MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

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

AGGREGATE REVENUE REQUIREMENT AND RETAIL SUPPLY TARIFF ORDER FOR FY 2021-22

Petition No. 19/2021

CORAM:

S.P.S. Parihar, Chairman
Mukul Dhariwal, Member
Shashi Bhushan Pathak, Member

IN THE MATTER OF:

Determination of Aggregate Revenue Requirement and Tariff for the Financial Year 2021-22 based on application filed by the Madhya Pradesh Industrial Development Corporation (MPIDC) for Special Economic Zone (SEZ) at Pithampur Area, District Dhar, Madhya Pradesh.

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List of Abbreviations

A&G	Administrative and General Expenses
ARR	Aggregate Revenue Requirement
CERC	Central Electricity Regulatory Commission
CSD	Consumer Security Deposit
Discom	Distribution Company
EA 2003	Electricity Act, 2003
EHT	Extra High Tension
FY	Financial Year
GFA	Gross Fixed Asset
GoI	Government of India
GoMP	Government of Madhya Pradesh
HP	Horse Power
HT	High Tension
IND-AS	Indian Accounting Standards
kV	kilo Volt
kVA	kilo Volt Ampere
kVAh	kilo Volt Ampere hour
kW	kilo Watt
kWh	kilo Watt hour
LT	Low Tension
MD	Maximum Demand
MOD	Merit Order Despatch
MP	Madhya Pradesh
MPIDC	Madhya Pradesh Industrial Development Corporation
MPERC	Madhya Pradesh Electricity Regulatory Commission
MPPGCL	Madhya Pradesh Power Generating Company Limited
MPPMCL	MP Power Management Company Limited
MPPTCL	Madhya Pradesh Power Transmission Company Limited
MU	Million Unit
MVA	Mega Volt Ampere
MW	Mega Watt
MYT	Multi-Year Tariff
NTP	National Tariff Policy
O&M	Operation & Maintenance
PGCIL	Power Grid Corporation of India Ltd.
PLF	Plant Load Factor
PPA	Power Purchase Agreement
R&M	Repair & Maintenance
RBI	Reserve Bank of India
RoE	Return on Equity

RPO	Renewable Purchase Obligation
SBI	State Bank of India
SEZ	Special Economic Zone
SLDC	State Load Dispatch Centre

A1: ORDER

(Passed on this 3rd Day of September, 2021)

1.1 This Order relates to Petition no. 19/2021 filed by the MP Industrial Development Corporation, erstwhile MP Audyogik Kendra Vikas Nigam (Indore) Ltd., (hereinafter referred to as MPIDC or the Petitioner or the Licensee) before MP Electricity Regulatory Commission (hereinafter referred to as the Commission or MPERC) for determination of Aggregate Revenue Requirement (ARR) and retail supply tariff for its Special Economic Zone (SEZ) area at Pithampur, District Dhar, Madhya Pradesh for the financial year 2021-22. 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, 2015 {RG-35 (II) of 2015} (hereinafter referred to as the MYT Regulations, 2015), and the first, second and third amendments issued in the said Regulations (hereinafter referred to as the Tariff Regulations or Regulations).

1.2 In accordance with the Tariff Regulations, MPIDC was required to file the petition for determination of ARR and Retail Supply Tariff for FY 2021-22 latest by 31st December, 2020.

1.3 The Petitioner vide letter dated 28th November, 2020, submitted that the Petitioner is in process of finalisation of audited accounts for its power business for FY 2018-19 and provisional accounts for FY 2019-20. Further, the Petitioner stated that the delay is accountable to the amalgamation of several businesses of MPIDC and delay in resumption of operations of the Petitioner and Auditor due to several lockdowns/ restrictions imposed by the Central and State Governments owing to the pandemic situation of COVID-19. The Petitioner requested for additional time and filed the tariff Petition on 30th March, 2021.

1.4 The Commission held the motion hearing on 28th May, 2021, and admitted the Petition. The Commission vide daily order dated 28th May, 2021, directed the Petitioner to publish the public notice in newspapers for obtaining the comments / objections / suggestions from the stakeholders. The public notice was published on 30th May, 2021, in the newspapers Dainik Bhaskar, Indore and Free Press Journal, Indore. Last date for inviting comments / suggestions / objections was 14th June, 2021.

1.5 Meanwhile the Commission vide letter No. MPERC/RE/2021/572 dated 29th May, 2021, directed the Petitioner to file clarification, additional data/information as per observations of the Commission. The Petitioner submitted the additional information / reply to additional data / information requirement on 14th June, 2021.

1.6 In response to the public notice, the Commission has not received any suggestions/ comments/ objections from the stakeholders. Further, none of the stakeholders made any representation before the Commission during the public hearing conducted on 15th

June, 2021 through virtual mode.

Aggregate Revenue Requirement

1.7 The Petitioner has stated that due to outbreak of COVID-19 pandemic and its continued effect, it has not been a business-as-usual year and poses a lot of uncertainty especially with respect to electricity consumption by Industries. Therefore, Petitioners has made projections for energy sales, numbers of consumers and connected load for FY 2021-22 assuming the same energy sales, number of consumers and connected load as envisaged for FY 2020-21.

1.8 The Commission has determined the Aggregate Revenue Requirement (ARR) for the Petitioner for FY 2021-22. The Commission has also considered the impact of MP Transco True-up of FY 2018-19 approved by the Commission in ARR for FY 2021-22. The Commission has observed that revenue at existing tariff is sufficient to meet the ARR requirement approved for FY 2021-22 and the Petitioner is left with revenue surplus of Rs.14.49 Crore. The ARR is based on the future projections, therefore actual revenue requirement would be ascertain only through true-up petition to be filed by the Petitioner for the FY 2021-22. In the true-up, revenue surplus figures would likely to be changed. Further, true-up petitions for FY 2019-20 and FY 2020-21 are yet to be finalised, which may have an impact on future revenue requirement. Therefore, the Commission has decided to pass on 2/3rd of revenue surplus i.e. Rs.9.66 Crore to the consumers in the form of tariff reduction uniformly across the category and 1/3rd of revenue surplus i.e. Rs. 4.83 Crore to be retained with the Licensee, which shall be considered at the time of truing up of FY 2021-22. Revenue surplus, if any determined in True-up of FY 2021-22, shall be considered for adjustment along with the holding cost in subsequent Retail Supply Tariff Orders.

1.9 Abstract of the ARR filed by the Petitioner and admitted by the Commission for FY 2021-22 is shown in the Table below:

Table 1: ARR filed by the Petitioner and admitted by the Commission for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22	
		Filed	**Admitted**
	Sale and Power Purchase Requirement		
1	Sale (MU)	435.67	440.83
2	Distribution loss (%)	1.50%	1.50%
3	Distribution loss (MU)	6.63	6.71
4	Intra state transmission loss (%)	2.59%	2.59%
5	Intra state transmission loss (MU)	11.76	11.90
6	Total power purchase requirement (MU)	454.06	459.44
	Expenditure (Rs Crore)		
7	Purchase of power	165.46	165.24
8	Intra-state transmission (MP Transco) charges	13.40	10.61
9	SLDC charges	0.04	0.05
10	R&M expense	2.07	1.65

Sr. No.	Particulars	FY 2021-22	
		Filed	**Admitted**
11	Employee expenses	3.61	1.89
12	A&G expense (excluding MPERC fees)	2.11	2.11
13	MPERC Fees	0.02	0.01
14	Depreciation	1.68	0.45
15	Interest & finance charges	1.44	1.42
16	Bad Debt	0.97	0.00
17	Land Lease	2.19	0.00
18	**Total expenses**	**192.98**	**183.42**
19	Return on Equity (RoE)	1.13	0.87
20	**Total expenses including RoE**	**194.11**	**184.29**
21	*Less:* Other income	0.03	3.10
22	**Standalone Aggregate Revenue Requirement (ARR)**	**194.08**	**181.19**
23	***Revenue Gap of MP Transco True-up of FY 2018-19***		**2.56**
24	**Total ARR**	**194.08**	**183.75**
	Revenue		
25	Revenue from sale of power at existing tariff	193.53	198.24
26	**Revenue Gap/ (Surplus) at existing tariff (Sr. No.24-Sr. No.-25)**	**0.55**	**(14.49)**
27	Revenue at Proposed / Approved tariff	193.53	188.58
28	**Revenue Gap/ (Surplus) at approved tariff (Sr. No.24-Sr. No.-27)**	**0.55**	**(4.83)**

Implementation of the Order

1.10 The Commission has determined the distribution and retail supply tariff for various consumer categories based on the ARR admitted for FY 2021-22. The retail supply tariffs shall be recoverable by the Petitioner in its licensed area of supply for FY 2021-22. The tariff determined by this Order for FY 2021-22 shall be applicable until amended or modified by an Order of this Commission. It is further ordered that the Petitioner is permitted to issue bills to consumers in accordance with the provisions of this Tariff Order and applicable Regulations.

1.11 The Commission directs that this Order be implemented along with directions given and conditions mentioned in the detailed Order and Tariff Schedules attached to this Order. The Petitioner is directed to take immediate steps to implement this Order after giving seven (7) days public notice in the newspapers, 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 amended from time to time.

1.12 With this Order, the Commission has disposed of the instant petition.

Sd/-	Sd/-	Sd/-
Shashi Bhushan Pathak	**Mukul Dhariwal**	**S.P.S. Parihar**
Member	**Member**	**Chairman**

A2: Public Suggestions and Comments on Licensee's Petition

2.1 The Commission directed the Petitioner to publish the gist of ARR/Tariff proposal in the newspapers to invite comments/objections/suggestions from the stakeholders by 14th June, 2021. The public notice was published on 30th May, 2021 in the newspapers Dainik Bhaskar, Indore and Free Press Journal, Indore. No Comments/Objections/ Suggestions have been received from any stakeholders in this matter.

2.2 The Commission invited all willing stakeholders to present their comments/ suggestions/objections related to the ARR and tariff proposal during the public hearing which was held on 15th June, 2021 on virtual mode. However, none of the stakeholder participated during the public hearing.

A3: AGGREGATE REVENUE REQUIREMENT FOR FY 2021-22

Sales forecast as projected by the Petitioner

Petitioner's Submissions

3.1 The Petitioner has submitted that due to outbreak of COVID-19 pandemic and its continued effect, it has not been a business-as-usual year and poses a lot of uncertainty especially with respect to electricity consumption by Industries. In addition to this, the Petitioner submitted that the major consumption in the Petitioner's area is by the Industrial Consumers only. Therefore, the Petitioner has projected energy sales, numbers of consumers and connected load, for various customer categories for FY 2021-22 assuming the same energy sales, consumers and connected load as envisaged for FY 2020-21.

3.2 Further, the Petitioner submitted that for estimating the energy sales for FY 2021-22, the Petitioner has used the provisional energy sales for April,2020 to December,2020 and has proportionately derived the energy sales for FY 2020-21.

3.3 The Petitioner has used the same connected load for FY 2020-21 which it has observed during April,2020 to December,2020.

3.4 Further, for projecting the number of consumers for FY 2021-22, the Petitioner has used a very nominal escalation factor of 1% over the provisional estimate for FY 2020-21 for HT 33 kV Industrial Consumer Category and for other consumer categories, the Petitioner has not considered any growth.

3.5 Summary of sales projections, number of consumers and connected load for FY 2021-22 is given in the table below:

Table 2: Summary of sales projections, numbers of consumers and connected load filed by the Petitioner for FY 2021-22

Consumers Category	Sales (MU)	No. of Consumers (Nos.)	Connected Load (KVA)
LT Consumer Categories			
Domestic	0.08	8	160
Non-Domestic	0.13	19	74
Public Water Works and Street Light	0.02	1	15
LT Industrial	0.15	8	197
Total LT Sale	**0.38**	**36**	**446**
HT Consumer Categories			
Industrial	**435.28**	**52**	**76,928**
33 KV	435.21	49	76,728
11 KV	0.08	3	200
Non-Industrial	-	-	-
Total HT Sale	**435.28**	**52**	**76,928**
Total LT+HT Sale	**435.67**	**88**	**77,374**

Commission's Analysis

3.6 For FY 2021-22, the Petitioner has projected sale of 435.67 MU on the basis of the provisional energy sales for April, 2020 to December, 2020 and then proportionately derived the energy sales for FY 2020-21. The Commission has taken due cognizance of Petitioner's submissions and responses to data gaps with regards to sales projections.

