MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

5th Floor, "Metro Plaza", E-5, Arera Colony, Bittan Market, Bhopal - 462016



Petition No. 45/2020

PRESENT:

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

IN THE MATTER OF:

MPPTCL's petition for determination of Transmission Tariff for MYT control period from FY 2019-20 to FY 2023-24.

M. P. Power Transmission Co. Ltd., Jabalpur

Petitioner

Versus

- (i) M. P. Poorv Kshetra Vidyut Vitaran Co. Ltd., Jabalpur
- (ii) M. P. Madhya Kshetra Vidyut Vitaran Co. Ltd., Bhopal
- (iii) M. P. Paschim Kshetra Vidyut Vitaran Co. Ltd., Indore
- (iv) M. P. Industrial Development Corporation Ltd. (SEZ), Indore
- (v) West Central Railways, Jabalpur

Respondents

ORDER (Passed on this day of 19th May, 2021)

1. Madhya Pradesh Electricity Regulatory Commission, Bhopal (hereinafter referred to as MPERC or **Commission**) notified MPERC (Terms and conditions for Determination of Transmission Tariff) (Revision-IV) Regulations, 2020 {RG-28 (IV) of 2020}" on 14.02.2020, which are applicable during the control period from FY 2019-20 to FY 2023-24 (hereinafter referred to as **MYT Regulations** or the Regulations).

Regulation 10.10 of the aforesaid Regulations provides for filing of MYT petition within 60 days of notification of these Regulations. However, M.P. Power Transmission Company Ltd., Jabalpur vide its letter No. 04-01/CRA Cell/F-124/113 dated 4th May' 2020 had sought time extension up to 30.06.2020 for filing MYT petition for FY 2019-20 to FY 2023-24 with the following submission:

"This is to submit that due to unprecedented situation arising out of COVID-19 Pandemic, the Govt. and other offices at Jabalpur were closed w.e.f. 21.03.2020 which subsequently continued up to 29.04.2020 due to declaration of National Lock Down by the Govt. of India. As per directives issued by the Govt. of MP on 29.04.2020, the offices were directed to be re-opened w.e.f. 30.04.2020 and allowed functioning of the offices with 30% staff only. This is further submitted that District Jabalpur has been kept under Red Zone, which have constrained in functioning of the office because of Nonattendance of staff residing in Containment Zones of the City. The information for framing the MYT Petition is voluminous which is to be obtained from different offices of MPPTCL and MPPMCL which are also not functioning properly to their full capacity. It is further submitted that process of the voluminous information in the formats prescribed for Multi Year Tariff filing requires sufficient time. As such, at least Two-months time is required for framing the MYT Petition subject to resumption of normal functioning of all concerned offices.

In view of the above, it is prayed that Hon'ble Commission may kindly be pleased to allow filing of MYT Petition for Transmission Tariff control period FY 2019-20 to FY 2023-24 by the MPPTCL up to 30.06.2020."

It was observed by the Commission that on account of outbreak of COVID-19 and as a measure to contain the spread of this pandemic, the Government of India has taken measures to lockdown the country with effect from 25.3.2020. Due to aforesaid reasons, the generating companies in the state and M.P. Power Transmission Company were unable to file their MYT petitions within the time stipulated in the Regulations.

With the above background and keeping in view the difficulties faced by the Generating Companies and Transmission Licensee in filing MYT petitions during this period, the Commission in exercise of the powers under Regulation 6.2 of MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2020 and Regulation 10.10

of the MPERC (Terms and Conditions for determination of Transmission Tariff) Regulations, 2020 relaxed the timeline. The Generating Companies and MPPTCL were permitted to file the Multi-year tariff petitions for the control period FY 2019-20 to FY 2023-24 by **30th June, 2020**.

- Vide letter no. 1230 dated 26.06.2020, Madhya Pradesh Power Transmission Company Limited Jabalpur (hereinafter referred to as MPPTCL) filed the subject petition for determination of the Transmission Tariff for control period FY 2019-20 to FY 2023-24. In Para 1.10 of the petition, the petitioner stated that the instant petition for Multi-Year Tariff is governed by the MYT Regulations notified by the Commission on 14.02.2020. It further stated that the Transmission Capital Investment Plan matching with MYT Control Period i.e. FY 2019-20 to FY 2023-24 has already been submitted by MPPTCL to the Commission in Petition No. 42 of 2020. Subsequently, the Commission has approved the Capex Plan of MPPTCL vide order dated 12/03/2021. Audited Accounts of the Company were available till FY 2018-19. The MYT Petition has been filed on the projections/ estimations based on above mentioned plan & documents.
- 3. Motion hearing in the subject matter was held on 7th August, 2020. Vide daily order dated 10.08.2020, the petition was admitted and petitioner was directed to serve copies of the petition on all Respondents in the matter. The Respondents were also directed to file their response if any, on the petition by 5th September' 2020. MPPTCL confirmed that vide letter No. 2280 dated 17.08.2020, it has served copy of the petition to all the Respondents in the subject matter.
- 4. Subsequently, vide Commission's letter No. 1013 dated 4th September' 2020, the information gaps and the requirement of additional details/ data/ documents were communicated to the petitioner seeking its response by 30.09.2020.
- 5. Vide letter No. 3191 dated 29th September' 2020, MPPTCL submitted that during last two weeks, two personnel of their office were discovered with Corona positive resulting in disruption of office functioning. The functioning of other offices from where various information for preparation of reply were requisitioned was also affected due to the reason that some of the officials in these offices were suffering from Corona virus. Due to the aforesaid unavoidable circumstances, the compilation & finalization of reply to the Commission's observations was delayed. In view of the above, MPPTCL requested the Commission for extension of time to submit its reply till 15.10.2020.
- 6. Vide letter No. 3464 dated 09/10/2020, MPPTCL filed reply to the issues raised by the Commission. Vide letter No. 4839 dated 09/12/2020, MPPTCL submitted advance copy of the Reporter of Compliance (RoC) report for FY 2019-20. The parameters for 0&M expenses were verified from the RoC report.

7. On the queries raised by the Commission, issue wise reply filed by the petitioner are as under:

Issue: Transmission Capacity:

i. In para 2.3 of the petition, the petitioner has considered notification dated 21/03/2016 issued by the Energy Department, Government of MP (Annexure – II) for allocation of generating capacity. However, the allocation of capacity with regard to some power stations in Appendix – I of aforesaid Annexure may be changed after a period of four years. Therefore, the latest position with regard to all power stations mentioned in this Appendix - I alongwith the current status of transmission capacity was sought.

MPPTCL's response:

The allocated Transmission capacity for each financial year of the control period were obtained from the MP Power Management Company Ltd., which have been considered and mentioned at Para 2.3 to Para 2.9 of the subject Petition. The detailed annexures of the same are appended as Annexure-VI(a) to VI(e) with the Petition. In compliance to the directives of the Hon'ble Commission, the same have been again verified from MPPMCL wherein it is confirmed that the MPPMCL has provided updated capacity based on the Govt. of MP notification dtd. 21.3.2016. As such, there is no change in the capacity considered in the aforesaid Petition.

Issue:

ii. In para 2.6 of the petition for True up of Transmission Tariff (P. No. 45/2019) filed by MPPTCL, the capacity allocation for FY 2018-19 is shown as 17403.31 MW. However, the total anticipated transmission capacity of 19742.32 MW for FY 2019-20 has been worked out in para 2.4 of the subject petition. Detailed calculations for working out the transmission capacity of 19742.32 MW for FY 2019-20 was sought.

MPPTCL's response:

The details of Transmission capacity of FY 2019-20 as 19742.32 MW are given in Annexure-VI(a) appended with the Petition. The total capacity from MP Thermal Generation, MP Hydel Generation, Inter-State Hydel Projects, Central Sector, Share from Renewable Projects and Private Generators for FY 2019-20 is 20699.78 MW which after deduction of Auxiliary consumption / Losses, worked out to 19417.32 MW. Having considered 55 MW and 270 MW for MPIDC and WCR respectively, the capacity is evaluated to 19742.32 MW.

Issue: Transmission Capex Plan:

- iii. In para 4.1 & 4.2 of the subject petition, the petitioner has mentioned year-wise physical and financial plan for five years coinciding with the MYT control period. The petitioner was asked to submit the following details;
 - (a) The details of actual physical and financial achievements during FY 2019-20.
 - (b) The list of works capitalized during FY 2020-21 till date.

- (c) The list along-with physical & financial achievement of all works which are expected to be capitalized during FY 2020-21, based on the actual achievements till date, was sought.
- (d) There is variation in figures of physical assets shown in para 4.4 for FY 2019-20 under need based physical program & projection of physical assets in para 4.5 of the subject petition. Therefore, the petitioner was asked to submit the reasons for such variations in physical assets and submit the correct figures in both tables.

MPPTCL's response:

- (a) The details of Physical & Financial achievements during FY 2019-20 are submitted herewith as Annexure-1. It may kindly be seen that **tentative** expenditure based on the physical achievements during FY 2019-20 works out to Rs. 1939 Crores.

 The list of works capitalized during FY 2019-20 at field level is submitted as Annexure-2. It may kindly be seen that tentative Capitalization amount works out to Rs. 1270.11 Crores which will **further enhance by loading of direct booking expenditure and interest & overhead charges at Head Quarter level**.
- **(b)** The list of Capitalized works during FY 2020-21(up to 31.8.2020) at field level is submitted herewith as Annexure-3. The tentative amount of Capitalization at field level till 31.8.2020 is Rs. 227.83 Crores which is exclusive of direct booking expenditure and interest & overhead charges which will be loaded at Head Quarter level.
- (c). The anticipated works likely to be completed during FY 2020-21 are submitted herewith as Annexure-4. The expected construction of transmission line likely to involve an expenditure of Rs. 1273.83 Crores and the expenditure on construction on EHV Sub stations is likely to be Rs. 787.16 Crores. The total expenditure on Transmission works during FY 2020-21 is expected to be Rs. 2060.99 Crores.
 - It is submitted that Capitalization during a particular financial year may involve Capitalization of the works of the preceding 2 to 3 years besides works completed in that financial year. As such, to anticipate the amount of Capitalization in a particular year will largely depend upon the Capitalization done in previous years and based on the average Capitalization for those years, the Capitalization for any particular year(s) can be anticipated. Based on the similar assumptions, the anticipated Capitalization for the financial years coinciding with the control period has been worked out reducing the Plan projections by the average Capitalization figure i.e. 60.15% achieved during FY 2016-17 to FY 2018-19. This is further submitted that the Hon'ble Commission has been kind enough to work out the anticipated Capitalization based on the aforesaid assumptions / methodology in previous control periods.
- (d). It is submitted that the figures in Table 4.4 for FY 2019-20 is based on projections (60.15% of Capital Investment Plan projections) while the same considered in Table 4.5 is based on actual physical Assets addition during FY 2019-20. Further, the figures in Table 4.4 considered for FY 2019-20 has no impact anywhere, as the actual physical Assets addition figures have been considered in Para 5.3 for working out the O&M claims.

