders Suggestions

O&M expenses of DISCOMs should be considered based on actual data of FY 2019-20 and should not be on the basis of Regulations.

The O&M expenses proposed by the Petitioner for FY 2020-21 is Rs. 1,844 Crore, as compared to Rs. 1,766 Crore for FY 2019-20 and Rs. 1594 Crore for FY 2018-19. Such increase in O&M Expenses should not be allowed as this continuous increase shows DISCOMs ineffectiveness of handling their day to day working.

Petitioners' Response

O&M Expenses have been considered as per the provision of MPERC (Terms and Conditions for determination of Tariff for distribution and Retail Supply of Electricity and Methods and Principles for Fixation of charges) Regulation, 2015.

Commission's view

The Commission has noted the submission of the Stakeholder and the Petitioners. The Commission allows O&M Expenses in accordance to the norms stipulated in the MPERC Tariff Regulations, 2015 and its amendments thereof. These norms have been fixed following due diligence of the actual O&M expenses of the Petitioners in past years.

ISSUE No. 13: *Depreciation*

Stakeholders Suggestions

The Petitioner has claimed high depreciation charges for the control period based on incremental increase in fixed assets. Depreciation must be allowed based on actual capacity added/ assets created.

The depreciation on the assets handed over by the consumers as well as by the developer of colony should not be allowed.

Petitioners' Response

The Commission in its tariff orders, has considered depreciation rate of 2.44%, which is very much on lower side as compared to actual average rate of depreciation which is around 4.81%. Therefore, depreciation claimed by East DISCOM in its ARR of FY 2020-21 is in order.

Commission's view

The Commission has been repeatedly directing the Petitioners to submit the Fixed Asset Register in the prescribed format, however, the Petitioners have failed in complying the said direction. Accordingly, the Commission in line with the approach adopted in previous years has allowed lower depreciation rate of 2.44%, 2.81% and 2.44% for East, West and Central DISCOMs, respectively.

ISSUE No. 14: Computation of Return on Equity and Interest & Finance Charge

Stakeholders Suggestions

Proper verification of the details of loans and actual interest paid against the loans has to be done before approval of the same.

The petitioner has been claiming only 70% of the loan amount as loan and rest 30% as equity regardless of using 100% of fund of project cost being sourced from loans. Such project cost should be taken as loan for whole 100%.

Additionally, as per UDAY scheme, by FY 2020-21, an amount of Rs. 18,487 Crore would be granted to petitioner and Rs 7,568 Crore would be given as equity. DISCOM should use this amount to pay off equivalent debt and interest should be reduced accordingly.

Petitioners' Response

All relevant documents and proofs are provided for the purpose of due diligence and verification.

The Return on Equity claimed by the petitioner are in accordance with MPERC Tariff Regulations, 2015 and amendment thereof.

Further, with regards to the amount released under UDAY Scheme, loan is to be taken over by GoMP in a phased manner through book adjustments and no amount is to be made available by the government as cash. Lower interest liability due to such takeover would result in lower weighted average interest rate which is already being considered in form F3(a) of the petition.

Commission's view

In accordance to the Regulation 21 of the MPERC Tariff Regulations, 2015 and its amendments thereof, the Commission has considered funding of the completed assets in debt:equity ratio of 70:30 subject to maximum addition in equity as 30% or actual, whichever is lower. Further, the Commission shall also consider the addition in equity on actual basis at the time of truing up in accordance to the provision of the Regulations. The treatment of the UDAY shall be considered appropriately at the time of truing up.

ISSUE No. 15: *Consumer Security Deposit*

Stakeholders Suggestions

Interest on Consumer Security Deposit (CSD) is paid to the consumers at RBI Rate, which is only 6.5% p.a., whereas industries have to take working capital loan at 12-13% p.a. Therefore, the DISCOM should be directed to credit interest on CSD at market rate or allow facility to submit bank guarantee towards CSD.

The recovery of additional security deposit should not be allowed in case of delay in payment of dues by HT consumers.

To enhance the Ease of Doing Business in Madhya Pradesh, DISCOMs should accept Bank Guarantee against Security Deposits for all the new as well as existing HT Power Connections in the State. This would not only save the interest paid by Power Distribution Companies, but also allow the industry to use the idle cash towards the growth of their industry and state as well.

Petitioners' Response

Interest on security deposit is claimed as per provisions of MPERC Regulations.

In accordance with Clause 1.19 of the "Madhya Pradesh Electricity Regulatory Commission (Security deposit) (1st amendment) Regulations 2019" issued by the Commission for default on payment of bills by the consumer, DISCOM is bound to ask for additional security deposit in case of late payment of bills.

As regards to accepting Bank Guarantee for Security Deposit, Petitioner is of the opinion that on accepting security through Bank Guarantee, the distribution companies will face additional financial burden and administrative difficulties as well as there is no legal validity of the arrangement of security Bank Guarantee.

Commission's view

The interest on Security Deposit has been allowed by the Commission as per the provision of the MPERC Tariff Regulations, 2015 and its amendments thereof and approach adopted by the Commission in previous tariff orders. The computation of the same has been detailed in the Chapter A2 of this Order.

ISSUE No. 16: Bad and doubtful debts

Stakeholders Suggestions

The provision of bad and doubtful debts may be allowed at the time of True up petition only after verification of the actual write-off of the amount. Any benefit passed onto the consumers should not be allowed under this head.

Petitioners' Response

MPERC Regulations RG – 35(II) of 2015 provides the methodology for computation of provision for Bad & Doubtful Debts, wherein it is stated that it is to be allowed to the maximum of 1% of yearly revenue. The Bad and doubtful debts claimed in the petition is well within aforesaid limit prescribed in the Regulation.

Commission's view

The Bad and doubtful debts have been allowed by the Commission as per the provision of the MPERC Tariff Regulations, 2015 and its amendments thereof and approach adopted by the Commission in previous tariff orders. The same has been detailed in the chapter A2 of this Order.

ISSUE No. 17: Other Costs/ Income

Stakeholders Suggestions

The exercises involving the working out of Depreciation, Interest and Finance Charges, Interest on consumer security deposit, Return on Equity, Provision for Bad and Doubtful debt, other Income and Non-tariff Income are as per existing regulations and actuals of FY 2018-19 as base year. These exercises should be based on the basis of actual data available till February, 2020.

In Other income an amount of Rs.1,164 Crore has been projected but income from surcharges have not been considered. The Commission is requested to consider surcharge part of other income and in some states, it is already the norm.

Petitioners' Response

All component of ARR including depreciation, Interest & Finance Charge, Interest on consumer security deposit, return on equity, provision for bad and Doubtful Debt and other have been considered as per the MPERC (Terms and Conditions for determination of Tariff for distribution and Retail Supply of Electricity and Methods and Principles for Fixation of charges) Regulation, 2015.

With regards to late payment surcharge, the MPERC Regulations RG-35 (II) of 2015 stated that, "*41.2 The delayed payment surcharge shall not be considered as income for the purpose of determination of gap between Aggregate Revenue Requirement and Tariff & other Income.*"

Thus, provisions of Tariff Regulation do not recognize the delayed payment surcharge as a part of other Income.

Commission's view

The Commission allowed the Delayed Payment Surcharge in accordance to the provision of the Regulations.

ISSUE No. 18: Revenue Gap

Stakeholders Suggestions

The revenue gap of Rs. 2,000 Crore for FY 2020-21 estimated by the Petitioners is misleading as it does not take into account past recovery of Rs. 3,873 Crore which was not part of revenue requirement of FY 2019-20. The tariff hike in actual is of Rs. 6,144 Crore instead of Rs. 2,000 Crore which works out to a hike of 18.7%.

Petitioners' Response

The revenue requirement for the FY 2020-21 has been estimated as Rs. 41,332 Crore with revenue gap of Rs.2,000 Crore. For this tariff hike of 5.7% has been proposed. As regarding the past losses, DISCOMs are required to file a separate petition called True-Up petition to claim the same. This petition is based on audited Financial Statement/Balance Sheet of the Company & therefore can only be filed after the completion of financial audit of the Company. For the information of the consumers, the DISCOMs have already filed true up petitions up to the year FY 2018- 19.

Commission's view

The Commission in this order has approved ARR and Retail Tariff for FY 2020-21 including the True up amount for which the orders have been passed by the Commission till the date of issue of this Tariff Order.

ISSUE No. 19: Cross Subsidy Surcharge and Additional Surcharge

Stakeholders Suggestions

The Petitioner should show the computation of wheeling charge and CSS to be levied up on the open access consumer in the ARR petition.

The addition of FCA component in CSS to increase the effective CSS applicable to Open Access consumers is untenable, as CSS ought to be worked out based on cost to serve for the relevant category of consumers. DISCOMs' proposal to link the same to the tariff of consumer is not aligned with earlier orders of the Commission.

Also, FCA being an adjustment which impact the consumer that procure power from the DISCOMs, does not directly impact the open access consumers as they don't get benefits of reduced fuel cost in the DISCOMs' Power Purchase. Hence, the proposal to link FCA with CSS on Open Access consumers ought to be rejected.

Additional Surcharge has been calculated by considering the weighted average monthly fixed rate of surrendered power, which is based on daily weighted fixed rate generating station in the surrendered power. The Commission in Retail Supply Tariff Order for FY 2019-20, considered the average monthly fixed rate arrived based on daily least fixed rate of generating stations whose energy was surrendered due to open access consumers for determining Additional Surcharge. In the months of October'18 to January '19, DISCOM has purchased far more electricity than claimed surrendered energy amount. Therefore, stranded energy in these months did not occur necessarily due to open access. So, in determining Additional surcharge, cost of backdown energy surrendered due to open access for months of October '18 to January '19 should not be considered.

Open access consumers pay demand charges to the Distribution Licensee as a regular consumer. Such fixed cost already incurred by the Open access consumers will have to be adjusted in the cost attributable to Open Access as stranded capacity of the DISCOMs.

The Commission should invoke provisions under Section 42(2) sub para 4 of Electricity Act 2003 and abolish Cross Subsidy and Additional Surcharge.

The Commission should remove Cross Subsidy and Additional Surcharge on Purchasing RE Power from third party within the State to increase use of Green power and minimize the pollution in the State.

Further, Petition do not have any information on the revenue received from Cross Subsidy Surcharge and Additional Surcharge. It is observed that amount of Rs. 1,100 Crore is due on account of Cross Subsidy Surcharge and Additional Surcharge, which is not shown in Petition. Revenue to be received from Open Access consumers is also not shown in Petition. Also, procurement of power to Railways from open market was granted due to compelling circumstances however, Cross Subsidy Charge and Additional Surcharge is payable by Railways. The Commission is requested to take effective steps giving direction to the petitioners for recovery of outstanding arrears from Railways.

Petitioners' Response

As per MPERC (Terms & Conditions for Intra State Open Access in MP) Regulations 2005, the Wheeling Charge and Cross Subsidy Surcharge are to be decided by Commission only.

The CSS is levied for the consumers is in line with the Tariff Policy, 2016.

Proposal for levy of Cross Subsidy Surcharge and Additional Surcharge is in accordance with the provision of Section 42 of the Electricity Act 2003 and Tariff policy issued by the Central Government.

The additional surcharge of Rs. 1.19 per unit has been computed 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.

As regards to information on revenue from Cross subsidy and Additional Surcharge, the whole billed amount to the consumer irrespective of realization is considered as revenue of DISCOM for determination of ARR and Tariff.

As regards to arrear from Railways, a joint petition has been filed before Commission by MP East, Central and West DISCOMs to direct Railway to make payment of dues towards the open access.

Commission's view

The Commission has determined Additional Surcharge on the basis of actual monthly data for previous year without any escalation, in line with the approach adopted by the Commission in previous years' Tariff Orders.

The Commission has computed Wheeling Charges and Cross-Subsidy Surcharge on the basis of projected network capacity addition during FY 2020-21 for different voltage levels, in accordance with the provisions of Tariff Policy, 2016.

The computations for Cross-Subsidy Surcharge, Additional Surcharge and Wheeling Charge have been detailed in the Chapter A3 of this order.

Fuel Cost Adjustment / Fuel Surcharge

ISSUE No. 20: Levy of Fuel Cost Adjustment

Stakeholders Suggestions

The fuel cost surcharge acts as hindrance on working of industry and also impacts on the industry working capital. Further, the State of Madhya Pradesh has surplus of power and revenue. Therefore, the FCA recovery should be abolished.

Any additional FCA should not be allowed in next one year as any increase in FCA also increases electricity duty by 9%.

The Petitioner has proposed changes in methodology for computation of FCA formula, which should not be allowed by the Commission. Further, the Commission should verify the Coal purchase Invoices, Transportation Cost, etc. from external agency.

Petitioners' Response

Practice of determination of FCA is in accordance with the provision of Section 62(4) of the Electricity Act, 2003. FCA is meant to ensure speedy recovery of cost of supply due to increase in the power purchase cost.

As per the Section 62(5) of Electricity Act, 2003, the Commission has sole jurisdiction for determination of the FCA. Approval of FCA is in line with provision of Act as well as Regulations.

Fuel Cost Adjustment (FCA) charge is trued up by the Commission for each quarter to pass on the variations in fuel cost incurred by the generators to DISCOMs. Accordingly, DISCOMs levy FCA charges to the consumers as part of energy charges, whereas, the Cross Subsidy surcharge is levied to high value consumers to provide the obligated power supply at affordable rate. Thus, to protect financial health of DISCOMs, an increase in Cross Subsidy Surcharge to the extent of FCA charges is desirable for providing quality and reliable power supply to end consumers.

The Petitioners have proposed FCA formula in accordance with Electricity Act, 2003. Appropriate view may be taken by the Commission on the same.

Commission's view

Considering various stakeholders' submissions, the Commission has decided to retain the existing provisions in this matter.

Tariff Design and Tariff Schedule

ISSUE No. 21: Tariff Design related

Stakeholders Suggestions

Tariff for all categories should be equal to Cost of Supply and all the consumer categories should have the same Tariff. The Government should provide the subsidy to achieve uniform Tariff across all consumer categories.

Fixed Charges for Industrial category should be reduced. Also, tariff for rural consumers should be reduced compared to Tariff for Urban consumers to promote industries in rural areas. Further, No Fixed Charges should be charged for Residential consumers. No Fixed Charges should be charged for consumers having Net Metering connection for Solar generation.

Another stakeholder suggested that proposed increase in tariff for commercial category is unjustified. The tariff is neighboring States for commercial category is lesser compared to existing tariff in MP. Therefore, tariff should be reduced.

The Tariff hike of 5.28% for Residential and 6.61% for Agriculture and Industrial categories is unjustified and should not be allowed. Tariff increase is allowed to DISCOMs every year, however, there is no improvement in services provided to consumers.

Another stakeholder suggested that DISCOMs have asked for tariff hike of 5.28% for Domestic category, however, actual proposed hike is more than that. DISCOMs have proposed to change tariff slab from 51 units to 150 units to revised slab of 51 units to 100 units because of which actual tariff hike would be 7.3% to 33% in various slabs of Domestic category. In view of the surplus availability which presently is not being used/sold, it is proposed that the abrupt increase of tariff from 100 to 150 units needs to be reviewed and prescribed in manner to encourage the consumers to consume more so that surplus is restrained and DISCOMs earn better revenue.

DISCOM's ACoS has increased significantly from past few years leading to higher revenue losses. Present ACoS reported is Rs. 6.94 per unit which is higher compared to ACoS of DISCOMs in neighboring States. DISCOMs should be held responsible for increase in ACoS and ACoS should be reduced so that increase in Tariff is not required.

The applicability of LV1 category should be extended to "Mega Kitchen" for feeding mid-day meals in schools. Also, these kitchens should be permitted supply at HT level.

The applicability of HV 3.4 power intensive industries tariff category should be extended to Cryogenic Air Separation Units (ASU) as 85% of the cost of production is electricity in their ASU plant.

Contract Demand charges are very high compared to neighboring States. To increase the utilization of Petitioner's power, it is proposed to reduce the contract demand charges.

Petitioners' Response

The Tariff policy also provides for the cross subsidy of $\pm$20% with respect to average cost of supply. Therefore, the Commission is fully empowered of differential tariff to be charged from 2 different class of consumers and this practice should continue in the interest of consumers of the State.

As regards to government subsidy, appropriate view may be taken by the Commission in this regard.

As regards to tariff hike in commercial category, electricity tariffs have been proposed keeping in view the average cost of supply and cross subsidy roadmap of the aforesaid company.

As regards to fixed charges of Industries, Petitioner has proposed Fixed Charges and Energy Charges as per the principle of two-part tariff laid down in Tariff Policy. Tariff design is such that there will be reduction in tariff with increase in Load Factor of the consumer. Also, licensee has not proposed any ToD surcharge from 6 pm to 10 pm, and rebate of 20% is given for night time Consumption. However, the Commission may take a view on the same.

As regards to hike in domestic tariff, electricity tariffs are determined keeping in view the provisions contained in the Electricity Act, 2003, cross subsidy roadmap and Regulations issued by the Commission keeping in view the average power supply cost of the licensee. An increase of about 5% has been proposed by the petitioner which is reasonable and appropriate to cover inflation.

As regards to agricultural tariff hike, the tariff for LV-5 consumers are lower than the average cost of supply of the petitioner. In comparison, the power consumption for agricultural works has increased in the past years and agricultural production has also increased in the State, which was made possible by development of infrastructure and tireless efforts by the Petitioner. DISCOM is supplying electricity for 10 hours on agricultural feeders. Only natural causes such as storm, lightning, falling of trees on top of power lines are the main reason for interruption of power due to accidental malfunction in equipment and proper maintenance is been carried out by the DISCOMs from time to time.

As regards to demand charge, the Petitioner has proposed Fixed Charges and Energy Charges as per the principle of two-part tariff. It is also to bring to the knowledge of consumers that fixed charges are levied to recover the cost and maintenance of electrical infrastructure.

As regards to the delay in submission of petitions by DISCOMs, the True-up orders issued for FY 2008-09, FY 2009-10 and FY 2010-11 issued by the Commission in FY 2011-12 were in litigation before the Hon'ble APTEL for determination of Power Purchase. In compliance with the order dated 15th September, 2015 by Hon'ble APTEL in appeal no. 276, 270, 272, and 234/ 2014, the additional power purchase cost was validated for adjustment in the order passed by the Commission.

As regards to Average Cost of Supply, ACoS increases with increase in power procurement cost over time. ACoS is State specific as the constituents of ACoS depend upon State specific parameters. Thus, State to State ACoS varies. Further, the Electricity Tariff increment of about 5% is reasonable and appropriate to cover inflation.

As regards to applicability of Mega kitchens in tariff schedule of LV-1, the Commission may take an appropriate view on the same.

As regards to Cryogenic Air Separation Units into HV-3.4, applicability criteria for inclusion of any industrial unit into HV 3.4 is as per tariff provision. As stakeholder has not intimated about their process. Therefore, in absence of the same it would not be appropriate to comment on their demand for inclusion of their industry in Power intensive industry.

<u>Commission's view</u>

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has taken appropriate view in tariff design and tariff schedules.

ISSUE No. 22: Tariff for HT Industrial

<u>Stakeholders Suggestions</u>

Monthly Fixed charges proposed to be increased from Rs. 340 per kVA to Rs. 385 per kVA (13.24% increase in just one year). DISCOM is already recovering Annual Minimum Guarantee charges for the cost of line and any other new infrastructure should be recovered as per the approval of the Commission. Therefore, any increase in monthly fixed charges should not be allowed.

Energy charges in last 8 years had increased almost every year. This year, it is proposed to be increased by 3.6% (Rs. 7.00 to Rs. 7.25 per unit) for upto 50% load factor category. For above 50% load factor category, it is proposed to be increased by 4.2% (Rs. 6.00 to Rs. 6.25 per unit). Along with the this, the Electricity Duty has also been increased from 8% to 9% in the past, which will result in tariff shock to the consumers.

Petitioners' Response

As per principle of two-part tariff, fixed charge should be sufficient to recover the fixed cost being incurred by the DISCOM. At present, fixed charges are not sufficient to recover the fixed cost and same is being recovered through variable charges. Accordingly, proposal to increase in fixed charges is in line with concept of two-part tariff. It may be appreciated that even after proposed increase, fixed charges of 11 kV consumers are substantially less than the 33 kV consumer.

Further, the issue of Electricity Duty is not subject matter of Tariff petition.

Commission's view

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has taken the suitable view in tariff design and tariff schedules.

ISSUE No. 23: Tariff Hike for 11kV HT consumers

Stakeholders Suggestions

The Petitioners have proposed abnormal tariff hike for 11 kV HT consumers for FY 2020-21 as compared to 33 kV HT consumers. The proposed tariff hike will result in increase in fixed charges by 13.24% from previous year for 11 kV HT consumers.

Further, the increase in tariff will adversely affect those HT consumers, who have converted from LT to HT tariff. In addition, the 11 kV tariff presently is too high. Therefore, the Commission should not allow tariff hike and also reduce fixed charges proposed to previous year level. In addition, the HT connection tariff should be treated at par with the LT consumers.

Also, to attract LT industrial consumer to switch over on HT, in the past the difference between LT and HT tariff on 11 kV was kept less. Therefore, when deciding the HT tariff, the above point should be kept in mind and 11 kV HT tariff should be kept very near to LT tariff.

Petitioners' Response

The Petitioners has projected the ARR in accordance with Tariff Regulations, 2015. Moreover, the current tariff is not sufficient to recover the cost of supply. Therefore, a nominal tariff hike has been proposed in line with the concept of two-part tariff.

Further, the proposed higher fixed charge for 11 kV HT consumer is substantially less as compared to 33 kV consumer. In addition to this, a rebate of Rs. 1 per unit in energy charge is available to those existing LT consumers converting to HV-3 category. Hence, the Commission has already taken care of interest of existing LT consumer who has been converted into 11 kV HT in HV-3 category.

Further, it may be observed that, presently the fixed charges for 11kV industrial consumer is very less compared to 33 kV industrial consumer.

Commission's view

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has taken the suitable view in tariff design and tariff schedules.

ISSUE No. 24: Tariff design for power intensive industries

Stakeholders Suggestions

Tariff for 132 kV consumer in HV- 3.4 category is proposed to be increased by Rs 15 / kVA in fixed charge and Rs. 0.20 / kWh in energy charges, which is very high in view of the prevailing low inflation. Therefore, the increase in tariff should not be allowed.

The quantum of transmission losses borne by 132 kV consumers is much higher than that of 33 kV and other voltage categories of consumers. However, instead of providing relaxation to higher voltage category consumers. The Petitioners has proposed to charge Rs. 100/ kVA more for fixed charges from 132 kV consumers, which is on the higher side as compared to that of 33 kV consumers. This difference should be reduced to as low as possible. The energy charges for 132 kV and 33 kV consumers should not be more than Rs. 4 and Rs. 5, respectively.

Power Intensive Industries in other states of the country are provided rebate of Rs. 2 to Rs.3 per unit in tariff. Similarly, concession may be given to existing power intensive industries.