3.7 The Commission observed that while projecting the sales for FY 2021-22, the actual sales of consumers of FY 2020-21 (i.e. upto December 2020) has been considered by the Petitioner. The sales for this period were impacted due to subdued demand prevailing on account of lockdown imposed to contain COVID-19 pandemic. Accordingly, the Commission has reviewed the sales and connected load forecast submitted by the Petitioner and compared the same with the past trend i.e. actual sales and connected load as per R15 for FY 2017-18 to FY 2020-21. On analysis it was observed that majority of sales to the tune of 99.80% belong to HV-1.1 Industrial consumer category connected at 33 kV. The sales for this category increased at 4 Year CAGR of 7.16%, whereas the connected load correspondingly increased at 4 Year CAGR of 6.55%. So it can be inferred that the increase in sales in past years was commensurate with the increase in connected load. However, from actual data for April 2021 to June 2021, it is observed that the connected load has increased by 1.30% (connected load as per March, 2021 was 77,098 kVA and in April, 2021 was 79,098 kVA). Therefore, considering that the Petitioner is not expecting any further increase in consumer, connected load and uncertainty prevailing due to COVID-19, the Commission consider it appropriate to approve sales considering the growth rate of 1.30% in line with the growth in actual connected load for FY 2021-22 (April 2021 to June 2021) over FY 2020-21.

3.8 For other categories except HV-1.1 (HT Industrial for 33 kV Supply), LV-1 (Domestic), LV-3 (Public Water Works and Street Lights) no particular trend is observed from the past, accordingly the Commission has considered the sales and connected load as submitted by the Petitioner for FY 2021-22.

3.9 In case of LV-1 (Domestic) category, the Commission observed that as per present status there is no consumers under this category. Accordingly, the Commission has considered it appropriate to approve the sales for domestic category as nil.

3.10 For LV:-3 (Public Water Works and Street Lights) category, the Commission observed that there was discrepancy in the submission of the Petitioner with regard to the energy sales, number of consumers and connected load. Therefore, the Commission has considered the sales, connected load and number of consumers at the levels of FY 2020-21.

3.11 Based on the above, the category wise sales admitted by the Commission for FY 2021-22, is as shown below:

Table 3: Summary of sales admitted by the Commission for FY 2021-22

Consumer category	Claimed	Admitted (MU)
LT consumer categories		
Domestic	0.08	0.00
Non-Domestic	0.13	0.13
Public Water Works and Street Light	0.02	0.14
Industrial	0.15	0.15
Total LT Sale	**0.38**	**0.42**
HT Consumer Categories		
Industrial	435.29	440.41
Non-Industrial	0.00	0.00
Total HT Sale	**435.29**	**440.41**
Total LT+HT Sale	**435.67**	**440.83**

Energy / Power Purchase Requirement

Petitioner's Submissions

3.12 The Petitioner has projected the requirement of 454.06 MU for procurement of energy to cater projected sale of 435.67 MU. The Petitioner submitted that for computation of the intra-State transmission losses (MPPTCL system losses), the loss level of 2.59% has been considered, as approved by the Commission in the Retail Supply Tariff Order for Petitioner for FY 2019-20.

3.13 The Petitioner has submitted that the energy requirement has been estimated considering the normative distribution losses of 1.50% for FY 2021-22, as specified in Tariff Regulations, 2015 and its amendments thereof. The Petitioner has further submitted that it has not considered the PGCIL losses for FY 2021-22 as it will be directly procuring power from MP Power Management Co. Ltd. (MPPMCL).

3.14 The Petitioner has filed the energy requirement for FY 2021-22, as shown in the table below:

Table 4: Energy requirement for FY 2021-22 filed by the Petitioner

Sr. No.	Particulars	FY 2021-22	
		%	MU
1	**Energy sales**		
	LT sales		0.38
	HT / EHT sales		435.28
	Total energy sales		**435.67**
2	Distribution losses	1.50%	6.63
3	**Energy requirement at T-D boundary**		**442.30**
4	Intra-state transmission losses	2.59%	11.76
5	**Energy requirement at the State periphery**		**454.06**
6	Inter-state transmission losses	0.00%	-
7	**Total energy requirement**		**454.06**

Commission's Analysis

3.15 The distribution loss level trajectory as specified for the Petitioner in the Tariff Regulations, 2015, as amended from time to time, for the Control Period from FY 2016-17 to FY 2021-22 is given in the table below:

Table 5: Distribution loss trajectory as per Regulations

Sr. No.	Distribution Licensee	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1.	SEZ, Pithampur	2.00%	1.90%	1.80%	1.80%	1.50%	**1.50%**

3.16 Accordingly, for projecting the energy requirement, the Commission has considered the distribution loss for FY 2021-22 at 1.50% in accordance with the Regulations.

3.17 Since the Petitioner is sourcing the entire requirement of power from MPPMCL, there shall not be any external losses. Accordingly, the inter-state transmission losses have not been considered.

3.18 The Commission has considered intra-State transmission losses as 2.59% for FY 2021-22 based on actual intra-state transmission loss for FY 2019-20 as considered in the Retail Supply Tariff Order of FY 2021-22 for MP State DISCOMs.

3.19 The energy/power purchase requirement on the basis of the sales and loss levels admitted by the Commission for FY 2021-22 is as shown in the table below:

Table 6: Energy / power purchase requirement admitted by the Commission

Particulars	FY 2021-22	
	%	MU
Energy sales		
LT sales		0.42
HT / EHT sales		440.41
Total Energy sales		**440.83**
Distribution losses	1.50%	6.71
Energy requirement at T-D boundary		**447.54**
Intra-state transmission losses	2.59%	11.90
Total energy requirement		**459.44**

Assessment of Energy Availability

Petitioner's Submissions

3.20 The Petitioner has submitted that a Bulk Power Supply Agreement (BPSA) and a Supplementary Agreement has been signed between MP Power Management Company Ltd. (MPPMCL) and Petitioner on 29th March, 2016 and 31st March, 2017, respectively, for supply of power on Long term basis up to 45 MW. As per the BPSA, the Bulk Electricity shall be supplied to procurer at the weighted average tariff as determined/approved by the State Commission in tariff order of MPGENCO. The

Petitioner considering increase in number of consumers and demand, increased their contracted capacity to 50 MW from August, 2018 and 55 MW from September, 2020. Further, considering the increase in demand, the Petitioner requested MPPMCL to increase the contracted capacity to 60 MW from 1st July, 2021. The details of energy available as per BPSA have been shown in the Table below:

Table 7: Details filed by the Petitioner for FY 2021-22

S. No	Name of Generation stations	Units allocable (MU)
1	ATPS, Chachai (Unit no. 5)	20.03
2	STPS, Sarni (unit no. 10 & 11)	79.04
3	STPS, Sarni (unit no. 6 & 9)	79.97
4	SGTPS (Unit no 1 to 4)	47.52
5	SGTPS (Unit no.5)	47.52
6	SSTPP (Singaji)	114.14
7	**Total as Allocated**	**388.22**
8	**Balance Remaining Units**	**-**
9	**Total Consumption**	**388.22**

3.21 The Petitioner is also planning to purchase renewable power themselves or through MPPMCL in accordance with Renewable Power Obligation for FY 2021-22. Further, the Petitioner submitted that in order to limit reliance on external sources, the Petitioner has implemented the Solar Rooftop Policy in FY 2020-21 for its consumers and expects its benefits to begin from FY 2021-22 for meeting a part of Solar RPO.

3.22 To comply with Renewable Purchase Obligation, power purchase requirement from renewable sources as worked out by the Petitioner is shown in the table below:

Table 8: Renewable Power Purchase Requirement as submitted by the Petitioner for FY 2021-22

Particulars	FY 2021-22
RPO Solar (%)*	6.00%
RPO Non-Solar (%)*	8.50%
Total	**14.50%**
Ex-bus requirement	454.06
RPO Solar (MU)	27.24
RPO Non-Solar (MU)	38.60
Total (MU) for RPO	**65.84**

**Petitioner has incorrectly considered the Solar and Non-solar RPO for FY 2021-22*

3.23 Annual projected availability as filed by the Petitioner is shown in the table below:

Table 9: Energy Availability as filed by the Petitioner for FY 2021-22

Sr. No.	Source	Availability (MU)
1	MPPMCL	**388.22***
2	RPO Obligation	**65.84**
	Total	**454.06**

* *Submitted in Reply to the Data Gap*

Commission's Analysis

3.24 The Petitioner has projected to procure 60 MW from MPPMCL for FY 2021-22 to cater its energy demand. The Commission has observed that the Petitioner requested MPPMCL for increasing its contracted capacity from 55 MW to 60 MW on the same terms and conditions of its existing Bulk Power Supple Agreement (BPSA). The consent for the same was provided by MPPMCL vide letter dated 29th June, 2021, from 1st July, 2021. Therefore, the Commission has considered the contracted capacity of 60 MW to be purchased from MPPMCL in accordance with the terms and conditions as per the BPSA from 1st July, 2021.

3.25 Further, the Commission has taken cognizance of surplus power available with MPPMCL as per retail tariff Petition for FY 2021-22 for MP State DISCOMs. Accordingly, the Commission has considered energy requirement upto availability from the allocated generating stations and any shortfall in availability from these stations to meet energy requirement is to be catered from surplus power available with the MPPMCL / MP State DISCOMs at weighted average rate of power purchase towards allocated stations as approved by the Commission in tariff order for MP Genco.

3.26 To compute the availability from allocated stations, the Commission has not considered the allocation from STPS, Sarni (Unit No. 6 & 9) generating station in line with the approach followed in Retail Supply Tariff Order of FY 2021-22 for MP State DISCOMs. Therefore, the Commission has worked out the availability by excluding the contracted capacity of STPS, Sarni Units No. 6 & 9 and proportionating remaining allocated generating stations i.e. ATPS, Chachai (Unit No. 5), STPS, Sarni (unit no. 10 & 11), SGTPS (Unit no.5), SSTPP (Singaji) and SGTPS (Unit no 1 to 4). Further, to meet its balance energy requirement the Petitioner may purchase power from MPPMCL at the weighted average tariff in accordance to the conditions specified in the BPSA.

3.27 Accordingly, to project the energy availability from the allocated generating stations to the Petitioner for FY 2021-22, the Commission has considered the energy availability as approved in the Retail Supply Tariff Order for State DISCOMs for FY 2021-22 against each generating stations and prorated the same for contracted capacity of the Petitioner. The computation of energy availability from these generating stations is shown in table as follows:

Table 10: Details of energy available from MPPMCL for FY 2021-22

Name of Allocated Generating Stations	Installed Capacity (MW)	Total Availability as per Tariff Order for DISCOMs for FY 2021-22 (MU)	Allocation to Petitioner as per BPSA (MW)#	Availability as per allocation (MU)$
	A	B	C	D
ATPS, Chachai (Unit no. 5)	210	1,576.76	3.88	28.50
STPS, Sarni (Unit no. 10 & 11)	500	3,405.66	9.23	61.56

Name of Allocated Generating Stations	Installed Capacity (MW)	Total Availability as per Tariff Order for DISCOMs for FY 2021-22 (MU)	Allocation to Petitioner as per BPSA (MW)#	Availability as per allocation (MU)$
	A	B	C	D
SGTPS (Unit no. 1 to 4)	840	4,823.42	15.51	87.19
SGTPS (Unit no.5)	500	3,278.61	9.23	59.27
SSTPP (Singaji)	1,200	7,209.32	22.15	130.32
Total availability from MPPMCL	**3,250**	**20,293.77**	**60.00**	**366.85**

 # Allocated capacity of 55 MW upto 30th June 2021 and 60 MW from 1st July, 2021
$ Prorated availability for 55 MW capacity for period from April 2021 to June 2021 and for 60 MW capacity for period from July 2021 onwards

3.28 Further, 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 October 02, 2015. Thereafter, the Commission had issued Sixth Amendment to the said Regulation, as per which, minimum quantum of electricity to be purchased from Renewable sources of energy is 8.00% from Solar and 9% from Non-Solar sources for FY 2021-22.

3.29 Accordingly, the Commission has computed the quantum of solar and non-solar power purchase requirement based on the total energy requirement admitted for FY 2021-22, excluding requirement met through hydro sources, as shown in the table below:

Table 11: Renewable Purchase Obligation worked-out by the Commission

Particulars	FY 2021-22
RPO Solar	8.00%
RPO Non-Solar	9.00%
Total	**17.00%**
Ex-bus requirement (MU)	459.44
RPO Solar (MU)	36.76
RPO Non-Solar (MU)	41.35
Total (MU)	**78.10**

3.30 The Commission sought preparedness of the Petitioner to fulfil RPO and existing tied up capacity for purchase of power from Solar and Non-solar plants. The Petitioner submitted that it is planning to purchase renewable power on its own or through MPPMCL in line with Renewable Power Obligation (RPO) for FY 2021-22. Further, the Petitioner submitted that in order to limit reliance on external sources, the Petitioner has implemented the Solar Rooftop Policy in FY 2020-21. As per the present status, one consumer is in the process to install Solar Rooftop at its premises, Petitioner is also in discussion with other consumers for further implementation of Solar Rooftop. The Commission has observed that the MP State DISCOMs do not have adequate procurements from Solar and Non-Solar sources to meet their RPO requirements and hence the Petitioner will not be able to procure Solar and Non-Solar renewable power from MPPMCL. Accordingly, the Commission directs the Petitioner to comply its RPO obligation for FY 2021-22 through purchase of power from RE generators as detailed in subsequent section *'Renewable Purchase Obligation"*.