Issue: 0&M expenses:

iv. The report from Reporter of Compliance for FY 2019-20 has not been submitted by MPPTCL till date. Therefore, the copy of same was sought from the petitioner.

MPPTCL's response:

It is submitted for kind consideration that the report of Reporter of Compliance for FY 2019-20 has been delayed because of interruption in obtaining information from various field offices due to COVID-19 pandemic and its compilation. However, efforts are being made to finalize the same at the earliest possible and the same will be submitted to Hon'ble Commission immediately thereafter.

Issue:

v. The normative O&M expenses are based on length of line and number of bays. However, the physical and financial transmission plan has covered the details of lines and sub-stations only. The petitioner was asked to provide details of bays also in the physical and financial plan.

MPPTCL's response:

The No. of Bays estimated to be added during FY 2019-20 to FY 2023-24 are given at Para 4.4(D) (Page No. 21) of the Petition which is based on the anticipated addition during the control period while the anticipated addition for FY 2020-21 to FY 2023-24 and actual addition of Bays during FY 2019-20 has been given in Para 5.3 (Page No. 23) of the Petition and these figures have been considered for working out the O&M Expenses.

Issue:

vi. The actual 0&M expenses for FY 2019-20 with head wise details was sought.

MPPTCL's response:

The accounts for FY 2019-20 are yet to be finalized, as such, the provisional O&M Expenses for FY 2019-20 are Rs. 580.41 Crores i.e. R&M Rs. 79.32 Crores, Employee Cost Rs. 390.88 Crores and A&G Rs. 110.21 Crores. These figures are however provisional and subject to reconciliation and accounting adjustments.

Issue:

vii. A comparative chart showing normative 0&M expenses vis-a vis the actual head wise 0&M expenses incurred during the last control period of FY2016-17 to FY 2018-19 was sought.

MPPTCL's response:

The Normative O&M Expenses vis-à-vis actual O&M Expenses as per Audited Accounts during FY 2016-17 to FY 2018-19 (approved in True up Petitions for FY 2016-17 & FY 2017-18 and claimed in FY 2018-19) are shown here in below;

(Rs. in Crore)

Head of O&M	FY 2016-17		FY 2017-18		FY 2018-19	
Expenses	Normative	Actual	Normative	Actual	Normative	Actual
R&M	-	74.13	-	94.17	-	82.82
Employee Cost	-	260.77	-	249.94	-	280.52
A&G	-	66.62	-	80.31	-	88.00
TOTAL -	408.76	401.52	447.64	424.42	499.66	452.34

Issue: Terminal benefit expenses:

viii. The actual pension payment of Rs 1739.56 Cr during FY 2018-19 has been mentioned in P. No. 45/2019. In para 6.4 of the subject petition, the actual pension payment is mentioned as Rs 1875.18 Cr for FY 2019-20. Further, it has been projected to Rs 3533.58 Cr in FY 2023-24. Detailed reasons along with calculations for steep rise under this head within a control period was sought.

MPPTCL's response:

This is to submit that claim towards Terminal Benefits during FY 2018-19 as per actual Audited Accounts has been Rs. 2024.33 Crores which included Rs. 1739.56 Crores for Pension, Rs. 284.75 Crores for Gratuity and Rs. 0.02 Crores for Annuity for additional Family Pension. The aforesaid claims are as per Para 7.3 of the True up Petition No. 45/2019. The expenses of Rs. 1875.18 Crore towards Pension, Rs. 185.04 Crore towards Gratuity and Rs. 6 Crore for difference of Gratuity as per 1972 Gratuity Act, totaling Rs. 2066.22 Crores for Terminal Benefits have been claimed for FY 2019-20 as per Para 6.4 of the MYT Petition No. 45/2020.

The actual pay out towards Pension from FY 2014-15 to FY 2019-20 have been considered for working out average factor of increase in Pension which worked out to **1.17** %. Based on the above factor, the Pension of Rs. 1875.18 Crores (Actual pay out) increased to Rs. 3533.58 Crore in FY 2023-24. The details of aforesaid working is submitted herewith as Annexure-5.

Issue:

ix. In table under para 6.4 of the petition, the Gratuity has been increased from Rs 185.04 Cr in FY 2019-20 to Rs 465.06 Cr in FY 2020-21. The detailed reasons & calculations for this increase along with supporting documents was sought.

MPPTCL's response:

The details of Gratuity have been given in Annexure-X of the Petition. However, as directed, the reasons for increase in Gratuity from Rs. 185.04 Crores in FY 2019-20 to Rs. 465.06 Crores in FY 2020-21 is submitted as under;

- (a) There were less retirees in FY 2019-20 since retirement age was increased by two years in March 2018. Now, there is considerable increase in retirement from April 2020 onwards.
- (b) Average DCRG per Pensioner as on June 2020 has been worked out as Rs. 18.68 Lacs and No. of retirees in FY 2020-21 is estimated 2490 Nos. Therefore, the DCRG liability during FY 2020-21 works out to Rs. 465.06 Crores. The same is detailed out in Annexure-X of the Petition. The calculation is again submitted for kind perusal as Annexure-6.

Issue:

x. The reasons for increase in the projection under the head "difference in Gratuity payment" from Rs 6.00 Cr in FY 2019-20 to Rs 80.39 Cr in FY 2020-21 was sought along-with copy of all documents in support of the aforesaid claim.

MPPTCL's response:

The difference in Gratuity payment picked up pace from December 2019 onwards and in FY 2019-20 the payments were made pertaining to the related Court cases which amounted to Rs. 6 Crore only. All Companies gave data of Rs. 273.98 Crore for payment towards difference in Gratuity and the balance amount of Rs. 267.98 Crore has been divided in ratio 30:30:30:10 for FY 2020-21, 2021-22, 2022-23 and 2023-24 respectively, presuming that the claims shall be lodged in that proportion. With the aforesaid assumption, the claim during FY 2020-21 works out to Rs. 80.39 Crore. The working is submitted herewith as Annexure-7, which is also annexed with the Petition as Annexure-IX.

Issue:

xi. A comparative chart showing projected Terminal benefit liabilities vis-a vis the actual head wise liabilities during the last control period of FY 2016-17 to FY 2018-19 was sought.

MPPTCL's response:

The claims of Terminal Benefits in True up Petitions for FY 2016-17, 2017-18 and 2018-19 vis- \dot{a} -vis approved amount for these years is submitted here in below;

(Rs. in Crore)

Head of	FY 2016-17		FY 2017-18		FY 2018-19		
Terminal Benefit Expenses	Claimed	Allowed	Claimed	Allowed	Claimed	Allowed	
Pension	1164.45	1164.45	1380.83	1380.83	1739.56		
Gratuity	367.76	367.76	326.23	326.23	284.75	Under	
Annuity for Family Pension	0.03	0.0	0.01	0.01	0.02	consideration of Hon'ble	
TOTAL -	1532.24	1532.21	1707.07	1707.07	2024.33	Commission	

Issue: Depreciation;

xii. The unaudited Financial statements including Balance sheet as on 31/03/2020 and profit and loss for FY 2019-20 was sought. The audited Financial statements for FY 2019-20 was sought at the earliest after audit.

MPPTCL's response:

The accounts of the MPPTCL are under finalization first time through ERP. The compilation and uploading of data as on 31.3.2019 for carry forward to FY 2019-20 is under scrutiny. The aforesaid exercise is also affected due to COVID-19 pandemic. Keeping in view, this unprecedented situation, the Ministry of Corporate Affairs, Govt. of India has extended the period for conducting AGM upto 31.12.2020. **The efforts are being made by the MPPTCL to finalize the financial statements by 30.11.2020**. In view of the above, the Hon'ble Commission may kindly consider to relax the submission of unaudited financial statement as on 31.3.2020, which shall be submitted as soon as the same are finalized.

Issue:

- xiii. In P. No. 45/2019 regarding true up of transmission tariff for FY 2018-19, Depreciation for FY 2018-19 has been claimed as Rs 383.90 Cr. However, in the subject petition Depreciation for FY 2019-20 is claimed as Rs 475.44 Cr showing an increase of 24%. However, the GFA has increased from Rs 11512.35 Cr to Rs 13201.44 Cr showing an increase of 14% only. The petitioner was asked to submit the following;
 - (e) The basis and methodology for computation of depreciation on projected GFA for each year of control period.
 - (f) To confirm that the rate of depreciation has been applied as per provisions under MPERC (terms and conditions for determination of transmission tariff) (Revision IV) Regulations, 2020.
 - (g) The calculations for arriving at the depreciation amount was sought in excel sheet. A soft copy of the calculation sheet was also sought.

MPPTCL's response:

It is submitted for kind consideration that addition of GFA in a particular year and cumulative Depreciation till that year has no fixed line relationship. The point-wise replies to the observations in this regard are submitted herein below;

e. The cumulative Depreciation till the end of FY 2018-19 forms the basis for calculation of Depreciation in subsequent years. The Depreciation as on 31.3.2019 shall be carried forward in subsequent years at the applicable rates. From FY 2019-20 onwards, it is presumed that average time of six months may be considered for applicability of Depreciation i.e. presuming that the capitalized amount for that particular year will be depreciable from the mid of that financial year yielding the Depreciation for six months of the financial year. This amount of Depreciation for FY 2019-20 will be added to the cumulative Depreciation as on 31.3.2020 (the Depreciation as on 31.3.2019 will be accumulated as per applicable rates of Depreciation till

31.3.2020) so as to evaluate the cumulative Depreciation as on 31.3.2020. This process has been carried forward for remaining financial years of the control period.

- f. It is to confirm that the rate of Depreciation has been applied as per the Tariff Regulations 2020.
- g. The calculations for arriving at the Depreciation amount is submitted herewith in excel sheet/soft copy and the same is enclosed as Annexure-8.

Issue: Interest and Finance charges:

xiv. In P. No. 45/2019 regarding True up of transmission tariff for FY 2018-19, Principal not due as on 31/03/2019 has been claimed as Rs 2567.97 Cr. and the weighted average rate of interest has been calculated as 4.50%. However, in the subject petition principal overdue of Rs 1281.70 Cr and interest overdue of Rs 2050.49 Cr have been shown over and above the aforesaid principal not due amounting to Rs 2567.97 Cr. Therefore, calculations for arriving at the weighted average rate of interest was sought.