Another Stakeholder submitted that the Commission in Tariff Orders for FY 2019-20 has allowed rebate to new connection on the permanently disconnected premises. However, the same is not being provided by the DISCOMs.

Petitioners' Response

Power Intensive Industries enjoy much lower tariff compared to HV 3.1- Industrial Tariff. It may be observed that at 33 kV, the energy charge for HV-3.4 category is 150 paise and 50 paise lower than HV-3.1 for below 50% load factor and for above 50% load factor and at 132 kV the same is 130 paise and 30 paise lower. Hence, the objection of higher tariff in HV-3.4 category is devoid of merit. The hike proposed in the petition is only due to inflation and its needed to cater to existing demand.

As per Tariff Order for FY 2019-20, average tariff of power intensive industry is Rs. 6.50 per unit as against the average cost of supply of Rs. 6.59, this means that power intensive consumers are not even contributing towards the average cost of supply. Apart from these new consumers are also availing the facility of rebate of Rs. 1 per unit towards new HT connections. Thus, proposed tariff hike is justified.

Since the current tariff is not sufficient to recover the cost of supply calculated as per the norms prescribed in the Tariff Regulations, 2015 a nominal tariff hike has been proposed.

With regards to Industrial Consumer submission referring to the prevailing tariff in other States, the Petitioner submitted that the average cost of supply may vary from State to State. Further while determining the tariff, each State Commission has to take into consideration local conditions and other relevant factors. Therefore, methodologies adopted by other Commissions have no relevance. Further for disposal of the surplus power various rebates have been proposed to increase the consumption of the consumers.

The rebates to HT Consumers are listed as below: -
(i) Time of day (ToD) Rebate (ii) Rebate for incremental monthly consumption (iii) Rebate for new HT connections (iv) Rebate for captive power plant consumers (v) Rebate for Open Access Consumers (vi) Power factor incentive (vii) Incentive for advance payment (viii) Rebate for online bill payment (ix) Prompt payment incentive.

In view of above, it is requested before the Commission to determine tariff in such a manner that the distribution licensee may be able to recover average cost of Supply.

Commission's view
The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has taken the suitable view in tariff design and tariff schedules.

ISSUE No. 25: Calculation of Fixed charges of domestic consumers

Stakeholders Suggestions

Abolish the practice of computing the connected load considering 0.1 kW load for every 15 units for domestic category of consumers. Beside this, the fixed charges for all slabs should be approved slab wise or to be kept same for the entire category.

Another stakeholder suggested that as domestic consumer hardly uses 10% of its contract demand, fixed charges of domestic consumers should be abolished and consumers should be billed only on energy charges.

Petitioners' Response
With regard to levy of fixed charges the billing of domestic consumer is different from other consumer categories. In all categories, fixed charges are being levied based on the sanctioned load or contract demand notwithstanding the actual consumption. In case of domestic consumers for the purpose of levy of fixed charges, load is being calculated based on the actual consumption to protect the interest of domestic consumer. The Commission prescribed the formula of calculation

of load considering every 15 units of consumption per month or part thereof equal to 0.1 kW. In case in any month consumer consumed 150 units from the DISCOM than fixed charges shall be levied for 1 kW load. In case of consumption is 135 units that fixed charges shall be levied for 0.9 kW. Thus, this provision is protecting the interest of domestic consumers. In the absence of this provision, domestic consumers shall be liable for payment as per sanctioned/connected load irrespective of its use.

As regards to abolishment of fixed charges, normally the licensee's fixed expenses should be recovered from the fixed charges of the rates and variable charges from the energy charges. In order to make full recovery of the fixed expenses from the fixed charge, the fixed charge will have to be impartial. Hence only partial recovery of fixed expenses is done under fixed charge and the remaining recovery is done through minimum and energy charges. To eliminate fixed charges, the energy charge will have to be increased unexpectedly. Therefore, it is not appropriate to abolish the fixed charge.

Commission's view

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has taken the suitable view in tariff design and tariff schedules.

ISSUE No. 26: Clarification on optional demand-based tariff up to 10 kW load for LV-2.2 category

Stakeholders Suggestions

The basis of categorization of consumers should be changed from connected load basis to operating load basis and the categories should be upto 10 kVA and above 10 kVA. Fixed charges should be calculated on the basis of demand in kVA only and no other basis should be specified in the Tariff order.

Petitioners' Response

For the connected load upto 10 kW option of connected load-based tariff is made available to protect interest of the small consumers and above 10 kW, demand-based tariff is mandatory. Further, the demand-based tariff charges are prescribed by the Commission both in terms of kW and kVA.

Commission's view

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has clarified the same in specific terms and conditions in the tariff schedule for LV-2.

ISSUE No. 27: Change of classification from Non-domestic to Industrial for Telecom Towers

Stakeholders Suggestions

As per MSME guidelines for MSME industries, telecom is also considered as MSME industry. Thus, all telecom tower connection given under non-domestic category should be converted in to industrial category.

Petitioners' Response

No activity of manufacturing/processing is being carried out in the telecom towers thus, present classification in the non-domestic category is appropriate and same should be continue.

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 provision.

ISSUE No. 28: LT industrial Tariff

Stakeholders Suggestions

Presently the LT industrial small consumers having connected load up to 20 HP are allowed concession of 30% in fixed and energy charges. This limit on contracted load to avail rebate should be increased from 20 HP to 25 HP. Further, it has been proposed by the petitioners that if the Maximum Demand in any month is recorded over 20 HP, then the concession allowed will be stopped thereafter for all months. The stakeholder opposes the proposal to discourage the small LT industries in a scenario of surplus availability.

Another stakeholder suggested that such rebate of 30% should be discontinued and consumers with load upto 150 HP should be classified in a single category at the same tariff. This has been suggested with a view that the manufacturing units producing similar products and having different sanctioned loads are not differentiated on tariffs.

Tariff proposed for LV-4 category of consumers is 30% to 40% higher compared to tariffs in neighboring States, which is harmful for industrial growth in the State of MP. Therefore, the tariffs for LV 4 category should be reduced.

Petitioners' Response

This special relief to protect the interest of small consumer is sufficient and no further increase is desirable.

As regards to the clause proposed mentioned by the stakeholder, no changes in this clause has been proposed by the petitioner. It is appropriate to keep lower tariff for small scale industries and the existing clause is sufficient.

As regards to the suggestion of single class of LT industrial consumer upto 150 HP and rebate for small scale consumer upto 25 HP, the provision of energy charge and fixed charge of 30% less than the fixed charge has been kept unchanged by the Petitioner for promoting small industries with less than 20 HP maximum demand. It would seem reasonable to propose a provision of 30% less charge than rates to promote small industries.

As regards to tariff of LV-4 category, due to increase in power production costs, the average cost of supply also increases, due to which it becomes inevitable to propose a hike in electricity tariffs. The average cost of supply varies from State to State. The average cost of supply of States vary due to various reasons including geographical location of the State, natural resources, cost of production, consumer base and density etc. Electricity tariffs are determined keeping in view the provisions of the Regulation, Electricity Act 2003, Cross Subsidy Roadmap issued by the Commission keeping in view the average cost of supply of the licensee.

<u>Commission's view</u>

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has decided to retain the existing tariff structure for consumers having contract demand up to 20 HP.

ISSUE No. 29: Agricultural consumers

<u>Stakeholders Suggestions</u>

It is observed that the tariff for LV 5.1 and LV5.2 are exactly same and the 2 categories should be merged as one.

Tariff should not be increased till works of Agricultural feeder separation is not completed and sufficient power supply is not provided by DISCOMs. Further, it is unreasonable to charge bill amount of 6 months as security deposit for Agricultural pump connections. Thus, appropriate interest should be provided on amount of security deposit.

Proposed tariff hike of 6.61% for LV-5 Agriculture category is unjustified. Such tariff hike is unbearable in absence of government subsidy.

Similar to LV 5.3 Agriculture consumers, minimum billing should also be applicable for LV 5.1 and LV 5.2 metered Agriculture consumers. Consumer using power higher than minimum billing should be billed for extra usage at the end of the year.

Flat rate tariff should also be applicable for Urban Agriculture consumers of LV 5.4 category.

Provision of 'No billing' should be introduced in Tariff Schedule in cases of draughts or other natural calamities when there is no power consumption.

Agriculture consumers are facing power interruptions because of poor maintenance of distribution network by DISCOMs. Penalty should be charged on DISCOMs for delay in providing services to consumers like replacement of faulty transformers, addressing line faults, etc. MPERC should ensure that DISCOM provide quality power supply to Agriculture consumers.

Since MP has surplus power, supply of minimum 10 hours during the day and for 6 to 8 hours during the night should be provided for Agriculture consumers.

As per Government's directions, minimum of 10 hours of power supply has to be provided to Agriculture consumers. However, DISCOM is providing only 8 hours of power supply Agriculture consumers. Additionally, Agriculture consumers are receiving lesser power supply due to line faults for which consumers do not get any compensation.

Petitioners' Response

Proposal for amendment in LV 5.2 category is submitted by the petitioners. The petitioner has gone through the suggestions raised by the objector and shall discuss the same with the concerned department and the Management.

The Commission may take an appropriate view in the matter. It is also to mention here that the matter of subsidy pertains to GoMP.

In the tariff schedule 5.1 (c), there is already category of DTR metered group consumers.

As regards to minimum billing of LV 5.1, 5.2, flat rate of LV 5.4, 'No Billing' in case of draught the Commission may take an appropriate view in the matter.

As regards to poor maintenance of distribution network and minimum hours of supply to agricultural consumers, DISCOM is providing 10 hours of electricity on agricultural feeders. But natural causes such as typhoon, hurricane, lightning, falling of tree on the line and accidental technical failure in equipment disrupts the power supply. Proper maintenance of electrical equipment is carried out by the company from time to time. However, in case of any specific problem, he can file objection in the Regional Chief Engineer or DISCOM Headquarters.

As regards to quality power supply, only standard level and quality transformers are installed by the company, in case of failure, action is taken to replace them quickly. Efforts are made to provide better services to consumers by properly managing the resources available by the company. Regular and contract employees are recruited by the company from time to time. And for pre and post monsoon maintenance, maintenance work is carried out through the workers on a man day basis.

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 tariff structure.

ISSUE No. 30: Contract Demand

Stakeholders Suggestions

At present, the consumers are allowed a certain margin of demand beyond their Contract Demand. Further, to enable petitioner to consume surplus power and get better revenue, the Commission should allow petitioners to increase maximum demand allowable by $1/3^{rd}$ of the prevailing norms viz. contract demand of 120% should be extended to 150% at normal rate, contract demand of 150% should be extended to 180% at normal rate and contract demand of 180% should be extended to 200% at normal rate.

Petitioners' Response

Considering the proposal of DISCOM's in FY 2019-20, the Commission had extended the tolerance limit from 15 % to 20 % for excess demand of the consumer due to their transient requirements in any month.

Due to Availability Based Tariff (ABT) and stringent scheduling of power, the cost of power has become very sensitive to the demand of power. Hence, charging of any drawl in excess of the contracted or scheduled demand at a higher rate than normal is fair and reasonable. The Petitioner feels that the consumer should follow the discipline of keeping their actual drawls as agreed with the licensee. However, if a particular consumer finds it difficult to maintain the maximum demand upto contract demand he has the option to increase / decrease the contract demand suitably.

Commission's view

Considering various stakeholders' submissions, the Commission has decided to retain the existing provisions in this matter.

ISSUE No. 31: Billing Demand

Stakeholders Suggestions

General Terms and Conditions for Billing Demand for the Fixed Charges for HV consumers should be changed from "90% of Contract Demand or Actual Demand, whichever is higher" to "80% of Contract Demand or Actual Demand, whichever is higher".

Further, another stakeholder requested the Commission to decrease the billing Demand to 65% of contract demand or actual demand whichever is higher.

Petitioners' Response

Due to Availability Based Tariff (ABT) and stringent scheduling of power, the cost of power has become very sensitive to the demand of power. Hence, charging of any drawl in excess of the contracted or scheduled demand at a higher rate than normal is fair and reasonable. The Petitioner feels that the consumer should follow the discipline of keeping their actual drawls as agreed with the licensee. However, if a particular consumer finds it difficult to maintain the maximum demand upto contract demand, option to increase / decrease the contract demand can be utilised.

As regards to high percentage of billing demand, the tariff is recovered from the consumers on the basis of concept of two-part tariff Structure, where the fixed charges are billed to the consumers for the recovery of fixed cost of the distribution licensees without consideration of any consumption of power. Hence, any reduction in the minimum bill demand will result into under recovery of fixed cost of the distribution licensees.

Commission's view

The Commission has observed that the revenue from fixed charges through the retail tariffs is only about 15-25% of the total revenue from different categories of consumers whereas, the fixed cost of the petitioners is about 60% of the ARR. The Commission has thus decided to retain the existing provisions in this matter.

ISSUE No. 32: Ceiling in the Load factor

Stakeholders Suggestions

The Commission is suggested to review the present slot of reduced rate of Energy charge of "Above 50% Load Factor" and modify it to be above 35% load factor in order to pass advantage to a reasonable number of consumers.

Petitioners' Response

It is not practically possible to fix the ceiling of load factor on the basis of load factor of individual consumers. The Commission has fixed the generic ceiling for all HT consumers. The purpose behind the differentiation of tariff is to promote the consumers to consume more power according to their respective contract demand.

Commission's view

Considering Petitioner's and various stakeholders' submissions, the Commission has decided to retain the existing provisions in this matter.

ISSUE No. 33: Applicability of Renewable Power Generators for Synchronization of power / Drawl of Power by Wind generators for Synchronization

Stakeholders Suggestions

The applicability of connection of Grid to be extended to renewable generators seeking synchronization of their plant and make a provision which ensures Renewable power plants are charged under this category only in times of shutdown period and during other emergencies. Also, in Clause (a) the term 'capacity' needs to be replaced with 'rated capacity'. Further Clause (b) need not be applicable for RE generators.

With the increase in tariff for HV-7 category regarding synchronization of power for generators connected to Grid, Wind generators have started experiencing additional burden that were not factored in their business case. Monthly consumption / drawl adjusted against monthly generation would be desirable. Further, HV – 7 category stipulates that power can be drawn for 2 hours of synchronization of plant with Grid, which is problematic for Wind generators as these generators have to draw power multiple times a day, if wind speed falls below 3m/s aside from planned/forced shutdowns.

Petitioners' Response

With a view to evolve a simplified billing mechanism following amendment in the HV-7 Tariff Schedule is proposed by the DISCOMs.

a) Applicability criteria are proposed to be modified. Now restriction regarding drawl of power for synchronization purpose is removed from applicability criteria.
b) Restriction of drawl upto 15% of Capacity of the unit of the plant is proposed to be modified to 15% of capacity of the plant. Further, consequence of drawl exceeding 15% is specifically provided.
c) Limitation regarding drawl of power for synchronization purpose maximum up to 2 hours is proposed to be removed.

The proposal of the DISCOM has been made in accordance with the draft amendment in the Regulation 10 of the Madhya Pradesh Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewable Sources of Energy) (Revision-I) Regulation, 2010 [RG-33(1) of 2010] by the Commission. As regards to removing the provision of charging at the rate of 2 times if ceiling of 15% be violated, Petitioner rejoinder that, if there is a restriction regarding drawl, there must be a provision dealing with the consequence if that restriction is violated. Thus, submission of stakeholder lacks merit.

Further, in line with the draft amendment in regulation 10 published by the Commission, title of the HV-7 Tariff category needs to be modified to "Drawl of Power by Generators connected to the Grid" to avoid confusion regarding applicable Tariff category.

The schedule of HV – 7 of the Tariff Order is for synchronization of power for all type of generators and not only for wind generators. If there is any genuine problem specifically for wind generators, the commission may take an appropriate view on the same.

Commission's view

Considering various stakeholders' submissions, the Commission has amended the existing provisions as per the details in the Tariff Schedule HV-7.

ISSUE No. 34: Rebate to HT Industries

Stakeholders Suggestions

The special treatment and special rebate should be extended to H.T. Industry tariff particularly for power intensive industries as without tariff relief these industries will become unviable to operate which is not in public or State interest.

Petitioners' Response

The Stakeholder would appreciate that the Commission has been consciously making efforts over the past several years to reduce the Cross-subsidy levels across all consumer categories. However, while doing so, the Commission has to consider the effect of tariff shock to any consumer category.

Commission's view

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, has decided to retain existing provisions.

ISSUE No. 35: Amendment in General Terms & Conditions of LT category

Stakeholders Suggestions

In the General Terms & Conditions of the Low-Tension Tariff, the clause 6(c) should be amended as under:

"The Sanctioned load/ Connected load/ Contract demand should not exceed 112 KW/ 150 HP. If the Consumer exceeds his load/ demand beyond this ceiling of 112 KW/ 150 HP on more than two billing months during the tariff period, the licensee may insist on the consumers to avail HT supply."

A Clause may be added in the General Terms & Conditions of the LT Tariff, which shall read as following:

"***Reclassification of consumer***

If it is found that a Consumer has been classified in a particular category erroneously, or the purpose of supply as mentioned in the distribution service agreement has changed or the consumption of power has exceeded the limit of that category or any order of reduction or enhancement of Contract Demand has been obtained, the distribution Licensee may reclassify him under appropriate category after issuing notice (with minimum notice period of 30 days) to him to execute a fresh agreement, on the basis of the altered classification or modified Contract Demand. If the Consumer does not take steps within the time indicated in the notice to execute a fresh agreement, the Distribution Licensee may, subject to the provisions of the Acts, Rules and *regulations for the time being in force, after issuing a clear 21 days show cause notice and after considering his explanation, if any, disconnect the supply of power. Further, the Distribution Licensee shall dispose of all such applications for change of tariff class by a consumer within maximum period of seven days after receipt of such application regarding the change of tariff class or communicate the reasons for not changing the tariff class, as applicable. In case of any dispute, the matter shall be referred to Forum for redressal of consumer."*

With the above categorization of LT Industrial consumers, the corresponding changes may be done in the Terms & Conditions of the Tariff Schedule LT-4.

Another stakeholder suggested, for LV-4 category, minimum consumption of 156 units/ kW and 324 units/ kW have been proposed in rural areas and urban areas, respectively. This should be kept as it is, i.e., 120 units/ kW and 240 units/ kW in rural areas and urban areas, respectively. Further, for religious & non-profit organizations, separate tariff should be provided at concessional rates. Besides this, there should be no minimum billing charges applicable for this category of consumers.

Petitioners' Response

As regards to LV-4 category consumer's minimum consumption rate and concessional tariff for NGO/charitable organization, the Commission may take a suitable view on the matter.

As regards to reclassification of consumers, the consumer premises are checked by Enforcement and O&M wings of the DISCOM. In case of change of purpose found during the checking the authorized officer takes appropriate action, which is a regular process.

Commission's view

The Commission, in view of various provisions of the Electricity Act, 2003 and other legal provisions has decided to retain the existing provisions in this matter.

ISSUE No. 36: Equal Tariff for Industrial, Non- Industrial & Power Intensive Industries

Stakeholders Suggestions

Tariff of Industries, Non-Industries & Power Intensive industries should be equal.

Petitioners' Response

As per Section 62(3) of The Electricity Act, 2003, the Commission is fully empowered to determine different tariff for different class of consumers.

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 tariff structure.

ISSUE No. 37: HV-4: Seasonal Consumer

Stakeholders Suggestions

The off-season period for seasonal consumer should be 4 months in place of 6 months as per consumers option and Tariff minimum units for consumer having contract demand up to 100 kVA should be 50 units per kVA or 600 units per annum per kVA as in the HV 3.1 categories. This will be helpful to small consumers.

Petitioners' Response

As proposed by the stakeholder, one cannot compare the seasonal consumer with the industrial consumer. The minimum billing demand for the off season in respect to the seasonal consumer is only '10% of Contract Demand' against 90% of Contract Demand in case of normal industrial consumer only on the premises that they consume power in a particular period of the year. If it is submission of the seasonal consumers that the period of the off season is very less, then in that case there would be no need of separate cheaper tariff for the seasonal consumer.

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 tariff structure.

ISSUE No. 38: Supply for temporary purpose in existing HT consumers premises

Stakeholders Suggestions

10% of sanctioned load is allowed to be used for construction for expansion/ renovation/ modification from existing HT connection 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 is always required as 10% of load of contract for such activity should be allowed.

Petitioners' Response

Issue of stakeholder is addressed in the Tariff Order for FY 2019-20. Existing HT consumer who requires temporary supply for the purpose of addition for excess demand.

Commission's view

The Commission had addressed the problems faced by existing HT consumers in the previous Tariff Order viz for FY 2019-20 and has retained the same provisions for the current Tariff Order also.

ISSUE No. 39: Ceiling and Additional Charge of Contract demand for 11 kV, 33kV and 132 kV consumers

Stakeholders Suggestions:

Ceiling demand for 11 kV consumer should be increased from 300 kVA to 500 kVA and for 33 kV consumers should be increased from 10,000kVA to 15,000 kVA.

The additional charge of 1% and 2% applicable respectively for exceeding contract demand of 50,000 KVA for 132 kV and 10,000 kVA for 33kV consumers should be relaxed upto the time State of Madhya Pradesh is power surplus.

Petitioners' Response

The instant issue raised by the stakeholder is not the subject matter of tariff petition.

As regards to additional charge, in Tariff Order FY 2019-20, Terms and Conditions of levy of such additional charge has been changed substantially and addressed by the Commission.

Commission's view

Considering various stakeholders' submissions, the Commission has decided to retain the existing provisions in this matter.

Rebates & Incentives

ISSUE No. 40: Rebate for Captive Power plants

Stakeholders Suggestions

Captive power plants should get rebate of Rs.2/unit for at least 7 years.

The rebate of Rs. 2/unit enjoyed by captive power plant consumer should be extended upto FY 2030-31 as it will make captive power plant owners surrender their captive power plant's power and also consume power from DISCOMs, which will increase the utilization of surplus power in better rates and minimize the losses.

Petitioners' Response

Petitioners stated that a captive consumer can avail a rebate of Rs. 2 per unit of reduction in captive generation, if it has an incremental consumption of power purchased from DISCOM and a reduction in captive generation units by the captive consumers, recorded during any month of the current year compared to the corresponding month of the last year simultaneously. This rebate is already allowed for a period of five years starting from FY 2016-17 provided the consumer maintains the above status.

Apart from this already a sizable amount of rebate is provided to the HT consumers. Some of these rebates have been provided for a long term of 2 to3 years. The rebates to HT Consumers are listed as below: -
(i) Time of day (ToD) Rebate (ii) Rebate for incremental monthly consumption (iii) Rebate for new HT connections (iv) Rebate for captive power plant consumers (v) Rebate for Open Access Consumers (vi) Power factor incentive (vii) Incentive for advance payment (viii) Rebate for online bill payment (ix) Prompt payment incentive.

In view of above, it is requested before the Commission to determine tariff in such a manner that the distribution licensee may be able to recover average cost of Supply.