3.31 The energy availability for FY 2021-22 as admitted by the Commission is given in the table below:

Table 12: Ex-bus energy availability as admitted by the Commission for FY 2021-22

Source	Availability (MU)
Total Requirement	459.44
Renewable Power Purchase as per RPO	78.10
Requirement to be met from MPPMCL	381.33
Availability from allocated generating stations	*366.85*
Additional requirement to be met from MPPMCL	*14.49*

Assessment of Power Purchase Cost

Petitioner's Submission

3.32 The Petitioner has considered station-wise fixed charges for FY 2021-22 on the basis of 5% escalation on the rates approved by the Commission as per the Retail Tariff Order for MPIDC for FY 2020-21, dated 12th March, 2021.

3.33 The Petitioner has submitted that the station-wise energy charges of FY 2020-21, approved by the Commission in the Retail Tariff for the MPIDC for FY 2020-21 have been escalated by 5% to arrive at the energy charges for the FY 2021-22 on the basis of the past trends in prices witnessed in cost of coal, transportation & logistics etc. It is pertinent to note that CERC, vide its notification No. Eco-1/2017-CERC dated 30th May, 2017, has indicated escalation rate of 13.78% for domestic coal as the escalation rate for the purpose of payment for procurement of power by Distribution Licensees. Therefore, the Petitioner finds it prudent to assume an escalation rate of 5% over the energy charges of FY 2020-21 to arrive at the energy charges for FY 2021-22.

3.34 Per unit rate for Long Term Power Procurement works out to Rs. 3.80/kWh for FY 2021-22 as per the above methodology. The detail of the same has been provided in table below:

Table 13: Details of cost filed by the Petitioner for FY 2021-22

S. No	Name of Generation stations	Fixed cost allocable to MPIDC in Rs. Crore (1)	Units allocable to MPIDC (MU)	Variable Cost (Rs/kWh)	Variable Cost in Rs Crore (2)	Power Purchase Cost (Rs. Crore) (1+2)	Total (Rs/kWh)
		A	B	C	D=C*B/10	E=A+D	F=E*10/B
1	ATPS, Chachai (Unit no. 5)	3.12	20.03	1.76	3.53	6.65	3.32
2	STPS, Sarni (Unit no. 10 & 11)	6.30	79.04	2.73	21.58	27.88	3.53

S. No	Name of Generation stations	Fixed cost allocable to MPIDC in Rs. Crore (1)	Units allocable to MPIDC (MU)	Variable Cost (Rs/kWh)	Variable Cost in Rs Crore (2)	Power Purchase Cost (Rs. Crore) (1+2)	Total (Rs/kWh)
		A	B	C	D=C*B/10	E=A+D	F=E*10/B
3	STPS, Sarni (Unit no. 6 & 9)	5.96	79.97	2.25	17.97	23.93	2.99
4	SGTPS (Unit no. 1 to 4)	10.69	47.52	2.54	12.07	22.77	4.79
5	SGTPS (Unit no.5)	5.81	47.52	1.98	9.43	15.24	3.21
6	SSTPP (Singaji)	17.19	114.14	2.98	34.04	51.23	4.49
7	**Total as Allocated**	**49.07**	**388.22**	**-**	**98.62**	**147.69**	**3.80**
8	**Balance Remaining Units**	**-**	**-**	**-**	**-**	**-**	**-**
9	**Total Allocation**	**49.07**	**388.22**	**-**	**98.62**	**147.69**	**3.80**

Commission's Analysis

3.35 The Commission has noted that a Bulk Power Supply Agreement (BPSA) and a Supplementary Agreement has been signed between MP Power Management Company Ltd. (MPPMCL) and Petitioner on 29th March, 2016 and 31st March, 2017, respectively, for supply of power on Long term basis up to 45 MW. Further, the Petitioner increased its contracted capacity to 50 MW from August, 2018, thereafter to 55 MW from 1st September, 2020 and 60 MW from 1st July, 2021.

3.36 Accordingly, based on BPSA, the Commission has considered the Energy Charge and proportionate Fixed Charges for the allocated generating stations as per Retail Supply Tariff Order of FY 2021-22 for MP State DISCOMs. The Commission has considered the purchase of additional energy requirement (above allocated 60 MW) by the Petitioner from MPPMCL at weighted average rate of Rs. 3.78/kWh as shown in table no. 16. Accordingly, the admitted fixed cost, variable cost and total power purchase cost from MPPMCL are shown in the tables below:

Table 14: Fixed Cost of Power Purchase from MPPMCL admitted for FY 2021-22

Allocated Generating station	Installed Capacity (MW)	Allocation to Petitioner as per BPSA (MW)#	Fixed Cost for the approved for Station (Rs. Crore)	Proportionate Fixed Cost for the Petitioner (Rs. Crore)
	A	B	C	D
ATPS, Chachai (Unit no. 5)	210	3.88	190.32	3.44
STPS, Sarni (Unit no. 10 & 11)	500	9.23	626.97	11.33
SGTPS (Unit no. 1 to 4)	840	15.51	390.47	7.06
SGTPS (Unit no.5)	500	9.23	292.26	5.28
SSTPP (Singaji)	1,200	22.15	1,119.43	20.24
Total	**3,250**	**60.00**	**2,619.45**	**47.35**

 # Allocated capacity of 55 MW upto 30th June 2021 and 60 MW from 1st July 2021

Table 15: Variable Power Purchase cost from MPPMCL admitted for FY 2021-22

Generating stations	Utilization by Petitioner (MU)	Variable Charge (Rs./ Unit)	Variable Cost (Rs. Crore)
	A	B	C=A*B/10
ATPS, Chachai (Unit no. 5)	28.50	1.73	4.93
STPS, Sarni (Unit no. 10 & 11)	61.56	2.37	14.59
SGTPS (Unit no. 1 to 4)	87.19	2.50	21.80
SGTPS (Unit no.5)	59.27	2.02	11.97
SSTPP (Singaji)	130.32	2.93	38.18
Additional Purchase from MPPMCL	14.49	3.78	5.48
Total	**381.33**	**2.54**	**96.66**

Table 16: Total Power Purchase cost from MPPMCL admitted for FY 2021-22

Generating stations	Fixed Cost (Rs. Crore)	Variable Cost (Rs. Crore)	Power Purchase Cost (Rs. Crore)	Utilization by Petitioner (MU)	Total Energy Rate (Rs/Unit)
	A	B	C=A+B	D	E=C/D*10
ATPS, Chachai (Unit no. 5)	3.44	4.93	8.37	28.50	2.94
STPS, Sarni (Unit no. 10 & 11)	11.33	14.59	25.92	61.56	4.21
SGTPS (Unit no 1 to 4)	7.06	21.80	28.86	87.19	3.31
SGTPS (Unit no.5)	5.28	11.97	17.26	59.27	2.91
SSTPP (Singaji)	20.24	38.18	58.42	130.32	4.48
Additional Purchase from MPPMCL		5.48	5.48	14.49	3.78
Total	**47.35**	**96.96**	**144.31**	**381.33**	**3.78**

Renewable Purchase Obligation (RPO)

Petitioners Submissions

3.37 The Petitioner has considered per unit rate for renewable power as Rs. 2.51/kWh for solar energy and Rs. 2.83/kWh for non-solar energy for FY 2021-22, on the basis of the rates approved by the Commission as per the Retail Supply Order for MPIDC for FY 2020-21 dated 12th March, 2021.

3.38 Details of the power purchase cost towards RPO compliance as filed by the Petitioner for FY 2021-22 is given in the table below:

Table 17: Details of RPO cost filed by the Petitioner for FY 2021-22

Sr. No.	Particulars	Power procurement rate (Rs. /Unit)	Power to be procured (MU)	Amount (Rs. Crore)
1	Solar	2.51	27.24	6.84
2	Non-Solar	2.83	38.60	10.92
	Total		**65.84**	**17.76**

Commission's Analysis

3.39 The Commission has observed that the MP State DISCOMs do not have adequate procurement from Solar and Non-Solar sources to meet their RPO requirements and hence the Petitioner may not be able to procure Solar and Non-Solar renewable power from MPPMCL.

3.40 Accordingly, in view of the competitive rates prevailing in the market, the Commission directs the Petitioner to fulfil its Solar and Non-Solar RPO by procuring power from Solar and Non-Solar RE sources at the rate of Rs. 2.51/kWh and Rs.2.83/kWh, respectively, in line with rates considered in Retail Tariff Order for FY 2021-22 of MP State DISCOMs.

3.41 Accordingly, the cost for fulfilment of RPO worked out is shown in the table below:

Table 18: Power purchase cost for fulfilment of RPO computed by the Commission

Particulars	Renewable Purchase		
	Rate	Quantum	Cost
	Rs. /kWh	MU	Rs. Crore
Solar	2.51	36.76	9.23
Non-Solar	2.83	41.35	11.70
Total		**78.10**	**20.93**

3.42 Further, the Commission directs the Petitioner to explore all the possible options to avail cheaper power for fulfilment of RPO obligation for the benefit of the consumers.

3.43 Total power purchase cost filed by the Petitioner and as admitted by the Commission for FY 2021-22 is summarized in the following table:

Table 19: Summary of the total power purchase cost filed by the Petitioner and admitted by the Commission for FY 2021-22

Source	Particulars	Claimed	Admitted
MPPMCL	Energy (MU)	388.22	381.33
	Amount (Rs. Crore)	147.69	144.31
	Weighted average Rate (Rs. /kWh)	3.80	3.78
RE purchase	Energy (MU)	65.84	78.10
	Amount (Rs. Crore)	17.76	20.93
	Weighted average Rate (Rs. /kWh)	2.70	2.68
Total	**Energy (MU)**	**454.06**	**459.44**
	Amount (Rs. Crore)	**165.45**	**165.24**
	Average Rate (Rs. /kWh)	**3.64**	**3.60**

Intra - State Transmission and SLDC Charges

Petitioner's Submission

3.44 The Petitioner has computed the transmission charges of MPPTCL on the basis of 5% nominal escalation of the provisional transmission charges of FY 2020-21. Since, the contracted capacity is projected to increase from 55 MW to 60 MW in FY 2021-22. Further, the Petitioners submitted that in case the actual transmission charges payable to MPPTCL are higher than the approved charges, the same would be sought at the time of true-up.

3.45 The Petitioner has considered SLDC charges same as approved by the Commission in the Retail Supply Order for MPIDC for FY 2020-21 dated 12th March, 2021.

3.46 Accordingly, the intra-State transmission charges and SLDC charges filed by the Petitioner for FY 2021-22 is shown in the table below:

Table 20: Intra-State Transmission charge and SLDC Charge filed by the Petitioner for FY 2021-22

Sr. No.	Particulars	Amount (Rs. Crore)
1	Intra-state transmission charges	13.40
2	SLDC charges	0.04

Commission's Analysis

3.47 The Commission has admitted intra state transmission charges as per the MPPTCL MYT Order dated 19th May, 2021 in Petition No. 45 of 2020 as shown in the Table below:

Table 21: Intra-State transmission charges admitted by the Commission for FY 2021-22

Particulars	Amount (Rs. Crore)
Intra-state transmission charges	10.61

3.48 The Commission has considered SLDC charges for FY 2021-22 as per the latest available SLDC Tariff Order dated 23rd November, 2020 in Petition No. 46 of 2019.

3.49 Accordingly, the SLDC charges admitted by the Commission for FY 2021-22 is shown in the table below:

Table 22: SLDC charges admitted by the Commission for FY 2021-22

Particulars	Amount (Rs. Crore)
SLDC charges	0.05

Pooled Power Purchase Cost

3.50 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."

3.51 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 23 : Pooled Power Purchase cost for FY 2021-22

Particulars	FY 2021-22
Power Purchase Requirement excluding RE sources (MU) Ex-Bus	381.33
Total Power Purchase Cost excluding RE sources (Rs Crore)	144.31
Pooled Power Purchase Cost (Rs/kWh)	**3.78**

Capital Expenditure Plan/ Capitalization of Assets

Petitioner's Submissions

3.52 The Petitioner has submitted the scheme wise projected capital expenditure for the FY 2021-22. Details of Capital Expenditure claimed by the Petitioner are shown in the table below:

Table 24: Details of Capex submitted by the Petitioner for FY 2021-22

Particulars	Amount (Rs. Crore)
Computers	**-**
Buildings	**0.00**
Boundary Wall	0.00
Drains	0.00
Street light laying	0.00
WBM Road	0.00
Building	0.00*
Logistic Hub	0.00
Plant and Machinery	**8.89**
Sub-station	8.89
CCTV Camera	0.00
Total	**8.89**

**Submitted in Reply to Data Gaps*

3.53 The Petitioner has submitted that the funding of capitalization is envisaged through various sources categorized under four heads namely Consumer Contribution, Grants, Equity and Debt. The capitalisation is proposed to be financed by consumer contribution of Rs. 0.49 Crore and the remaining amount is to be funded through debt and equity in the ratio of 70:30.