MPPTCL's response:

The desired calculation for working out Weighted Average Rate of Interest @ 4.50% for FY 2018-19 is tabulated below;

(Rs. in Crore)

S. No.	Particulars	Principal not due as on 31.03.2019	Rate of interest (%)	Interest
1	REC-I Secured	138.16	9.50%	13.14
2	REC-II Secured	16.35	9.50%	1.55
3	Union Bank of India	177.89	8.76%	15.58
4	ADB-1869	146.63	10.59%	15.40
5	GOMP ADB 2323	328.98	4.08%	13.42
6	GOMP ADB 2346	488.91	4.08%	19.95
7	GOMP ADB 3066	544.85	2.14%	11.66
8	GOMP JICA IDP-217	546.48	1.50%	8.20
9	GOMP JICA IDP-250	42.55	1.80%	0.77
10	GOMP KfW (GEC)	134.12	11.50%	15.42
11	Market Bond	3.05	8.30%	0.25
TOTA	IL -	2567.97	-	115.34

Weighted Average Rate of Interest = (115.34/2567.97) *100 = 4.50 %

Issue:

xv. The Balance sheet as on 31/03/2019 has recorded trade receivables of Rs 1750.81 Cr and TUT 10 in P. No. 45/2019 shows bad debts written off as Rs 535.70 Cr. In the subject petition, MPPTCL has shown principal and interest overdue. In view of this the efforts made for recovering the trade receivables and bad debts was sought.

MPPTCL's response:

The trade receivable amounting to Rs. 1750.81 Crore is the major amount receivable from the State Discoms which are not able to pay due to acute financial crunch. The receivables towards Parallel Operation Charges recoverable from Captive Power Plants are accumulating due to pending litigation at APTEL, New Delhi. The receivables from Discoms amounting to Rs. 535.14 Crores have been written-off by the Govt. of MP vide order No. 8964/R/3483/2015/XIII dtd. 11.10.2019. An amount of Rs. 0.45 Crore is towards miscellaneous losses i.e. Obsolescence of stores and compensation made upon accidents/death/injuries. An amount of Rs. 0.11 Crore has been written-off towards Parallel Operation Charges of Malanpur Captive Power Plant, the recoveries of the outstanding amount whereby have been decided by the National Company Law Tribunal, New Delhi.

Issue:

xvi. The weighted average rate of interest is calculated as 9.19% in FY 2019-20. However, the same was 4.50% for FY 2018-19 in P. No. 45/2019. The petitioner was asked to justify the reasons for increase in weighted average rate of interest. A soft copy of the calculation sheet for arriving at the weighted average rate of interest was sought.

MPPTCL's response:

The rate of interest in respect of JICA IDP 217 & 250 and ADB 3066 loans has been considered @ 12% per annum instead of lending agencies rates @ 1.5% & 1.80% (JICA loans) and @ 2.14% for ADB 3066 loan. The interest rate @ 12% has been considered in compliance to the directives of the Energy Department, Govt. of MP order No. F-5-15/2014/13 dtd. 31.3.2017. The calculation for working out Weighted Average Rate of Interest @ 4.5% per annum considered in True up Petition for FY 2018-19 has been done in compliance to directives of the Hon'ble Commission for True up order dtd. 4.5.2018 for FY 2016-17 and dtd. 4.1.2020 for FY 2017-18. It is to submit that accounts of MPPTCL are being finalized based on the interest @ 12% in respect of these loans and creation of liabilities to the Govt. of MP have occurred accordingly. In view of the above, to meet out those obligations towards interest payment on these loans, though the on-lending agreements as per directives of Hon'ble Commission in True up orders for FY 2016-17 and FY 2017-18 are yet to be executed, the interest rate @ 12% per annum in respect of JICA IDP 217 & 250 and ADB 3066 loans has been considered in framing the MYT Petition. The Weighted Average Rate for FY 2019-20 accordingly works out to 9.19% which is tabulated here as under;

FY-2019-20 (Rs. in Lacs)

S.	Particulars	Principal not due	Rate of	Interest
No.	Particulars	as on 31.03.2020	interest (%)	mierest
1	REC-I Secured	25966.00	9.75	2531.69
2	REC-II Secured	12297.00	9.75	1198.96
3	Union Bank of India	59696.46	8.18	4883.17
4	ADB-1869	12459.90	10.59	1319.50
5	GOMP ADB 2323	30740.59	3.27	1005.22
6	GOMP ADB 2346	45681.06	3.27	1493.77
7	GOMP ADB 3066	72798.13	12.00	8735.78
8	GOMP JICA IDP-217	50276.46	12.00	6033.18
9	GOMP JICA IDP-250	11122.40	12.00	1334.69
10	GOMP KfW (GEC)	42195.41	11.50	4852.47
11	Market Bond	228.48	8.30	18.96
Tota	<u>l</u> -	363461.89		33407.39

Weighted Average Rate of Interest for FY 2019-20 = (33407.39/363461.89)*100 = 9.19%

Issue:

xvii. With regard to Interest on working capital, the rate has been considered as 8.50% + 3.50% = 12.00% on the basis of SBI MCLR being 8.50% on 01/04/2019. However, SBI MCLR was 7.75% as on 01/04/2020 and it is 7.00% as on date. The petitioner was asked to submit the details of the actual rate of interest for working capital for FY 2019-20. The reasons for not considering the reduced SBI MCLR as on date was sought.

MPPTCL's response:

The SBI MCLR rate as on 1.4.2019 @ 8.5% has been considered to work out the Bank rate for each financial year of the control period. As per the monetary policy of the RBI announced from time to time, the MCLR rate of the Commercial Banks keep on changing. The SBI MCLR rate can not be predicted for the balance period of the control period at the time of filing the Petition, as such, the basic rate as on 1.4.2019 has been considered for balance control period also. However, it is submitted that in view of uncertainty involved in this matter, the Hon'ble Commission is prayed to kindly take a view on that.

Issue: Return on Equity;

xviii. In table under para 9.4, the opening equity for FY 2019-20 (closing Equity for previous year) is mentioned as Rs 3078.80 Cr for Return on Equity. However, in table under para 10.3 of the True-up petition for FY 2018-19, the closing Equity in FY 2018-19 was mentioned as Rs 3072.04 Cr. The correct figures and reason for discrepancy was sought.

MPPTCL's response:

The Equity as on 31.3.2019 is Rs. 3078.80 Crores which has been rectified in True up Petition for FY 2018-19 and it was submitted to Hon'ble Commission vide letter No. 3192 dtd. 29.9.2020.

Issue:

Non-tariff Income:

xix. The non-tariff income of Rs 23 Cr for FY 2019-20 and Rs 27 Cr for FY 2023-24 is claimed in the subject petition. However, the actual non-tariff income of Rs 61.35 Cr has been reported for FY 2018-19 in P. No. 45/2019 against the non-tariff income Rs 21.00 Cr allowed by the Commission. The actual non-tariff income for FY 2019-20 along-with the reason for lower projections was sought.

MPPTCL's response:

There was steep increase in Non-Tariff Income of Rs. 61.35 Crores in FY 2018-19 because of receipts of consultancy charges from Rewa Ultra Mega Solar Project (RUMS). The amount of Non-Tariff Income for FY 2018-19 considered in True up Petition for different heads excluding consultancy charges has been projected to be increased uniformly by 4% as detailed out in format TUT-2 appended with the Petition.

Issue: Response on the Respondent's submission;

xx. Vide Commission's daily order under reference, MPPTCL has been directed to serve copies of the petition on all Respondents. The response of MPPTCL on the respondents' reply to the subject petition, if any, was sought.

MPPTCL's response:

The copy of the Petition has been served upon to all the Respondents vide this office letter No. 04-01/CRA/F-124/2280 dtd. 17.8.2020. It is to submit that no comments have been offered by any of the Respondent till date.

8. Certain discrepancies were found in the above reply/information submitted by MPPTCL. Vide Commission's letter No. 1544 dated 29th December' 2020, the petitioner was asked to file comprehensive reply to all such discrepancies communicated to it by the Commission along with draft public notices in Hindi & English on the gist of the updated petition by 30.01.2021. Vide letter No. 5902 dated 29.01.2021, MPPTCL filed its response on the issues raised by the Commission along with updated petition based on the latest available figures of accounts for FY 2019-20 along-with draft public and draft public notices. Thus, **the petition was updated and amended by the petitioner**.

9. The issue wise response filed by the petitioner on the queries raised by the Commission are as under:

Issue: Transmission Capex Plan:

a. The petitioner has submitted that the tentative expenditure on Capital works based on physical achievements was Rs 1939 Cr during FY 2019-20. However, the tentative amount of Capitalization at field level is Rs 1270.11 Cr which is expected to further increase by loading of direct booking expenditure and interest & overhead charges at Head Quarter level. In support of aforesaid contention, the petitioner is required to submit the audited / unaudited balance sheet of FY 2019-20 along-with a statement for reconciliation of corresponding figures.

MPPTCL's response:

"As regards submission of unaudited balance sheet for FY 2019-20, it is to submit that the Accounts for FY 2019-20 are in the process of finalization, as such, the **preparation of balance sheet and other formalities may take some time**. However, it is submitted that the capitalization amount for the works capitalized during FY 2019-20 amounting to **Rs. 934.10 Crores** is **almost freezed**, which may slightly vary upon finalization of Accounts. As desired, the ARR for the FY 2019-20 to FY 2023-24 has been worked-out accordingly".

Issue:

b. MPPTCL has stated that the tentative capitalization for FY 2020-21, till 31.8.2020, was Rs 227.83 Cr as against the total expected expenditure of **Rs 2060.99 Cr** claimed for FY 2020-21 in the subject petition. Since, half yearly figures for actual capitalization are available now hence, the petitioner is required to submit the total capitalization up to September, 2020 and justify the amount to be considered for FY 2020-21 in the subject petition.

MPPTCL's response:

"The capitalization amount for the works capitalized upto September-2020 is Rs. 632.37 Crore without loading of Interest and Overheads. The capitalization upto September-2020 has been achieved during the Pandemic period where routine functioning of various offices responsible for completion of this task has been affected. In the 2nd half of the Financial Year (2020-21), the pace of capitalization is likely to increase and it is expected that the capitalization amount of Rs.1349.57 Crore (Para 4.4, Page 20 of the Petition) considered for working out the Depreciation of assets commencing from FY 2020-21 may be achieved. Regarding amount of Rs. 2060.99 Crore as indicated in the above referred letter, it is submitted that it is the estimated amount of the works (Transmission Lines & Sub-stations) anticipated for completion during FY 2020-21 and the same was intimated vide letter No. 3464 dated 09.10.2020 in response to the observations of the Hon'ble Commission. This is submitted for kind consideration that the capitalization amount of Rs. 1349.57 Crore considered in the petition is based on the Capital Investment Plan for FY 2019-20 to FY 2023-24 submitted by the MPPTCL to Hon'ble Commission for approval".