Commission's view

The Commission had introduced the rebate to Captive Power Consumers in view of surplus power available with the Petitioners and to incentivize the Captive Power Consumers to avail power from Licensees. The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has decided to continue with the provisions of FY 2019-20 tariff order.

ISSUE No. 41: Rebate on enhancement of contract demand by HT connection

Stakeholders Suggestions

GoMP has introduced a scheme for rebate on enhancement of contract demand in which a HT consumer who has increased the contract demand after 31st March, 2016 by 250 kW or 25% of the existing contract demand, whichever is lower is qualified for a rebate of Rs. 1 / kWh on energy charges. Petitioner may be directed to extend the rebate as mentioned in GoMP order.

Petitioners' Response

Availing of rebate by HT consumer whose operation starts from November, 2015 can only be taken by the GoMP.

Commission's view

The Commission observed that the comments received are regarding the rebate on enhancement of contract demand for HT consumers which has been offered by the Government. The Government under Section 65 of the Electricity Act, 2003 may extend the subsidy to any consumer or class of consumer. The Commission has been determining the Tariffs as per the provisions of the Electricity Act, 2003 and according to the Tariff Regulations and has therefore decided to retain the existing tariff structure

ISSUE No. 42: Rebate for EHT Consumers (220/132 KV consumers)

Stakeholders Suggestions

T&D losses for 132 kV and above consumers are in the range of 4% to 4.5% against total T&D losses of 17% in case of central DISCOM as mentioned in the ARR. Additionally the EHT consumers also bears the cost of installation and operation of EHT transformers and allied equipment. Therefore, the Commission should take cognizance of this and allow rebate to EHT consumers.

Petitioners' Response

Rebate of Rs.1/kWh has been proposed for green field industrial consumers. Although it is desirable to increase sales by encouraging the consumers to consume more power, mechanism for rebate cannot be allowed to be misused through intentional change in ownership, only to avail the benefit of the rebate.

Commission's view

The Commission observed that the comments received are regarding rebate to EHV Consumers (220/132 kV consumers). Accordingly, the Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has decided to continue with the provision of Tariff Order for FY 2019-20.

ISSUE No. 43: ToD Surcharge / Rebate for HT consumers

Stakeholders Suggestions

Petitioner is not providing ToD rebate to standby power drawn during standby period to standby / temporary power consumer. As per regulation, tariff applicable for standby consumers shall be as applicable for temporary connection, which shall be approved by the Commission for corresponding category in its tariff order from time to time. Clause no. 1.19 (i) of General Terms and Conditions mention in Retail Tariff Order of FY 2019-20, applicable for temporary HT connection stipulates that ToD Surcharge/ Rebate is applicable at same rate as applicable for permanent connection. Therefore, Petitioner should provide ToD tariff to standby consumers drawing power on temporary basis during planned / forced outages of Captive Power Plants.

Further, off-peak hours should be considered from 9.00 pm to 7.00 am and rebate of off-peak hours should be increased from 20% to 25%/30%/40% due to surplus power available in the State and also for increasing the utilization of the same.

Surplus Power of the State should be made available to power intensive industries of the State at Rs. 3 per unit.

Petitioners' Response

The petitioners disagree with the stakeholder suggestion and would like to continue with the treatment as proposed in the instant petition for FY 2020-21. Further, the ToD rebate for temporary connection will be applicable on the normal rate of energy charge.

The purpose of having ToD tariff is to ensure efficient utilization of electricity. Besides this, off-peak period rebate has been increased from 15% to 20% by the Commission in the Tariff Order of FY 2016-17. Further, the Commission has also ordered to not levy any peak period surcharge keeping in view surplus power in the State. Therefore, proposal for any further increase in ToD rebate is not appropriate.

As regards to making surplus power available to Industry at discount, the off-peak rebate of 20% of normal energy charges is available and it is proposed in the instant tariff petition FY 2020-21 also.

Commission's view

The Commission observed that the comments received are regarding the ToD Surcharge/ Rebate for HT consumers, the Commission has retained the existing provisions of ToD tariff. Further, the Petitioners are directed to undertake a detailed study of hourly consumption patterns of various consumer categories, based on ABT metering data, to identify which category is contributing how much to the peak consumption and which category can shift its consumption to off-peak hours, seasonal variation in the peak and off-peak consumption levels. Based on this study, the Petitioners should submit a comprehensive proposal to modify/upgrade the ToD tariff dispensation, along with its next Tariff Petition.

ISSUE No. 44: Load factor Incentive

Stakeholders Suggestions

The load factor incentive for the HT consumers should be reintroduced for load factor above 50%.

The consumers in the 11 kV class are MSME'S and their operation are not 365 days and 24 x 7 hours, there by the load factor of their industries never reach even closer to 50 %. Therefore, the energy charges that are leviable on them are that of load factor < 50% as against those levied on the other classes is load Factor > 50 %.

Petitioners' Response

The Tariff design is such that there will be reduction in tariff with the increase in load factor of the consumer and incentive proposed is quite reasonable and fair.

The Distribution Companies procure power on the basis of connected load/contract demand raised by the consumers. Low load factor shows that occasionally a high demand is set. To service that, peak capacity of the system is sitting idle for long periods, thereby imposing higher cost on system. Thus, electrical rates are designed so that customers with high load factors are charged less. The present tariff structure of differential tariff for consumers maintaining load factor >50 % and <

50% is appropriate.

Commission's view

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has decided to retain the existing provisions.

ISSUE No. 45: Power factor incentive

Stakeholders Suggestions

Improvement in power factor is beneficial to both consumer and utility. However, to create infrastructure to improve power factor near to infinity, the consumer has to invest a huge amount in power factor correction equipment. To incentivize such use of costly power factor correction equipment the Commission should consider giving power factor incentive from 90% onwards in the following manner,

(a)1% for each 1% increase from power factor from 90% to 95% and

(b) 2% for each 1 % increase from power factor above 95% to 100%.

The power factor incentive for HT/EHT should be increased from 7% to 10%. Further, similar benefits should also be extended to LT Industries stakeholder.

The proposed definition of percentage of power factor for the purpose of giving power factor incentive should not be allowed.

Petitioners' Response

Petitioner disagrees with stakeholder suggestion and would like to continue with the same treatment as proposed in petition for FY 2020-21.

In ideal situations, consumers are expected to maintain unity power factor. Active energy (kWh) and Reactive energy (kVARh) are consumed simultaneously. Reactive energy occupies the capacity of electricity network and reduces the useful capacity of the generation and distribution. Hence, its consumption also needs to be billed.

Further, power factor rebate is provided in lieu of cost of equipment installed by the consumers for improving the power factor. Since, the PF rebate is extended continuously for a long time and the breakeven period for the realization of the cost of the equipment is much less as compared to the time for which rebate is offered, therefore the petitioner has proposed to gradually reduce the PF incentives.

As regards to 10% incentive in place of present 7%, any further increase in such incentive will result into the increase of tariff of other consumer categories.

As regards to similar level of incentive to LT consumers, looking at the nature of load used by the HT consumer, comparison with LT consumer is not appropriate.

As regards to redefining the definition of percentage of power factor, proposal for calculation of "average monthly power factor" for the purpose of giving P.F. Incentive is in line with the formula approved by the Commission for Power factor surcharge. Petitioner has proposed the similar formula for calculation of PF incentive as applicable for calculation of P.F. surcharge in order to maintain the parity.

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 in this regard.

Other Charges

ISSUE No. 46: Tariff Minimum Charges

Stakeholders Suggestions

The Tariff Minimum Charges should be abolished and the guaranteed minimum annual consumption of 1,200 units per kVA of contract demand for HT industries having contract demand above 100 kVA is unjustifiable. Therefore, requested the Commission to provide slab wise guaranteed annual consumption above Contract demand of 100 kVA.

Further, many HT/EHT consumers have solar plant in their premises for self-use. But methodology for billing their TMM units in their cases has been changed by the Petitioners by reducing their actual electricity consumption. Therefore, the Commission is requested to direct the Petitioners to withdraw changes in methodology of computing TMM units with consumers having solar plant and calculate the actual electricity consumption as before.

The minimum monthly consumption units are proposed to be increased for LT Industrial consumers from 20 units to 27 units. However, there is no provision in the Electricity Act, 2003 for billing based on minimum consumption.

Old age homes, Day care Centres for senior citizens, rescue houses and orphanages run by Government / Charitable trust comes under HV- 6.2 tariff category. In view of the category of these class and their limitations to make more payment, the guaranteed minimum annual consumption may not be made applicable to this class of consumers.

Petitioners' Response

As per the principles of two-part tariff, fixed charges are meant for the recovery of fixed cost incurred by the Licensees. However, the prevailing 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 recover the total fixed cost of supply, TMC cannot be abolished.

In this regard, kind attention is also drawn towards the Regulation 42.1(d) of the Tariff Regulation 2015, which clearly states that tariff minimum charges, cannot be removed unless the fixed charges are aligned with the recovery of full fixed cost.

Commission's view

Tariff Minimum Charges are intended to ensure guaranteed recovery of fixed costs of the DISCOMs. Further, Tariff Minimum Charges are levied only when consumption of any consumer falls below guaranteed minimum consumption for a month. Therefore, the Commission has continued with the existing provisions of Tariff Minimum Charges.

ISSUE No. 47: Power factor Surcharge

Stakeholders Suggestions

Maximum power factor surcharge on account of low power factor should not exceed 10%, which is at present 35% in HT Consumers, while in case of LT consumers, it is only 10%.

Petitioners' Response

It is submitted that any reduction in the limit of power factor penalty for HT consumer would result into burdening of other consumer who are in fact maintaining their power factor. Considering the nature of load being used in the HT industries with respect to with LT consumer it is not appropriate to compare both the industries.

Commission's view

The Commission has noted the submission of the Stakeholder and the Petitioners, the Commission has decided to retain the existing provisions for applicability of power factor surcharge.

ISSUE No. 48: Metering charges

Stakeholders Suggestions

The metering charges being recovered be considered for withdrawal, as already decided by the Commission on 18th March, 2019.

Petitioners' Response

To ensure rationalization of tariff structure, the Petitioner has filed a petition No. 13/2019 before the Commission with request to abolish metering charges. Further, the Petitioners prayer has been allowed and presently is under consideration with the Commission. Furthermore, the Commission has initiated the process of amendment in the MPERC (Recovery of expenses and other charges for providing electric line or plant used for the purpose of giving supply) Regulations, (Revision-

I), 2009 vide public notice dated 12th February, 2020.

Commission's view

In accordance to MPERC (Recovery of expenses and other charges for providing electric line or plant used for the purpose of giving supply) Regulations, (Revision-1) 2009 (seventh Amendment), notified on 18th September, 2020, the Commission has decided in this Tariff Order that Metering Charges shall not be billed to any LV/HV Consumers.

Metering and Billing related issues

ISSUE No. 49: Meterisation of unmetered Consumers

Stakeholders Suggestions

Petitioners have failed to meet the directive target date of meterisation of domestic and agricultural consumers despite Commission's directive. Petitioners have also failed to abide by spirit of Section 55 (1) of Electricity Act, 2003. Therefore, the Commission should exercise their power for early Meterisation of the unmetered consumers that will help in reduction of distribution losses upto some extent.

The Commission should take action against the Petitioner for not achieving 100% meterisation. Further, as only a fraction of agriculture pump connection is metered it also contribute greatly to line losses.

As per Section 55 (1) of the Electricity Act, 2003, no licensee shall supply to a consumer with an unmetered connection after two years of the act unless State Commission extend special notification for the same. The notification regarding extension was issued in March, 2006. The DISCOMs till date has not even reached near the target. Thus, unmetered category should not be included in tariff at all as persuasion to complete the meterisation on war footing.

Petitioners' Response

Conscious effort is being made over the past several years for the materialization of unmetered consumers. The petitioner is submitting the status of Meterisation to the Commission on quarterly basis and is committed for 100% Meterisation.

The Meterisation of agricultural DTRs is not covered in any ongoing/sanctioned scheme. Plan for 100% predominant Agricultural Consumers will be prepared after sanction of loan assistance from financial institutions or from any Govt. Scheme.

The metering of agriculture connection is a challenging task and non-meterisation of same cannot be attributed to the licensee. Without the willingness of farmers of the State this task practically cannot be achieved. In most of the States of the country there is no metering for agriculture connections. Except agriculture pump connections licensee is moving towards 100% meterisation.

Commission's view

The Commission has noted the submission of the Petitioners and the stakeholders. The Commission has observed that the progress of the DISCOMs in DTR meterisation for FY 2019-20 is not satisfactory. The Commission further directs the DISCOMs to expedite DTR meterisation. The Commission has observed that simply providing meter is not the complete solution but the DISCOMs needs to ensure timely energy audit in order to control theft and pilferage. Therefore, the DISCOMs shall continue submitting the quarterly progress report along with the energy audit report. Further, the DISCOMs are also directed to submit an action plan by 30th January, 2021.

ISSUE No. 50: Untimely meter reading

Stakeholders Suggestions

The provision regarding meter reading on undesignated days of the month is creating unnecessary confusion to consumer's bill. DISCOM should adopt simpler method to avoid confusion.

Due to delay in meter reading for Residential consumers, period for billing is more than 30 days and consumers are billed according to higher tariff slabs. Therefore, bills should be for 30 days only. If there is delay in meter reading, bill period should be adjusted to 30 days in the billing software.

Petitioners' Response

To protect the interest of domestic consumers, methodology of pro-rata introduced by the Commission in Tariff Order for FY 2019-20. Petitioner has not proposed any amendment in this provision.

As regards to delay in meter reading, if the consumer's reading is after 30 days, then the electricity consumption is proportional to that month. This provision is in the category LV-1.2 of the tariff order which has been kept unchanged by the petitioner.

Commission's view

The Commission has already addressed this issue in the tariff order for FY 2019-20. However, the DISCOMs should ensure that the monthly bills are issued to the consumers in a timely manner.

ISSUE No. 51: Theft of Electricity

Stakeholders Suggestions

The action initiated against the power theft by the DISCOMs are inadequate. Further, the DISCOMs should initiate measures against the direct theft and also detect ghost consumers. In addition, unmetered units in rural area for FY 2020-21 projected is 840 MUs and its contribution in total sales is 12.73%. Hence, Tariff hike and unmetered supply only puts burden on H.T consumers, and if DISCOMs curb the theft of electricity effectively, tariff hike will not be required.

Another stakeholder suggested that the Commission has given directions to DISCOMs to reduce their losses. However, DISCOMs are not taking measures to reduce theft of electricity. DISCOMs show theft of electricity as its revenue loss and burdens consumers for its inefficiency by asking for increase in tariffs. DISCOMs should be directed to provide actual information on theft of electricity and conduct load shedding in areas where theft of electricity is higher.

Petitioners' Response

DISCOMs have been taking all actions as per provision of Electricity Act, 2003 for preventing the electricity theft. Further, the petition has been filed based on the normative loss approved by the Commission for tariff determination.

The massive growth in consumers from 36.18 lakhs in March 2013 to 61.21 lakhs as on January 2020, the massive growth in consumer number is due to integration of consumers in remote rural areas with the distribution network. Consumer density in rural area is very low due to which longer power lines were constructed for which T&D losses increased drastically. The company is trying to improve this by bringing transparency in reading (meter reading) and by enabling photo meter reading through mobile application, efficiency for consumers with less than 10 kW have risen drastically. The open wires of the low voltage lines in the potential areas of theft of electricity have been replaced by aerial bunched cable and the new low voltage lines are being expanded with aerial bunched cable, which has reduced the theft.

For strengthening the power infrastructure, an attempt has been made to increase the quality of power supply by improving the voltage profile by reducing the circuit length of transformer-wise low voltage lines, installation of new transformers and reducing the length of 11 kV lines. The distribution loss of the East DISCOM was 30.57% in the financial year 2018-19, which has been reduced to 23.24% in the current financial year 2019-20 (as on January-2020) as a result of the efforts made by the DISCOM.

As of March, 2020, 11.18 lakh meters are closed and defective, which is being planned on priority to increase billing efficiency.

As for efforts to reduce these line losses, the DISCOMs' Operation and Maintenance department is continuously trying to prevent theft through checking connections in the field and the annual revenue requirement is reduced from the fines collected from the thieves.

Commission's view

The Commission has noted the submission of the Stakeholder and the Petitioners. Accordingly, the Commission directs the Petitioners to enhance its efforts towards reduction in line losses on account of theft of electricity and to increase the billing efficiency. The Commission also directs the Petitioners to ensure meterisation of unmetered domestic connections in rural areas, DTR meters on pre-dominant agricultural load transformers and its regular energy audit.

ISSUE No. 52: Rebate on Online and Prompt Payment

Stakeholders Suggestions

In view of various benefits of pre-paid meter billing, pre-paid meters should be installed in each DISCOMs. Further, prompt payment discount should be increased from 0.5% to 1%. The minimum amount limit to avail prompt payment discount should be reduced from Rs. 10,000 to Rs. 5,000, so that maximum consumers can avail the benefits of discount.

Online payment is also covered under cash less payment act. Hence, cash credit discount on RTGS/NEFT should also be applicable to all such payments made under this mode.

Another stakeholder submitted that the rebate should not be allowed to HT consumers for online bill payment as most of these consumers pay through online mode only and rebate is creating an additional burden of Rs. 80 lakhs.

Petitioners' Response

As regards to pre-paid meter billing, the conversion is being done in Phased manner in the State of Madhya Pradesh and all the consumers shall be covered in timely manner.

The incentive for prompt payment for LT consumer category has been increased from 0.25% to 0.5% of the billed amount for that month. The rebate has been extended to consumers having minimum bill amount of Rs. 10,000 as against minimum billed amount of Rs. 1,00,000 during FY 20l9-20. The Petitioner has already incentivized its consumers for prompt payment.

As regards to NEFT/RTGS as cash less mode of payment, the Commission has considered the NEFT/RTGS as online modes in Tariff Order for FY 2019-20 and online payment rebate has been extended to NEFT/RTGS modes also.

Further, as regards to online payment by HT consumers, Online rebate is generally offered in lieu of savings in expenditure of licensee incurred on clerical work involved in cash collection, bank remittance etc. It deems fit in present scenario.

Commission's view

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has observed that the provisions in the previous Tariff Orders have been made to attract the On-Line payments and also to incentivize Advance/Prompt payments. The Commission has thus decided to continue with the same incentives/rebates in this Tariff Order also.

ISSUE No. 53: Billing of fixed charges, energy charges and minimum charges in case of net metered consumer

Stakeholders Suggestions

Investment payback capability of solar plants would greatly hamper if they had to provide such high fixed cost of electricity. Stakeholder also claims that DISCOM fully absorbs the benefit of Carbon Credits. The net unit consumed by the consumer over and above what they export should be billed in their respective slabs as per Tariff Order with telescopic benefits.

Petitioners' Response

Billing of domestic consumer is different from other consumer categories. In all categories, fixed charges are being levied based on the sanctioned load or contract demand notwithstanding actual consumption. In case of domestic consumer for the purpose of levy of fixed charges, load is being calculated considering every 15 units of consumption per month or part thereof equal to 0.1 KW. In case in any month consumer consumed 150 units from the DISCOM than fixed charges shall be levied for 1 KW load.

With regard to billing of net metering consumer following provision of the MPERC (Grid connected Net Metering) Regulations, 2015 (G - 39 of 2015):

"8 Energy Accounting and Settlement:-

(5) The excess electricity measured in kilo-watt hour may only be utilized to offset the consumption measured in kilo-watt hour and may not be utilized to compensate any other fee and charges imposed by the Distribution licensee as per the instructions of the Commission.

"

Thus, calculation of load for the purpose of billing of fixed charges is being done based on the total import energy from the grid.

Further, in the scenario of two part tariff, fixed charges are being levied to recover the fixed cost of the DISCOM. This fixed cost is required to incur by the DISCOM notwithstanding any consumption of energy from the DISCOM. It is also pertinent to mention that DISCOM is required to incur this fixed cost even if any consumer opts for net metering. Therefore, if the contention of stakeholder regarding calculation of load based on the net unit (import less export) is accepted and it may happen that consumer uses the distribution system even without payment of fixed charges. Since fixed charges in case of other category of consumer is being billed notwithstanding the use of facility of net metering, no relaxation should be provided to domestic consumer.

In regards to Energy Charges, billing of only net consumption (net of import & export units) is being done by the DISCOM as per provision of the Regulation. However, in the Tariff Order, for the purpose of billing, different slabs are provided based on the consumption of consumer. These slabs are incorporated in the Tariff Order considering the socio-economic status of consumer i.e. consumer having upto 30/50 unit consumption would represent the weaker section of society. Since the slab has been prescribed considering the consumption of the consumer and not based on the net billed units (import less export), while billing the net units, slab is being considered based on the consumption.

In the Tariff Order, there is no specific provision regarding any exemption of minimum charges to net metered consumers, hence billing of TMC is being done in accordance with the tariff order.

Commission's view

The Commission has observed that the comments received are regarding the charges billed for the Net Metering consumers. As the matter pertain to MPERC Net metering Regulations, 2015, the same may be dealt separately.

DISCOM Operational related issues

ISSUE No. 54: Merge all three DISCOMs and make one DISCOM

Stakeholders Suggestions

All the three Distribution Companies should be merged to form a single Distribution Company in the State to reduce Administration & General expenses. Few activities like operation of sub-stations, maintenance of lines, meter reading, etc. should be outsourced to private agencies.

Petitioners' Response

Madhya Pradesh is the fifth-most populated State with more than 8 Crore population and is India's second-largest state by area. In terms of urban-rural mix, 72% population resides in rural areas, while the balance 28% resides in urban areas. Merging of all the three Distribution companies shall affect the services provided to the Consumers. Operational issues also rise due to sudden increase in the operational area. Hence merging the three DISCOMs is not feasible.

Commission's view

The Commission has noted the submission of the Stakeholder and the Petitioners. The subject matter is the domain of the Government who may review this matter, if necessary.

ISSUE No. 55: Robust resource planning

Stakeholders Suggestions

DISCOM's predictable approach to resource planning has resulted in surplus power purchase contracts. The Cost of backed down generation capacity is contributing to a considerable part of the DISCOM's ARR. Thus, the Commission should direct the regulated utilities to prepare long term and short term resource plan to have the right mix of resources to ensure power demand is met in the least cost manner.

Petitioners' Response

MPPMCL on behalf of all three DISCOMs of MP have prepared the resource plan to have right mix of resources to ensure power demand met in the least cost manner.

Commission's view

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and opines that the Petitioners may evaluate the Stakeholder's suggestion and prepare long term and short term plans as specified through the MPERC (Power Purchase and Procurement Process) Regulations, (Revision-1), 2006 in order to optimize the power purchase costs.

Petition related issues

ISSUE No. 56: Proposed Tariff hike for FY 2020-21

Stakeholders Suggestions

The actual revenue proposed for FY 2020-21 is Rs. 41,332 Crores, whereas the expected revenue from the proposed current tariffs is Rs. 39,332 Crores, which results into revenue gap of 4.83% and amounts to Rs.2000 Crore.