Commission's Analysis

3.54 The Commission observed that the Petitioner has not submitted the details of the capital investment in accordance to the provisions of the Regulations. The Commission directed the Petitioner to submit the details with justification towards claimed capital investment. In reply the Petitioner submitted that the proposed capital expenditure for FY 2021-22 is majorly for the installation of an additional transformer of 63 MVA in its 132/33 kV sub-station switchyard, for optimising increasing load on power transformer and ensuring redundancy in the distribution network. Further, the Petitioner submitted that the Petitioner has already filed a separate petition for seeking approval of such capital expenditure with the Commission.

3.55 The Commission has observed that the Petitioner has filed a Petition for approval of the capital expenditure for FY 2021-22, which is under consideration. Therefore, the Commission has decided to provisionally consider the additional capitalisation of Rs. 8.89 Crore as claimed by the Petitioner for FY 2021-22. However, approval of capitalisation for FY 2021-22 at the time of true-up, shall be subject to approval of Capital Expenditure plan by the Commission and actual capitalisation.

Table 25: Capitalization admitted for FY 2021-22 (Rs. Crore)

Particulars	Claimed	Approved
Addition to GFA	8.89	8.89

Operations and Maintenance Expenses

Petitioner's Submissions

Employee Expenses

3.56 The Petitioner submitted that normative employee expenses for FY 2021-22, as notified in the MYT Regulation, 2015 and its amendment thereof has been considered.

3.57 Further, the Petitioner submitted that the Dearness allowance, terminal benefits and pension paid for FY 2019-20 (as per provisional accounts) have been considered for FY 2021-22. No escalation has been considered for DA and terminal benefits while projecting for FY 2021-22. Arrears of the 7th pay commission for FY 2021-22 has been projected based on provisional amount paid to the employees in FY 2019-20.

3.58 Accordingly, total employee expense claimed by the Petitioner is shown in the table below:

Table 26: Total employee expenses filed by the Petitioner for FY 2021-22

Sr. No.	Particulars	Amount (Rs. Crore)
1	Employee expenses excluding arrears, DA, terminal benefits and incentives	1.33
2	DA	1.62
3	Terminal benefits	0.35
4	7th Pay Commission Arrears	0.15
	Total employee expenses	**3.61**

A&G Expenses

3.59 The Petitioner submitted that Administrative and General (A&G) expenses have been projected on normative basis for FY 2021-22 as notified in the MYT Regulation, 2015 and its amendment thereof .

3.60 A&G expenses filed by the Petitioner are shown in the table below:

Table 27: A&G expenses filed by the Petitioner for FY 2021-22

Particulars	Amount (Rs. Crore)
A&G expenses	2.11

R&M Expenses

3.61 The Petitioner has submitted that it has entered into agreement with PTC India Ltd on 1st January, 2020 to carry out all R&M Expenses of its Electrical Network and also to provide consultancy services in various techno-commercial matters relating to the distribution and supply of electricity in the Special Economic Zone. Agreement with PTC India Ltd. will remain valid for three years.

3.62 The Commission had considered this expenditure in its earlier Tariff Order for the FY 2013-14, FY 2014-15 and FY 2015-16. The relevant extracts of the Tariff Order for FY 2013-14 dated September 10, 2013 has been reproduced below:

> *"2.47 The Commission noticed that the petitioner has filed O&M expenses as per the Regulations and has also filed the expenses as per the agreement signed with MPPKVVCL, Indore dated March 26, 2013. The petitioner has requested that the expenses in accordance with the agreement executed by them with MPPKVVCL be allowed. MPPKVVCL has to undertake all activities related to O&M expenses and also to provide consultancy services in various techno-commercial matters relating to the distribution and supply of electricity in the SEZ area.* ***The Commission is of the view that looking at the difficulties faced by the petitioner in the past related to its power business, it would be prudent to consider the contract between the petitioner and MPPKVVCL, Indore in the interest of the consumers. MPPKVVCL is a State owned Distribution Licensee and has expertise in operation and maintenance of power distribution system. [Emphasis Added]****".*

3.63 With PTC India managing R&M activities of the Petitioner various aspects related to distribution of power have improved considerably, including:

- The loss levels have reduced significantly, and hard efforts are being pushed to reduce it further and bring the same in the trajectory as approved by MPERC.
- The Petitioner has successfully upgraded its connectivity levels to grid from 33 kV to 132 kV voltage level.
- Quality of supply has improved considerably with minimum tripping and uninterrupted supply of power.

- Scheduling practices are optimized resulting into effective procurement.
- Number of incoming and outgoing feeders have been optimized and increased resulting into redundant supply, appropriate loading levels, load bifurcation and further reduction of distribution losses.
- Customer satisfaction level have improved with implementation of 24x7 call center and expeditious resolution of network and supply related issues.

3.64 Accordingly, R&M expenses projected is shown in the table below:

Table 28: R&M expenses filed by the Petitioner for FY 2021-22

Particulars	Amount (Rs. Crore)
R&M expenses	2.07

MPERC Fees

3.65 The Petitioner has projected MPERC fees as Rs. 0.02 Crore for FY 2021-22, as observed in recent years.

Commission's Analysis

3.66 Tariff Regulations, 2015 and its amendment thereof specify normative Operation and Maintenance (O&M) Expenses for the Petitioner. 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 2021-22 have been specified in the 3rd amendment to the Tariff Regulations, 2015, notified on 25th November, 2020. Accordingly, the same has been considered by the Commission for FY 2021-22. Further, the Regulations provide approval of R&M expenses as 5% of opening GFA for the FY 2021-22. These norms exclude pension, terminal benefits and incentive to be paid to employees, taxes payable to the Government and fee payable to MPERC.

3.67 The Commission has considered the Employee Expenses in accordance to the provision of the Regulations for FY 2021-22. Further, the Commission has considered terminal benefits for FY 2021-22 considering the actual terminal benefit incurred during FY 2017-18, without any escalation, being the latest available audited figures.

3.68 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 2021 to June 2021 and projected the DA @ 17% for July 2021 to December 2021 and DA @ 28% for January 2022 to March 2022 as allowed to the State DISCOMs in Retail Supply Tariff Order for FY 2021-22.

3.69 As regards MPERC fees, the Commission has considered as per the actual fees paid in FY 2021-22.

3.70 The Commission has considered Administrative & General (A&G) and Repair & Maintenance (R&M) expenses as per the norms specified in the Regulations. As regards consideration of R&M contract in the R&M expenses, the Commission deemed it appropriate to consider R&M expenses as per the provisions of the Tariff Regulations, 2015, as amended from time to time in line with the approach adopted in previous orders.

3.71 The admitted O&M expenses for FY 2021-22 is shown in the Table below:

Table 29: O&M expenses admitted by the Commission for FY 2021-22

Sr. No.	Particulars	Amount (Rs. Crore)
A	**Employee Expenses**	
1	Salary	1.33
2	DA	0.25
3	Terminal benefits	0.32
4	**Total Employee Expense**	**1.89**
B	**A&G Expenses**	**2.11**
C	**R & M (% of GFA)**	
1	Opening GFA as on 1.4.2021	32.98
2	**R & M for FY 2021-22 @ 5% of opening GFA**	**1.65**
D	**MPERC Fees (As per actual fees paid for tariff Petition of FY 2021-22)**	**0.01**
E	**Total O&M**	**5.66**

Depreciation

Petitioners Submissions

3.72 The Petitioner has considered the opening gross block of fixed assets of FY 2021-22 as per the closing block for FY 2020-21 as per provisional accounts of FY 2020-21.

3.73 The additions to asset have been considered as per the projected capitalisation for the FY 2021-22.

3.74 Depreciation has been worked out considering the asset head wise depreciation rates provided in Annexure II of MYT Regulations, 2015. The projected depreciation for FY 2021-22 is as shown below:

Table 30: Depreciation during the year filed by the Petitioner for FY 2021-22

Particulars	Amount (Rs. Crore)
Opening Gross Fixed Asset	24.15
Addition during the year	8.89
Deduction	-
Closing Gross Fixed Asset	33.04
Depreciation	**2.11**

3.75 The Petitioner has reduced the amortization of the assets capitalised from the consumer contributions and grant. Accordingly, net depreciation on GFA for FY 2021-22, after reducing amortization on consumer contribution, is shown in the table below:

Table 31: Net depreciation filed by the Petitioner for FY 2021-22

Particulars	Amount (Rs. Crore)
Depreciation and related debits	2.11
Less: Consumer contribution amortized	0.43
Net depreciation and related debits	**1.68**

Commission's Analysis

3.76 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 31st March, 2021, provided that the remaining depreciable value as on 31st 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.

3.77 In case of existing projects, the Tariff Regulations specify that the balance depreciable value as on 1st April, 2021, shall be worked out by deducting the cumulative depreciation including advance against depreciation as admitted by the Commission up to 31st March, 2021, 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% of the Assets value.

3.78 The Commission has considered the opening Gross Fixed Assets (GFA) for FY 2021-22 as per closing GFA approved in the Retail Supply Tariff Order for FY 2020-21 and thereafter the addition in GFA for FY 2021-22 has been considered as per the previous section "Capital Expenditure (Capex) and Capitalisation". Further, consumer contribution and grants towards capital asset has been considered same as per the Petitioner submission and reduced the same from the GFA for arriving at net GFA for FY 2021-22. Thereafter, the average net GFA has been worked out considering the opening and closing net GFA of FY 2021-22.

3.79 The Commission has considered the average depreciation rate of 4.95% for FY 2021-22 as per the rate admitted by the Commission in the true up of FY 2017-18.

3.80 Further, the Commission has observed that the Petitioner has been repeatedly not complying with the direction of the Commission for submission of Fixed Asset Register. Accordingly, the Commission in this order has decided to withheld 50% of the depreciation computed for FY 2021-22, which shall be allowed during true up of FY 2021-22 on satisfactory submission of Fixed Asset Register.

3.81 Accordingly, the Commission has admitted depreciation for FY 2021-22 as shown in the table below:-

Table 32: Depreciation admitted by the Commission

Particulars	Amount (Rs. Crore)
Opening net GFA as on 1st April, 2021 (As per closing GFA approved in Retail Tariff Order for FY 2020-21)	13.87
Add: Addition during the year	8.89
less: Consumer Contribution & Grants received in FY 2021-22	0.49
Closing net GFA as on 31st March, 2022	22.27
Average net GFA	18.07
Depreciation Rate	4.95%
Depreciation	**0.89**
50% Depreciation withheld due to non-submission of Fixed Asset Register	**0.45**
Net Depreciation	**0.45**

Return on Equity

Petitioner's Submissions

3.82 The Petitioner has claimed that return on equity is computed on average equity based upon the opening balance of equity and normative additions during the year, which has been arrived at by considering 30% of the capitalization net of consumer contribution and grants as funded from equity is shown in the table below:

Table 33: Return on Equity filed by the Petitioner for FY 2021-22

Particulars	Amount (Rs. Crore)
Equity associated with GFA as on the beginning of the year	5.82
30% of addition to net GFA considered as funded through equity	2.52
Total equity associated with GFA at the end of the year	8.34
Average equity associated with GFA at the end of the year	7.08
Return on Equity @ 16%	**1.13**

3.83 Further, the Petitioner submitted that it has not projected any tax on income for FY 2021-22.

Commission's Analysis

3.84 The Commission has considered the opening equity for FY 2021-22 as per closing equity approved in the Retail Supply Tariff Order for FY 2020-21 and thereafter equity addition for FY 2021-22 has been considered as 30% of the net GFA admitted for FY 2021-22.

3.85 The Return on Equity admitted for FY 2021-22 is shown in the table as follows:

Table 34: RoE admitted by the Commission for FY 2021-22

Sr. No.	Particulars	Amount (Rs. Crore)
1	Opening Equity identified with GFA as on 1st April, 2021 (As per closing equity approved in Retail Tariff Order for FY 2020-21)	4.15
2	30% of addition to net GFA considered as funded through equity net of consumer contribution	2.52
3	Total Equity identified with GFA as on 31st March, 2022	6.67
4	Average Equity (average of Sr. No. 1 & Sr. No. 3)	5.41
5	**RoE @16% of Sr. No. 4**	**0.87**

Interest and Finance Charges

Petitioner's Submissions

3.86 The Petitioner has stated that it has not borrowed any capital loan. However, as per the provisions of the Tariff Regulations, 2015 and its amendments thereof, the Petitioner has worked out normative loans for FY 2021-22 and calculated the interest thereon by applying weighted average interest rate of State DISCOMs of 7.76%, as per Retail Supply Tariff Order for the FY 2020-21.

3.87 The interest on normative loan considered for FY 2021-22 has been shown in the table below:

Table 35: Interest on normative project loan filed by the Petitioner for FY 2021-22

Particulars	Amount (Rs. Crore)
Debt associated with GFA as on the beginning of the year (Net of consumer contribution & grant)	5.39
Addition to debt (excluding consumer contribution & grants)	5.88
Repayment during the year	1.68
Total debt associated with GFA at the end of the year	9.59
Rate of interest & finance charges	**7.76%**
Interest & finance charges on normative basis for project loans	**0.58**

Commission's Analysis

3.88 The Commission has noted from the records filed by the Petitioner that it has not borrowed any loan. Therefore, there is no interest burden on the Petitioner. As regards equity in excess of 30% of capital contribution, relevant portion of the Tariff Regulations, 2015 and its amendments thereof is reproduced below:

"For a Project declared under commercial operation on or after 1.4.2016, if

the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan."