Issue: Terminal benefit expenses:

c. **Pension & Gratuity**: The average escalation factor of 1.17 used for projection of pension amounts to 17 % increase every year, which is much higher than escalation factor of 3.51 % mentioned in Regulation 28.3. It has been observed that it is based on the arrears of pay revision in the FY 2017-18 and FY 2018-19. However, there is no increase on account of the arrears of pay revision in FY 2019-20.

The petitioner was asked to consider the actual figures as per the latest audited accounts and escalate it with 3.51 % for submitting the revised & updated figures for pension and gratuity for remaining period of the subject MYT petition.

MPPTCL's response:

"The expenses towards Terminal Benefits in FY 2019-20 are almost freezed during the process of finalization of Accounts for FY 2019-20. The **actual pay-outs** according to aforesaid data for FY 2019-20 and provided by Terminal Benefit Trust is **Rs. 1834.01 Crore** which is inclusive of arrears amounting to Rs. 5.57 Crores paid towards difference of gratuity arising out of the order of the Hon'ble Supreme Court. As directed by the Hon'ble Commission conveyed vide above referred letter No. 1544 dated 29.12.2020, the average escalation factor for pension and gratuity has been taken as 3.51% for the subsequent years i.e. FY 2020-21 to FY 2023-24. The amount of pension and gratuity is indicated in the Annexure-I, which is submitted herewith".

d. **Issue: Difference in gratuity**:

The details of the relevant Court case which lead to sharp increase from Rs 6 Cr to Rs 80.39 Cr has not been mentioned by the petitioner. The petitioner is required to submit these details and also inform about the updated figures based on the actual expenditure under this head.

MPPTCL's response:

"The actual payment towards difference in gratuity in compliance to the decision of the Hon'ble Supreme Court vide order dated 05.10.2018 passed in Civil Appeals No. 10266 to 10268 of 2018, till December-2020 is **Rs. 15.61 Crore** and balance Rs 64.78 Crore is likely to be disbursed by March-2021. The order dated 05.10.2018 passed in Appeal No. 10266-10268 of the Hon'ble Supreme Court is submitted herewith for kind perusal please. (Annexure-II)"

e. **Issue: Depreciation:**

The petitioner is required to reconcile the depreciation for FY 2019-20 claimed in the subject petition with the unaudited / audited accounts for FY 2019-20. If required, the depreciation claims for future years of the subject MYT petition may also be adjusted accordingly.

MPPTCL's response:

"The depreciation figures on the basis of capitalization amount obtained in the process of finalization of Accounts for the FY 2019-20 has been **updated** and the depreciation for the subsequent years has also been adjusted accordingly".

- 10. A comparative chart showing the ARR filed by the petitioner in the original petition and in the amended petition is as follows:
 - (i) The summary of the ARR for the control period, as filed by MPPTCL in the **original petition** is as under;

(Rs. in Crore)

			ARR fo	r the Finan	cial Year	
S. No.	Particulars	FY	FY	FY	FY	FY
NO.		2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7
1	O&M Expenses	556.68	611.21	658.72	694.66	733.20
2.i	Against Current Liabilities	2066.22	2742.48	3191.67	3607.36	4012.14
2.ii	Provisions	95.93	102.20	108.89	116.03	123.64
2	Total Terminal Benefits	2162.15	2844.68	3300.56	3723.39	4135.78
3	Depreciation	475.44	549.04	578.84	598.88	608.02
4	Interest & Finance Charges	334.77	396.75	424.27	415.33	386.91
5	Interest on Working Capital	78.63	94.57	105.32	114.04	122.01
6	Return on Equity	610.79	694.33	760.74	804.00	831.41
7	Expenses Towards payment to PPP Licensee	37.80	37.80	37.80	37.80	37.80
8	Expenses Towards payment to OPGW Charges to PGCIL	2.47	1.18	1.09	1.06	1.02
9	MPERC's Fee	0.77	0.86	0.94	1.01	1.08
10	Taxes & fees (other than MPERC fee)	1.98	2.05	2.12	2.19	2.27
11	Security Expenses	22.74	26.94	26.96	27.02	27.08
	TOTAL -	4284.21	5259.41	5897.36	6419.38	6886.58
12	Less Non-Tariff Income (-)	-23.00	-24.00	-25.00	-26.00	-27.00
	ARR -	4261.21	5235.41	5872.36	6393.38	6859.58

(ii) The summary of the ARR for Control Period filed by the MPPTCL in the **amended and updated petition** is summarized hereunder;

(Rs. in Crore)

C			ARR fo	r the Financi	ial Year	
S.	Particulars	FY	FY	FY	FY	FY
No.		2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7
1	O&M Expenses	556.68	608.41	659.47	702.21	741.01
2(;)	Against Current	1834.01	1973.01	2039.44	2108.20	2125.78
2(i)	Liabilities	1034.01	1973.01	2037.44	2100.20	2123.70
2(ii)	Provisions	0.00	0.00	0.00	0.00	0.00
2	Total Terminal Benefits -	1834.01	1973.01	2039.44	2108.20	2125.78
3	Depreciation	455.50	509.18	538.97	559.02	568.16
4	Interest & Finance Charges	311.40	350.53	381.72	377.05	352.77
5	Interest on Working Capital	72.74	79.44	84.56	88.31	90.44
6	Return on Equity	590.03	652.82	719.23	762.48	789.90
7	Expenses Towards payment to PPP Licensee	37.80	37.80	37.80	37.80	37.80
8	Expenses of payment to OPGW Charges to PGCIL	2.47	1.18	1.09	1.06	1.02
9	MPERC's Fee	0.77	0.86	0.94	1.01	1.08
10	Taxes & fees (other than MPERC fee)	1.98	2.05	2.12	2.19	2.27
11	Security Expenses	22.74	26.94	26.96	27.02	27.08
	TOTAL -	3886.11	4242.20	4492.29	4666.37	4737.31
12	Less Non-Tariff	-23.00	-24.00	-25.00	-26.00	-27.00
14	Income (-)	-23.00	-24.00	-23.00	-20.00	-27.00
	ARR -	3863.11	4218.20	4467.29	4640.37	4710.31

11. It was observed that the petitioner has amended and updated the petition based on the latest available figures of accounts for FY 2019-20 due to which the figures for ARR items have changed and the net ARR for FY 2019-20 has reduced from **Rs 4261.21 Cr** in original petition to **Rs 3863.11 Cr** in the amended petition. Similarly, the ARR for other years of the control period has also been amended by the petitioner as shown in the tables above. Further the petitioner has submitted that no reply has been received from any of the Respondent in the subject petition. MPPTCL also submitted draft public notice in Hindi

and English on gist of the amended & updated petition. In view of the above, the petition was listed for public hearing on 23rd March' 2021.

- 12. Vide Commission's letter No. 264 dated 12/02/2021, MPPTCL was directed to publish the approved public notice in newspapers to invite comments / suggestions from the public and to submit its response on the comments / suggestions received by it by 12/03/2021. In response, vide letter no. 7030 dated 15/03/2021, MPPTCL submitted copies of the public notice published by it on 17/02/2021 in Hindi newspapers Jabalpur Express at Jabalpur, Pradesh Today at Indore and in English newspaper The Pioneer at Bhopal. MPPTCL further submitted that it has not received any comments / suggestions on subject petition upto the due date for filing comments / suggestions.
- 13. However, the Commission has received comments / suggestions from one stakeholder along with his application for condonation of delay in filing comments / suggestions through e-mail on 13/03/2021 (& hard copy on 16/03/2021). The aforesaid comments / suggestions were forwarded to the petitioner for its response. Vide letter no. 7153 dated 17/03/2021, MPPTCL submitted its pointwise response on the comments / suggestions.
- 14. In the amended petition submitted to the Commission, MPPTCL prayed the following: "In view of the submission made in foregoing paragraphs of the petition, the petitioner MPPTCL most respectfully prays that the Hon'ble Commission may;
 - (a) Kindly approve the Annual Fixed Cost for FY 2019-20 to FY 2023-24, as mentioned in Para 11.1, and allow the amount to be recovered from the Distribution Licensees and other customers as per Para 11.2 and 11.3. It is also prayed to kindly permit the MPPTCL to bill and recover from the beneficiaries, the under recovered amount as per Clause-17.2 of Tariff Regulations, 2020.
 - (b) Kindly approve the Transmission charges for Non-conventional Energy Source Based Generating Units / Open Access Customers connected on 132 KV and above as worked out in Para 11.4 of the Petition which shall be applicable from the date as approved by the Hon'ble Commission.
 - (c) Kindly issue appropriate orders as deem fit for funding of the terminal benefit trust fund as submitted in Para 6.7.
 - (d) Condone any inadvertent omission/errors/short-comings and permit the petitioner to add/change/modify/alter this filing and make further submission as may be required.
 - (e) Pass such orders, as Hon'ble Commission may deem fit and proper and necessary in the facts and circumstances of the case to grant relief to applicant."
- 15. **Public hearing** in this matter was held on 23rd March 2021 through video conferencing. At the public hearing, stakeholder submitted his comments / suggestions and the representatives of the petitioner responded on the aforesaid comments / suggestions submitted by the stakeholder. The details of the comments / suggestions received by the Commission, the response of the petitioner on the comments / suggestions along with the Commission's observations are annexed as **Appendix-1** to this Order.

Intra State Transmission System Capacity

Petitioner's submission:

16. The petitioner has broadly submitted the following in the amended petition:

16.1 Transmission Service Agreement -

In compliance to Clause 5 of the State Government order dated 31.5.05, the Five Companies and MPSEB entered into a Transmission Service Agreement on 17th June 2005, as per the draft approved and forwarded by MPSEB to the State Government. The Transmission Service Agreement dated 17th June'05 provides "The Tariff and terms & conditions for the Transmission services to be rendered by the Transco, shall be as per the Tariff determined by the State Commission from time to time. The MPPTCL has therefore raised the bills of Transmission charges since 1.6.2005 as per the Tariff determined by the Hon'ble Commission from time to time. Hon'ble Commission directed to enter into a long term Transmission Service Agreement. Accordingly, the Petitioner MPPTCL has entered into Transmission Service Agreement with the three Distribution Licensees on dates indicated hereunder;

(i). East Discom - 20.11.2006.
 (ii). Central Discom - 17.11.2006.
 (iii). West Discom - 17.11.2006.