As Energy Charges have already increased due to approval of FCA during FY 2019-20, any tariff hike should not be allowed. Power purchase cost which contributes to 80% of the total ARR has doubled during the period from FY 2010-11 to FY 2020-21. Therefore, the Commission is requested to closely scrutinize the reasons contributing to such increase.

Tariff should be reduced in view of the dwindling fuel prices and surplus power availability in the State.

Further, the Petitioners should recover all their government dues before proposing any tariff hike. Also, any deficit in revenue for continuous operation should be met by Government in the form of subsidy.

Survey for distribution transformer level loss should be done to realise the actual loss of electricity in each DTR from which huge amount of loss can be prevented which can be used to prevent tariff hike.

Petitioners' Response

The Petitioner has considered all components of ARR in accordance with applicable Regulations. Further, the revenue from existing tariff is not sufficient to recover the cost of supply. Hence, the Petitioner has proposed minimum tariff hike.

The tariff increase calculation is based on the revenue gap analysis. Nominal increase in tariff has been proposed which is barely sufficient to cover the inflation cost. The expenses of distribution licensee are governed by the regulations and expenses above the norms are not imposed on consumer in the form of tariff hike.

Commission's view

The Commission has taken the cognizance of stakeholders' suggestions and Petitioners' reply, and has determined the ARR by exercising due prudence and considering the norms specified through the MYT Regulations notified by it. Accordingly, the Commission has revised the tariff as detailed in Chapter A2 and A3 of this order..

Miscellaneous

ISSUE No. 57: Change in Description for Telecom towers

Stakeholders Suggestions

Current description 'telecom towers for mobile communication' appears inappropriate in view of evolving nature of technology and emerging business models. It would be more appropriate to substitute it with a generic term such as 'Telecom towers' or for a more inclusive term such as 'telecom towers for multiple communication operators.'

Petitioners' Response

Since LV-2.2 is residuary category and any establishment not covered in any other category shall be classified under this category. Thus, present description has no material impact on the classification of telecom towers for billing purpose. However, the Commission may take suitable view on the suggestion of stakeholder.

Commission's view

After taking due cognizance of Stakeholder's submissions and subsequent reply by the Petitioner, the Commission has decided to continue with the existing provisions in this matter.

ISSUE No. 58: Use of electricity for charging of telecom towers from the existing connection of industrial consumers

Stakeholders Suggestions

The tariff HV 3.1 (industrial) is applicable to all HT industrial consumer for power, light and fan etc. including all energy consumed for Common and ancillary facilities like bank, shops, water supply, sewage pumps, police station etc. The correct interpretation and intended interpretation would be any and all such sub-users that are situated within the premises of an HT industrial consumer including telecom towers that comprise ‘common and ancillary’ facilities of such consumers. Petitioner however are plainly misreading the tariff classification.

Petitioners’ Response

Use of electricity in the ancillary services such as bank, canteen, and police station are specifically allowed. However, Tariff Order is silent about the use of electricity in the charging of mobile tower installed in the premises of industrial consumer. To avoid any dispute in this regard the Commission is requested to clarify the issue.

Commission’s view

The Commission allows common and ancillary services in the premises of Industrial Units and names a few services for the ease of understanding the meaning of ancillary services. Certainly, such ancillary services are not restricted by the nomenclature of illustrated services only and it covers other such services also including the Telecom Towers etc.

B. <u>POST-COVID</u>

ISSUE No. 1: Clarification of force majeure condition due to COVID-19 pandemic by West DISCOM.

<u>Stakeholders Suggestions</u>

The force majeure condition applicability mentioned in circular issued from West DISCOM dated 08th May,2020 should be clarified and amended to accommodate consumers affected by the COVID-19 pandemic as the government-imposed lockdown without any kind of notice.

As per the provisions in the Supply Code Regulations, during force majeure conditions, the Consumer must intimate the Licensee by giving 7 days clear notice regarding the same. But due to sudden lockdown, the majority of consumers were not able to intimate the DISCOM due to which the consumers may have to carry huge financial burden in the future challenging times. In addition, without relief, many consumers would find themselves in financial difficulties and the Commission should take necessary steps to alleviate the pains of consumers in this regard. Therefore, following suggestions are requested to be implemented in this regard,

1. To allow all consumer to give the notice if not given so far.
2. Reduce the contract demand from the date from which consumers were required to reduce supply and till the permission given by the State government to restart the factory to the extent of minimum of supply voltage or up to required reduce contract demand on which they availed the load in case the supply voltage is 33 KV and minimum contract demand is 100 KVA, in case of 11 KV minimum contract demand is 50 KVA and in case of LT consumer it is 3 KW.
3. Provide convenient instalments to make payment of electricity bills raised during lock down period i.e. March 2020 and April 2020.

<u>Petitioners' Response</u>

The circular issued by the Petitioners are in accordance with the Clause 11.2 of the Madhya Pradesh Electricity Supply Code, 2013. Any relief due to COVID-19 pandemic is not the subject matter of present petition which is filed for the proceedings of determination of ARR and Retail Supply Tariff for FY 2020-21.

Consumer may avail remedy under appropriate provision of MP Electricity Supply Code, 2013. Further, the DISCOM is also providing relief by extending due date and deferment of payment of charges.

<u>Commission's view</u>

The objection by the Stakeholder is related to the provisions in Supply Code with regard to the force majeure conditions. It is also observed by the Commission that a separate petition has been filed by some petitioners in this matter which is under consideration of the Commission. Therefore, the matter shall be dealt through the subject petition.

ISSUE No. 2: Passing on the incentives given by the Govt to the Consumers

Stakeholders Suggestions

Petitioners can get funding at attractive terms through Nationalized banks and Financial institution. PFC/REC would be infusing of Rs. 90,000 Crore to DISCOM against receivable and loans to be given against State guarantee for exclusive purpose of discharging liabilities of Power generating company (Genco). The benefits of these should be passed onto General Consumers. Also, CGS would give the following incentives to pass onto the end consumers in lockdown period:

1. Capacity charges for power not scheduled, to be payable without interest after the lock down in three monthly equal instalments.
2. Rebate of about 20% to 25% on power supply billed to DISCOM and interstate transmission charges levied by PGCIL.
3. Rebate of 20 to 25% interstate transmission charges would result in to saving in the range of 400-450 Crore. (interstate transmission charges are in the range of 1,600 to 1,700 Crore)
4. Possibility of deduction on Return on equity should be explored as share market is in bad shape and interest rates are low.
5. Capital expenditure should be curtailed. Scheme with payback exceeding three years must be stopped.
6. DISCOM should be advised to re-negotiate long term power purchase contracts to reduce the burden of fixed cost.

Petitioners' Response

Petitioner had submitted the impact of rebate of Rs 147.08 Cr provided by NTPC on capacity charges of NTPC plants billed for the lockdown period due to COVID-19. Further, a rebate of Rs 67 Cr in transmission charges has been given by PGCIL. This information of this rebate has been provided to the Commission in response to queries raised by the Commission in vide letter dated 19.05.2020.

Commission's view

The Commission appreciates the submission of the Stakeholder. The Commission has duly considered all the rebate / incentives offered by the CGS/ PGCIL to the Petitioners, while computing the power purchase cost and transmission charges. This has been detailed in the Chapter A2 of this order.

Further, the Commission directs the Petitioner to explore options to reduce interest burden of the DISCOMs by exploring various options through refinancing or through any other medium available with the Petitioners.

ISSUE No. 3: Effect of COVID-19 on Industrial Consumers

Stakeholders Suggestions

The industrial consumers are expecting industries load factor in between 10% to 25% for the current financial year due to COVID-19 lockdown. Moreover, the reduction of the load factor is likely to increase the cost of energy between Rs 10/- to Rs 30/- per unit due to applicability of conditions of minimum on both fixed and energy charges. The Commission should amend the present method of billing (Fixed charges & Energy Charges with terms and condition of minimum charges) to billing on the actual units consumption at the Average Billing Rate determined in ARR.

In addition, the Commission need to waive off the Fixed Charge, Variable Charge and Tariff minimum charges during the months of lockdown period and also billing should be based on the actual consumption of units by consumers. Further, the provision for Tariff minimum charges should be discontinued for all the categories of the consumer including industries and commercial establishments.

The formula of Power Factor calculation be suitably modified and no penalty should be levied for non-maintenance of Power Factor for the period of lockdown as lower utilization of the industry will lead to non-maintainability of the power factor. Similarly, no penalty should be recovered for delayed payment of electricity bills for the period of lockdown.

In addition, some suggestion provided by the Stakeholders includes waiver of Fixed Charge for 6 months starting April 2020, 50% rebate/ waiver of Actual Charges, Charges related to actual electricity consumption from 1st June,2020 till GOI announces complete opening of the economy.

Further, various States have provided concessions/relief to Industrial and Commercial/Non-domestic Consumers in COVID-19 pandemic as the lockdown have impacted the country's industry and economy very harshly. Therefore, the consumers should be provided with relief and also be supported to tackle this economic impact.

Petitioners' Response

The fixation of tariff is determined by the Commission as per the provisions of Electricity Act, 2003 and Tariff policy. Further, as per provision of Tariff regulation, 2015 and also as per principle of cost of supply, it is required to determine the ARR and Retail supply Tariff.

Moreover, during COVID-19, the petitioners are liable to pay the fixed cost to the generators irrespective of quantum of power received. Therefore, consumers should also be liable to pay the fixed cost to the DISCOMs. However, any relief due to COVID-19 pandemic is not the subject matter of the present petition.

Further, the DISCOMs are providing relief to the consumers by extending due date and deferment of payment of charges. Besides, this consumer can avail remedy under appropriate provision of MP Electricity Supply Code, 2013.

Commission's view

The tariffs are levied as per the prevailing tariff order issued by the Commission. The Commission has observed that the State Government has extended some relief measures in view of adverse impact of the lockdown due to COVID-19 pandemic. The Commission has also observed that, there are some Petitions filed seeking reliefs due to the lockdown situation which are under consideration of the Commission.

ISSUE No. 4: Resubmission of ARR Petition and Demand and forecast of Sales

Stakeholders Suggestions

The proposed ARR should be modified taking into consideration of the economic effect of COVID-19 pandemic on the country and Madhya Pradesh. All demand and sales projection should be estimated taking into account of the demand post COVID-19 pandemic. Further, due to lockdown tariff determination process should be postponed for this year.

Further, the Petitioners should resubmit the tariff petition considering the available data of FY 2019-20 as provisional unaudited account for determination of tariff. In addition to this, there is huge gap in numbers of actual audited value of FY 2018-19 and provisional value of FY 2019-20. Also, the Petitioners on the basis of audited account of FY 2018-19 has submitted a gap of Rs. 7,053.34 Crores for truing up. Therefore, there is a need for strict prudence checking before the approval by the Commission.

Petitioners' Response

The Petitioner has filed the ARR and Tariff Petition for the Distribution & Retail Supply Business for FY 2020-21, in accordance with applicable Regulations.

Further, in regards to impact of COVID-19 on ARR of licensee, the Petitioners stated that lockdown resulted in the lower consumption of energy. Hence, the revenue of the DISCOMs have been adversely affected. Furthermore, the Petitioners has submitted the audited accounts of FY 2018-19, final sale figures of FY 2019-20 and revised sales forecast figures to the Commission after considering the impact of COVID-19 as per instruction of the Commission.

Commission's view

The Commission appreciates the submission made by the Stakeholders. In view of the COVID-19 pandemic, the Commission had asked the Petitioners to submit the data required to analyse the impact of the same on the ARR for FY 2020-21 filed by the Petitioners. Further, the Commission had also directed the Petitioner to submit the actual sales for FY 2019-20 and first two months of

FY 2020-21 to assess the impact of COVID-19. Accordingly, after carrying out proper due diligence of the details submitted by the Petitioner, the Commission has revised the Sales, Power Purchase Cost among various other parameters, which has been detailed in the chapter A2 of this order.

ISSUE No. 5: Actual billing rates as per monthly bills higher than the approved Average Billing Rate (ABR) for Industrial consumer of LV-4 and HV-3.1 Category of consumers

Stakeholders Suggestions

DISCOMs are charging much higher energy rates in the monthly bills as compared to the tariff rates approved in the Tariff Order. Whereas, Average Billing Rate for FY 2020-21 should not be higher than the Average Billing Rate determined for FY 2019-20.

Petitioners' Response

The provision under Section 62(3) of the Electricity Act, 2003 provides for the factors based determination of differential tariff. Further, the Commission is fully empowered to make differential tariff to be charged from two different class of consumers and this practice should be continued in the interest of consumers of the State.

The average billing rate worked out by the Commission is based on the projected consumers & sales for whole category, whereas the actual billing is being done by the DISCOM are as per rate approved in the Tariff schedule considering the actual load factor, power factor, supply voltage & consumption of the consumer. Hence, billing rate of any particular consumer may be varied.

Commission's view

The Commission agrees with the submission of the Petitioners that the actual Billing Rate may vary depending on the various factors such as actual Load Factor, Power Factor, actual sales etc. which may vary from that considered by the Commission while projecting the revenue for a particular class of consumers. However, the DISCOMs should ensure that all the consumers are billed in accordance to the applicable tariff rates approved by the Commission in the Tariff Schedule of the respective Tariff Order.

ISSUE No. 6: Cross Subsidy

Stakeholders Suggestions

As per Electricity Act, the Cross-subsidy for all categories of consumers should be kept within ±20% of Average Cost of Supply. Further, the HV-3.1and LV-4 category Industrial consumer seeks the reasoning for loading their tariff with Cross- Subsidy of +23% and +32 %.

Petitioners' Response

The Commission has been consciously making efforts over the past several years to reduce the cross-subsidy levels across all consumer categories.

Commission's view

The Cross Subsidy varies year on year based on various factors viz. Sales mix of various consumer categories with respect to the total sales, connected load, number of consumers, component of power purchase cost in the ARR and other costs also which keep varying every year. It is observed that due to adverse impact on sales of commercial and industrial consumers due to COVID-19 pandemic, the cross subsidization for these categories increased as compared to previous year. Though, the Commission is making efforts to reduce the cross subsidies gradually without giving the tariff shock to any other subsidized category of consumers.

ISSUE No. 7: Rebate for Online Bill Payment

Stakeholders Suggestions

DISCOMs have assumed that the payment made through NEFT/RTGS are eligible for rebate for online payments only from the date of issuance of the tariff order. Therefore, the Petitioners are not considering payment through NEFT/RTGS for FY 2017-18 & FY 2018-19 even though the tariff order for FY 2017-18 and FY 2018-19 provides the provision for rebate of 0.5% on online payments for HT Consumers. The Commission should provide necessary directives to address the issue and provide reliefs for previous years.

Petitioners' Response

The billing of the consumers has been done in accordance to the Tariff order issued by the Commission from time to time. As per Tariff order, Chapter A1, Clause 1.32, the tariff order for FY 2019-20 is applicable from 17th August, 2019. Therefore, the Petitioners are providing rebate on payment made through NEFT/RTGS modes (i.e. online mode) from the date of applicability of the tariff order. Further, the billing of any particular consumer is not the subject matter of the present Petition.

Commission's view

It is clarified that any provision introduced by the Commission in any tariff order is applicable from the date of applicability of the said order. Further, the Commission has continued the rebate for online bill payment in this order also.

ISSUE No. 8: Rebate for HV Industry

Stakeholders Suggestions

HV Industry tariff must be more attractive as compared to the neighboring States in order to attract investments. Further, special treatment and rebate should be given to HV Industries, especially labour intensive industries.

Petitioners' Response

Tariff of a State depends on the Average Cost of Supply in that State. It is not reasonable to compare it with other States, as it relies upon various different scenarios of State like production cost, geographical area, natural resources, consumer base etc. The tariff proposal has been formulated as per provisions of Electricity Act, 2003, MPERC Regulations. Further, the petitioner has submitted the list of rebates provided to the HT consumers.

Commission's view

The Commission has taken the cognizance of stakeholders' suggestions, Petitioners' reply and other commercial aspects, and has decided to continue with the rebates as detailed in the Tariff Schedule for HV Consumers.

ISSUE No. 9: Levy of Electricity Duty

Stakeholders Suggestions

The Commission should advice the State Government for exemption on Levy of Electricity Duty for a period of at least six months or for the whole FY 2020-21 in order to provide relief and support to the consumers.

Petitioners' Response

Levy of Electricity duty is not the subject matter of the present Tariff Petition.

Commission's view

The Commission has observed that the issue raised by the Stakeholder is in the purview of the State government and it is not related to the present tariff petition..

ISSUE No. 10: Cancellation of Six private power producer with illegal contracts

Stakeholders Suggestions

Six private power producers viz. Jaypee Bina Power, Jaiprakash Power STPS, Nigri, Jhabua Power STPS, MB Power STPS, BLA Power and Lanco Amarkantak TPS have obtained the contract illegally. Hence the cancellation of contract with these fraudulent power companies should be done which saves amount of around Rs. 7,414 Crore and reduce the average electricity rate by Rs. 4.75

per unit. In the time of pandemic, it is essential to save as much as possible to provide relief to general consumers and thus these contracts should be nullified as soon as possible.

Petitioners' Response

The purchase of electricity by the petitioner is done on the basis of the principle of dispatch of priority order for the supply of electricity demand under the total demand of distribution companies, demand for sale in the open market through exchange, banking arrangement from other States and the remaining of the power is backdown.

Further, under the priority of order dispatch, if some electricity is purchased from the last power station on the basis of variable charge to supply the total demand of the Petitioner, then the power rate per unit of power is bound to be higher. Moreover, the distribution companies are required to pay fixed charges on the declared capacity based on the terms of the agreement with the power generation companies.

Further, the surplus power in the country is easily available at rate of Rs. 2.5 per unit, the Petitioners also conveyed that the rate of power available in the power exchange is based on the demand and time of demand. However, the demand of surplus power to the Petitioners aside from the normal electricity supply, mainly is during the Rabi season between October and January. Hence, based on previous experiences. The Petitioners has observed that during this period, the electricity in power exchange is also expensive.

Further, constant efforts are being made by MP Power Management Company from time to time to get out of the contract for expensive power plants with surplus energy. In addition, the Petitioners have also prohibited the contract from DVC in the past years regarding this context.

Commission's view

The Commission has observed that the suggestions of the Stakeholder lacks clarity. The Commission, however, opines that the Petitioner may continue their efforts to optimize their power purchase costs after evaluating all potent possibilities.

ISSUE No. 11: Methodology for computing TMM units in case of HT consumers

Stakeholders Suggestions

The methodology for computing TMM units in case of HT consumers who have installed solar plant for self-use should remain unchanged as was being adopted when solar plant was not installed.

Petitioners' Response

Petitioner submitted that the suggestion made by stakeholder is not acceptable as the existing methodology of levying and computing TMM has no ambiguity.

Commission's view

The Commission has taken due cognizance of the issue raised by the stakeholders. However, the issue of net metering shall be dealt as per the provisions of MPERC Net Metering Regulations, 2015 and its amendments thereof.

ISSUE No. 12: Procurement of power from open market by Railways

Stakeholders Suggestions

Permission for procurement of power to Railways from open market was granted due to compelling circumstances, however cross subsidy surcharge and additional surcharge are payable by Railways from 1st April, 2017 as per bills raised by the petitioners. The Petitioners have filed a petition before the Commission for recovery of Rs. 942 Crore outstanding amount from Railways and the Petitioners are not taking any action pending directive of the Commission. The Commission should take effective steps by giving direction to the petitioners for recovery of outstanding arrears from Railways.

Petitioners' Response

Indian Railways has been granted Open Access permission by the nodal officers as per the provision of MPERC (Terms & Conditions for Intra-State Open Access in MP) Regulations, 2005 and amendments from time to time. Further, the Petitioners has raised the demand of additional surcharge and cross subsidy applicable to Indian Railways. Anyway, DISCOMs have filed petition (P. no 11/2020) before the Commission regarding non receipt of payment from Indian Railways, the matter is under adjudication.

Commission's view

The matter is under consideration of the Commission through a separate Petition. Accordingly, the Commission shall take an appropriate view in the matter.

ISSUE No. 13: Tariff rationalization for Domestic Consumers

Stakeholders Suggestions

Though surplus power availability is continuously increasing, the petitioners have proposed tariff hike in every slab of domestic category, which would restrain the demand of power more. Further, concessional rate slab has been reduced from existing 51 to 150 units to 51 to 100 units resulting in to increase in tariff from 7.3% to 33%.

Therefore, it is desirable that domestic tariff is lowered thereby providing domestic consumer incentive to spend more power which would narrow the surplus margin and will result in earning of better revenue for the DISCOMs.

Petitioners' Response

The Petitioner has proposed tariff hike for different categories as per Cross Subsidy road map, Electricity Act, 2003, MPERC Regulations and Tariff Policy.

Commission's view

The Commission has maintained same tariff slab as approved in Tariff Order for FY 2019-20. Further, the Commission has revised the tariff for domestic consumers which has been detailed in tariff design chapter of this order.

ISSUE No. 14: High Power Purchase Cost

Stakeholders Suggestions

The power purchase cost is a major element in expenditure, which comprises about 66 to 68% of ARR. A substantial amount of payment is given to the generation companies under sub head 'Gross Power Purchase Cost for MP State as mentioned in Table 95 of tariff petition for which power has not been schedule throughout the year, which has cumulated expenditure of Rs. 3,329 Crores. Further, a fixed charge of Rs. 516 Crores is charged by Power grid Corporation Ltd as transmission charge from these generation companies. Therefore, the Commission should take some sort of measure to ensure the minimization of unproductive usage of funds and to safeguard the interest of consumers.

Further, the petitioner in Table 94 named 'Merit Order Dispatch for FY 2020-21 and Table 95 named 'Gross Power Purchase Cost for MP State of tariff petition highlights that extremely costly electricity has been purchased from some generation companies. Moreover, present tariff available in the country are at lower rate and also the State have surplus power. Therefore, purchasing of such costly power will be an injustice to the consumers of the State. Hence, in the future such costly electricity purchase should be disallowed and not buying this costly power will save Rs. 2,055 Crores for distribution companies.

Petitioners' Response

In the petition, power purchase expenses have been considered as per provision of CERC/ MPERC orders issued for respective generating stations and power purchase bills of previous years. The Petitioners submitted that the Commission only after scrutinizing all the relevant records/information determines the ARR of the licensees. All detail/information regarding calculation of power purchase cost is given in the chapter A4, A5 and A6 of the petition.

Further, Petitioners commitment towards 24 x 7 days power supply in the State and to meet difference between demand and supply of power during the Rabi season, long term contracts were signed with various power sources in the last years only to supply the projection of demand for power. Therefore, on the basis of these contracts, the installed capacity of the State has increased after the COD of different sources in the last few years and the State has become self-sufficient in terms of availability, thereby realizing the 24-hour power supply in urban and rural areas.

Presently except agriculture feeders' consumers, all other consumers are provided with 24 hours of electricity in the State. Moreover, even after sufficient power capacity is contracted, during the peak demand of the Rabi season, the power supplied by the Petitioners to other States is withdrawn and some expensive variable charge power is partially managed by backdown.