3.89 Accordingly, the Commission has considered the equity contribution in excess of 30% as the capital employed for creation of the assets as normative loans. Consumer contribution and grants has been reduced from the GFA for the purpose of computing normative loan.

3.90 The Commission has allowed interest on loan for FY 2021-22 considering the approach as follows:

i. Net asset addition to GFA during the year is arrived by subtracting the consumer contribution and grants received from total asset addition to GFA.

ii. 70% of the net addition to GFA after reducing consumer contribution and grants has been considered as funded through loan

iii. Loan repayment has been considered equal to the depreciation for the respective year

3.91 As regards interest rate, since the Petitioner does not have any loans, therefore, it may not be possible to compute their actual weighted average rate of interest. Accordingly, the Commission has considered the weighted average interest rate of long-term loans of other distribution licensees of Madhya Pradesh as admitted in the State DISCOMs Retail Supply Tariff Order for FY 2021-22. Details of the normative loan and interest admitted are shown in the table below:

Table 36: Interest on normative project loan admitted by the Commission for FY 2021-22

Particular	Amount (Rs. Crore)
Opening normative loan identified with GFA as on 1st April, 2021 (As per closing normative loan approved in Retail Tariff Order for FY 2020-21)	6.09
70% of addition to net GFA considered as funded through Loan net of Consumer Contribution	5.88
Debt repayment	0.45
Closing debt associated with GFA as on 31st March, 2022	11.53
Average debt	8.81
Weighted average rate of interest (%) based on DISCOMs Retail Supply Tariff Order for FY 2021-22	6.94%
Interest cost admitted on project loans	**0.61**

Interest on Working Capital

Petitioner's Submissions

3.92 The Petitioner has submitted that the interest on working capital has been calculated on the basis of provisions of the Tariff Regulations, 2015 and its amendments thereof.

3.93 The Petitioner has considered interest rate of 12.15% at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April, 2020, for computing Interest on Working Capital for FY 2021-22. Further, the Petitioner has submitted that it is making power purchase payments on immediate basis to earn power purchase rebate, therefore, the Petitioner has not considered 30 days (one month) credit principle while estimating the Interest on Working Capital.

3.94 Details of Interest on Working Capital as submitted by the Petitioner are shown below:

Table 37: Details of Interest on Working Capital for FY 2021-22 by the Petitioner

Sr. No.	Particulars	Amount (Rs. Crore)
1	**For Wheeling Activity**	
i	Inventory for 2 months based on ARR considered at 1% of GFA for previous year	0.24
Ii	1/12th of O&M Expenses	0.65
Iii	2 months of Receivables from Wheeling charges	-
Iv	**Total Working Capital**	**0.89**
V	Rate of Interest	12.15%
Vi	**Interest on Working Capital for wheeling activity**	**0.11**
2	**For Retail Activity**	
I	Inventory for 2 months based on ARR for previous year	-
Ii	O&M expenses for one month	-
Iii	2 months of Receivables of average billing	32.26
Iv	Less:1/12th of Power Purchase expenses	13.79
V	Less: Consumer Security Deposit	20.12
Vi	**Total Working Capital**	**(1.66)**
Vii	Rate of Interest	12.15%
Viii	**Interest on Working Capital for retail activity**	**(0.20)**
3	**Total Interest on Working Capital (1(vi)+2(viii))**	**0.00**

Commission's Analysis

3.95 MYT Regulations, 2015 and its amendments thereof specify that the total working capital shall consist of expenses towards working capital required for the supply activity and for the wheeling activity. Parameters that shall be considered for computation of working capital for wheeling and supply activities have also been specified separately. Further, as per MYT Regulations, 2015, the rate of Interest on Working Capital shall be equal to the State Bank of India Advance Rate as on 1st of April of the relevant year. Accordingly, the Commission has considered SBI advance rate of 12.15% prevailing on 1st April, 2021, for the computation of interest on working capital. Accordingly, the Interest on Working Capital has been computed as shown in the table below:

Table 38: Interest on Working Capital admitted by the Commission for FY 2021-22

Sl. No.	Particulars	Amount (Rs. Crore)
For wheeling activity		
A)	1/6th of annual requirement of inventory for previous year	0.04
B)	Total O&M expenses	5.66
B) i)	1/12th of total O&M expenses	0.47
C)	**Receivables**	
C) i)	Annual revenue from wheeling charges	0.00
C) ii)	Receivables equivalent to 2 months average billing of wheeling charges	0.00
D)	Total working capital ((A) + (B)(i) + (C)(ii))	0.52
E)	Rate of interest (%)	12.15%
F)	**Interest on working capital for wheeling activity**	**0.06**
For Retail Sale activity		
A)	1/6th of annual requirement of inventory for previous year	0.01
B)	**Receivables**	
B) i)	Annual revenue from tariff and charges	183.75
B) ii)	Receivables equivalent to 2 months average billing	30.62
C	Power purchase expenses	165.24
C) i)	1/12th of power purchase expenses	13.77
D	Consumers security deposit	16.51
E)	Total working capital ((A) + (B)(ii) – (C)(i) – (D))	0.36
F)	Rate of interest	12.15%
G)	**Interest on working capital for retail activity**	0.04
	Summary	
1	**For wheeling activity**	**0.06**
2	**For retail sale activity**	**0.04**
3	**Total interest on working capital admitted**	**0.11**

Interest on Consumer Security Deposit

Petitioner's Submissions

3.96 The Petitioner has submitted that the Interest on consumer security deposit has been paid to the consumers according to the provisions of the Tariff Regulation, 2015 and its amendments thereof, for security deposit. Interest rate is considered same as the RBI bank rate of 4.25% prevailing as on 1st April, 2020. The Petitioner claimed interest of Rs. 0.86 Crore over the Consumer Security Deposit amount of Rs. 20.12 Crore for FY 2021-22.

Commission's Analysis

3.97 The Commission has considered consumer deposit based on the actual deposit available with the Petitioner as on 31st March 2019 and whereas the interest rate on security deposit has been considered same as approved for the State DISCOMs in Retail Supply Tariff Order for FY 2021-22 of 4.25% (latest prevailing RBI Bank Rate). Accordingly, the interest on consumer security deposit approved by the

Commission for FY 2021-22 is as show in the table below:

Table 39: Interest on Consumer Security deposit admitted by the Commission for FY 2021-22

Sl. No.	Particulars	Amount (Rs. Crore)
1.	Consumer security deposit	16.51
2.	**Interest amount admitted**	**0.70**

Lease Rent

Petitioner's Submissions

3.98 The Petitioner has claimed Rs. 2.19 Crore for FY 2021-22 towards the lease rent payable by the Petitioner for the land used for the purpose of power business. The Petitioner has worked out land premium and lease rent charges for such portion of the land.

3.99 The abstract of the clause 33 of the Tariff Regulations, 2015 is reproduced below:

> *"**33.Lease/Hire purchase charges.***
>
> *Lease charges for assets taken on lease by Distribution Licensee shall be considered as per lease agreement provided the charges are considered reasonable by the Commission."*

3.100 The Petitioner has claimed that lease rent is legitimate expense and should be permitted to be recovered as an expense through the ARR. The lease rent is being charged by MPIDC as it is an opportunity cost lost for MPIDC SEZ business as they could have leased out this land to some other industry and received lease rent against it. Further, as a distribution licensee, in normal course of action MPIDC would have purchased this land for establishment of its power distribution infrastructure. The cost incurred for purchase of land gets capitalized and the Commission allows depreciation, interest on loan and return on equity chargeable on account of this cost as part of ARR. Accordingly, this expenditure, in the form of either lease rent or depreciation, interest on loan and return on equity chargeable on the capital cost incurred by MPIDC, is inevitable.

3.101 The Petitioner has sought lease rent in its review petition 86 of 2012 and the Hon'ble Commission in its Order dated 21st December, 2012 has disallowed lease rent sighting reason of non-payment. The relevant part of the same is reproduced here below for reference.

> *"ii. Land Premium and Lease rent charges:*
>
> *…….*
>
> *The Commission considered the matter and observed that in the instant case since no actual payments are being made to the SEZ on account of land premium or lease rent such notional expense cannot be charged to the*

consumers. The claim made by the petitioner in this regard is not sustainable."

3.102 The Petitioner has submitted that it has now made all past payments towards lease rent and hence the Commission is requested to approve lease rent on actual basis. There have been instances in other states wherein the Commission has allowed this expenditure pertaining to lease rental as a pass through in the tariff over and above the other expenses.

3.103 A precedence in this matter can be seen in case of approval of the Truing-up of FY 2013-14 and FY 2014-15, Provisional Truing-up of FY 2015-16, and Projection of ARR for the 3rd Control Period FY 2016-17 to FY 2019-20 for the transmission licensee MEGPTCL in Maharashtra by the Hon'ble MERC in Case no. 50 of 2016. In the said case, the land for Akola-II Sub-station was initially to be purchased and handed over by MSETCL to MEGPTCL, however, later on based on management decision, the land was later leased out to MEGPTCL. Accordingly, while the total capital cost of land in the overall capital cost was reduced, the corresponding increase in the lease rental for the same was factored as additional Operation and Maintenance (O&M) expenses in the ARR for the Control Period. Considering the facts of the case, the Commission had approved the least rent for Akola II Sub-station over and above the normative O&M expenses of MEGPTCL prescribed in the MYT Regulations.

3.104 In view of the above, the Petitioner requested the Commission to allow lease rent charged to its power business as a legitimate expenditure as part of the ARR for the FY 2021-22.

Commission's Analysis

3.105 After examining the submissions regarding lease rent by the Petitioner, the Commission has not admitted the lease rent of Rs. 2.19 Crore as claimed by the Petitioner in line with the approach followed by the Commission in the previous orders.

3.106 Summary of the interest and finance charges as filed and as admitted are given in table below:

Table 40: Interest and Finance charges admitted by the Commission for FY 2021-22

Sr. No.	Particulars	Claimed	Admitted (Rs. Crore)
1	Interest on Project Loans	0.58	0.61
2	Interest on Working Capital Loan	0.00	0.11
3	Interest on Consumer Security Deposit	0.86	0.70
4	Lease Rent	2.19	0.00
5	**Total**	**3.63**	**1.42**

Bad & Doubtful Debts

Petitioner's Submissions

3.107 The Petitioner has submitted that as per clause 35 of the Tariff Regulations, 2015, bad and doubtful debts in the ARR can be considered up to 1% of the yearly revenue. The Petitioner has considered doubtful debts to the tune of 0.5% of the yearly revenue for the FY 2021-22 as Rs. 0.97 Crore.

Commission's Analysis

3.108 The Commission has observed that the actual bad and doubtful debt for the Petitioner was nil till FY 2018-19. As no audited account has been made available, thereafter, the Commission has not allowed any provision for Bad & Doubtful Debts for FY 2021-22. However, the Petitioner may approach the Commission for its consideration at the time of truing up with actual details of the bad debt and along with all the details to enable prudence of the same.

Income Tax

3.109 The Petitioner has not claimed any expense towards income tax for FY 2021-22, Therefore, the Commission has admitted Income Tax Expenses for FY 2021-22 as Nil.

Other Income

Petitioner's submissions

3.110 The Petitioner has submitted the other income for FY 2021-22 based on the provisional accounts for FY 2019-20 as shown in the table below:

Table 41: Other Income filed by the Petitioner for FY 2021-22

Sr. No.	Particulars	Amount (Rs. Crore)
1	Miscellaneous Income	0.00
2	Interest Received on Deposit with MPSEB	0.00
3	Shutdown Charges	0.005
4	Power Application Processing Fees	0.014
5	Supervision Charges	0.011
6	**Total Other Income**	**0.030**

Commission's Analysis

3.111 The Commission has admitted other income of Rs. 3.10 Crore for FY 2021-22 as per the actual other income for FY 2018-19, without any escalation, as audited account thereafter has not been provided. The same shall be considered at the actuals, at the time of true-up.

ARR filed and admitted for FY 2021-22

3.112 The Commission has determined the ARR for FY 2021-22 as detailed in preceding paragraphs. Further, the Commission has also considered the Revenue Gap admitted by the Commission in MP Transco True-up of FY 2018-19.