An agreement dated 29.01.2005 also exists between MPSEB (Now MPPTCL) and MPAKVN(SEZ) which is now MP Industrial Corporation (MPIDC), and as per Transfer Scheme MPIDC is a Long-Term Open Access customer of MPPTCL, for availing power at its Special Economic Zone at Pithampur, Distt. Dhar. Further, West Central Railways (WCR), a Long Term Open Access Customer on behalf of Indian Railways entered into Bulk Power Transmission Agreement, with MPPTCL on 7.10.2016 for transmission of power to the Traction Sub-Station (TSS) points of Railways in MP effective from 22.01.2016 for power schedule.

16.2 Intra-State Transmission System -

Intra-State Transmission System of MPPTCL comprises of EHV Lines and Sub-stations of various voltages. Position as on 31.3.19 is tabulated hereunder;

		As on 31.3.2019			
C No	Walter a Lavel	EHV Lines	EHV		
S. No.	Voltage Level	Sub-Stations			
		Ckt. KMs	Number	MVA Capacity	
1	400 KV	3520.95	11	8495	
2	220 KV	12929.07	78	23990	
3	132 KV	18914.55	276	28246	
TOTAL -	-	35364.57	365	60731	

16.3 Transmission Capacity for FY 2019-20 -

The total capacity commissioned/ contracted by MPPMCL on behalf of the Distribution Companies as on 31.3.2019 is depicted as 19417.32 MW after deduction of auxiliary power/loss (Excluding MPIDC) and after taking into consideration 55 MW Capacity of MPIDC and 270 MW Capacity of WCR, total of 19742.32 MW capacity is anticipated for commissioning/ contract. Thus, the Generating capacity available in MP's System will be;

S. No	Type of Generation	Total Capacity (MW)	Share after Aux./ Loss deduction (MW)
1	MP Thermal Generation (excluding MPIDC allocation)	5345.00	4941.77
2	MP Hydel Generation (including share)	595.00	592.09
3	Inter-state Hydel Projects	322.20	321.24
4	Joint Venture Hydel Projects	2424.32	2406.97
5	Central Sector, ER, NR (Thermal)	4655.66	4225.92
6	Share from Renewable Projects	3962.60	3834.11
7	From Private Projects	3395.00	3095.22
8	MPIDC	55.00	55.00
9	WCR	270.00	270.00
Total		21024.78	19742.32

Details are shown in Annexure-VI(a). The Capacity of WCR is to be treated as additional.

16.4 Transmission Capacity for FY 2020-21 -

The total capacity commissioned/ contracted by MPPMCL on behalf of the Distribution Companies as on 31.3.2020 is depicted as 22232.44 MW after deduction of auxiliary power /loss (Excluding allocation of MPIDC). and after taking into consideration 55 MW Capacity of MPIDC and 320 MW Capacity of WCR, total of 22607.44 MW capacity is anticipated for commissioning/ contract and the same is tabulated hereunder:-

S	Particulars	Contracted/	Net: after aux. /
No.	Furticulars	Commissioned	loss deduction
1	MP Thermal Generation (excl. MPIDC)	5345.00	4941.77
2	MP Hydel Generation (including share)	595.00	592.09
3	Inter-state Hydel Projects	322.20	321.24
4	Joint Venture Hydel Projects	2424.32	2406.97
5	Central Sector, ER, NR (Thermal)	5449.49	4951.66
6	Share from Renewable Projects	6122.00	5923.49
7	From Private Projects	3395.00	3095.22
8	MPIDC	55.00	55.00
9	WCR	320.00	320.00
Tota	l Generation MW	24028.01	22607.44

Details are shown in Annexure-VI(b). The Capacity of WCR is to be treated as additional.

16.5 Transmission Capacity for FY 2021-22 -

The total capacity commissioned/ contracted (anticipated) by MPPMCL on behalf of the Distribution Companies as on 31.3.2021 is depicted as 23031.24 after deduction of auxiliary power/loss MW (Excluding allocation of MPIDC). and after taking into consideration 60 MW Capacity of MPIDC and 330 MW Capacity of WCR, total of 23421.24 MW capacity is anticipated for commissioning/ contract and the same is tabulated hereunder: -

S	Particulars	Contracted/	Net: after aux. /
No.	Furticulars	Commissioned	loss deduction
1	MP Thermal Generation (excl. MPIDC)	4510.00	4192.86
2	MP Hydel Generation(including share)	595.00	592.09
3	Inter-state Hydel Projects	322.20	321.24
4	Joint Venture Hydel Projects	2424.32	2406.97
5	Central Sector, ER, NR (Thermal)	5449.49	4951.66
6	Share From Renewable Projects	7746.00	7494.84
7	From Private Projects	3370.00	3071.58
8	MPIDC	60.00	60.00
9	WCR	330.00	330.00
Tota	l Generation MW	24807.01	23421.24

Details are shown in Annexure-VI(c). The Capacity of WCR is to be treated as additional.

16.6 Transmission Capacity for FY 2022-23 -

The total capacity commissioned/ contracted (anticipated) by MPPMCL on behalf of the Distribution Companies as on 31.3.2022 is depicted as 24257.15 MW (Excluding allocation of MPIDC) and after taking into consideration 60 MW Capacity of MPIDC and 340 MW Capacity of WCR, total of 24657.15 MW capacity is anticipated for commissioning/ contract and the same is tabulated hereunder:-

S	Particulars	Contracted/	Net : after aux. /
No.	Purticulars	Commissioned	loss deduction
1	MP Thermal Generation (excl. MPIDC)	4510.00	4192.86
2	MP Hydel Generation(including share)	595.00	592.09
3	Inter-state Hydel Projects	322.20	321.24
4	Joint Venture Hydel Projects	2424.32	2406.97
5	Central Sector, ER, NR (Thermal)	5449.49	4951.66
6	Share From Renewable Projects	9013.00	8720.75
7	From Private Projects	3370.00	3071.58
8	MPIDC	60.00	60.00
9	WCR	340.00	340.00
Tota	l Generation MW	26084.01	24657.15

Details are shown in Annexure-VI(d). The Capacity of WCR is to be treated as additional.

16.7 Transmission Capacity for FY 2023-24 -

The total capacity commissioned/ contracted (anticipated) by MPPMCL on behalf of the Distribution Companies as on 31.3.2023 is depicted as 25276.01 MW after deduction of auxiliary power/loss (Excluding allocation of MPIDC).and after taking into consideration 60 MW Capacity of MPIDC and 340 MW Capacity of WCR, total of 25676.01 MW capacity is anticipated for commissioning/ contract and the same is tabulated hereunder:-

S	Particulars	Contracted/	Net : after aux. /
No.	Particulars	Commissioned	loss deduction
1	MP Thermal Generation (excl. MPIDC)	4510.000	4192.86
2	MP Hydel Generation(including share)	595.000	592.09
3	Inter-state Hydel Projects	322.200	321.24
4	Joint Venture Hydel Projects	2424.320	2406.97
5	Central Sector, ER, NR (Thermal)	5449.490	4951.66
6	Share From Renewable Projects	10066.000	9739.61
7	From Private Projects	3370.000	3071.58
8	MPIDC	60.00	60.00
9	WCR	340.00	340.00
Tota	l Generation MW	27137.01	25676.01

Details are shown in Annexure-VI(e). The Capacity of WCR is to be treated as additional.

Transmission Capacity allocation among Discoms, WCR & MPIDC -

16.8. The capacity allocation to Discoms is proposed on the following basis.

- (i). Net transmission capacity available for a particular year is apportioned in the ratio based on ratio of energy requirement of three state owned Discoms as notified by State Govt. order dtd. 30.3.2016 and WCR allocation is treated as additional.
- (ii) The details of projected energy inputs between all three Discoms during the control period i.e. FY 2019-20 to FY 2023-24 and percentage allocation based on energy inputs of Discoms is tabulated hereunder:-

		FY 2019-20	0	FY 2020-2	1	FY 2021-2.	2	FY 2022-2.	3	FY 2023-2	4
S. N.	Distribution Licensee	Energy inputs of Discoms (MU)	Alloc a- tion (%)	Energy inputs of Discoms (MU)	Alloc ation (%)	Energy inputs of Discom (MU)	Alloc ation (%)	Energy inputs of Discoms (MU)	Alloc ation (%)	Energy inputs of Discoms (MU)	Alloc- tion (%)
1	MP PKVVCL, Jabalpur	20508.98	29.37	22151.04	29.26	23874.08	29.49	25522.41	29.66	27075.41	29.74
2	MP MKVVCL, Bhopal.	24133.28	34.56	26686.04	35.25	28440.75	35.13	30063.44	34.93	31563.33	34.67
3	MP PaKVVCL, Indore.	25185.56	36.07	26867.96	35.49	28647.92	35.38	30470.33	35.41	32389.35	35.58
4	Total Discoms	69827.83	100	75705.04	100	80962.75	100	86056.17	100	91028.09	100

- (iii). The capacity of current year is taken as on 31st March of previous year.
- (iv). The fractional allocation worked out has been rounded off.

16.9 Based on above, the allocated transmission capacity (MW) proposed is tabulated hereunder;

S. No.	Distributi on Licensee	Allo- cation (in%)	2019- 20	Allo- cation (in%)	2020- 21	Allo- cation (in%)	2021-22	Allo- catio n (in%)	2022- 23	Allo- cation (in%)	2023- 24
1	MP PKVVCL, Jabalpur	29.37 %	5703.02	29.26 %	6505.14	29.49 %	6791.39	29.66 %	7194.15	29.74 %	7518.10
2	MP MKVVCL, Bhopal.	34.56 %	6710.84	35.25 %	7836.94	35.13 %	8090.46	34.93 %	8474.15	34.67 %	8764.27
3	MP PaKVVCL, Indore.	36.07 %	7003.46	35.49 %	7890.36	35.38 %	8149.39	35.41 %	8588.85	35.58 %	8993.64
4	Total Discoms	100 %	19417.32	100 %	22232.44	100 %	23031.24	100 %	24257.15	100 %	25276.01
5	WCR	-	270.00	-	320.00	-	330.00	-	340.00	-	340.00
6	MPIDC	-	55.00	-	55.00	-	60.00	-	60.00	-	60.00
7	GRAND TOTAL -	_	19742.32		22607.44	_	23421.24		24657.15	_	25676.01

As per Transmission Tariff Regulations, the Distribution Companies, MPIDC and WCR will share the transmission charges in the ratio of capacity allocated to them.