In regard to payment to generation companies without purchasing a single unit from these companies, the Petitioners conveyed that on the basis of the agreement with the power generation company, the distribution licensees are liable to pay fixed charges for the declared capacity by the power generation company.

Further, the Petitioners in the Petition for gross revenue requirement assessment for the surplus energy has made considering all the months of FY 2020-21. Similarly, power availability assessment has been done considering the power availability from both Central and State. However, during actual operation the surplus power estimated can even be on lower side due to low availability or unavailability of generating plants and also for various reasons.

Further, the Petitioners are reducing the cost of purchasing energy from the revenue derived from the sale of the remaining surplus energy by backing down the expensive variable charge energy, which are higher than Rs.3.28, the average rate of three years of exchange of surplus energy. Hence, this has been calculated by Petitioners considering the consumer interest.

Commission's view

The Commission has carried out due diligence while approving the power purchase cost which has been detailed in chapter A2 of this order.

ISSUE No. 15: Distribution losses

Stakeholders Suggestions

It is observed that petitioners use distribution loss figures of 1 year back to project the energy requirement of next year. But it should be based upon latest figure as it is a very important parameter.

Petitioners' Response

The Petitioner has claimed ARR considering the normative Distribution as specified in the MPERC Tariff Regulations, 2015 and its amendments.

Commission's view

The Commission has approved the ARR for the Petitioners considering the normative distribution losses approved in MPERC Tariff Regulations, 2015 through it second amendment wherein the normative losses have been specified for FY 20-21, thereby not allowing passthrough of higher losses and associated costs on account of inefficiency of the Petitioners to the Consumers.

The Commission has endeavored to address the issues raised by the Stakeholders related to tariff, during the process of determination of ARR and retail supply tariff and has incorporated most of the issues related to the Tariff Petition by clubbing the broader issues together in this chapter. The Commission has also observed that the issues raised by the Stakeholders post COVID-19 pandemic were mostly common to the issues raised during the pre-COVID-19. Therefore, the Commission has not discussed the same again here separately in the Post COVID-19 part of the chapter.

Annexure-1 (List of Stakeholders)

A: Pre-COVID-19

LIST OF STAKEHOLDERS- CENTRAL DISCOM - TARIFF FY 2020-21

Sl. No.	Name/ Designation	Address
1	Shri Vipin Kumar Jain	M/s. M.P. Scale Industries Organization E-2/30, Arera Colony, Bhopal-462016
2	Dr. Praveen Agrawal	M/s Madhya Pradesh Chamber of Commerce and Industry Chamber Bhawan, Sanatan Dharma Mandir Marg, Gwalior-474009
3	Shri S. Pal	M/s. Vardhman Yarns Vardhman Textile limited, A1-A6, Ind. Area-II, Mandideep Dist. Raisen
4	Shri Hemant Gupta	M/s. Amba Shakti Udyog Ltd. Plot No. 44 & 47, A.B. Road, Industrial Area, Banmor Dist. Morena-476444
5	Signatory	M/s. INOX Air Products Pvt. Ltd. 1,25&6, Industrial Area, Govindpura, Bhopal
6	Shri Jogendra Behera	M/s. Indian Energy Exchange Ltd. 3,4,5&6, Industrial Area, Govindpura, Bhopal
7	Shri Lakshmi Narayan Balasubramanian	M/s. Ayana Renewable Power Ltd. 3rd Floor, Sheraton Grand Hotel, Bridge Gateway Campus,26/1, Dr. Rajkumar Road, Bangalore-560055
8	Shri Abhay Potdar	M/s. CLP Wind Farms (India) Pvt. Ltd. 7th Floor, Fulcum, Sahar Road, Andheri (East), Mumbai-400099
9	Shri Parinay Deep Shah	M/s. DJ Energy Pvt. Ltd. J&S Chambers G-64, Ground floor, Lajpat Nagar-1, New Delhi
10	Shri Atul Kumar Naik	M/s. Solar Energy Corporation of India Ltd. 1st Floor, Prius Platinum, D-3, District Center, Saket, New Delhi-110017
11	Signatory	M/s. Hero Future Energies, Clean Wind Power (Ratlam) Pvt. Ltd. 212, Ground Floor, Okhla Industrial Estate, Phase-III, New Delhi-110020
12	Shri. K.N. Mathur	M/s. HEG Limited Mandideep, Dist. Raisen-462046
13	Shri Gaurang Sethi	M/s. Azure Power Maple Pvt. Ltd. 3rd Floor, Asset 301-304 and 307, World Mark 3, Aero City, New Delhi-110037

Sl. No.	Name/ Designation	Address
14	Shri T.A.N. Reddy	M/s. Electric Power Transmission Association (EPTA) F-1, The Mira Corporate Suites, 1&2 Ishwar Nagar, Mathura Road, Okhia Crossing, New Delhi-110065
15	Shri Dhruv Singh Tomar	Rashtriya Kisan Majdur Mahasangh Vill. Mhow, Post Bhadrauli, Teh.Dist. Gwalior
16	Dr. Subhas C Pandey	HIG 1/8, Shivani Complex, Shivaji Nagar, Bhopal-462016
17	Shri Ashwini K Swain	M/s. Centre for Policy Research Dharam Marg, Chanakyapuri, New Delhi-110088
18	Shri Alok Kumar Verma	Pani Ke Pas, Pratapward Tikari, Betul-460001
19	Shri MC Bansal	Justice For Public cause foundation trust Flat No. 402, Sapphire Block, Nikhil Nestles, Near Ashima Mall, Hosangabad Road, Jatkhedi Bhopal Pincode-462026

LIST OF STAKEHOLDERS - WEST DISCOM - TARIFF FY 2020-21

Sl. No.	Name/ Designation	Address
1	Signatory	M/s. Grasim Industries Ltd. (Chemical Div.) Birlagam, Nagda-456331
2	Shri S.M. Jain	M/s. Venus Alloys Pvt. Ltd. 67, Industrial Area, Mandsaur - 458001 (M.P.)
3	Shri Satish Sood, Director	M/s. Oasis Distillaries Ltd., H-102, B-12, Metro Tower Vijay Nagar, Indore-452010
4	Shri Rakesh Mehata	M/s. Jaora Flour & Foods Pvt. Ltd., Polytechnic College Road, Jaora, Distt. Ratlam
		M/s. Jaora Flour & Foods Pvt. Ltd. Unit-II Polytechnic College Road, Jaora, Distt. Ratlam
5	Shri Rohit Bhoraskar	M/s. Viraj Conductors (P) Ltd. 13- B, Industrial Area, Ujjain
6	Shri Pawan Singhaniya	M/s. Jaideep Ispat & Alloys Pvt. Ltd. (CCD) 103, Laxmi Tower, 576, M.G. Road, Indore-452001
7	Shri Pawan Singhaniya	M/s. Rathi Iron & steel Industries Ltd. 103, Laxmi Tower, 576, M.G. Road, Indore-452001
8	Shri Ashok Kataria	M/s. Kataria Wires Pvt. Ltd. 310-13, Industrial Estate, Ratlam
9	Shri Madan Lal Kataria	M/s. Kataria Industries Pvt. Ltd. 34-38 & 44 Industrial Area, Ratlam-457001
10	Shri Pankaj Kataria	M/s. Ratlam Wires Pvt. Ltd. Plot No. 3, Industrial Estate, Ratlam
11	Signatory	M/s Satyam Industries Pati Bakrota Road, Khetia. Teh. Pansemal, Distt. Barwani
12	Signatory	M/s. Venkatesh Industries Niwali Road, Sendhwa, Distt. Barwani
13	Signatory	M/s Shreeram Industries Jalgaon Road, Pansemal, Distt. Barwani
14	Signatory	M/s.Pradeep Cotton Pvt. Ltd. Warla Road, Sendhwa, Distt. Barwani
15	Shri Jitendra Soni	M/s. Tanmay Pure Spun, K-463, Village Susari, Teh, Kukshi, Distt. Dhar.
16	Proprietor	M/s. Harman Cotex Bistan Road, Opp. Dejla Dewada Colony, Khargone-451001
17	Shri Pravesh Kumar Sharma	Bharti Infratel Ltd. H-3, 4th floor, Metro Tower, Scheme No. 54 A.B. Road Indore-452010
18	Shri MC Rawat	The Madhya Pradesh Textile Mills Association Jal Sabhagrah, 56/1, South Tukoganj, Indore-452001

Sl. No.	Name/ Designation	Address
19	Shri Manjit Chawala	M/s. Mandi Vyapari Sangh Vyapari Vishranti Bhawan, Krishi Upaj Mandi Parisar, Bistan Road, Khargone
20	Shri P.L. Nene	The Electricity Consumer Society C/o, The Madhya Pradesh Textile Mills, 56/1, South Tukaganj, Indore-452015
21	Dr. Goutam Kothari	M/s. Pithampur Audyogik Sangthan 231, Saket Nagar, Indore-452018
22	Shri Sachin Agrawal	M/s. Agrawal Parishad 18, Vaibhav Chamber, 1st Floor, 7/1, Ushaganj, Indore-452001
23	Shri Ashok Khandelia	M/s. Association of Industries Dewas 1/B/1, 1/B/2A, I.S. Gajra Industrial Area, No.1, A.B. Road, Dewas-455001
24	Shri Sunil Vyas	M/s. Association of Industries Madhya Pradesh Udyog Bhawan, Pologround, Industrial Estate, Indore
25	Shri R.C. Somani	M/s. Vidyut Mandal Pentioners Association Urja Parisar, Pologround, Indore
26	Signatory	M/s. Sendhwa Cotton Association C/o, M/s. Pradeep Cotton Pvt. Ltd., Warla Road, Sendhwa, Distt. Barwani
27	Shri R.S. Goyal	51, Pradesh Nagar Nemawar Road, Indore-452001
28	Shri M.U. Nagori	225, Karmchari Colony, Dewas
29	Shri Satyanarayan Sharma	31/3, Nijatpura, Shri Matwale Hanuman Mandir ke Piche (Kshirsagar), Indore
30	Shri Mahesh Varun Yadav	EWS A-12/28, Vednagar, Sanwer Road, Ujjain
31	Shri Sunil kumar Jain	7/548-A, Kasturba Nagar, Ratlam
32	Shri Suhas Khandekar	H.No. 201, Vasant Kunj, 270, Lokmanya Nagar, Indore-452009
33	Shri Mahesh Garg	16, Samvad Nagar, Indore
34	Shri Arun Chaturvedi	C-2/14, Mahananda Nagar, Dewas Road, Ujjain
35	Shri Govind Sharma	Mohd. Farukh Tol kate ke Samne, Raw, Distt. Indore
36	Shri Mukesh Koshal	Akhil Bharatiya Grahak Panchayat Mhow
37	Shri Sachin Agrawal	Mahalaxmi Nagar, Indore
38	Shri Sanjay Agrawal	M/s. Upbhokta Hit Prahari 970, Manak Chowk, Mhow, Distt. Indore
		Mohd. Farukh Tol kate ke Samne, Raw, Distt. Indore
39	Shri Suresh Agrawal	All India Dal Mil Association, Indore

LIST OF STAKEHOLDERS - EAST DISCOM - TARIFF FY 2020-21

Sl. No.	Name/ Designation	Address
1	Shri P.G. Najpandey	M/s. Nagrik Upbhokta Margdarshak Manch 6/47, Ramnagar, Adhartal, Jabalpur
2	The Secretary General	M/s. MP Ferrous Alloys Association C/o. Ramni Power & Alloys Pvt. Ltd. Main Road, Balaghat
3	Signatory	Ramnik Power & Alloys Pvt. Ltd. Main Road, Balaghat
4	Shri Anil Badgotri	M/s. J.K. White Katni (Unit of J.K. Cement)
5	Signatory	M/s. Prism Johnson Limited, Mahakari, Post Bathia, Distt. Satna-485111
6	Shri Sankar Nagdeo	M/s. Mahakoshal Chamber of Commerce & Industry Chamber Bhawan, Civic Centre, Marhatal, Jabalpur-482002
7	Shri Himanshu Khare	M/s. Jabalpur Chamber of Commerce and Industry Moti Building, Ashok Marg, Cantt. Jabalpur
8	Shri Sourbh Jain	M/s. Hindu Seva Parishad 2022, Gupteshwar Road, Ratan Nagar, Jabalpur-482002
9	Shri D R Jeswani	M/s. Mahakaushal Udyog Sangh Industrial Area, Ricchai, Jabalpur-482010
10	Shri Akhil Mishra	M/s. Lardganj Vyapari Sangh 26, S.P. Market, Lordganj, Jabalpur
11	Shri K.K. Agrawal	M/s. Bharat Krishak Samaj Shri Shanti shah kisan Karyalaya, Gangotri Apartment, Gol bajar, Jabalpur
12	Shri Rajnarayan Bhardwaj	M/s. Kisan Sewa Sena (Sangthan) Shri Shanti shah kisan Karyalaya, Gangotri Apartment, Gol bajar, Jabalpur
13	Shri Jitendra Kumar Deshi	M/s. Kisan Sewa Sena (Sangthan) Shri Shanti shah kisan Karyalaya, Gangotri Apartment, Gol bajar, Jabalpur
14	Shri Amit Kumar Agrawal	Shri Mahila Griha Udyog Lijjat Papad Wright Town, Jabalpur-482002
15	Shri Rajendra Agrawal	1995/A, Gyan Vihar Colony, Narmada Road, Jabalpur-408068
16	Shri Nirmal Lohia	Taldarbaja, Tikamgarh
17	Shri D Khandelwal	950, Napier Town, Jabalpur
18	Shri Vinay Kumar Singh Parihar	Madhya Pradesh Vidyut Mandal Abhiyanta Sangh, Shade No. 13, Vidyut nagar, P.O. Rampur, Jabalpur-482008
19	Shri Arun Jain	Jabalpur

Sl. No.	Name/ Designation	Address
20	Shri Vipin Kumar Jain	M/s. M.P. Scale Industries Organization E-2/30, Arera Colony, Bhopal 462016
21	Dr. Praveen Agrawal	Confederation of Indian Industries Chamber Bhawan, Sanatan Dharma Mandir Marg, Gwalior 474009
22	Signatory	M/s. INOX Air Products Pvt. Ltd. 1,25&6, Industrial Area, Govindpura, Bhopal

B: Post-COVID-19

LIST OF STAKEHOLDERS - CENTRAL DISCOM - TARIFF FY 2020-21

Sl. No.	Name/ Designation	Address
1	Rakesh Yedke	M/s Bhaskar Industries Pvt. Ltd Plot 15-16, Sector-D, Industrial Area, Mandideep - 462046, Bhopal
2	Ramesh Ramnani	M/s Akoya Food Industry Plot No. 143, Sector- I, Industrial Area, Govindpura, Bhopal - 462023
3	Amit Lalwani	M/s Amit Grah Udyog Plot no. 15-B, 15-C, Sector-I, Industrial Area, Govindpura, Bhopal
4	S. P. Bansal	M/s Associated Engineers 6-E, Industrial Area, Govindpura, Bhopal-462023
5	S. P. Bansal	M/s Praveen Udyog 5-E, Industrial Area, Govindpura, Bhopal-462023.
6	Signatory	M/s AMP Speciality Products Pvt. Ltd. Plot- 70, New Industrial Area - II, Mandideep - 462046, Bhopal
7	Er Nirmal Mitna	M/s Bhopal Switchgears Pvt. Ltd. Plot No.29 & 30, Sector - E, Industrial Area, Govindpura, Bhopal-462023
8	Signatory	Shree Cables & Conductors Pvt. Ltd 7-C, 14A & 15A, Industrial Area, Govindpura, Bhopal-462023
9	Raju B.	M/s B.K. Enterprises H-45, Industrial Area, Govindpura, Bhopal-462023
10	G. R. Gour	M/s E.M Electro Mechanicals Pvt. Ltd- Unit-1 31-E, Industrial Area, Govindpura, Bhopal-462023
11	Rohan Khare	M/s Evonne Industries Pvt. Ltd Sector - H, L.U.H Complex, Industrial Area, Govindpura, Bhopal-462023
12	Archana Jena	Bend Joints Pvt Ltd 42-43A, Industrial Area, Govindpura, Bhopal-462021
13	Ramesh Jangalwa	M/s G. K. Electricals 6A, F-Sector, Industrial Area, Govindpura, Bhopal-462023
14	Anil Agrawal	M/s Techno Fibre Industries 1E, I-Sector Spl. Industrial Area, Govindpura Bhopal-462023
15	Sachindra Mahule	M/s Instrumentation Associates 98-B, Sector- H Industrial Area, Govindpura, Bhopal, MP - 462023
16	N. L. Gupta	M/s Champion Engineering Industries 25 - E, Industrial area, Govindpura, Bhopal. Madhya Pradesh

Sl. No.	Name/ Designation	Address
17	N. L. Gupta	M/s Young Engineers Shed No-13, Sector-A, Industrial Estate, Govindpura, Bhopal, MP - 462023
18	Signatory	M/s Aasita Industries H-4, Industrial Area, Govindpura, Bhopal-462023
19	Pradeep Singh	M/s Electrical Transformer Company (ETC) 15 G Bharat Nagar JK Road, Bhopal
20	Amit Kumar Udhwani	M/s Enterprising Engineers 46-47, Sector-A, Industrial Area, Govindpura, Bhopal-462023
21	Puneet Agrawal	M/s Box Craft 147-C, Sector-H, Industrial Area, Govindpura, Bhopal-462023
22	Manoj Verma	M/s Dawn Engineers Plot No.9A, Sector - D, Industrial Area, Govindpura, Bhopal-462023
23	Abhimanyu Chopra	M/s Enn Kay Engineering Company 19-H, Mplun Complex, Industrial Area, Govindpura, Bhopal-462023
24	Signatory	M/s V.K Enterprises Plot No.28, 29, 30A , Sector - I, Industrial Area, Govindpura, Bhopal-462023
25	S.K Khabya	M/s KK Engineering Works Plot No. 79B, Sector - A, Near Mplun Complex, Industrial Area, Govindpura, Bhopal - 462023
26	Rajesh Jain	M/s Jyoti Rubber Engineers 32, Sector-E, Industrial Area, Govindpura, Bhopal-462023
27	Bhupinder Singh	M/s Monga Pipe Industries Pvt. Ltd 5-B, Industrial Area, Govindpura, Bhopal-462023
28	Manish Agrawal	M/s Quality Engineering & Insulation Products 71-A, Industrial Area, Govindpura, Bhopal-462023
29	Vikas Prakash	M/s CEE DEE Industries H-30/2, Industrial Area, Govindpura. Bhopal - 462023
30	Hemant Khanna	M/s Vinayak Engineering Works Plot No. 10, 11, 12, Zone -1, Near Railway line, M.P. Nagar, Bhopal-462011
31	Ravi Bhojwani	M/s Precision Engineering Components Plot No.04, Sector I, Industrial Area, Govindpura Bhopal-462023
32	Rahul Chouksey	M/s Rishi Industries 155, Sector-H, Industrial Area, Govindpura, Bhopal-462023
33	Amarjeet Singh	Govindpura Industries Association Association Complex, Industrial Area, Govindpura, Bhopal-462023

Sl. No.	Name/ Designation	Address
34	Shirish Parandekar	M/s Dielectric Corporation F-32, Industrial Area, Govindpura, Bhopal-462023
35	Shirish Parandekar	M/s Dielectric Corporation -II F-92, Industrial Area, Govindpura, Bhopal-462023
36	Yogesh Goel	M/s Alco Electrostrips Pvt. Ltd. Plot No-101, Sector -F, Industrial Area, Govindpura, Bhopal-462023
37	Vitus John	M/s Delta Engineering Works 58, Sector- I, Industrial Area, Govindpura, Bhopal - 462023
38	Prashant Agrawal	M/s Mechmen 11, Sector- C, Industrial Area, Govindpura, Bhopal - 462023
39	P. A. Joseph	M/s M.P. Veneers Pvt. Ltd. E-1/82, Arera Colony, Bhopal -462016
40	Kunal S. Merchant	M/s Permali Waliace Pvt. Ltd. Opposite Reserve Bank of India, Hoshangabad Road, Bhopal - 462011
41	Signatory	M/s New Bharat Engineering Works 27-A/ Sector-H, Industrial Area, Govindpura, Bhopal-462023
42	Gautam Jaiswal	M/s Skyline Industries 4/1, Industrial Estate, Govindpura, Bhopal-462023
43	Anurag Shrivastava	Madhya Pradesh State Council Confederation of Indian Industry (CII) Plot no 17, Third Floor, ISBT Commercial Complex Hoshangabad Road, Bhopal - 462011
44	Amarjeet Singh	Shri Vishwakarma Fabricators Plot No. 9-H, Sector- H, Industrial Area, Govindpura, Bhopal - 462023
45	M.C Goyal	M/s Fujitsu Optel Pvt. Ltd D-6, Industrial Area, Mandideep, Bhopal-462046
46	Signatory	M/s Balaji Company Plot No. 26, Sector- H, Industrial Area, Govindpura, Bhopal - 462023
47	Signatory	M/s Rashee Control Equipments Pvt. Ltd Plot No. 57,79 & 99, Sector- I, Industrial Area, Govindpura, Bhopal - 462023
48	Rajnish	M/s Mechanical Constructors No. 3, Sector-F, Industrial Area, Govindpura, Bhopal-462023
49	Chiraug Sampat	M/s Cuprum Industries 18-A & 19-A, Sector- D, Industrial Area, Govindpura, Bhopal - 462023
50	Harsh Sampat	M/s Forward Engineering Industries 44, B.H.E.L, Ancilliary Estate, Habibgani, Bhopal - 462024

Sl. No.	Name/ Designation	Address
51	Signatory	M/s Dynamech Electro Power Pvt. Ltd 55 & 56-A, Sector - H, Govindpura Industrial Area, Bhopal-462023
52	Jayesh Malani	M/s Lasercut (I) Technology Pvt. Ltd-Unit - II Plot No. 76, Sector- I, Industrial Area, Govindpura, Bhopal - 462023
53	Jayesh Malani	M/s Lasercut (I) Technology Pvt. Ltd-Unit - I Plot No. 115-B, Sector- H, Industrial Area, Govindpura, Bhopal - 462023
54	A. K. Pandey	M/s Sanwaria Consumer Ltd Office Hall No. 1, First Floor Metro walk, Bittan Market, Bhopal -462016
55	Praveen Mishra	M/s Raasvin Rubbers Pvt. Ltd.-Sector -H 25, MPLUN Complex, Sector- H, Industrial Estate, Govindpura, Bhopal - 462023
56	Praveen Mishra	M/s Raasvin Rubbers Pvt. Ltd.-Sector -I Plot No. 6B, Sector- I, Industrial Area, Govindpura, Bhopal - 462023
57	A. K. Pathak	M/s Advance Engineering Company E-28, Industrial Area, Govindpura, Bhopal - 462023
58	Mukesh Malik	M/s M.K Enterprises (Divya Steel) Plot No. H/13, Industrial Area, Govindpura, Bhopal - 462023
59	Gilbert E Fernandes	M/s Global Heavy Engineering Indusrtries 48 & 49, Sector H, Industrial Area, Govindpura, Bhopal-462023
60	M. K. Sharma	M/s Narmada Equipments Pvt. Ltd. 2/3, Industrial Estate, Govindpura, Bhopal-462023
61	Signatory	M/s D.K Insulation Industries 9-E, Industrial Area, Govindpura, Bhopal - 462023
62	Signatory	M/s Mayur Enterprises Plot No. 156, Sector H, Industrial Area, Govindpura, Bhopal-462023
63	Dr. Virendra K. Gangwal	M/s The Gangwal Industries Gangwal Mills Compound, Near Phalka Bazaar, Lashkar, Gwalior-474001
64	Deepak Joishar	M/s Speciality Organics Pvt. Ltd 49-B, Sector-B, Industrial Area, Mandideep, Dist - Raisen - 462046
65	Anuradha Goel	M/s Ducon Paints Pvt. Ltd C-49, Sector B, Mandideep Industrial Area, Distt. Raisen - 462046
66	Siddhartha Singh Bisen	M/s Bisen Engineering Pvt Ltd Plot No.31, Sector -A, Industrial Area Mandideep, Distt Raisen - 462046