3.113 Accordingly, the details of ARR claimed by the Petitioner and as admitted by the Commission for FY 2021-22 is shown in the table as follows:

Table 42: ARR as claimed by the Petitioner and as admitted by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2021-22	
		Filed	**Admitted**
	Sale and Power Purchase Requirement		
1	Sale (MU)	435.67	440.83
2	Distribution loss (%)	1.50%	1.50%
3	Distribution loss (MU)	6.63	6.71
4	Intra state transmission loss (%)	2.59%	2.59%
5	Intra state transmission loss (MU)	11.76	11.90
6	Total power purchase requirement (MU)	454.06	459.44
	Expenditure (Rs Crore)		
7	Purchase of power	165.46	165.24
8	Intra-state transmission (MP Transco) charges	13.40	10.61
9	SLDC charges	0.04	0.05
10	R&M expense	2.07	1.65
11	Employee expenses	3.61	1.89
12	A&G expense (excluding MPERC fees)	2.11	2.11
13	MPERC Fees	0.02	0.01
14	Depreciation	1.68	0.45
15	Interest & finance charges	1.44	1.42
16	Bad Debt	0.97	0.00
17	Land Lease	2.19	0.00
18	**Total expenses**	**192.98**	**183.42**
19	Return on Equity (RoE)	1.13	0.87
20	**Total expenses including RoE**	**194.11**	**184.29**
21	*Less:* Other income	0.03	3.10
22	**Standalone Aggregate Revenue Requirement (ARR)**	**194.08**	**181.19**
23	***Revenue Gap of MP Transco True-up of FY 2018-19***		**2.56**
24	**Total ARR**	**194.08**	**183.75**

Revenue from existing tariffs and Gap / Surplus

Petitioner's submissions

3.114 The Petitioner has submitted that the projected revenue at existing tariff for FY 2021-22 is estimated at Rs. 193.53 Crore. The category wise revenue projected by the Petitioner at existing tariff is as follows:

Table 43: Revenue at existing tariff projected by Petitioner for FY 2021-22

Category	Sales (MU)	Revenue (Rs. Crore)
LT Category		
LV-1 Domestic	0.08	0.04
LV-2 Non -Domestic	0.13	0.07
LV-3 Public Water Works and Street Lights	0.02	0.01
LV-4-LT Industrial	0.15	0.10
LT Total	**0.38**	**0.21**
HT Category		
HV-1 - HT Industrial and Non-Industrial	435.28	193.32
HT Total	**435.28**	**193.32**
Total	**435.67**	**193.53**

Table 44: Revenue at proposed tariff projected by Petitioner for FY 2021-22

Category	Sales (MU)	Revenue (Rs. Crore)
LT Category		
LV-1 Domestic	0.08	0.04
LV-2 Non -Domestic	0.13	0.07
LV-3 Public Water Works and Street Lights	0.02	0.01
LV-4-LT Industrial	0.15	0.10
LT Total	**0.38**	**0.21**
HT Category		
HV-1 - HT Industrial and Non-Industrial	435.28	193.32
HT Total	**435.28**	**193.32**
Total	**435.67**	**193.53**

3.115 Based on the projected ARR and revenue at existing tariff, the Petitioner has projected revenue gap of FY 2021-22 as follows:

Table 45: Gap / Surplus as submitted by the Petitioner for FY 2021-22

Sr. No.	Particulars	Amount (Rs. Crore)
1	Aggregate Revenue Requirement	194.08
2	Revenue at existing tariff	193.53
3	**Revenue Gap/(Surplus)**	**0.55**

Commission's Analysis

3.116 The Consumer category wise revenue worked out for FY 2021-22 by the Commission is as follows:

Table 46: Revenue at existing tariff admitted by the Commission for FY 2021-22

Category	Sales (MU)	Revenue (Rs. Crore)
LT Category		
LV-2 Non -Domestic	0.13	0.06
LV-3 Public Water Works and Street Lights	0.14	0.06
LV-4-LT Industrial	0.15	0.10
LT Total	**0.42**	**0.22**
HT Category		
HV-1 - HT Industrial and Non-Industrial	440.41	198.02
HT Total	**440.41**	**198.02**
Total	**440.83**	**198.24**

3.117 On the basis of the above and admitted Aggregate Revenue Requirement for FY 2021-22, the Revenue Gap / (Surplus) at existing tariff for FY 2021-22 admitted by the Commission is as follows:

Table 47: Revenue Gap / (Surplus) admitted by the Commission for FY 2021-22

Sr. No.	Particulars	Amount (Rs. Crore)
1	Aggregate Revenue Requirement	183.75
2	Revenue at existing tariff	198.24
3	**Revenue Gap/(Surplus)**	**(14.49)**

3.118 From the above it can be observed that revenue at existing tariff is sufficient to meet the ARR requirement approved for FY 2021-22 and the Petitioner is left with revenue surplus of Rs. 14.49 Crore. Accordingly, the Commission has decided to pass on 2/3rd of revenue surplus i.e. to the consumers in the form of tariff reduction uniformly across the category and 1/3rd of revenue surplus i.e. Rs. 4.83 Crore to be retained with the Licensee, which shall be considered at the time of truing up of FY 2021-22. Revenue surplus, if any determined in True-up of FY 2021-22 shall be considered for adjustment along with the holding cost in subsequent Retail Supply Tariff Orders.

3.119 Accordingly, based on the above, the revenue at approved tariff for FY 2021-22 is as follows:

Table 48: Revenue at approved tariff admitted by the Commission for FY 2021-22

Category	Sales (MU)	Revenue (Rs. Crore)
LT Category		
LV-2 Non -Domestic	0.13	0.058
LV-3 Public Water Works and Street Lights	0.14	0.057
LV-4-LT Industrial	0.15	0.097
LT Total	**0.42**	**0.21**

Category	Sales (MU)	Revenue (Rs. Crore)
HT Category		
HV-1 - HT Industrial and Non-Industrial	440.41	188.36
HT Total	**440.41**	**188.36**
Total	**440.83**	**188.58**

A4: WHEELING CHARGES, CROSS SUBSIDY SURCHARGE AND ADDITIONAL SURCHARGE

Determination of "wheeling cost"

4.1 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

4.2 On the basis of the admitted ARR for FY 2021-22, the expenditure towards wheeling activity for the Petitioner is as shown in the Table below:

Table 49: Expenditure towards Wheeling Activity

Particulars	**(Rs. Crore)**
O&M Expenses	5.66
Depreciation	0.45
Interest on Project Loans	0.61
Return on Equity	0.87
Interest on Working Capital Loans (Wheeling activity)	0.06
Less: Other Income as attributed to wheeling activity	-
Income Tax	-
Total	**7.65**

Segregation of costs among voltage levels

4.3 The costs of distribution identified as 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 Petitioner but they are not directly connected to the distribution system. Certain costs such as cost 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.

4.4 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 the country.

4.5 It is observed that the present accounting practices followed by the Petitioner 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.

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

Table 50: Identification of asset value

Voltage level of Lines	Cumulative length of lines (ckt-km)	Per unit cost (Lakh Rs./ckt km)	Total Cost of lines (Rs. Crore)
33 kV	33.25	13.95	4.64
Below 33 kV			
11 kV	12.00	13.23	1.59
LT	5.00	6.99	0.35
Sub-total	**17.00**		**1.94**
Total	**50.25**		**6.57**

Table 51: Total Cost of transformer voltage level

Transformer Voltage Level	Cumulative capacity (MVA)	Per unit cost (Lakh Rs. /MVA)	Total Cost (Rs. Crore)
33/11 kV Transformer	10.00	43.55	4.36
11/0.4 kV Transformer	3.20	3.04 per 100 kVA	0.97
Total	**13.20**		**5.33**

4.7 Data for length of lines and transformation capacity expected to be added during FY 2021-22 are taken as provided in the petition.

4.8 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 52: Identification of value of network at each voltage level

Voltage level	Cost of Lines (Rs. Crore)	Cost of Transformation (Rs. Crore)	Total Cost (Rs. Crore)
33 kV	4.64	4.36	8.99
Below 33 kV	1.94	0.97	2.91
Total	**6.57**	**5.33**	**11.90**

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

Table 53: Identification of network expenses (wheeling cost) at different voltage level

Voltage Level	Assets value (Rs. Crore)	Assets value Ratio (%)	Total wheeling cost (Rs Crore)	Wheeling Cost (Rs Crore)
33 kV	8.89	75.55%	7.65	5.78
Below 33 kV	2.91	24.45%		1.87
Total	**11.90**	**100.00%**		**7.65**

Sharing of Wheeling costs

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

4.11 This allocation of wheeling cost is done based on the usage of the network at different voltage level by the 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 54: Allocation of wheeling cost over distribution system users

Sr. No.	Particulars	Quantity
A	Wheeling Cost at 33 kV- (Rs Crore)	5.78
B	Sales at 33 kV (MU)	440.33
C	Total Sales (MU) {HV + LV}	440.83
D	Proportion of 33 kV sales to total sales (MU)	99.89%
	Cost allocation	
E	Wheeling cost of 33 kV allocated to 33 kV users only (A*D)-(Rs. Crore)	5.77

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

Table 55: Wheeling Charges

Voltage	Wheeling Cost allocated (Rs. Crore)	Sales (MU)	Wheeling charges (in Rs. /unit)
EHT	-	-	-
33 kV	5.77	440.33	0.13

Applicability of wheeling charges under different scenarios

4.13 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 the distribution network up to the consumer's connection.

(b) Scenario 2: Both Generator and consumer are connected to the distribution system of the Distribution Licensee at 33 KV: The power generated by the open access generator will be consumed within the area of the Petitioner 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.

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

Determination of Cross-Subsidy Surcharge

4.15 The Tariff Policy notified by GOI on dated 28 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."

4.16 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.

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

Table 56: Power Purchase Cost per unit

Sr. No.	Particulars	FY 2021-22
1	Quantum of Power Purchase (MU)	459.44
2	Cost of Power Purchase (Rs. Crore)	165.24
3	**Average Power Purchase Cost (Rs./kWh)**	**3.60**

4.18 Voltage wise transmission, distribution and commercial losses applicable for FY 2021-22 is as follows:

Table 57 : Voltage-wise losses

Voltage Level	Loss level (L)
EHT Voltage (Transmission System) excluding External losses	2.59%
HT Voltage System Losses	1.50%

4.19 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 2021-22 are worked out as under: -

Table 58 : Transmission Charges

Particulars	Rs. Crore
PGCIL Charges	-
MPPTCL Charges	10.61
Total Charges	**10.61**
Units to be handled by MPPTCL	459.44
Transmission Charges per unit	**0.23**

4.20 Finally, the term in the Tariff Policy formula 'T', Average Tariff for each category is derived from their expected revenue for FY 2021-22.

4.21 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.

4.22 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 scenario are 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 2021-22 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.

4.23 The 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 applicable MPERC (Co-generation and generation of Electricity from Renewable sources of energy) Regulations, 2010 as amended from time to time.

Table 59 : Scenario wise cost (Rs. per unit)

Scenario	Wt. Average Cost of Power	Cost of Power grossed up for distribution losses	Cost of Power grossed up for transmission losses	Transmission charges	Wheeling charges	Total Cost [C/(1-L/100) +D+R]
1	3.60	3.65	3.75	0.23	0.13	4.11
2	3.60	3.65	3.75	0.00	0.13	3.88

Table 60 : Category wise average tariff and CSS (Rs. per unit)

Category of HT/EHT consumers	Average Tariff 'T'	Scenario 1	CSS	Ceiling of 20%	Applicable CSS
HV-1: Industrial and Non-Industrial	4.28	4.11	0.17	0.86	0.17

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

4.24 In regard to the Petitioner's request for determination of additional surcharge to be levied from open access consumers, the Commission observed that the Petitioner has not furnished the requisite details. The Petitioner may, if require, file a separate petition for determination of additional surcharge with details related to existing open access consumers.

A5: FUEL COST ADJUSTMENT CHARGE

5.1 As per the Regulations, the Commission decides to continue with the FCA formula along with its associated mechanism/modalities with minor modifications as detailed in following paragraphs.

5.2 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 for 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 drawal 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.

5.3 FCA shall have to be worked out on the basis of the normative parameters as per respective generation Tariff Orders issued by the appropriate Commissions. Further, increase/ decrease in power purchase cost if any, shall need mandatory prior approval of the Commission.

5.4 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.

5.5 FCA charge shall be uniformly applicable to all categories of consumers of the Petitioner.

5.6 The responsibility of working out the rate of FCA every quarter shall rest with the Petitioner.

5.7 The Petitioner shall work out the change in variable cost of power purchase during the preceding quarter based on the bills received by them from the long-term coal 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 61: 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/ Decrease in variable cost of power purchase**
		(MU)	**Rate (paise/unit)**	**Cost (Rs. Crore)**	**Rate (paise/unit)**	**Cost (Rs. Crore)**	**[5-7] (Rs. Crore)**
1	2	3	4	5	6	7	8
Total							

5.8 The Petitioner 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 Orders, shall be subtracted from the total ex-bus power drawn during the preceding quarter to arrive at normative sale.

5.9 FCA charge shall be worked out by the Petitioner based on the formula provided hereinabove 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.