17. Performance of Intra – state Transmission System_–

17.1 Transmission Losses -

Transmission losses in Intra-State system have reduced gradually during the previous control period on account of the execution of Capital Plan. These are tabulated hereunder;

Details for FY	2016-17	2017-18	2018-19
Energy Received into System (MUs)	60797.28	65350.83	71945.23
Energy sent Out of System (MUs)	59150.63	63552.25	69994.79
Energy Lost (MUs)	1646.65	1798.58	1950.44
Transmission Loss (%)	2.71%	2.75%	2.71%
Target fixed by Hon'ble MPERC	2.82%	2.82%	2.82%

As per the directives of the Hon'ble Commission, MPPTCL is computing the voltage-wise transmission losses. The year-wise details of previous control period are given hereunder;

		Transmission Losses in Percentage At Various Voltage Levels						
S. No.	System Voltage							
		2016-17	2017-18	2018-19				
1	400 KV	1.13%	1.02%	1.12%				
2	220 KV	1.92%	1.88%	1.94%				
3	132 KV	0.44%	0.56%	0.49%				
4	Overall loss	2.71%	2.75%	2.71%				

17.2 Transmission System Availability -

The Commission has fixed a target of Transmission System Availability as 98% in the MYT Regulations. The Transmission System Availability achieved during the last control period i.e. FY 2016-17 to FY 2018-19 was higher than the target fixed. This indicates proper maintenance of lines and sub-stations as well as prompt outage management. The achievements are;

S. N.	Custom Voltago	Transmission System Availability						
3. IV.	System Voltage	2016-17	2017-18	2018-19				
1	400 KV	95.46%	98.62%	98.86%				
2	220 KV	99.02%	99.25%	99.77%				
3	132 KV	99.23%	99.36%	99.74%				
4	Total System -	98.39%	99.15%	99.59%				
5	Target -	98.00%	98.00%	98.00%				

17.3 Transformer Failure -

The MPPTCL is carrying out the maintenance of transformers periodically as per schedules laid down. This has resulted in controlling the transformer failures. The year-wise details are given below;

S.	Period >	FY 2016-17		FY 2017-18		FY 2018-19	
No.	reriou >	Nos.	%	Nos.	%	Nos.	%
1	Auto-Transformers	0	0	2	1.00%	1	0.48%
2	Power Transformers	7	0.88%	5	0.81%	7	1.05%

17.4 Interface points -

The MPPTCL's network is connected to Inter-State, Generating and Distribution Systems presently through 1075 Interface points. Details are given hereunder;

Metering Status	2016-17	2017-18	2018-19
GENCO -TRANSCO	53	53	53
CGS/NHPC/NTPC/PGCIL	<i>7</i> 9	91	91
OTHER STATE-TRANSCO	16	16	16
OPEN ACCESS (SEZ)	9	24	24
TRANSCO-DISCOM (E/Z)	229	252	265
TRANSCO-DISCOM (C/Z)	259	272	293
TRANSCO-DISCOM (W/Z)	299	317	333
TOTAL	944	1025	1075

ABT compliant meters installed on Interface points for implementation of Intra-State ABT.

17.5 Electrical Accidents -

MPPTCL has ensured that its field staff observes safety regulations to avert the accidents. Accidents occurred during last three years are tabulated hereunder;

S. No.	Particulars	2016-17	2017-18	2018-19
1	Fatal Accident to Human	1	2	3
2	Non-fatal Accident to Human	4	8	5
3	Fatal Accident to Animals	0	0	0
4	TOTAL -	5	10	8

Commission's Analysis:

- 18. On perusal of the subject petition, the information gaps/ infirmities in the claims made by MPPTCL were communicated by the Commission and the response of MPPTCL on all such issues has been detailed in earlier paragraphs of this order.
 - 18.1 Vide Commission's letter No. 1013 dated 04/09/2020, it was mentioned that in para 2.3 of the petition, the petitioner has considered notification dated 21/03/2016 issued by the Energy Department, Government of MP for allocation of generating capacity. However, the allocation of capacity with regard to some power stations may be changed after a period of four years. Therefore, the latest position with regard to all power stations along-with the current status of transmission capacity was sought.
 - 18.2 Further the detailed calculations for working out the transmission capacity of 19742.32 MW for FY 2019-20 was also sought.

18.3 Vide letter No. 3464 dated 09/10/2020, MPPTCL responded that "The allocated Transmission capacity for each financial year of the control period were obtained from the MP Power Management Company Ltd., which have been considered and mentioned at Para 2.3 to Para 2.9 of the subject Petition. In compliance to the directives of the Hon'ble Commission, the same have been again verified from MPPMCL wherein it is confirmed that the MPPMCL has provided updated capacity based on the Govt. of MP notification dtd. 21.3.2016. As such, there is no change in the capacity considered in the aforesaid Petition.

18.4 MPPTCL also submitted that "The total capacity from MP Thermal Generation, MP Hydel Generation, Inter-State Hydel Projects, Central Sector, Share from Renewable Projects and Private Generators for FY 2019-20 is 20699.78 MW which after deduction of Auxiliary consumption / Losses, worked out to 19417.32 MW. Having considered 55 MW and 270 MW for MPIDC and WCR respectively, the capacity is evaluated to 19742.32 MW".

18.5 Considering above, the transmission capacity as filed by the petitioner is considered for the purpose of subject MYT order on provisional basis. The actual transmission capacity as per the latest available information shall be considered during the process of True-up.

CAPITAL COST AND CAPITAL STRUCTURE

Petitioner's submission:

19. TRANSMISSION PLAN -

19.1 Transmission Plan for Control period of FY 2019-20 to FY 2023-24:

Hon'ble Commission has circulated the Guidelines for Capital Expenditure by licensee in MP on 19.07.2005. Para 1.4 of the Guidelines provide that the Licensee shall file a comprehensive 5year Capital Investment Plan. Accordingly, the Petitioner filed the 5 year Capital Investment Plan for the period 2017-18 to 2021-22 through the Petition No. 33/2017. Hon'ble Commission approved the aforesaid Capital Investment Plan with appropriate directions to the petitioner MPPTCL to fulfill various directions contained therein and exercise prudence in expenditure, vide its order dated 02.05.18.

As per the requirements of the MPERC (Term & Conditions for determination of Transmission Tariff) (Revision-IV) Regulations, 2020; for the new MYT control period of FY 2019-20 to FY 2023-24 notified on 14.02.2020, the Capex Plan coinciding with MYT control period i.e. FY 2019-20 to FY 2023-24 has already been submitted vide letter dated. 18.3.2020 to Hon'ble Commission. The total plan amount is proposed as Rs 8480.52 Crores (excluding TBCB) with EHV lines addition of 8409.79 Ckt Kms and MVA capacity addition of 19635.50 MVA. The year-wise Physical and Financial details are tabulated hereunder: -

19.2 Physical – Transmission Plan programme for 5 year period of FY 2019-20 to FY 2023-24.

S.		Year wise	Physical .	Programme	?		TOTAL
No	Particulars	2019-20	2020- 21	2021-22	2022- 23	2023- 24	PLAN (2019-24)
<i>A.</i>	TRANSMISSION	V LINES (Ck	tKms) -		•		
1	400KV Lines	49.89	516	0	0	0	565.89
2	220KV Lines	660.96	864	710	120	74	2428.96
3	132KV Lines	888.94	1089	1769	500	1168	5414.94
TOT	AL -	1599.79	2469	2479	620	1242	8409.79
В.	EHV SUB-STAT	IONS (MVA)) -		•	•	
1	400 KV	945	1900	0	0	100	2945
2	220 KV	2070	3476	1666	160	210	7582
3	132 KV	1778.5	1912	2935	1183	1300	9108.5
	TOTAL	4793.5	7288	4601	1343	1610	19635.5
С.	EHV SUB-STAT	IONS (Nos.)	_				
1	400 KV	1	2	0	0	0	3
2	220 KV	4	7	4	0	0	15
3	132 KV	16	10	25	6	16	73
TOT	AL –	21	19	29	6	16	91

19.3 Financial – Transmission plan programme for 5 year period of FY 2019-20 to FY 2023-24.

		YEARWIS	SE INVESTA	MENT IN RS	. Lakhs		TOTAL
S. No	Particulars	2019- 20 (Need based)	2020- 21 (Need based)	2021- 22 (Need based)	2022- 23 (Need based)	2023- 24 (Need based)	PLAN (2019- 24) (Need based)
1	400KV Lines	16621	11193	949	0	181	28944
2	220KV Lines	43715	23754	17908	1500	3327	90204
3	132KV Lines	49852	41158	51561	38114	36443	217128
i	TOTAL (LINES)	110188	76105	70418	39614	39951	336276
4	400KV Substations	28698	21621	3207	2000	1241	56767
5	220KV Substations	44172	21058	11908	1300	2497	80935
6	132KV Substations	45458	63494	62279	41467	37170	249868
7	Misc. Works	52273	42072	29352	0	509	124206
ii	TOTAL (S/S)	170601	148245	106746	44767	41417	511776
	G. TOTAL (i+ii)	280789	224350	177164	84381	81368	848052

19.4 PLAN RELATED TO CONTROL PERIOD -

The Five-Year Plan coinciding with MYT control period i.e. FY 2019-20 to FY 2023-24 has been submitted to Hon'ble Commission. As the plan/s are basically need based linked to financial availabilities, shifting of certain works may occur, consequently change in plan size besides change in period of execution may be become inevitable. The scaling down of the plan size or shifting of targets due to various factors beyond the control of MPPTCL might affect the targeted anticipated plan, as such, realistic requirement of funds for different years of the control period has been worked out. The works to the tune of Rs 2567.00 Crores planned for execution through TBCB mode has been excluded for working out the ARR.

The year-wise fund requirement for the control period based on five-year plan which is under consideration of Hon'ble MPERC is given in Annexure –VII (a) and year wise details of amount for TBCB works during FY 2019-20 to FY 2023-24 has been given in Annexure-VII(b).

The element / voltage-wise anticipated physical plan for works to be carried out by MPPTCL and through TBCB mode during this control period are given in Annexure VIII(a) & Annexure - VIII(b) respectively.

The Physical targets during this control period as per the submitted five year plan are summarized here in below;

19.5 WORKS EXPECTED TO BE CAPITALIZED DURING THIS CONTROL PERIOD-

All out efforts are being made by the Petitioner to get the works completed as per Plan. However, it has been experienced in past that certain works are to be shifted to later years on account of slippage in Generating units commissioning schedule to save idling of Transmission Assets. Certain slippage may also be due to problem of getting finance at reasonable rate of interest and lack of getting trained Turn-key contractors to complete the works in contracted time. Therefore, at this stage, petitioner MPPTCL assumes a realistic percentage of Plan completion for working out the Tariff, which will be subject to True-up as per actual achievements and expenditures during a year.