Sl. No.	Name/ Designation	Address
67	Syed Rafat Ali	M/s Amhaq Healthcare Pvt. Ltd. Plot no.111-112, 129-132 sector-A, Industrial Area, Distt. Raisen, Mandideep -462046
68	K.K. Gupta	M/s Om Bacharbar Thermocol IND. Plot no.18, New Industrial Area No - II, Dist - Raisen Mandideep -462046
69	C.B Malpani	Association of All Industries Plot No. AM-19, Sector B, Industrial Area, Mandideep, Distt.: Raisenc- 462046
70	Sharmila Kumbhat	M/s K-Lite Industries Pvt. Ltd Plot no. E31-E32, Industrial Area, Phase - II, Dist - Raisen Mandideep -462046
71	D.K. Mundra	M/s Nahar Spinning Mills Pvt Ltd Village- Simrai, Dist - Raisen, Mandideep -464993
72	Signatory	M/s M.M Metal Industries Plot No-7-B, Sector-B, Industrial Estate, Distt. Raisen, Mandideep -462046
73	A. Kumar	M/s SEL Manufacturing Co. Ltd Village - Mehatwara, Tehsil - Javar, Distt. – Sehore - 466118
74	Rajeev Agrawal	M/s Dynamic Solutions 95, New Industrial Area-II, Mandideep-462046
75	Seema Jain	M/s Singhai EPS Industries Plot no.155-156, New Industrial Area - II, Mandideep - 462046
76	G. N. Nair	M/s Inspros Engineers Pvt. Ltd. Unit -II E-22, Phase-II, Industrial Area, Satlapur, Mandideep – 462046
77	G. N. Nair	M/s Inspros Engineers Pvt. Ltd. 126, Sector - A, Industrial Area, Mandideep – 462046
78	P.K Arora	M/s Omsai Pump Spares Pvt. Ltd 39-A-B, Sector - C, Industrial Area, Mandideep - 462046
79	Arvind Sharma	M/s Impressionspace Planners Pvt. Ltd. Mandideep
80	Sachindra Mahule	M/s Suntron Systems 68, New Indl. Area II, Mandideep 462046
81	Mukesh Bansal	M/s Bansal Engineering Works Plot No. D-29, Industrial Area, Satlapur, Mandideep
82	Mukesh Bansal	M/s Bansal Bricks Plot No. 197, Industrial Area, Mandideep
83	Dinesh Nimje	M/s CG Power and Industrial Solutions Ltd D-5, Industrial Area, MPAKVN, Mandideep-462046
84	K. N. Shrivastava	M/s Rad Medical Plot No. 54B, Sector B, Industrial Area, Mandideep – 462046

Sl. No.	Name/ Designation	Address
85	K. N. Shrivastava	M/s Alliance Meditech Pvt Ltd D-17, Phase II, New Industrial Area, Satlapur, Mandideep - 462046
86	K.K. Sharma	M/s Paras Electricals Works 75, A-Sector, Industrial Area, Mandideep
87	Harish Chandra Sharma	M/s The Gwalior Forest Products Ltd. PO. Katha Mill, AB Road, Shivpuri - 473551
88	Anurag Nain	M/s M.R. Industries Plot No. 15-16, Industrial Area, Budni
89	Subhash Awachat	Lion Fabrics Pvt Ltd. Bhopal
90	Neil John	United Engineering Industries Pvt. Ltd 50, B-51/A, H- Sector, Industrial Area, Govindpura, Bhopal-462023
91	Signatory	M/s Sai Industries
92	Amitabh Taneja	M/s Shopping Centres Association of India 1st Floor Panchal Iron Works, Plot No. 111 / 3, Marol Co-Operative Industrial Estate, Marol, Andheri (East), Mumbai 400059
93	Shri S. Krishnan	M/s L.K Maheshwari & Co. E-7/ 574 Arera Colony, opposite 1100 quarters, Bhopal
94	Shri Yatish Kumar	M/s T.S Industrys H-Sector, Industrial Area, Govindpura, Bhopal-462023
95	Signatory	M/s Mesh Print, Printing & Packaging Plot No. 105-A, Sector-F, Industrial Area, Govindpura, Bhopal-462023
96	Signatory	M/s Shiv Shakti Metal Corporation F-17, Industrial Area, Govindpura, Bhopal-462023
97	Signatory	M/s Palod Industries 29-B, Sector-D, Mandideep, Distt-Raisen
98	Signatory	M/s Shree Balaji Packaging 119 Sector-1, Industrial Area, Govindpura, Bhopal - 462023
99	Signatory	M/s DGSM Food Pvt Ltd 3-B, Sector-I, Industrial Area, Govindpura, Bhopal-462023
100	Signatory	M/s Satya Biscuits Pvt Ltd. Plot No. 66-A, Sector-H, Industrial Area, Govindpura, Bhopal-462023
101	Signatory	M/s Indiana Fabricators 146-G, H-Sector, Industrial Area, Govindpura, Bhopal-462023
102	Signatory	M/s Sugo Industries 52-53/A, Industrial Area, Govindpura, Bhopal - 462023
103	Signatory	M/s Bharat Air Products Plot No. 1-A, Sector-H, Industrial Area,Bhopal

Sl. No.	Name/ Designation	Address
104	Signatory	M/s Pal Industries 27-C, Sector -H, Industrial Estate, Govindpura, Bhopal
105	R. Kanathe	M/s Betul Media & Publication Pvt. Ltd Near Chhatrapati Shivaji School, Fansl Kahadan, Thana Road, Kothi Bazar, Betul-460001
106	Sanjeev Agarwal	M/s Sakshi Battery Industries Plot No-7-A, Sector-B, Industrial Estate, Mandideep
107	Sanjeev Agarwal	M/s Hitechwear Private Limited 142, Kalpana Nagar, Bhopal
108	Kamal Ubriani	M/s Vikas Foundry & Engineers 12A, Sectore-I, Industrial Area, Govindpura, Bhopal
109	Signatory	M/s Ergo Plast Pvt. Ltd MF-104, Ajay Tower, E5/1, Arera Colony Bhopal-462016
110	Signatory	M/s SV Transformers Govindpura Industrial State Bhopal
111	Signatory	M/s DynoPower Plot No. 34, 35-A, Sectore-B, Industrial Area, Govidpura, Bhopal-462023
112	Signatory	Water Resource Department Jal Sansadhan Bhawan, Tulsi Nagar, Bhopal
113	Signatory	M/s Bhopal Electrical Insulation Pvt. Ltd Plot No.55, Sector-I, Industrial Area, Govindpura, Bhopal -462023
114	Signatory	M/s Amit Industries E-41, Industrial Area, Govindpura, Bhopal -462023
115	Signatory	M/s Capri Paints 109, Sector-I, Industrial Area, Govindpura, Bhopal - 462023
116	Signatory	M/s Ashoka Electronics B-22, Sector-I, Industrial Area, Govindpura, Bhopal - 462023
117	Anshul Jain	M/s Aditya Industries F-8, Smruti Tower, 159 Zone - II M.P Nagar, Bhopal-462011

LIST OF STAKEHOLDERS - WEST DISCOM - TARIFF FY 2020-21

Sl. No.	Name/ Designation	Address
1	Gurmeet Singh	M/s Printwell Offset Printers 113-A Pologround Industrial Estate, Indore - 452003
2	Sumit Purohit	Adroit Industries (India) Ltd 44-59, Sector D-2, Industrial Area, Sanwer Road, Indore-452015
3	Signatory	M/s Vrindavan Cold Storage (Indore) Pvt Ltd Kelod Kartal, Marol Machla Road, Khandwa Road, Indore-452020
4	H. S. Shukla	M/s Oasis Distilleries Ltd. H-102, B-2 Metro Tower, Vijay Nagar, Indore -452010
5	Satish Mittal	M/s Mandi Gobindgarh Steels Pvt. Ltd. 61/1, Sector -F, Sanwer Road, Industrial Area, Indore-452015
6	Sunil Gureja	M/s Manu Steel Works R-18 Polo Ground Industrial Estate, Indore
7	Navin Batra	M/s HHW Care Products (I) Pvt. Ltd. 79, SDA Compound, Lasudia Mori, Dewas Naka, Indore - 452010
8	Signatory	M/s Hertz Electronics Shed No. 35 Sector-D-2, Sanwer Road Industrial Area, Indore 452015
9	Kanhaiyalal Khatri	M/s Vasu Paints Pvt. Ltd., Indore
10	Ashok Chandra Gupta	M/s Mechcutters India 19, Martand Chowk, Indore- 452007
11	Anil Birani	M/s Nirvana Steels 6-A, Sector-B, Sanwer Road, Indore
12	Signatory	M/s Anumay Industries Pvt. Ltd. 2, Ravi Shankar Shukla Marg, Indore
13	Signatory	Omega Manufacturing Company Pvt. Ltd. 3, Ravishankar Shukla Marg, Opp. Power House, Indore-452003
14	Signatory	M/s Supreme Rolls & Shears Pvt. Ltd. 200A & B, Sector-F, Samwer Road, Industrial Area, Indore-452015
15	Zuber Ahmed Ansari	M/s Reliable Steels 8B-9C, Sector-C, Industrial Area, Sanwer Road, Indore - 452015
16	Sanjay Zatakia	M/s Zest Pharma 275 Sector "F" Sanwer Road, Indore
17	Signatory	M/s Kesar Alloys & Metals Pvt. Ltd 109 & 110, Vikram Urbane, Scheme No.54, Mechanic Nagar Extn, B/h Sayaji Hotel, Indore – 452010

Sl. No.	Name/ Designation	Address
18	Signatory	M/s Diwakar Packagings 47, Polo Ground, Indore
19	Saurabh Jain	M/s Prem Textiles International Pvt Ltd 46A/27B, Sector C, Industrial Area, Sanwer Road. Indore-452015
20	Signatory	M/s Shivalik Vyapar Pvt. Ltd Gram-Panchdaria Tech-Sanwer, Indore-453777
21	Somnath Shindey	Shri Vinayaka Filtrade Pvt. Ltd 11-IG, Shekhar Residency, Opp. Hotel Fortune Landmark, P.O. Vijay Nagar, Indore -452 015
22	Signatory	M/s Masand Agro Equipments Pvt. Ltd 70 Shastri Market, Indore- 452007
23	Signatory	M/s Rohit Offset Pvt. Ltd 99, Pologround, Industrial Estate, Indore-452015
24	Signatory	M/s Amit Paper Products 99, Pologround, Industrial Estate, Indore-452015
25	Gopal Garg	Sanoh India Pvt. Ltd Steel Tube Road, Dewas - 455001
26	Signatory	Hind Filters Private Ltd. 1A/8A Industrial Area, A.B. Road, Dewas-455 001
27	Signatory	Shree Laxmi Syntex Pvt. Ltd. 3A-4A, Industrial Area, Ujjan Road, Dewas - 455001
28	Signatory	Dhvani Terefabs Exports Pvt. Ltd 4B, Industrial Area No.2, A.B Road, Dewas - 455001
29	Alok Sharma	Vippy Spinpro Ltd 14-A Industrial Area, A B Road, Dewas-455001
30	Suresh Parwal	Mechno Tech Plot No.1B/3 Industrial Area no.1, A.B. Road, Dewas-455001
31	Balakrishnan.T	Munshiram Industries Plot No. 10, Industrial Area, Ujjan Road, Dewas - 455001
32	Ashok Khandella	Association of Industries Dewas 1/B/1, 1/B/2A, I.S. Gajra Industrial Area No. 1, A. B. Road, Dewas - 455001
33	Signatory	M/s Vippy Industries Ltd 28, Industrial Area, A.B. Road, Dewas-455001
34	Vipin Jain	Kasyap Sweetners Ltd Chetanya Garm, Badnawar, Dist. Dhar - 454660
35	Signatory	M/s Aryawart Yantriky Plot No. 40, Road No.13, Sector No.1, Pithampur, Dist - Dhar-454775
36	Manmohan Gupta	M/s Agya Auto Ltd - Unit 2 Plot No. 51, AB , Sector -3, Pithampur, Dist - Dhar-454774
37	Vyasdeep Gupta	M/s Springtech Suspensions Pvt Ltd Plot No-2, Sector-5, Pithampur, Dist - Dhar-454775

Sl. No.	Name/ Designation	Address
38	ChandraBhan Chaurasia	M/s Amazing Box Creator 59, Sector-III ,MPAKVN, Industrial Area, Pithampur, Dist - Dhar
39	Signatory	Omega Manufacturing Company Pvt. Ltd. Plot No-55B, Sector-II, Industrial Area, Pithampur, Dist - Dhar
40	Abbas Itarsiwala	M/s Raj Safety Glass Company Sector-3, Pithampur, Dhar
41	Signatory	M/s Kesar Ispat Limited Plot No.619-621, Industrial Area, Sector-3, Pithmpur, Dist.Dhar-454775
42	Signatory	M/s Kalindi Fibres Khalghat, Manawar Road, Dharampuri, Distt- Dhar-454449
43	Manoj Gala	M/s Prashanti Engineering Pvt. Ltd. Plot No.60, Industrial area, Sector No.1, Pithampur, Dist Dhar -454775
44	Dileep Kumar	Shri Shakti Vishavkarma Steel Khedapati Hanuman Mandir Road, Distt Ratlam, Namli - 457222
45	Piyush Dakh	Hotel Athithi Palace, Ratlam
46	Signatory	M/s Sarvanand Plast Industries 1605/2, Near Sheetal Dham Sailana Road, Vill-Dhamnod, Distt- Ratlam-457001
47	Mustafa Naalwala	M/s Shaba Cylinder Pvt. Ltd 3, Industrial Area, Maxi Road, Ujjain - 456010
48	Deepak Jaisinghani	M/s India Phosphate 19E/20A, Industrial Area, Maxi Road, Ujjain-456001
49	Ateet Agrawal	M/s Himansh Industries 67 A, Industrial Area, Maxi Road, Ujjain
50	Signatory	M/s Pioneer Engineering Industries 75/8-9, Industrial Area, Maxi Road, Ujjain - 456010
51	Ankit Kumar Lath	M/s Kamal Cotspin Pvt. Ltd. Gran Rahipura, Khandwa Road, Burhanpur – 450331
52	Signatory	Shri. Anand Agro Industries Plot No. /1,2, Village Gawahand, Post Loni, Burhanpur-450331
53	Abhishek Gupta Himanshu Srivastava	MB Power (Madhya Pradesh) Ltd 239, Okhla Industrial Estate, Phase-III New Delhi – 110 020
54	Alok Agarwal	Narmada Bachao Andolan 2, Sai Nagar, Mata Chowk, Khandwa, Madhya Pradesh -450 001
55	Sanjay Gupta	M/s Fair Trade Agri Processors Gram Bagfal Barwaha, Dist-Khargone-451115

Sl. No.	Name/ Designation	Address
56	Signatory	Shri Rajrajeshwar Cotton Pvt. Ltd Warla Road, Sendhwa, Dist. Barwani- 451666
57	Ajay kasat	M/s Raaj Medisafe India Ltd. Pithampur, District-Dhar
58	Ajay kasat	M/s Shriniwas Polyfabrics and Packwell Pvt. Ltd. Pithampur, District-Dhar
59	Pramod Dafaria	M/s. Association of Industries Madhya Pradesh Udyog Bhawan Polo ground Industrial Estate Indore-452015.
60	Ashok Jain	M/s Fluidomat Ltd.
61	Signatory	M/s Fakhari Minerals & Grinding Industries Khandwa Baroda Road, Lakhankot, Alirajpur
62	Signatory	M/s Bhagwati Minerals Off 12, Mahatma Gandhi Marg, Alirajpur
63	Signatory	M/s Leo Paints & Chemicals 18/2 Mangal Udyog Nagar, Palda, Indore
64	Signatory	M/s Geeta Textiles Mills 295/2, Gram Amagird, Ganpati Naka, Alamganj, Burhanpur
65	Signatory	M/s Reliance Plastic Containers 10/A, Agrawal compound, Palda, Indore
66	Signatory	Shivangi Rolling Mills Pvt. Ltd. 305-306, Airen Heights, B/h Pakiza Showroom,14, PU-3 Commercial, Vijay Nagar, A. B. Road, Indore - 452 010 (MP)
67	Signatory	Mamleshwar Agro Fuel Pvt.Ltd. Survey no. 58/1 Ralamandal, Tillor Main Road Behind Gurukripa Cold Storage Village Bihadiya District Indore.
68	Vijay Mundra	M/s. Mundra Steel Re-Rolling Mill D-45/E-50 Sector-'C' Sanwer Road Indore-452015.
69	Shri Rajendra K. Yadav	M/s. Gulmohar Filtech Pvt. Ltd. 80, Industrial Area Extension CAT Road Rau Indore-453331
70	Shri S.M. Jain	M/s. Venus Alloy Pvt. Ltd. 67, Industrial Area, Mandsaur, Madhya Pradesh - 458001
71	Shri S.M. Jain	M/s. All India Induction Furnace Association (MP Chapter) 67, Industrial Area, Mandsaur, Madhya Pradesh - 458001

LIST OF STAKEHOLDERS - EAST DISCOM - TARIFF FY 2020-21

Sl. No.	Name/ Designation	Address
1	Rajendra Agrawal	1995/A, Gyan Vihar Colony, Narmada road
2	Rajesh Choudhary	101, D N Jain Shopping Complex Jabalpur-482002
3	D. Khandelwal	960, Napier Town, Jabalpur
4	Mohinder Singh	M/s Singh Construction Equipments & Machinery Pvt. Ltd., Richhal, Industrial Area, Jabalpur-482010
5	Signatory	M/s Rewa Polymers Plot No.-77, Richhai Industrial Area, Jabalpur - 482010
6	Signatory	M/s Betul Oil Ltd. Village Kaima, Raghuraj Nagar, Distt - Satna- 485001
7	Signatory	M/s Shridhar Industries Katni Pvt Ltd Krishi Upaj Mandi Road, Paharua, Kanti
8	Jaidev Tamrakar	Vindhya Boards Pvt. Ltd. 55, Industrial Area, Satna- 485001
9	Jayant Joshi	M/s Raymond Ltd., B1, AKVN Industrial Growth Centre, Kailash Nagar, Boregaon, Tah. Sausar, Dist. Chhindwara- 480106
10	Signatory	M/s Miraj Drymix Pvt Ltd Borgaon, Saunsar, Mpakvn Growth Center, Chhindwara
11	Signatory	M/s Ramnik Power and Alloys Pvt. Ltd Industrial Area Sarandi, Village Sarandi Tah Waraseoni Dist Balaghat
12	Rahul Nigam	M/s Premium Pipes Jabalpur
13	Signatory	M/s A.P.T. Tiles Garden Road, Garra, Balaghat-481001

TARIFF

SCHEDULES

Annexure-2 (Tariff Schedules for Low Tension Consumers)

ANNEXURE TO THE TARIFF ORDER PASSED BY MPERC FOR FINANCIAL YEAR 2020-21

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, 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	325	NIL

(b) Minimum Charges: Rs. 45 per connection per month as minimum charges is applicable to this category of consumers.

LV 1.2

(i) Energy Charge and Fixed Charge – For metered connection

Monthly Consumption Slab (units)	Energy Charge with telescopic benefit (paise per unit) Urban/ Rural areas	Monthly Fixed Charge (Rs.)	
		Urban areas	Rural areas
Up to 50 units	413	61 per connection	46 per connection
51 to 150 units	505	102 per connection	82 per connection

Monthly Consumption Slab (units)	Energy Charge with telescopic benefit (paise per unit) Urban/ Rural areas	Monthly Fixed Charge (Rs.)	
		Urban areas	**Rural areas**
151 to 300 units	645	23 for each 0.1 kW load	20 for each 0.1 kW load
Above 300 units	665	25 for each 0.1 kW load	23 for each 0.1 kW load

Minimum Energy Charges: Rs. 70 per connection per month as minimum charges towards energy charges are applicable for above categories.

Notes:

1) The fixed charges shall be levied considering every 15 units of consumption per month or part thereof equal to 0.1 kW of load. **Example**: If consumption during the month is 125 units, then the fixed charges shall be levied for 0.9 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: 5th June 2020
Next Meter Reading: 10th July 2020
Consumption period: 36 days
Consumption: 450 units

Slab-wise consumption to be considered for billing:

Slab	Computation of Consumption on Pro-rata basis	Units to be considered for billing (kWh)
0-50	50 units/30 days*36 days	60
51-150	100 units/30 days *36 days	120
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 and DTR meter

Temporary/ DTR meter connection	Energy Charge (paise per unit) Urban/ Rural areas	Monthly Fixed Charge (Rs.)	
		Urban areas	Rural areas
Temporary connection for construction of own house (max. up to three years)	1.25 times the tariff applicable as per schedule LV 1.2 (i)		
Temporary connection for social/ marriage purposes and religious functions.	830	70 for each one kW of sanctioned or connected or recorded load, whichever is highest, for each 24 hours duration or part thereof.	55 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

Minimum Charges: Rs. 1000/- per connection per month is applicable towards energy charges for temporary connection and no minimum charges are applicable for supply through DTR meter for clusters of Jhuggi/Jhopadi.

(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 @ 510 per unit	82 per connection

Note: Minimum charges: No minimum charges are applicable to this category of consumers.