5.10 The Petitioner shall commence billing of FCA charge from the first day of the billing quarter.

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

5.12 Following illustration is given for the purpose of understanding:

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

5.14 The details of the normative Losses for MPPTCL System and normative distribution losses as per this Tariff Order of the Commission are indicated in the table below:

Table 62: MPPTCL and Distribution losses

Sr. No.	Month/Year	MPPTCL Losses*	Distribution Losses**
		%	%
1	April, 2021	2.59%	1.50%
2	May, 2021	2.59%	1.50%
3	June, 2021	2.59%	1.50%
4	July, 2021	2.59%	1.50%
5	August, 2021	2.59%	1.50%
6	September, 2021	2.59%	1.50%
7	October, 2021	2.59%	1.50%
8	November, 2021	2.59%	1.50%
9	December, 2021	2.59%	1.50%
10	January, 2022	2.59%	1.50%
11	February, 2022	2.59%	1.50%
12	March, 2022	2.59%	1.50%

* Transmission Losses: M.P. Transmission losses are based on input at State periphery.
** Distribution Losses: Distribution losses are based on input at Distribution Licensee's periphery.

A6: RETAIL TARIFF DESIGN

Legal Position

6.1 In exercise of the powers vested under Section 61 and Section 62 of the Electricity Act, 2003 and all other powers enabling it in this behalf, the Commission has determined the Aggregate Revenue Requirement and Tariff for FY 2021-22 for the Petitioner. Due consideration was given to the submissions made by Petitioner, Stakeholders 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

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

Linkage to Average Cost of Supply

6.3 The Commission directed the Petitioner 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, the Petitioner has submitted the details of calculation of the voltage wise cost of supply as per the methodology provided by the Hon'ble APTEL.

6.4 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.

6.5 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 Distribution Licensee's costs can be apportioned to different voltage levels in proportion to the sale 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, these costs can be pooled and apportioned equitably, on pro-rata basis to all voltage levels.

6.6 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 following methodology. The category wise cross subsidy so worked out is indicative in nature, as the base data for the same need to be duly culled out on actual.

(i) Voltage wise cost of supply has been computed for 33 kV and 11 kV (inclusive of LT) categories only.

(ii) Sales as admitted by the Commission for 33 kV and 11 kV (inclusive of LT) categories have been considered.

(iii) Total Distribution losses of the Petitioner has been considered the same as specified in the Tariff Regulations, 2015 and its amendment thereof for FY 2021-22 while Intra-State transmission losses have been considered as per actuals for FY 2019-20 as admitted in the previous section of this Order.

(iv) Total losses as admitted by the Commission have been segregated voltage wise for 33 kV and 11 kV (inclusive of LT) in the same proportion as submitted by the Petitioner.

(v) Power purchase costs at the Petitioner's periphery for 33 kV and 11 kV (inclusive of LT) based on the voltage-wise input energy have been considered. All other costs of the Petitioner are allocated based on the sales to each voltage-level.

(vi) Voltage wise total cost derived has been divided by voltage wise sales for working out the voltage wise cost of supply.

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

Table 63: Broad computation of voltage-wise cost of supply

Particulars	Units	33 KV System	11 KV + LT System	Total
Sales Admitted	MU	440.33	0.50	440.83
Technical and Commercial losses considered (including MPPTCL Losses)	%	4.05%	5.06%	4.05%
Energy Input admitted	MU	458.92	0.52	459.44
Energy Lost	MU	18.59	0.03	18.61
Commercial losses	MU	-	-	-
Technical losses for all voltage in proportion to Sales	MU	18.59	0.03	18.61
Net Energy Input	MU	458.92	0.52	459.44
Power Purchase Costs - allocated based on voltage-wise losses	Rs Cr	175.70	0.20	175.90
Other costs - allocated based on voltage-wise sales	Rs Cr	10.94	0.01	10.95
Less: Other income - allocated based on voltage-wise sales	Rs Cr	3.10	0.00	3.10
Total Costs (ARR requirement)	Rs Cr	183.54	0.21	183.75
VCoS	**Rs/kWh**	**4.17**	**4.21**	**4.17**

6.8 Category wise cross-subsidy admitted by the Commission for FY 2021-22 is shown in the table below:

Table 64: Cross subsidy-based voltage-wise cost of supply for FY 2021-22

Category	VCOS (Rs. / Unit)	Average billing rate (Rs. /Unit)	Ratio of Average billing Rate to Voltage-wise Cost of Supply (%)
LT CATEGORIES			
LV 2: Non- Domestic	4.21	4.34	103%
LV 3: Public Waterworks & Streetlights	4.21	4.17	99%
LV 4: LT Industry	4.21	4.05*	96%
HT CATEGORIES			
HV-1: Industrial & Non-Industrial	4.17	4.28	103%

**For LV-4 category, ABR has been computed considering a representative load factor of 50%, since the load factor for projected sales is very low i.e below 10% and leads to very high ABR, which does not represent the actual cost of electricity supply to these consumers.*

6.9 While determining the tariffs for FY 2021-22, 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 2021-22 works out to be Rs 4.17 per unit as against Rs 4.54 per unit in FY 2020-21. The table below shows the cost coverage (Average realization in percentage of Average cost of supply) on account of tariff for FY 2021-22 as compared to the cost coverage in the tariff order for FY 2020-21:

Table 65: Comparison of tariff v/s overall average cost of supply

Category	Average Billing Rate as % of Average CoS	
	FY 2020-21 (as per tariff order)	FY 2021-22 (as per this tariff order)
LT CATEGORIES		
LV 2: Non- Domestic	134%	104%
LV 3: Public Waterworks & Streetlights	97%	100%
LV 4: LT Industry	128%	97 %*
HT CATEGORIES		
HV-1: Industrial & Non-Industrial	100%	103%

** For LV-4 category, ABR has been computed considering a representative load factor of 50%, since the load factor for projected sales is very low i.e below 10% and leads to very high ABR, which does not represent the actual cost of electricity supply to these consumers.*

6.10 Further, the Petitioner has prayed in the Petition, supported by letter dated 16th July, 2021, and sought clarification on applicability of advance payment and prompt payment rebate. The Petitioner submitted that some of the consumers are availing rebate on advance payment and prompt payment on the same electricity bill. The Commission has taken cognisance of the issue raised by the Petitioner and accordingly clarifies that consumer may avail either advance payment rebate or prompt payment rebate on an electricity bill.

A7: COMPLIANCE ON DIRECTIVES ISSUED IN TARIFF ORDER FOR FY 2020-21

The response submitted by Petitioner on the directives issued by the Commission in the Retail Supply tariff order for FY 2020-21 and the Commission's observations/ directions thereon are given below:

7.1 Depreciation Model

Commission's Directive: *The Commission directs the Petitioner to submit depreciation model till FY 2019-20, linked with the Fixed Asset Register at the time of filing of Tariff Petition for FY 2021-22.*

Petitioner Response: The Petitioner submitted that it has considered the depreciation rates, for various asset heads, as prescribed by the Commission in the Annexure-II of MYT Regulations, 2015 for computing the depreciation for FY 2021-22. The Petitioner also submitted that while preparing the Petition, it has duly reduced the value of the assets created from the consumer contributions from the gross value of the assets and thereafter worked out the net depreciation. Further, the Petitioner has also submitted that the ARR/ Tariff model in MS excel to the Commission in which details regard to the computation of depreciation has been mentioned in "Depreciation' sheet for the kind reference of the Commission.

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

7.2 Inclusion of additional details in the Audited Accounts for the Power Business

Commission's Directive: *The Commission directs the Petitioner to include details of quantum of category-wise sales, quantum of power purchase and voltage-wise distribution losses in its Audited Accounts for the Power Business for FY 2018-19 onwards and submit the same along with the Petition for FY 2021-22.*

Response: The Petitioner submitted that it is in the process of finalising the separate balance sheet for FY 2019-20 and hopefully get it signed shortly. Further, the Petitioner submitted that it has prepared the statement containing category wise sales, quantum of power purchase and voltage wise distribution losses and will submit the same along with True-up Petition for FY 2019-20.

Commission's observations/directions: The Commission directs the Petitioner to intimate details of quantum of category-wise sales, quantum of power purchase and voltage-wise distribution losses for the Power Business for FY 2018-19 onwards and submit the same along with the Petition for FY 2022-23.

7.3 Submission of R-15 Report Categories and Sub-Categories Wise

Commission's Directive: *The Commission directs the Petitioner to submit R-15 in accordance with the categories and sub-categories specified in Tariff Schedule.*

Response: Petitioner submitted that it has enclosed monthly R-15 Reports for the FY 2019-20 in soft copies and hard copies along with ARR and Tariff Petition for the year 2020-21.

Commission's observations/directions: It has been observed that the Petitioner submitted the monthly R-15 report categories and sub-categories wise for the HT consumers. However, for the LT consumer the Petitioner has not provided the sub-categories wise details. Therefore, the Petitioner is directed to submit R-15 in accordance with the categories and sub-categories specified in Tariff Schedule.

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

New Directive: The Commission directs the Petitioner to submit a comprehensive study on voltage wise cost of supply with large representative sample covering all consumer categories. The study should be conducted through an outsource independent agency of repute. The outcome/conclusion of the study to be shared with the Commission within six months of issue of this Tariff Order.

TARIFF

SCHEDULES

Annexure-1 (Tariff Schedules for Low Tension Consumers)

ANNEXURE TO THE TARIFF ORDER PASSED BY MPERC FOR FINANCIAL YEAR 2021-22

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION
TARIFF SCHEDULES FOR LOW TENSION CONSUMERS OF
MPIDC (Indore), LTD., SEZ PITHAMPUR

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Tariff Schedule LV - 1

DOMESTIC: ---
Applicability:
This tariff is applicable for light, fan and power for residential use only. Dharamshalas, old age houses, rescue houses, orphanages, places of worship and religious institutions shall also be covered under this category.

Tariff:

Energy charges (paise per unit)	Monthly Fixed Charges (in Rs)
327	58 per connection

Minimum charges: Rs. 65 per connection per month as minimum charges towards energy charges are applicable for the above category.

Specific Terms and conditions for LV-1 category

a) In case energy charges for actual consumption are less than minimum charges, minimum charges shall be billed towards energy charges. All other charges, as applicable, shall also be billed.

b) Other terms and conditions shall be as specified under General Terms and Conditions for Low Tension consumers.

Tariff Schedule LV - 2

NON-DOMESTIC: ---
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, Parlours, All Offices, Hospitals and medical care facilities including Primary Health Centres, 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 (except those which are covered in LV 2.1), who is required to pay GST/Commercial tax/service tax/value added tax (VAT)/entertainment tax/luxury tax under any Central/State Acts., Educational Institutions including workshops and laboratories of Engineering Colleges / Polytechnics/ITIs (which are registered with /affiliated/ recognized by the relevant Govt. body or university), and any other establishment which is not covered in other LV categories.

Tariff:

Sub category	Energy charges (paise/unit)	Monthly Fixed charges (in Rs)
LV 2.1 Sanctioned load-based tariff (only for connected load up to 20kW)		
On all units if monthly consumption is not more than 50 units	337	53 per KW
On all units in case monthly consumption exceeds 50 units	372	88 per KW
LV 2.2 Demand based tariff		
OPTIONAL Demand based tariff (only for contract demand above 10 KW and up to 20kW)	372	108 per KW or 86 per kVA of billing demand
Mandatory demand based tariff for contract demand above 20 kW	372	108 per KW or 86 per kVA of billing demand

Sub category	Energy charges (paise/unit)	Monthly Fixed charges (in Rs)
Temporary connections including Multi point temporary connection at LT for Mela*	447	108 per KW or 86 per kVA or part thereof of sanctioned or connected or recorded load whichever is highest

*In case permission for organizing Mela is granted by Revenue Authorities of Government of Madhya Pradesh or by MPIDC/SEZ.

Specific Terms and Conditions for LV-2 category:

a) **Minimum consumption:** The consumer shall guarantee a minimum annual consumption of 360 units per kW or part thereof 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) Other terms and conditions shall be as specified under General Terms and Conditions.

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 SEZ or any other organization authorised by the Government in the area of SEZ to supply/ maintain public water works / sewerage installations and shall also be applicable to electric crematorium maintained by local bodies/trusts. The tariff **LV-3** is also applicable to 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 Government or Local Bodies or SEZ and Sulabh Shochalaya.

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: For Public Water Works and Street Light

Category	Energy Charges (paise per unit)	Monthly Fixed Charges (in Rs. per KW)	Minimum Charges (Rs)
LV 3: Public Water Works and Street Lights	417	NIL	300 per kW
Temporary supply for **Public Water Works and Street Lights**	1.25 times the applicable tariff		

Specific Terms and Conditions for LV-3 category:

(a) **Incentives for adopting Demand Side Management**

An **incentive** equal to 5 % of energy charges shall be given on installation and use of energy saving devices (such as ISI energy efficient motors for pump sets and programmable on-off/ dimmer switch with automation for street lights). Incentive will be admissible only if full bill is paid within due dates failing which all consumed units will be charged at normal rates. Such incentive will be admissible from the month following the month in which energy saving devices are put to use and are verified by a person authorized by the licensee. This incentive will continue to be allowed till such time these energy saving devices remain in service. The licensee is required to arrange wide publicity of above incentive.

(b) Other terms and conditions shall be as specified under General Terms and Conditions.