19.6 With reference to approved plans in earlier MYT control period (i.e. FY 2016-17, FY 2017-18 & FY 2018-19) the plan envisaged and targets achieved are given as under;

Rs. in Crores

S No.	PARTICULARS	2016-17	2017-18	2018-19	Total of Previous MYT Period
1	As approved in plan	1181.21	1598.46	2158.01	4937.68
2	TBCB/PPP	0.00	0.00	0.00	0.00
	Net	1181.21	1598.46	2158.01	4937.68
2	Work completed	712.17	633.97	1624.12	2970.26
	% Execution	60.29%	39.66%	75.26%	60.15%

Therefore, for working out Tariff, our plan projections @ 60.15% have been considered reasonably in this MYT Petition. There is no inclusion in this working for TBCB works as the same do not constitute the part of ARR of MPPTCL.

S.	DADTICIII ADC		NEED BASED II ONTROL PERIC	NVESTMENT DD (Rs IN Lacs)			
No	PARTICULARS	2019-20	2020-21	2021-22	2022-23	2023-24	TOTAL ((2019-20 to 2023-24)
1	400KV Lines	9998.36	6733.15	570.87	0.00	108.88	17411.25
2	220KV Lines	26296.75	14289.21	10772.55	902.32	2001.36	54262.19
3	132KV Lines	29988.46	24758.58	31016.50	22927.47	21922.28	130613.29
	TOTAL (LINES)	66283.56	45780.94	42359.93	23829.79	24032.51	202286.73
4	400KV Sub- stations	17263.27	13006.11	1929.17	1203.10	746.52	34148.17
5	220KV Sub- stations	26571.65	12667.43	7163.25	782.01	1502.07	48686.43
6	132KV Sub- stations	27345.25	38194.80	37463.91	24944.46	22359.60	150308.02
7	Misc. Works	31444.81	25308.40	17656.69	0.00	306.19	74716.08
	TOTAL (SUB- STATIONS)	102624.98	89176.74	64213.03	26929.58	24914.38	307858.71
	TOTAL (TRANSMISSION)	168908.54	134957.68	106572.95	50759.37	48946.90	510145.44

19.7 Accordingly, the physical plan is also anticipated to be reduced by the same percentage and the same is tabulated hereunder;

		YEARWISE NEEDBASED PHYSICAL PROGRAMME							
S. No.	PARTICULARS	2019- 20	2020- 21	2021-22	2022- 23	2023- 24	TOTAL ((2019- 20 to 2023-24)		
A	EHV LINES								
1	400KV Lines	30.01	310.40	0.00	0.00	0.00	340.41		
2	220KV Lines	397.60	519.74	427.10	72.19	44.51	1461.14		
3	132KV Lines	534.74	655.09	1064.14	300.77	702.61	3257.36		
	TOTAL CKT KMS	962.35	1485.23	1491.24	372.96	747.12	5058.91		
В	MVA Addition								
1	400KV	568.46	1142.94	0.00	0.00	60.15	1771.56		
2	220KV	1245.21	2090.99	1002.18	96.25	126.33	4560.95		
3	132KV	1069.86	1150.16	1765.55	711.63	782.01	5479.22		
	TOTAL MVA	2883.53	4384.09	2767.73	807.88	968.50	11811.73		

		YEARWISE NEEDBASED PHYSICAL PROGRAMME							
S. No.	PARTICULARS	2019- 20	202		2021-22 23		TOTAL ((2019- 20 to 2023-24)		
	EHV SUB-								
С	STATIONS								
	400KV Sub-								
	stations	1.00	1.00	0.00	0.00	0.00	2.00		
Now	220KV Sub-								
New	stations	2.00	4.00	2.00	0.00	0.00	9.00		
	132KV Sub-								
	stations	10.00	6.00	15.00	4.00	10.00	44.00		
	TOTAL Nos.	13.00	11.00	17.00	4.00	10.00	55.00		
	400KV Sub-								
	stations	0.00	0.00	1.00	0.00	0.00	1.00		
Additional	220KV Sub-								
Xmer	stations	10.00	4.00	2.00	1.00	1.00	17.00		
	132KV Sub-								
	stations	8.00	7.00	6.00	5.00	0.00	26.00		
	TOTAL Nos.	18.00	10.00	9.00	6.00	1.00	45.00		
	400KV Sub-								
	stations	0.00	0.00	0.00	0.00	0.00	0.00		
Aug of	220KV Sub-								
Xmer	stations	0.00	0.00	0.00	0.00	0.00	0.00		
	132KV Sub-								
	stations	6.00	6.00	6.00	6.00	6.00	30.00		
	TOTAL Nos.	6.00	6.00	6.00	6.00	6.00	30.00		
D	New Bays								
	400KV Sub-								
	stations	7	17	1	0	0	25		
Addition	220KV Sub-								
of Bay	stations	31	55	19	7	7	119		
	132KV Sub-								
	stations	121	130	138	67	83	539		
	TOTAL Nos.	159	202	158	74	90	683		

It may kindly be perused that the fund required for works to be completed as referred to in the above table is/ shall be Tied-up. The Equity is expected to be invested by the State Government.

19.8 PROJECTIONS OF PHYSICAL ASSETS -

It is submitted that the quantum of line construction of various voltage class and number of bays added during FY 2019-20 has been considered as per actual while realistic projections as elaborated at Para-4.4 and actual as per True-up Petition for FY 2018-19, the cumulative Assets for each year of control period are expected to be as under;

S. No	Particula r	Unit	As on 1.4.19	Addition in FY 2019-20 (Actual)	As on 1.4.20	Expected Addition in FY 2020-21	As on 1.4.21	Expected Addition in FY 2021-22	As on 1.4.22	Expected Addition in FY 2022-23	As on 1.4.23	Expected Addition in FY 2023-24	As on 1.4.24
1	400 KV Lines	Ckt. KMs	3520.95	49.90	3570.85	310.40	3881.25	0.00	3881.25	0.00	3881.25	0.00	3881.25
2	220 KV Lines	Ckt. KMs	12929.07	665.21	13594.28	519.74	14114.02	427.10	14541.12	72.19	14613.30	44.51	14657.82
3	132 KV Lines	Ckt. KMs	18914.55	1170.24	20084.79	655.09	20739.88	1064.14	21804.02	300.77	22104.79	702.61	22807.40
4	400 KV Bays	Nos.	148.00	10.00	158.00	17.00	175.00	1.00	176.00	0.00	176.00	0.00	176.00
5	220 KV Bays	Nos.	713.00	52.00	765.00	55.00	820.00	19.00	839.00	7.00	846.00	7.00	853.00
6	132 KV Bays	Nos.	2500.00	143.00	2643.00	130.00	2773.00	138.00	2911.00	67.00	2978.00	83.00	3061.00

20. Provisions under Regulations:

Regulation 19 of the MPERC (Terms and conditions for determination of transmission tariff) (Revision-IV) Regulations, 2020 provides as under:

a. Capital cost for a Project shall include:

the Expenditure incurred or projected to be incurred on original scope of work, including interest during construction and financing charges, any gain or loss on account of foreign exchange rate variation during construction on the loan - (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, up to the Date of Commercial Operation of the Project, as admitted by the Commission after prudent check, shall form the basis for determination of Tariff.

b. The capital cost admitted by the Commission after prudent check shall form the basis for determination of Tariff:

Provided that in case of individual transmission project, prudent check of capital cost may be carried out based on the benchmark norms specified by the Central Commission from time to time:

Provided further that in cases where benchmark norms specified by the Central Commission are not applied, prudent check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost overrun and time over-run, and such other matters as may be considered appropriate by the Commission for determination of Tariff:

Provided also that where the Transmission Service Agreement provide for ceiling of actual expenditure, the capital expenditure admitted by the Commission shall take into consideration such ceiling for determination of Tariff:

Provided also that in case of the Existing Projects, the capital cost admitted by the Commission prior to 01.04.2019 and the additional capital expenditure projected to be incurred for the respective Year of the Tariff period during FY 2019-20 to FY 2023-24, as may be admitted by the Commission, shall form the basis for determination of capital cost.

Further Regulation 22 the MPERC (Terms and conditions for determination of transmission tariff) (Revision-IV) Regulations, 2020 provides as under:

Debt-equity ratio:

22.1 For a Project declared under commercial operation on or after 1.4.2019, the debt-equity ratio would be considered as 70:30 as on CoD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- (i) where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of Tariff:
- (ii) the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment: and
- (iii) Any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

Explanation- The premium, if any, raised by the Transmission Licensee, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the Project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilized for meeting the capital expenditure of the Transmission System.

Commission's Analysis: -

- 21. On perusal of the contents in the subject petition with regard to the components of the capital cost, the information gaps/ infirmities in the claims made by MPPTCL were communicated to the petitioner by Commission and the response of MPPTCL on all such issues has been detailed in earlier paragraphs of this order.
- 22. In Commission's order dated 12/03/2021 in petition No. 42 of 2020 filed by MPPTCL for approval of Capital Investment Plan for Transmission works to coincide with control period of MYT (FY 2019-20 to FY 2023-24), the following has been mentioned:

"Considering the submissions of the petitioner, the Commission considers the MPPTCL's prayer in this matter, under clause 1.15 of the "Guidelines for Capital expenditure by licensees in Madhya Pradesh" and hereby accords in principle approval to works of Rs. 2333.15 Crores mentioned in Annexure – III & IV of the petition, which are enclosed as Appendix No. 1 & 2 of this Order. The works under updated Transmission Investment Plan amounting to Rs. 8480.52 Crores for five year period of FY 2019-20 to FY 2023-24, also includes the works of Rs. 6147.37 Crores already approved vide Commission's order dated 02/05/2018 in Petition No. 33 of 2017 mentioned in Annexure - II of the petition and enclosed as Appendix No. 3 of this Order for ready reference".

Based on the foregoing observations, the updated Transmission Capital Investment Plan for FY 2019-20 to FY 2023-24 is summarized as under:

[A] Financial - Transmission CAPEX Plan for 5 year period of FY 2019-20 to FY 2023-24.

	Particulars	Year wis	Total				
S. No.		2019- 20	2020- 21	2021- 22	2022- 23	2023- 24	Plan (2019-24)
1	400KV Lines	16621	11193	949	0	181	28944
2	220KV Lines	43715	23754	17908	1500	3327	90204
3	132KV Lines	49852	41158	51561	38114	36443	217128
i	TOTAL (Lines)	110188	76105	70418	39614	39951	336276
4	400KV Substations	28698	21621	3207	2000	1241	56767
5	220KV Substations	44172	21058	11908	1300	2497	80935
6	132KV Substations	45458	63494	62279	41467	37171	249869
ii	TOTAL (S/S)	118328	106173	77394	44767	40908	387570
7	Misc. Works	52273	42072	29352	0	509	124206
iii	TOTAL (Misc.)	52273	42072	29352	0	509	124206
	GRAND TOTAL (i + ii + iii)	280789	224350	177164	84381	81368	848052

[B] Physical - Transmission CAPEX Plan for 5 year period of FY 2019-20 to FY 2023-24.