Specific Terms and Conditions for LV-1 category:

a) The Energy Charges corresponding to consumption recorded in DTR meter for clusters of Jhuggi/Jhopadi shall be equally divided amongst all consumers connected to that DTR for the purpose of billing. The Distribution Licensee will obtain consent of such consumers for billing as per above procedure.

b) In case Energy Charges for actual consumption are less than minimum charges, minimum charges shall be billed towards energy charges. All other charges, as applicable, shall also be billed.

c) 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.

d) 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.

e) In case of temporary requirement for renovation/upgradation of premises, additional load is allowed to be used from existing metered connection on the same tariff applicable for permanent connection. Provided that the total load being used in the premises at a time should not exceed 130% of its sanctioned load.

f) 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)	640	153 per kW	122 per kW
Demand based tariff **Mandatory** for Connected load above 10 kW	640	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 consumption:** The consumer shall guarantee a minimum annual 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). However, the load of X-Ray unit shall be excluded while considering the load of the consumer for calculation of minimum consumption. The method of billing minimum consumption 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 Distribution Licensee shall provide Trivector /Bivector Meter capable of recording Demand in kVA/kW, kWh, kVAh. 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:

<table>
<tr><th>Category of consumers/area of applicability</th><th>Energy Charge (paise per unit)</th><th>Monthly Fixed Charge (Rs. per kW)</th><th>Minimum Charges (Rs)</th></tr>
<tr><td>LV 3</td><td></td><td></td><td></td></tr>
<tr><td>Municipal Corporation/ Cantonment board /Municipality / Nagar Panchayat</td><td>563</td><td>306</td><td rowspan="3">No Minimum Charges</td></tr>
<tr><td>Gram Panchayat</td><td>532</td><td>133</td></tr>
<tr><td>Temporary supply</td><td colspan="2">1.25 times the applicable tariff</td></tr>
</table>

Specific Terms and Conditions for LV-3 category:

(a) Incentives for adopting Demand Side Management:

An **incentive** equal to 5 % of Energy Charges shall be given on installation and use of energy saving devices (such as ISI energy efficient motors for pump sets and programmable on-off/ dimmer switch with automation for street lights). **Incentive** will be admissible only if full bill is paid within due dates failing which all consumed units will be charged at normal rates. Such incentive will be admissible from the month following the month in which energy saving devices are put to use and are verified by a person authorized by the Distribution Licensee. This incentive will continue to be allowed till such time these energy saving devices remain in service. The Distribution Licensee is required to arrange wide publicity of above incentive.

(b) Other terms and conditions shall be as specified under General Terms and Conditions of Low Tension Tariff.

Tariff Schedule LV - 4

LT INDUSTRIAL

Applicability:

Tariff **LV-4** is applicable to light, fan and power for operating equipment used by printing press and any other industrial establishments and workshops (where any processing or manufacturing takes place including tyre re-treading). These tariffs are also applicable to cold storage, gur (jaggery) making machines, flour mills, Masala Chakkies, hullers, khandsari units, ginning and pressing units, sugar cane crushers (including sugar cane juicing machine), power looms, dal mills, besan mills, and ice factories and any other manufacturing or processing units (excluding bottling plant) producing/processing food items or processing agriculture produce for preservation/increasing its shelf life and Dairy units (where milk is processed to produce other end products of milk other than chilling, pasteurization etc.)

Tariff:

S. No.	Category of consumers	Monthly Fixed Charge (Rs.)		Energy Charge (paise per unit) – Urban / Rural Area
		Urban Areas	Rural Areas	
4.1	**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
4.1 b	Temporary connection	1.25 times of the applicable tariff		

*** In case of consumers having contract demand up to 20 HP, 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.**

4.2 Seasonal Consumers (period of season shall not exceed 180 days continuously). If the declared season or off-season spreads over two tariff periods, then the tariff for the respective period shall be applicable.				
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
4.2 b	**During Off - season**	Normal tariff as for Non-seasonal consumers on 10 % of contract demand or actual recorded demand, whichever is more	Normal tariff as for Non-seasonal consumers on 10 % of contract demand or actual recorded demand, whichever is more	120 % of normal tariff as for Non-seasonal consumers

Terms and Conditions:

(a) The maximum demand of the consumer in each month shall be reckoned as four times the largest amount of kilovolt ampere hours delivered at the point of supply of the consumer during any continuous fifteen minutes in that month.

(b) Demand based tariff is mandatory for all the LT industrial consumers and the licensee shall provide Tri vector/ Bi vector Meter capable of recording Demand in kVA/ kW, kWh, kVAh and Time of Use consumption.

(c) **Minimum Consumption:** Shall be as per following:

i. **For LT Industries in rural areas:** The consumer shall guarantee a minimum annual consumption (kWh) based on 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 guarantee a minimum annual consumption (kWh) based on 240 units per HP or part thereof of contract demand irrespective of whether any energy is consumed or not during the year.

iii. The consumer shall be billed monthly minimum 10 units per HP per month in rural area and 20 units per HP per month in urban area in case the actual consumption is less than above specified units.

iv. Method of billing of minimum consumption shall be as given in the General Terms and Conditions of Low Tension tariff.

(d) **Additional Charge for Excess Demand:** Shall be billed as given in the General Terms and Conditions of Low Tension Tariff.

(e) **Other Terms and conditions for seasonal consumers**:

i. The consumer has to declare months of season and off season for the current financial year within 60 days of issue of this tariff order and inform the same to the Distribution Licensee. If the consumer has already declared the period of season and off-season during this financial year prior to issue of this order, same shall be taken into cognizance for the purpose and accepted by the Distribution Licensee.

ii. The seasonal period once declared by the consumer cannot be changed during the financial year.

iii. This tariff is not applicable to composite units having seasonal and other category of loads.

iv. 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 financial year as per the tariff in force.

v. 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 financial year as per the tariff in force.

(f) Other terms and conditions shall be as specified under General Terms and Conditions of Low Tension Tariff.

Tariff Schedule LV - 5

AGRICULTURE AND ALLIED ACTIVITIES

Applicability:

The tariff **LV-5.1** shall apply to connections for agricultural pump, chaff cutters, threshers, winnowing machines, seeding machines, irrigation pumps of lift irrigation schemes including water drawn by agriculture pumps for use by cattle and pump connections for the purpose of fodder farming associated to Gaushalas.

The tariff **LV-5.2** shall apply to connections for nurseries, farms growing flowers/ plants/ saplings/ fruits, mushroom and grasslands.

The tariff **LV-5.3** shall apply to connections for fisheries ponds, aquaculture, sericulture, hatcheries, poultry farms, cattle breeding farms and those dairy units only where extraction of milk and its processing such as chilling, pasteurization etc. is done.

The tariff **LV- 5.4** shall apply to connections for permanent agricultural pump, chaff cutters, threshers, winnowing machines, seeding machines, irrigation pumps of lift irrigation schemes including water drawn by agriculture pumps for use by cattle to whom flat rate tariff is applicable and pump connections for the purpose of fodder farming associated to Gaushalas.

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	46	469
(ii)	Above 300 units up to 750 units in the month	57	572
(iii)	Rest of the units in the month	62	600
b)	Temporary connections	62	600
c)	DTR metered group consumers	Nil	459
LV-5.2			
a) (i)	First 300 units per month	46	469
(ii)	Above 300 units up to 750 units in the month	57	572
(iii)	Rest of the units in the month	62	600

S. No.	Sub-Category	Monthly Fixed charges (Rs. per HP)	Energy charges (paise per unit)
b)	Temporary connections	62	600
LV-5.3			
a)	Up to 25 HP in urban areas	102 per HP	530
b)	Up to 25 HP in rural areas	82 per HP	510
c)	Demand based tariff (Contract demand and connected load up to 150 HP) (Mandatory above 25 HP) in urban areas	255 per kW or 204 per kVA of billing demand	600
d)	Demand based tariff (Contract demand and connected load up to 150 HP) (Mandatory above 25 HP) in rural areas	133 per kW or 106 per kVA of billing demand	600

For Agriculture flat rate consumers having load upto 10 HP

S. No.	Agriculture flat rate tariff exclusive of subsidy*.	Charges payable by the consumer in Rs. per HP (for period of 6 months) from April to September	Charges payable by the consumer in Rs. per HP (for period of 6 months) from October to March
LV-5.4			
a)	Three phase- urban	375	375
b)	Three phase- rural	375	375
c)	Single phase- urban	375	375
d)	Single phase- rural	375	375

For Agriculture flat rate consumers having load more than 10 HP

S. No.	Agriculture flat rate tariff exclusive of subsidy*.	Charges payable by the consumer in Rs. per HP (for period of 6 months) from April to September	Charges payable by the consumer in Rs. per HP (for period of 6 months) from October to March
LV-5.4			
a)	Three phase- urban	750	750
b)	Three phase- rural	750	750
c)	Single phase- urban	750	750
d)	Single phase- rural	750	750

*****see para 1.2 of terms and 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:**
Rates payable by the consumer under tariff schedule LV 5.4 are exclusive of subsidy. The bill for the consumer covered under the tariff schedule 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. Energy Department GoMP vide letter No. 8523/F-3-10/2020/13 dated 15.12.2020 has conveyed that the flat rate agriculture consumers having load upto 10 HP will pay Rs 750/- per HP per annum and flat rate agriculture consumers having load more than 10 HP will pay Rs 1500/- per HP per annum in two six monthly equal instalments. The State Government would pay subsidy to the DISCOMs for the difference of applicable tariff for this category and bill payable by the flat rate consumers.

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 metered consumers covered under tariff schedule LV 5.1 and LV 5.4 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

S. No.	Particulars of Energy Saving Devices	Rate of rebate
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 consumption**

(i) **For Metered agricultural consumers (LV-5.1 and LV-5.2):** The consumer shall guarantee a minimum 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 will guarantee a minimum annual consumption (kWh) based on 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 20W 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 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	Monthly Fixed Charges	Energy Charge (Paise/unit)
Electric Vehicle/ Rickshaw charging installations	Rs 100 per kVA or 125 per kW of Billing Demand	600

a) **Additional Charge for Excess demand:** Shall be billed as given in General Terms and Conditions of Low Tension tariff.

b) For the consumers in this category, demand based tariff is mandatory. The Distribution Licensee shall provide Trivector /Bivector Meter capable of recording Demand in kVA/kW, kWh, kVAh.

c) Other terms and conditions shall be as specified under General Terms and Conditions of Low Tension Tariff.

GENERAL TERMS AND CONDITIONS OF LOW TENSION TARIFF

1. **Rural Areas** mean those areas notified by the GoMP vide notification no. 2010/F13 /05/13/2006 dated 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. Rounding off: All bills will be rounded off to the nearest rupee i.e. up to 49 paisa shall be ignored and 50 paisa upwards shall be rounded off to next Rupee.

3. Billing Demand: In case of demand based tariff, the billing demand for the month shall be the actual maximum kVA demand of the consumer during the month or 90% of the contract demand, whichever is higher. The billing demand shall be rounded off to the nearest integer number i.e. fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored.

4. Fixed charges billing: Unless specified otherwise, fractional load for the purposes of billing of fixed charges shall be rounded off to nearest integer i.e. fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored. However for loads less than one kW/HP, it shall be treated as one kW/HP.

5. **Method of billing of minimum consumption:**

   A. **For metered agricultural consumers and other than agricultural consumers horticulture activity - LV 5.1 and LV 5.2**: The consumer shall be billed minimum monthly consumption (kWh) specified for his category for the month in which his actual consumption is less than prescribed minimum consumption.

   B. **For other consumers where applicable**:

   a. The consumer shall be billed one twelfth of guaranteed annual minimum consumption (kWh) specified for his category each month in case the actual consumption is less than above mentioned minimum consumption.

   b. During the month in which actual cumulative consumption equals or is greater than the annual minimum guaranteed consumption, no further billing of monthly minimum consumption shall be done in subsequent months of the financial year and only actual recorded consumption shall be billed.

   c. Tariff minimum consumption shall be adjusted in the month in which cumulative actual or billed monthly consumption exceeds cumulative monthly prorated minimum annual guaranteed consumption. If actual cumulative consumption does not get fully adjusted in that month, adjustment shall continue to be provided in subsequent months of the financial year. The following example illustrates the procedure for monthly billing of consumption where prorated monthly minimum consumption is 100 kWh based on annual consumption of 1200 kWh.

Month	Actual cumulative consumption (kWh)	Cumulative minimum consumption (kWh)	Higher of 2 and 3 (kWh)	Already billed in the year (kWh)	To be billed in the month = (4-5) (kWh)
1	2	3	4	5	6
April	95	100	100	0	100
May	215	200	215	100	115
June	315	300	315	215	100
July	395	400	400	315	85
Aug	530	500	530	400	130
Sept	650	600	650	530	120
Oct	725	700	725	650	75
Nov	805	800	805	725	80
Dec	945	900	945	805	140
Jan	1045	1000	1045	945	100
Feb	1135	1100	1135	1045	90
March	1195	1200	1200	1135	65

6. **Additional Charge for Excess connected load or Excess Demand:** Shall be billed as per 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 the energy charges due to the excess demand or excess connected load

      ii. **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 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 the energy charges due to the excess demand or excess connected load

ii. **Fixed Charges for Excess load:** These charges shall be billed as per following, for the period for which the use of excess load is determined in condition i) above:

1. **Fixed Charges for Excess load when the connected load is found up to 130% of the sanctioned load**: Fixed Charges for Excess load over and above the 120 % of sanctioned load shall be charged at 1.3 times the normal rate of Fixed Charges.

2. **Fixed Charges for Excess load when the connected load exceeds 130% of sanctioned load**: In addition to Fixed Charges in 1 above, connected load found over and above 130 % of the sanctioned load shall be charged at 2 times the normal rate of Fixed Charges.

c) The above billing for Excess Connected Load or Excess Demand, applicable to consumers is without prejudice to the Distribution Licensee's right to ask for revision of agreement and other such rights that are provided under the Regulations notified by the Commission or under any other law.

d) The maximum demand of the consumer in each month shall be reckoned as four times the largest amount of kilovolt-ampere hours delivered at the point of supply of the consumer during any continuous fifteen minutes in that month.

7. Incentives/Rebates:

(a) **Rebate on advance payment**: For advance payment made before commencement of consumption period for which bill is prepared, a rebate of 1 % per month on the amount (excluding security deposit) which remains with the Distribution Licensee at the end of calendar month shall be credited to the account of the consumer after adjusting any amount payable to the Distribution Licensee.

(b) **Incentive for prompt payment**: An incentive for prompt payment @0.50% of the bill amount (excluding arrears, security deposit,, any subsidy given by Government and Government levies viz. Electricity Duty and Cess etc.) shall be given in case the payment is made at least 7 days in advance of the due date of payment where the current month billing amount is equal to or greater than Rs. Ten Thousand. The consumers in arrears shall not be entitled for this incentive.

(c) **Rebate for online bill pment:** 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.

(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 is equal to or more than 85%, incentive shall be payable as follows:

Power Factor	Percentage incentive payable on billed energy charges
Above 85% up to 86%	0.5
Above 86% up to 87%	1.0
Above 87% up to 88%	1.5
Above 88% up to 89%	2.0
Above 89% up to 90%	2.5
Above 90% up to 91%	3.0
Above 91% up to 92%	3.5
Above 92% up to 93%	4.0
Above 93% up to 94%	4.5
Above 94% up to 95%	5.0
Above 95% up to 96%	6.0
Above 96% up to 97%	7.0
Above 97% up to 98%	8.0
Above 98% up to 99%	9.0
Above 99%	10.0

For this purpose, the "average monthly power factor" is defined as the ratio in percentage of total kilowatthours to the total kilovoltampere hours recorded during the month.

All the rebates/incentives shall be calculated on amount excluding Government Subsidy.

8. Other Terms and Conditions:

(a) The Sanctioned Load or Connected Load or Contract Demand 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 beyond this ceiling on more than two occasions in two billing months during the tariff period, the Distribution Licensee may insist on the consumer to avail HT supply.

(b) No metering charges shall be billed in this tariff order.

(c) In case the cheque presented by the consumer is dishonoured, without prejudice to Distribution Licensee's rights to take recourse to such other action as may be available under the relevant law, a service charge of Rs. 200 plus applicable GST per cheque shall be levied in addition to delayed payment surcharge

(d) Other charges as stated in Schedule of Miscellaneous Charges shall also be applicable.

(e) Existing LT power consumer shall ensure that LT capacitor of proper rating is provided. In this regard, the Madhya Pradesh Electricity Supply Code, 2013, 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 at the rates given below:

1. **For the consumer whose meter is capable of recording average power factor**:

    a. Surcharge @ 1 % of energy charges for every 1% fall in power factor below 80% up to 75 %.

    b. Surcharge of 5% plus 1.25% of energy charges for every 1% fall in power factor below 75% up to 70%.

    The maximum limit of surcharge will be 10 % of the energy charges billed during the month.

2. **For LT connections other than e (1) above**The 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, 2013, 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.

(f) Levy of power factor surcharge as indicated hereinabove shall be without prejudice to the rights of the Licensee to disconnect the consumer's installation, if steps are not taken to improve the power factor by installing suitable shunt capacitors.

(g) In case of any dispute on applicability of tariff on a particular LT category, the decision of the Commission shall be final.

(h) The tariff does not include any tax, cess or duty, etc. on electrical energy that may be payable at any time in accordance with any law then in force. Such charges, if any, shall also be payable by the consumer in addition to the tariff charges and applicable miscellaneous charges.

(i) **Delayed payment Surcharge for all categories:** Surcharge at the rate of 1.25 % per month or part thereof on the amount outstanding (including arrears) will be payable if the bills are not paid up to due date subject to a minimum of Rs.5/- per month for total outstanding bill amount up to Rs. 500/- and Rs 10/ per month for amount of bill more than Rs.500/. The part of a month will be reckoned as full month for the purpose of calculation of delayed payment surcharge. The delayed payment surcharge will not be levied for the period after supply to the consumer is permanently disconnected. This provision shall not be applicable to that category where the levy of delayed payment surcharge has been prescribed separately.

(j) In case of conversion of LT connection into HT connection, it is mandatory on the part of both the consumer and the licensee to get the HT agreement executed before availing supply at HT.

(k) Use of mix loads in one connection: Unless otherwise permitted specifically in the tariff category, the consumer using mix loads for different purposes shall be billed for the purpose for which the tariff is higher.

(l) Consumers in the notified Industrial Growth Centres/Industrial areas/Industrial parks receiving supply under urban discipline shall be billed urban tariff.

(m) No change in the tariff or the tariff structure including minimum charges for any category of consumer is permitted except with prior written permission from the Commission. Any action taken without such written permission of the Commission shall be treated as null and void and shall also be liable for action under relevant provisions of the Electricity Act, 2003.

(n) All conditions prescribed herein shall be applicable to the consumer notwithstanding if any contrary provisions exist in the agreement entered into by the consumer with the licensee.

(o) If any difficulty arises in giving effect to any of the provisions of this order, the Commission may, by general or special order, direct the Licensees to do or undertake things, which in the opinion of the Commission is necessary or expedient for the purpose of removing the difficulties.

9. Additional conditions for Temporary Supply at LT:

Temporary supply cannot be demanded by a prospective/ existing consumer as a matter of right but will normally be arranged by the Distribution Licensee when a requisition giving due notice is made. The temporary additional supply to an existing consumer also shall be treated as a separate service and charged subject to following conditions. However, service under Tatkal Scheme shall be made available within 24 hours according to the charges specified in the order of the Commission regarding Schedule of Miscellaneous Charges.

(a) Fixed Charge and Energy Charge for temporary supply shall be billed at 1.25 times the normal charges as applicable to relevant category if not specified otherwise specifically.

(b) Estimated bill amount is payable in advance before serving the temporary connection subject to replenishment from time to time and adjustment as per final bill after disconnection. No interest shall be given to consumers for this advance payment.

(c) The Sanctioned load or connected load shall not exceed 112kW / 150 HP.

(d) The month for the purpose of billing of charges for temporary supply shall mean 30 days from the date of connection. Any period less than 30 days shall be treated as full month for the purpose of billing.

(e) Connection and disconnection charges and other miscellaneous charges shall be paid separately as may be specified in the Schedule of Miscellaneous Charges.

(f) Load factor concession shall not be allowed on the consumption for temporary connection.

(g) Power factor incentive/penalty shall be applicable at the same rate as applicable for permanent connection.

10. 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.

Annexure-3 (Tariff Schedules for High Tension Consumers)

ANNEXURE TO THE TARIFF ORDER PASSED BY MPERC FOR FINANCIAL YEAR 2020-21

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

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	310	590

Note: A rebate of Rs. 2 per Unit in energy charges is applicable. This rebate shall be applicable up to FY 2021-22.

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 2021-22 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) Guaranteed Annual Minimum Consumption shall be 1500 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.

(d) The consumer shall at all times restrict their actual maximum demand within the contract demand. In case the actual maximum demand in any month exceeds 120% of the contract demand, the tariffs given in various schedules shall apply to the extent of the 120% of the contract demand only. The consumer shall be charged for excess demand computed as difference of recorded maximum demand and 120% of contract demand on fixed charges and while doing so, the other terms and conditions of tariff, if any, shall also be applicable on the said excess demand.

(e) **Energy charges for excess demand**: No extra charges are applicable on the energy charges due to the excess demand or excess connected load.

(f) The excess demand so computed as per above, if any, in any month shall be charged at the following rates:

> **(a)** When the recorded maximum demand is up to 130% of contract demand- Excess Demand over and above 115 % of the contract demand—at the rate of Rs. 341 per kVA

(b) When the recorded maximum demand exceeds 130% of contract demand: - In addition to fixed charges in (a) above, recorded demand over and above 30 % of the contract demand shall be charged—at the rate of Rs. 465 per kVA

While doing so, other provisions of electricity tariff (such as tariff minimum charge etc.) will also be applicable on aforesaid excess demand.

(g) Power Factor Penalty:

i. If the average monthly power factor of the consumer falls below 90 percent, penalty will be levied at the rate of one percent of total energy charges for the month for each one percent fall in the average monthly power factor below 90 percent. **For determination of power factor, lag only logic shall be used and no power factor penalty shall be levied if leading power factor is recorded.**

ii. If the average monthly power factor of the consumer falls below 85 percent, the consumer shall be levied a penalty of 5% (five percent) plus @ 2% (two percent) for each one percent fall in his average monthly power factor below 85 percent, on the total amount of bill under the head of "Energy Charge". This penalty shall be subject to the condition that overall penalty on account of low power factor does not exceed 35%.

iii. For this purpose, the "average monthly power factor" is defined as the ratio expressed in percentage of total kilowatthours recorded to the total kilovoltampere hours recorded during the billing month. This ratio (%) shall be rounded off to the nearest integer figure and the fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored.

iv. Notwithstanding what has been stated above, if the average power factor of a new connection of the consumer is found to be less than 90% in any month during the first 6 (six) months from the date of connection, the consumer shall be entitled to a maximum period of six months to improve it to not less than 90% subject to following conditions:

- This period of six months shall be reckoned from the month in which the average power factor was found for the first time to be less than 90%.

- In all cases, the consumer will be billed penal charges for low power factor, but in case the consumer maintains the average power factor in subsequent three months (thus in all four months) to not less than 90%, the charges on account of low power factor billed during the said six months period, shall be withdrawn and credited in next monthly bills.

- The facility, as mentioned herein, shall be available not more than once to new consumer whose average power factor is less than 90% at any time during 6 months from the date of connection. Thereafter, the charges on account of low average power factor, if found less than 90%, shall be payable as by any other consumer.