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: For industrial consumers

	Category	Monthly Fixed Charges (in Rs.)	Energy Charges (paise per unit)
4.1	**Industrial consumers**		
4.1 a	Demand based tariff (for Contract demand up to 150 HP)	108 per kW or 86 per kVA of billing demand	372
4.1 b	Temporary connection	1.25 times of the applicable tariff	

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 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. The consumer shall guarantee a minimum annual consumption (kWH) based on 360 units per HP or part thereof of contract demand irrespective of whether any energy is consumed or not during the year.

ii. The consumer shall be billed monthly minimum 30 units per HP per month in case the actual consumption is less than above specified units.

iii. 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 shall be as specified under General Terms and Conditions.

Tariff Schedule LV - 5

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	108 per kW or 86 per kVA of Billing Demand	388

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. **SEZ Area** means the area notified by Government of Madhya Pradesh (GoMP) as may be amended from time to time.

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. 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 Demand:** Shall be billed as per following procedure:

a) **Consumers availing supply at 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 105% of the contract demand, the tariff in this schedule shall apply to the extent of 105 % of the contract demand only. The consumer shall be charged for demand recorded in excess of 105% of contract demand (termed as Excess Demand) and consumption corresponding thereto at the following rates:-

(i) **Energy charges for Excess Demand**: The consumer shall pay charges @ 1.3 times the tariff for energy charges for consumption corresponding to excess demand in case the maximum demand recorded exceeds the 105% of the contract demand.

Example If a consumer having a contract demand of 50 kVA records a maximum demand of 60 kVA, the billing of energy charges for excess demand of (60 kVA-52.5 kVA)= 7.5 kVA shall be = (total consumption recorded during the month x 7.5 kVA/maximum recorded demand) x 1.3 x energy charge unit rate.

(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 115% of the contract demand**:- fixed charges for Excess Demand over and above the 105 % 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 115% of contract demand**:- In addition to fixed charges in 1 above, recorded demand over and above 15 % of the contract demand shall be charged at 2 times the normal rate of fixed charges.

b) The above billing for Excess Demand, applicable to consumers, is without prejudice to the 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.

c) 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. Other Terms and Conditions:

(a) 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 licensee at the end of calendar month shall be credited to the account of the consumer after adjusting any amount payable to the licensee.

(b) **Incentive for prompt payment**: An incentive for prompt payment @0.25% of the bill amount (excluding 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.

(c) The Sanctioned load or connected load, in case of connected-load based tariff should not exceed 112.5 kW / 150 HP. In case of demand-based tariff, the contract demand should not exceed 112.5 kW / 150 HP without any ceiling on connected load. If the consumer exceeds his load / demand beyond this ceiling on more than two occasions in two billing months during the tariff period, the Licensee may insist on the consumer to avail HT supply.

(d) No metering charges shall be billed in this tariff order.

(e) In case the cheque presented by the consumer is dishonoured, without prejudice to Licensee's rights to take recourse to such other action as may be available under the relevant law, a service charge of Rs. 150 plus applicable GST per cheque shall be levied in addition to delayed payment surcharge.

(f) Other charges as stated in schedule of miscellaneous charges under MPERC (Recovery of Expenses and Other Charges for Providing Electric line or Plant used for the purpose of Giving Supply) Regulations, 2009 and as amended from time to time shall also be applicable.

(g) Existing LT power consumer shall ensure that LT capacitor of proper rating is provided. In this regard, Madhya Pradesh Electricity Supply Code 2021 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 consumer having meter not capable of recording average power factor**: The consumer shall ensure that LT capacitors of proper rating are provided and are in good working LT capacitors of proper rating are provided and are in good working condition. In this regard, Madhya Pradesh Electricity Supply Code, 2021 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.

(h) 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.

(i) In case of any dispute on applicability of tariff on a particular LT category, the decision of the Commission shall be final.

(j) 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.

(k) **Delayed payment Surcharge for all categories:** Surcharge at the rate of 1% 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.

(l) 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.

(m) Use of mix loads in one connection: Unless otherwise permitted specifically in the tariff category, the consumer requesting for use of mix loads for different purposes shall be billed for the purpose for which the tariff is higher.

(n) 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.

(o) 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.

8. Additional conditions for Temporary Supply at LT:

(a) Temporary supply cannot be demanded by a prospective/ existing consumer as a matter of right but will normally be arranged by the 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.

(b) 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.

(c) 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.

(d) The Sanctioned load or connected load, in case of connected load based tariff should not exceed 112.5 kW /150 HP. In case of demand based tariff the contract demand should not exceed 112.5 kW / 150 HP without any ceiling on connected load.

(e) 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.

(f) Connection and disconnection charges and other miscellaneous charges shall be paid separately as may be specified in the Schedule of Miscellaneous Charges.

(g) Power factor incentive/penalty shall be applicable at the same rate as applicable for permanent connection.

Annexure-2 (Tariff Schedules for High Tension Consumers)

ANNEXURE TO THE TARIFF ORDER PASSED BY MPERC FOR FINANCIAL YEAR 2021-22

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION
TARIFF SCHEDULES FOR HIGH TENSION CONSUMERS OF
MPIDC (Indore), LTD., SEZ PITHAMPUR

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Tariff Schedule - HV - 1

INDUSTRIAL AND NON-INDUSTRIAL

Applicability:

The **tariff HV-1.1(Industrial)** shall apply to all HT industrial consumers including Mini Steel Plants (MSP), MSP with rolling mills/ sponge iron plants in the same premises, electro chemical/ electro thermal industry, Ferro alloy industry etc 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.

The **tariff HV-1.2 (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.

Tariff:

S. No.	Category	Monthly Fixed Charges (Rs/kVA of billing demand per month)	Energy charges (Paise / unit)
1.1	**Industrial**		
	11 KV supply	193	382
	33 KV supply	228	379
1.2	**Non-Industrial**		
	11 KV supply	248	402
	33 KV supply	263	392

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 33 kV or 11 kV	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) Other terms and conditions shall be as specified under General Terms and Conditions of High Tension Tariff.

Tariff Schedule - HV - 2

PUBLIC WATER WORKS
Applicability:

The Tariff Category HV-2 shall apply to supply of power to Public Utility Water Supply schemes, sewage treatment plants /sewage pumping plants and for energy used in lighting pump house and dairy (for those dairy units where only extraction of milk and its processing such as chilling, pasteurization etc. is done).

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.

Tariff:

Category	Monthly Fixed charges (Rs. / kVA of billing demand per month)	Energy Charges (paise per unit)
11 kV supply	198	372
33 kV supply	223	342

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) Other terms and conditions shall be per the General Terms and Conditions of High Tension Tariff.

Tariff Schedule - HV - 3

SYNCHRONIZATION OF POWER FOR GENERATORS CONNECTED TO THE GRID

Applicability:

This Tariff shall apply to those generators who are already connected to the grid and seek to avail power for synchronization with the grid. This Tariff category shall also be applicable to the Generator/Co-generation plant from Renewable Sources entitled to draw power exclusively for its own use from the State Distribution Licensee for synchronization of plant with the grid or during shutdown period of its plant or during other emergencies.

Tariff for all voltages:

Category	Energy Charge (Paise/unit)
Generators for synchronization with Grid	**778**

Terms and Conditions:

(a) The supply for above purpose with the grid shall not exceed 15% of the capacity of the Power Plant. In case of drawl of power above 15% of the capacity of the power plant on any occasion, the excess energy drawn during the billing month shall be billed at the rate of 2 times of the normal energy charges.

(b) The condition for minimum consumption shall not be applicable to the generators including CPP. Billing shall be done for energy recorded on each occasion of availing supply during the billing month.

(c) The supply shall not be allowed to the CPP for production purpose for which they may avail stand-by support under the relevant Regulations.

(d) The synchronization with the grid shall only be made available after commissioning of plant.

(e) The generator including CPP shall execute an agreement with the Licensee for meeting the requirement of synchronization with the grid incorporating the above terms and conditions.

Tariff Schedule - HV - 4

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 (Rs/ kVA of Billing Demand per month)**	**Energy Charge (Paise/unit)**
HT Supply	86 per kVA of Billing Demand	388

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

The following terms and conditions shall be applicable to all HT consumer categories subject to specific terms and conditions for that category as mentioned in the tariff schedule of respective category:

1.1 The contract demand shall be expressed in whole number only.

1.2 **Character of Service:** The character of service shall be as per Madhya Pradesh Electricity Supply Code, 2021.

1.3 **Point of Supply:** The point of supply shall be as per provisions of Madhya Pradesh Electricity Supply Code, 2021.

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. 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) In the month which cumulative actual or billed monthly consumption of the consumer exceeds the cumulative monthly prorated minimum annual guaranteed consumption and if the consumer was charged in earlier months for tariff minimum difference consumption on account of his actual consumption being less, then such 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 such tariff difference consumption does not get fully adjusted in that month, such adjustment shall continue to be done 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 paise shall be ignored and 50 paise upwards shall be rounded off to next Rupee.

Incentive/ Rebate / Penalties

1.8 ***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.

1.9 An incentive for prompt payment @0.25% of the bill amount (excluding electricity duty and other Government levies) 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.

1.10 **Power Factor Penalty**

(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 Licensee reserves the right to disconnect the consumer's installation till steps are taken to improve the same to the satisfaction of the 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 Kilo Watt hours to the total kilo volt Ampere 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.

1.11 **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 105% of the contract demand, the tariffs given in various schedules shall apply to the extent of the 105% of the contract demand only. The consumer shall be charged for excess demand computed as difference of recorded maximum demand and 105% of contract demand on energy charges and 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**: The consumer shall pay charges @ 1.3 times the tariff for energy charges for consumption corresponding to excess demand in case the maximum demand recorded exceeds 105% of the contract demand.

Example: If a consumer having a contract demand of 200 kVA records a maximum demand of 250 kVA, the billing of energy charges for excess demand of (250 kVA- 210 kVA)= 40 kVA shall be = (total consumption recorded during the month x 40 kVA/maximum recorded demand) x 1.3 x energy charge unit rate.

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 115% of the contract demand :-** fixed charges for Excess Demand over and above the 105 % 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 115% of contract demand** :- In addition to fixed charges in 1 above, recorded demand over and above 15 % 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 105 kVA at normal tariff.

b) Above 105 kVA up to 115 kVA i.e. for 10 kVA at 1.3 times the normal tariff.

c) Above 115 kVA up to 140 kVA i.e. for 25 kVA at 2 times the normal tariff.

While doing so, other provisions of electricity tariff (such as tariff minimum charge etc.) will also be applicable on aforesaid excess demand.

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 Electricity Supply Code, 2021.

1.12 **Delayed Payment Surcharge:** Surcharge at the rate of 1 % 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.

1.13 **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 Licensee's rights to take action in accordance with any other applicable law.

1.14 **Temporary supply at HT:** If any consumer requires supply for a temporary period, the temporary supply shall be treated as a 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 charge shall be recovered for the full billing month or part thereof.

(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) Connection and Disconnection Charges shall also be paid.

(f) In case of existing HT consumer, the temporary connection may be given through existing permanent HT connection on following methodology of assessment :

(i) Deemed contract demand for the month to be billed for the fixed charge= C.D. (existing) on normal tariff for permanent connection + C.D. for temporary connection on normal tariff for temporary supply.

(ii) Billing demand for the month shall be as per tariff order for the deemed contract demand for that month.

(iii) Consumption during the month may be billed for Permanent connection (A)

$$A = \frac{\text{Contract demand (Permanent)}}{\text{Deemed contract demand}} \times \text{Total consumption}$$

Consumption of Temporary connection = Total consumption - (A)

(iv) The consumption worked out above for temporary connection shall be billed at 1.25 times the normal energy charges.

(v) The demand in excess of deemed contract demand as calculated above at **f**(i) shall be treated as Excess Demand. For billing purposes such Excess demand, if any, in any month shall be treated as pertaining to temporary connection load and shall be charged at 1.5 times the normal fixed charges & energy charges of temporary connection. Additional charges for excess demand recorded during the period of temporary connection shall be calculated as given below :

Fixed charges for excess demand = fixed charges per kVA for temporary connection x excess demand x 1.5 (one and half)

Energy charges for excess demand = energy charges per unit for temporary connection x 1.5(one and half) x (excess demand/deemed contract demand) x total consumption

(g) Power factor incentives/penalties and the condition for Time of Day Surcharge/ rebate shall be applicable at the same rate as for permanent connection.

Other Terms and Conditions for permanent connections:

1.15 The existing 11KV consumer with contract demand exceeding 300 kVA, who want to continue to avail supply at 11kV at his request, shall be required to pay additional charge at 5 % on the total amount of Fixed Charges and, Energy Charges billed in the month.

1.16 The existing 33KV consumer with contract demand exceeding 10,000 kVA, who want to continue to avail supply at 33kV at his request, shall be required to pay additional charge at 3% on the total amount of Fixed Charges and Energy Charges billed in the month.

1.17 No metering charges shall be billed in this tariff order.

1.18 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.

1.19 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.

1.20 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.

1.21 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.

1.22 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.

1.23 All conditions prescribed herein shall be applicable notwithstanding if any contrary provisions, exist in the agreement entered into by the consumer with the licensee.