(h) Emergency feed extension: Provided that if as a result of the emergency in the traction substation or in the transmission line supplying load or part thereof is transferred to an adjacent traction substation, the M.D. for the month for that adjacent traction substation shall be as the average of M.D. for previous three months during which no emergency had occurred.

(i) Other terms and conditions shall be as mentioned in the General Terms and Conditions of High Tension Tariff.

Tariff Schedule - HV - 2

COAL MINES:

Applicability:
This Tariff shall apply to the Coal Mines for power, ventilation, lights, fans, coolers, etc. which shall mean and include all energy consumed for coal mines and lighting in the offices, stores, canteen, compound lighting etc. and the consumption for residential use therein.

Tariff:

Sub category	Monthly Fixed Charge (Rs./kVA of billing demand per month)	Energy Charge for consumption up to 50% load factor (paise / unit)	Energy Charge for consumption in excess of 50% load factor (paise / unit)
Coal Mines			
11 kV supply	675	725	640
33 kV supply		715	620
132 kV supply		695	600
220 kV supply		672	576

Specific Terms and Conditions:

a. **Guaranteed Minimum Consumption** shall be on the following basis :

Supply Voltage	Guaranteed 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 consumption shall be as given in General Terms and Conditions of High Tension Tariff.

b. **Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be as specified in General Terms and Conditions of High Tension Tariff.

c. Other terms and conditions shall be as specified under General Terms and Conditions of High Tension Tariff.

Tariff Schedule - HV - 3

INDUSTRIAL, NON-INDUSTRIAL AND SHOPPING MALLS

Applicability:

The **tariff HV-3.1(Industrial)** shall apply to all HT industrial consumers including mines (other than coal mines) for power, light and fan etc. which shall mean and include all energy consumed for factory and lighting in the offices, main factory building, stores, canteen, residential colonies of industries, compound lighting, common and ancillary facilities such as Banks, General purpose shops, Water supply, Sewage pumps, Police Stations etc. in 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	347	710	610
	33 kV supply	570	705	600
	132 kV supply	660	662	565
	220/400 kV supply	660	620	520
3.2	**Non-Industrial**			
	11 kV supply	327	745	655
	33 kV supply	470	725	630
	132 kV supply	560	680	570
3.3	**Shopping Malls**			
	11 kV supply	336	725	650
	33 kV supply	388	715	610
	132 kV supply	520	665	590
3.4	**Power intensive industries**			
	33 kV supply	565	540	540
	132 kV supply	668	517	517
	220 kV supply	668	510	510

Specific Terms and Conditions:

(a) **Guaranteed Minimum Consumption** for all the above categories shall be on following basis:

Supply Voltage	Sub- category	Guaranteed annual minimum consumption in units (kWh) per kVA of contract demand
For supply at 220/132 kV	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 consumption shall be as given in General Terms and Conditions of High Tension Tariff.

(b) **Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be as specified in General Terms and Conditions of High Tension Tariff.

(c) **Rebate for supply through feeders feeding supply to predominantly rural areas**: HT consumers of this category receiving supply through rural feeders shall be entitled to 5 % rebate on Fixed Charges and 20 % reduction in Minimum Consumption (kWh) as specified above for respective voltage levels.

(d) **Rebate for existing HT connections:** A rebate of Rs. 1/Unit in energy charges is applicable for incremental monthly consumption w.r.t corresponding month of FY 2015-16. For any new consumer other than green field connection served during and after FY 2015-16, the base months for calculation of incremental monthly consumption shall be the first 12 months after availing the connection. The incremental consumption for any month shall be worked out considering the consumption of the corresponding base month.

(e) **Rebate for new HT connections:** A rebate of Rs 1/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 2021-22 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 through their captive power plants located in Madhya Pradesh.

ii. The rebate shall be applicable upto FY 2021-22 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 2020-21) 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 then their consumption from DISCOM may be treated as zero for the base year.

X = the incremental consumption recorded by the captive consumer in any month of the current financial year compared to the same month of base year.
And

Y = the quantum of reduction in units consumed from captive plant (self-consumption) achieved by the captive consumer in any month of the current financial year compared to the same month in the base year.
For all other cases of incremental consumption i.e when X>Y, the existing rebate of Rs 1/unit in energy charges will be applicable on X-Y units (as per the rebate for incremental consumption given in clause d in the Specific Terms & Conditions for HV-3).

Scenario 1: There is no reduction in Captive Generation but only incremental consumption from DISCOM, hence a rebate of Rs 1/unit in energy charges is applicable on incremental consumption from DISCOM (as per the rebate for incremental consumption given in clause d 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 2019-20).
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 2020-21) compared to the same month in last year (FY 2019-20).

iii. The rebate shall be applicable from the date of request submitted by the consumer to the Licensee during FY 2020-21.

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 2017-18		**FY 2018-19**		**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 incrementa l 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 2020-21. This rebate is applicable for FY 2020-21 for the units billed only after the commencement of HT Agreement during FY 2020-21.

(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 maximum continuous one hundred eighty days and for a minimum period of three months. **If the declared season/off-season spreads over two tariff periods, then the tariff for the respective period shall be applicable.**
The licensee shall allow this tariff to any industry having seasonal use only.

This tariff shall also be applicable to mini/micro and small hydel plants to meet the essential requirement of power to maintain the plants without any ceiling as to the period for which supply shall be taken.

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	367	695	590
33 kV supply	408	675	570
During Off-Season			
11 kV supply	Rs. 367 on 10% of contract demand or actual recorded demand during the season, whichever is higher	834 i.e. 120% of seasonal Energy Charge	Not applicable
33 kV supply	Rs. 408 on 10% of contract demand or actual recorded demand during the season, whichever is higher	810 i.e. 120% of seasonal Energy Charge	Not applicable

Specific Terms and Conditions:

a) **Guaranteed Annual Minimum Consumption** shall be 900 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) **Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be as specified in General Terms and Conditions of High Tension Tariff.

c) The consumer has to declare months of season and off season for the current financial year within 60 days of issue of this tariff order and inform the same to the licensee. If the consumer has already informed the Licensee of his season/off-season months during this financial year prior to issue of this order, same shall be accepted and shall be valid for this tariff order.

d) The seasonal period once declared by the consumer cannot be changed during the year.

e) This tariff schedule is not applicable to composite units having seasonal and other category loads.

f) 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 tariff year.

g) 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 36.0% of CD (120% of 30% of CD), the consumer will be billed under HV 3.1 Industrial tariff for the whole financial year as per the tariff in force.

h) 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.

Note: Private water supply scheme, water supply schemes run by institutions for their own use/employees/townships etc. will not fall in this category but billed under the appropriate tariff category to which such institution belongs. In case water supply is being used for two or more different purposes then the highest tariff shall be applicable.

This tariff category shall also apply to supply of power to other than agriculture pump connections i.e. the connection for hatcheries, fisheries ponds, poultry farms, cattle breeding farms, grasslands, vegetables/ fruits/ floriculture/ mushroom growing units etc. and dairy (for those dairy units where only extraction of milk and its processing such as chilling, pasteurization etc. is done). However, in units where milk is processed to produce other end products of milk, billing shall be done under HV-3.1 (Industrial) category.

Tariff:

Sub-Category	Monthly Fixed Charge (Rs. / kVA of billing demand per month)	Energy Charge (paise per unit)
11 kV supply	327	602
33 kV supply		590
132 kV supply		550

Specific Terms and Conditions:

(a) **Guaranteed Annual Minimum Consumption** shall be 720 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) **Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be as specified in General Terms and Conditions of High Tension Tariff.

(c) **Incentive for adopting Demand Side Management**

An **incentive** equal to 5 % energy charges shall be given on installation and use of energy saving devices (such as ISI energy efficient motors for pump sets). **Incentive** will only be admissible if full bill is paid within due dates failing which all consumed units will be charged at normal rates as the case may be. Such incentive will be admissible from the month following the month in which energy saving devices are put to use and its verification by a person authorized by the licensee. The incentive will continue to be allowed till such time these energy saving devices remain in service. The Distribution Licensee is required to arrange wide publicity for above incentive. The Distribution Licensee is required to place quarterly information regarding incentives provided on its web site.

(d) Other terms and conditions shall be as per the General Terms and Conditions of High Tension Tariff.

Tariff Schedule - HV - 6

BULK RESIDENTIAL USERS

Applicability:

The tariff category **HV-6.1** is applicable for supply to industrial or any other township (e.g. that of University or academic institutions, hospitals, MES and Border villages etc.) for domestic purpose only such as lighting, fans, heating etc. provided that the connected load for essential common facilities such as Non-domestic supply in residential area, street lighting shall be within the limits specified hereunder: -

(i) Water supply and Sewage pumping, Hospital - **No limit**

(ii) Non-domestic/Commercial and other General purpose put together **- 20% of total connected load.**

The tariff category **HV-6.2** is applicable for supply to Registered Cooperative Group Housing Societies as per the Ministry of Power's notification no. S.O.798 (E) dated 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, 2013 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	326	625	560
	33 kV supply		610	540
	132 kV supply		590	520
2	**For Tariff Sub-Category 6.2**			
	11 kV supply	204	625	560
	33 kV supply		610	540
	132 kV supply		550	510

Specific Terms and Conditions:

(a) **Guaranteed Annual Minimum Consumption** shall be 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) All individual end-users shall enter into a tripartite agreement with the Management of the Group Housing Society and the licensee for availing supply of electricity in the Society in order to get the benefit of the tariff under this category. 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.

Tariff for all voltages:

Category	Energy Charge (Paise/unit)
Generators synchronization with Grid	960

Terms and Conditions:

(a) The supply for synchronization 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 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	Monthly Fixed Charges	Energy Charge (Paise/unit)
HT Supply	Rs 120 per KVA of Billing Demand	590

Terms and Conditions:

a) **Additional Charge for Excess demand:** Shall be billed as given in General Terms and Conditions for High Tension tariff.

b) For the consumers in this category, demand based tariff is mandatory. The Distribution Licensee shall provide Trivector /Biverctor Meter capable of recording Demand in kVA/kW, kWh, kVAh.

c) Other terms and conditions shall be as specified under General Terms and Conditions for High Tension Tariff.

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GENERAL TERMS AND CONDITIONS OF HIGH TENSION TARIFF

<u>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:</u>

1.1 The contract demand shall be expressed in whole number only.

1.2 Character of Service: The character of service shall be as per the Madhya Pradesh Electricity Supply Code, 2013 as amended from time to time.

1.3 Point of Supply:

(a) The power will be supplied to the consumer ordinarily at a single point for the entire premises.

(b) In case of Railway Traction, the supply at each sub-station shall be separately metered and charged.

(c) In case of coal mines, the power will be supplied ordinarily at a single point for the entire premises. The power may, however, be supplied, on the request of the consumer, at more than one point subject to technical feasibility. In such cases, metering and billing will be done for each point of supply separately.

1.4 **Determination of Demand:** The **maximum demand** of the supply in each month shall be four times the largest number of kilovolt ampere hours delivered at the point of supply during any continuous 15 minutes during the month as per sliding window principle of measurement of demand.

1.5 **Billing demand:** The billing demand for the month shall be the actual maximum kVA demand of the consumer during the month or 90% of the contract demand, whichever is higher. In case power is availed through open access, the billing demand for the month shall be the actual maximum kVA demand during the month excluding the demand availed through open access for the period for which open access is availed or 90% of the contract demand, whichever is higher, subject to clause 3.4 of the M.P. Electricity Supply Code, 2013.

The provisions regarding additional charges for excess demand shall be applicable as per clause 1.15 of these conditions.

Note: The billing demand shall be rounded off to the nearest integer number i.e. the fraction of 0.5 or above will be rounded off to next integer figure and the fraction of less than 0.5 shall be ignored

1.6 **Tariff minimum consumption shall be billed as follows:**

1) The consumer shall be billed for guaranteed annual minimum consumption (kWh) based on number of units per kVA of contract demand specified for his category, irrespective of whether any energy is consumed or not during the year.

2) The consumer shall be billed one twelfth of guaranteed annual minimum consumption (kWh) specified for his category each month in case the actual consumption is less than above mentioned minimum consumption.

3) During the month in which actual cumulative consumption equals or greater than the annual minimum guaranteed 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 guaranteed consumption. If actual cumulative consumption does not get fully adjusted in that month, adjustment shall continue to be provided in subsequent months of the financial year. The following example illustrates the procedure for monthly billing of consumption where prorated monthly minimum consumption is 100 kWh based on annual consumption of 1200 kWh.

Month	Actual cumulative consumption (kWh)	Cumulative minimum consumption * (kWh)	Higher of 2 and 3 (kWh)	Already billed in the year (kWh)	To be billed in the month = (4-5) (kWh)
1	2	3	4	5	6
April	95	100	100	0	100
May	215	200	215	100	115
June	315	300	315	215	100
July	395	400	400	315	85
Aug	530	500	530	400	130
Sept	650	600	650	530	120
Oct	725	700	725	650	75
Nov	805	800	805	725	80
Dec	945	900	945	805	140
Jan	1045	1000	1045	945	100
Feb	1135	1100	1135	1045	90
March	1195	1200	1200	1135	65

1.7 **Rounding off:** All bills will be rounded off to the nearest rupee i.e. up to 49 paisa shall be ignored and 50 paisa upwards shall be rounded off to next Rupee.

Incentive/ Rebate / penalties

1.8 **Power Factor Incentive:**

Power factor incentive shall be payable as follows:

Power Factor	**Percentage incentive payable on billed energy charges**
Above 95% and up to 96%	1.0 (one percent)
Above 96% and up to 97%	2.0 (two percent)
Above 97% and up to 98%	3.0 (three percent)
Above 98 % up to 99%	5.0 (five percent)
Above 99 %	7.0 (seven percent)

1.9 **Load factor calculation**

1) The **Load Factor** shall be calculated as per the following formula:

$$\text{Load Factor (\%)} = \frac{\text{Monthly consumption X 100}}{\text{No. of hours in the billing month X Demand (KVA) X PF}}$$

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.

1.10 **Incentive for advance payment:** For advance payment made before commencement of consumption period for which bill is prepared, an incentive of 1 % per month on the amount which remains with the licensee at the end of calendar month (excluding security deposit) shall be credited to the account of the consumer after adjusting any amount payable to the licensee.

1.11 **Rebate for online bill payment:** Rebate of 0.5% on the total bill amount maximum up to Rs 1000 will be applicable for making online payment of bill.

1.12 **Prompt payment incentive**: An incentive for prompt payment @0.25% of bill amount (excluding arrears, security deposit, meter rent and Government levies viz. Electricity Duty and Cess) shall be given in case the payment is made at least 7 days in advance of the due date of payment where the current month billing amount is equal to or greater than Rs. One Lakh. The consumers in arrears shall not be entitled for this incentive.

1.13 **Time of Day (ToD) Surcharge / Rebate:** This scheme is applicable to the categories of consumers where it is specified. This is applicable for different periods of the day i.e. normal period, peak load and off-peak load period. The surcharge / rebate on energy charges according to the period of consumption shall be as per following table:

Sr. No.	Peak / Off-peak Period	Surcharge / Rebate on energy charges on energy consumed during the corresponding period
1.	Evening peak load period (6 PM to 10 PM)	Normal rate of Energy Charge
2.	Off peak load period (10 PM to 6 AM next day)	20 % of Normal rate of Energy Charge as Rebate

Note: Fixed charges shall always be billed at normal rates i.e. ToD Surcharge / Rebate shall not be applied on Fixed Charges

1.14 **Power Factor Penalty (For consumers other than Railway Traction HV-1)**

(i) If the average monthly power factor of the consumer falls below 90 percent, the consumer shall be levied a penalty @ 1% (one percent), for each one percent fall in his average monthly power factor below 90 percent, on total amount of bill under the head of “Energy Charges”.

(ii) If the average monthly power factor of the consumer falls below 85 percent, the consumer shall be levied a penalty of 5% (five percent) plus @ 2% (two percent) for each one percent fall in his average monthly power factor below 85 percent. , on the total amount of bill under the head of “Energy Charges”. This penalty shall be subject to the condition that overall penalty on account of low power factor does not exceed 35%.

(iii) Should the average monthly power factor fall below 70%, the Distribution Licensee reserves the right to disconnect the consumer's installation till steps are taken to improve the same to the satisfaction of the Distribution Licensee. This is, however, without prejudice to the levy of penalty charges for low power factor in the event of supply not being disconnected.

(iv) For this purpose, the "average monthly power factor" is defined as the ratio expressed in percentage of total kilowatthours to the total kilovoltampere hours recorded during the billing month. This ratio (%) shall be rounded off to the nearest integer figure and the fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored.

(v) Notwithstanding what has been stated above, if the average monthly power factor of a new consumer is found to be less than 90% in any month during the first 6 (six) months from the date of connection, the consumer shall be entitled to a maximum period of six months to improve it to not less than 90% subject to following conditions:

a) This period of six months shall be reckoned from the month following the month in which the average power factor was found for the first time to be less than 90%.

b) In all cases, the consumer will be billed the penal charges for low power factor, but in case the consumer maintains the average monthly power factor in subsequent three months (thus in all four months) to not less than 90%, the charges on account of low power factor billed during the said six months period, shall be withdrawn and credited in next monthly bills.

c) The facility, as mentioned herein, shall be available not more than once to new consumer whose average monthly power factor is less than 90% in any month during 6 months from the date of connection. Thereafter, the charges on account of low average power factor, if found less than 90%, shall be payable as applicable to any other consumer.

1.15 **Additional Charges for Excess Demand**

i. The consumer shall at all times restrict their actual maximum demand within the contract demand. In case the actual maximum demand in any month exceeds 120% of the contract demand, the tariffs given in various schedules shall apply to the extent of the 120% of the contract demand only. The consumer shall be charged for excess demand computed as difference of recorded maximum demand and 120% of contract demand on fixed charges and while doing so, the other terms and conditions of tariff, if any, shall also be applicable on the said excess demand. The excess demand so computed, if any, in any month shall be charged at the following rates from all consumers except Railway Traction.

ii. **Energy charges for excess demand**: No extra charges are applicable on the energy charges due to the excess demand or excess connected load.

iii. **Fixed charges for Excess Demand: -** These charges shall be billed as per following:

1. **Fixed charges for Excess Demand when the recorded maximum demand is up to 130% of the contract demand:** Fixed charges for Excess Demand over and above the 120 % of contract demand shall be charged at 1.3 times the normal fixed charges.

2. **Fixed charges for Excess Demand when the recorded maximum demand exceeds 130% of contract demand**: In addition to fixed charges in 1 above, recorded demand over and above 130 % of the contract demand shall be charged at 2 times the normal fixed charges.

   Example for fixed charges billing for excess demand: If the contract demand of a consumer is 100 kVA and the maximum demand recorded in the billing month is 140 kVA, the consumer shall be billed towards fixed charges as under:-

   a) Up to 120 kVA at normal tariff.

   b) Above 120 kVA up to 130 kVA i.e. for 10 kVA at 1.3 times the normal tariff.

   c) Above 130 kVA up to 140 kVA i.e. for 10 kVA at 2 times the normal tariff.

iv. The excess demand computed in any month will be charged along with the monthly bill and shall be payable by the consumer.

v. The billing of excess demand at higher tariff is without prejudice to the Licensee’s right to discontinue the supply in accordance with the provisions contained in the Madhya Pradesh Electricity Supply Code, 2013.

1.16 **Delayed Payment Surcharge:** Surcharge at the rate of 1.25 % per month or part thereof on the amount outstanding (including arrears) will be payable if the bills are not paid up to due date. The part of a month will be reckoned as full month for the purpose of calculation of delayed payment surcharge. The delayed payment surcharge will not be applicable after supply to the consumer is permanently disconnected.

1.17 All the rebates/incentives shall be calculated on amount excluding Government Subsidy.

1.18 **Service Charge for Dishonoured Cheques:** In case the cheque(s) presented by the consumer are dishonoured, a service charge at the rate of Rs. 1000/- plus applicable GST per cheque shall be levied in addition to delayed payment surcharge as per rules. This is without prejudice to the Distribution Licensee's rights to take action in accordance with any other applicable law.

1.19 **Temporary supply at HT:** The character of temporary supply shall be as defined in the M.P. Electricity Supply Code, 2013. 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 guarantee minimum consumption (kWh) as applicable to the permanent consumers on pro-rata basis 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) The consumer shall pay rental for the metering system.

(f) Connection and Disconnection Charges shall also be paid.

(g) In case existing HT consumer requires temporary supply for the purpose of addition and/or alteration within the premises of existing HT connection, then the consumer is allowed to avail the same through its existing permanent connection to the extent of its Contract Demand and such consumer shall be billed at applicable tariff for permanent connection. Excess demand, if any, shall be treated as per the provisions in clause 1.15 above.

(h) Load factor incentive shall not be allowed on the consumption for temporary connection.

(i) Power factor incentives/penalties and the condition for Time of Day Surcharge/ rebate shall be applicable at the same rate as for permanent connection.

Other Terms and Conditions for permanent connections:

1.20 The existing 11 kV consumer with contract demand exceeding 300 kVA who want to continue to avail supply at 11 kV at his request, shall be required to pay additional charge at 3 %. This additional charge of 3% shall be applicable for enhanced demand recorded for fixed charges and incremental units proportionate to enhanced demand recorded for energy charges.

1.21 The existing 33 kV consumer with contract demand exceeding 10,000 kVA who want to continue to avail supply at 33 kV at his request, shall be required to pay additional charge at 2%. This additional charge of 2% shall be applicable for enhanced demand recorded for fixed charges and incremental units proportionate to enhanced demand recorded for energy charges.

1.22 The existing 132 kV consumer with contract demand exceeding 50,000 kVA who want to continue to avail supply at 132 kV at his request, shall be required to pay additional charge at 1%. This additional charge of 1% shall be applicable for enhanced demand recorded for fixed charges and incremental units proportionate to enhanced demand recorded for energy charges.

1.23 No Metering Charges shall be billed in this Tariff Order.

1.24 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.

1.25 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.

1.26 No changes in the tariff or the tariff structure including minimum charges for any category of consumer are permitted except with prior written permission of the Commission. Any order without such written permission of the Commission will be treated as null and void and also shall be liable for action under relevant provisions of the Electricity Act, 2003.

1.27 In case a consumer, at his request, avails supply at a voltage higher than the standard supply voltage as specified under relevant category, he shall be billed at the rates applicable for actually availed supply voltage and no extra charges shall be levied on account of higher voltage.

1.28 All consumers to whom fixed charges are applicable are required to pay fixed charges in each month irrespective of whether any energy is consumed or not.

1.29 If any difficulty arises in giving effect to any of the provisions of this order, the Commission may, by general or special order, direct the Licensees to do or undertake things, which in the opinion of the Commission is necessary or expedient for the purpose of removing the difficulties.

1.30 All conditions prescribed herein shall be applicable notwithstanding if any contrary provisions, exist in the agreement entered into by the consumer with the licensee.

1.31 Wherever, there is contradiction in general terms & conditions and specific terms & conditions given for any particular category, the specific terms and conditions shall prevail for that category.