S.	Particulars	Year wise	Year wise Physical Program (FY)							
No.		2019-	2020-	2021-	2022-	2023-	Plan			
		20	21	22	23	24	(2019-24)			
A.	Transmission Lines (CktKms) -									
1	400KV Lines	49.89	516	0	0	0	565.89			
2	220KV Lines	660.96	864	710	120	74	2428.96			
3	132KV Lines	888.94	1089	1769	500	1168	5414.94			
TOT	AL -	1599.79	2469	2479	620	1242	8409.79			
B.	EHV Sub-Stati	ons (MVA)	-							
1	400 KV	945	1900	0	0	100	2945			
2	220 KV	2070	3476	1666	160	210	7582			
3	132 KV	1778.5	1912	2935	1183	1300	9108.5			
	TOTAL	4793.5	7288	4601	1343	1610	19635.5			
C.	EHV Sub-Stati	ons (Nos.)	-							
1	400 KV	1	2	0	0	0	3			
2	220 KV	4	7	4	0	0	15			
3	132 KV	16	10	25	6	16	73			
TOT	AL –	21	19	29	6	16	91			

23. The Commission has issued True- up orders for Transmission Tariff of the petitioner till FY 2018-19. The status of GFA addition approved by the Commission in these orders based on the actual addition to GFA as per the Audited Accounts after prudence check is as under;

(Rs. in Crore)

	Particular				Total for	Average for
S. No.	(Rs. Cr)	FY 2016-17	FY 2017-18	FY 2018-19	3 years	each year
		P. No. 58/17	P. No. 50/18	P. No. 49/19		
		Order	Order	Order		
		Dt.4.5.18	Dt.4.1.20	Dt.8.2.21		
		A	В	С	D=A+B+C	E=D/3
	GFA addition					
	approved by					
	the					
	Commission					
	in True -up					
	Orders	712.08	633.97	1624.06	2970.11	990.04

- 24. In para 4.2 of the subject petition, MPPTCL has mentioned GFA addition for 5 years as Rs 8480.52 Cr. as filed by it in the aforesaid petition No. 42/2020 (regarding Capex Plan and approved by the Commission) However in para 4.4, it has itself considered execution percentage of 60.15 % based on the past performance and so has considered GFA addition for 5 years as Rs 5101.45 Cr only (Average **Rs 1020.29 Cr.** each year).
- 25. Further based on Commission's Query during the course of the processing this petition, and the actual GFA addition in the available accounts for FY 2019-20, the petitioner has considered GFA addition of Rs 4346.47 Cr for five years in para 7.5 of the amended petition. Thus, GFA addition of Rs 4346.47 Cr for 5 years means average addition of Rs 869.29 Cr. each year.

This is appropriate in view of the past performance of last 3 years mentioned in table above, which shows that average addition has been Rs 990.04 Cr. **Therefore, the Commission considers the GFA addition as claimed by the petitioner** in para 7.5 of the amended petition.

26. In accordance with the provisions of Regulation 22 of the MYT Regulations, Debt: Equity ratio of 70:30 has been considered. **Therefore, the GFA addition and its funding for the purpose of this MYT Order is considered as under:**

(Rs. in Crore)

S. No.	Year	GFA addition	Debt	Equity
			(@70%)	(@30%)
1	FY 2019-20	934.10	653.87	280.23
2	FY 2020-21	1349.58	944.71	404.87
3	FY 2021-22	1065.73	746.01	319.72
4	FY 2022-23	507.59	355.31	152.28
5	FY 2023-24	489.47	342.63	146.84

However, the above figures have been considered provisionally for the purpose of calculation of various parameters of ARR in this MYT Order only. The actual annual capitalization as per the Audited accounts for each financial year, after prudence check by the Commission shall be considered appropriately in the true up petitions in accordance with the provisions of the Regulations.

ANNUAL FIXED COST

OPERATION & MAINTENANCE EXPENSES -

27. Petitioner's submission:

27.1 The O&M expenses comprise of Employee cost, Repairs & Maintenance (R&M) cost and Administrative & General (A&G) cost. The Norms for O&M Expenses have been fixed on the basis of Circuit kilometers of Transmission lines and number of bays in Sub-station. These Norms exclude Pension, Terminal Benefits, incentive and arrears to be paid to employees, taxes payable to the Government and fee payable to MPERC. The Petitioner shall claim the taxes payable to the Government, fees to be paid to MPERC and any arrears paid to employees separately. The Norms for O&M expenses per 100 Ckt-km and per bay have been prescribed in Para 38.1 of the Regulations as under;

Norms for O&M expenses per 100 Ckt. km and per bay

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
	LINES -	Rs Lacs / 100 Ckt. KM / Annum							
1	400 KV Line	35.92	37.18	38.48	39.83	41.23			
2	220 KV Line	33.54	34.71	35.93	37.19	38.50			
3	132 KV Line	35.30	36.54	37.82	39.15	40.52			
	BAYS -	Rs Lacs / Bay / Annum							
1	400 KV Bay	10.75	11.13	11.52	11.93	12.35			
2	220 KV Bay	12.48	12.92	13.38	13.84	14.33			
3	132 KV Bay	12.52	12.96	13.42	13.89	14.38			

The total allowable O&M expenses for the Transmission Licensee shall be calculated by multiplying the average number of bays and 100 Ckt-km of line length for the Year with the applicable norms for O&M expenses per bay and per 100 Ckt-km respectively.

27.2 PROJECTION OF EHV LINES & SUB-STATIONS -

Projections of EHV Lines and Sub-stations bays additions have been made under Para 4.5. The Petitioner has filed the 'True-up' Petition of FY 2018-19, in which the actual EHV Lines and Substations have been given in the position of 31.03.2019, which is taken as actual Assets as on 01.04.2019. The projections for the Control Period under consideration are based on the value as on 1.4.2019 and projected accordingly.

The works which are expected to be commissioned till 31.03.2024 as per five year plan under consideration of Hon'ble Commission are summarized in Annexure-VIII(a) of this Petition. The addition of Ckt. Kms of EHV Lines and number of bays in EHV Sub-stations for FY 2019-20 given in the table at Para 4.5 are as per actual while for rest of the years realistic targets have been envisaged as submitted at Para 4.4

27.3 ASSETS DURING CONTROL PERIOD -

Based on the table given in Para 4.5 of Transmission Plan and the progress for 2018-19 as filed in True-Up Petition of FY 2018-19, the average length of Lines and average numbers of bays expected during the years of control period are given in following table;

	Length of	Line in Ckt:k	am as on				Average Length of Line during				
Voltage	1.4.19	1.4.20	4.404		1.4.23	1.4.24	2019-20	2020-21	2021-22	2022-23	2023-24
	1.4.19	1.4.20	1.4.21	1.4.22	1.4.23	(2	(2+3)/2	(3+4)/2	(4+5)/2	(5+6)/2	(6+7)/2
1	2	3	4	5	6	7	8	9	10	11	12
400 KV	3520.95	3570.85	3881.25	3881.25	3881.25	3881.25	3545.90	3726.05	3881.25	3881.25	3881.25
220 KV	12929.07	13594.28	14114.02	14541.12	14613.30	14657.82	13261.67	13854.15	14327.57	14577.21	14635.56
132 KV	18914.55	20084.79	20739.88	21804.02	22104.79	22807.40	19499.67	20412.33	21271.95	21954.40	22456.10
TOTAL	35364.57	37249.91	38735.14	40226.38	40599.34	41346.47	36307.24	37992.53	39480.76	40412.86	40972.90

	Number o	f Bays in no	s. as on				Average Number of Bays during				
Voltage	1.4.19	1 4 24	2019-20	2020- 21	2021-22	2022-23	2023- 24				
	111127	1.1.20	1,1,2,1	(2+3)/2	(3+4)/2	(4+5)/2	(5+6)/2	(6+7)/2			
1	2	3	4	5	6	7	8	9	10	11	12
400 KV	148.00	158.00	175.00	176.00	176.00	176.00	153	166.5	175.5	176	176
220 KV	713.00	765.00	820.00	839.00	846.00	853.00	739	792.5	829.5	842.5	849.5
132 KV	2500.00	2643.00	2773.00	2911.00	2978.00	3061.00	2571.5	2708	2842	2944.5	3019.5
TOTAL -	3361.00	3566.00	3768.00	3926.00	4000.00	4090.00	3463.50	3667.00	3847.00	3963.00	4045.00

27.4 O&M CLAIM FOR CONTROL PERIOD -

Based on the 'O&M Norms' referred in Para 5.1 above, and the average length of EHV Lines and number of Bays as given in Para 5.3, during the five years of control period, O&M expenditure claim for the control period is tabulated hereunder;

(Rs. in Lacs)

S. No.	Voltage Class	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Α.	EHV Lines	•		•		
i	400KV	1273.69	1385.34	1493.50	1545.90	1600.24
ii	220KV	4447.97	4808.77	5147.89	5421.26	5634.69
iii	132KV	6883.38	7458.67	8045.05	8595.15	9099.21
Sub-Total of O&M Cost for EHV lines		12605.04	13652.78	14686.44	15562.31	16334.14
В.	Bays		-			-
Ι	400 KV	1644.75	1853.15	2021.76	2099.68	2173.60
ii	220 KV	9222.72	10239.10	11098.71	11660.20	12173.34
iii	132 KV	32195.18	35095.68	38139.64	40899.11	43420.41
Sub-T Bays	otal of O&M Cost for	43062.65	47187.93	51260.11	54658.99	57767.35
Grand	l Total	55667.68	60840.71	65946.56	70221.30	74101.48
Say in `Crores		556.68	608.41	659.47	702.21	741.01

It is prayed to allow O&M expenses for control period as under-

(i) FY 2019-20 - Rs. 556.68 Crores (ii) FY 2020-21 - Rs. 608.41 Crores (iii) FY 2021-22 - Rs. 659.47 Crores (iv) FY 2022-23 - Rs. 702.21 Crores (v) FY 2023-24 - Rs. 741.01 Crores

27.5 OTHER ITEMS -

The claim for the items not included in O&M such as terminal benefits, Arrears for wage revision, fees, taxes etc. is being made in subsequent paras of this petition.

28. **Provisions under Regulations:**

Regulations 28 of the MYT Regulations provides as under:

28. Operation & Maintenance expenses

- 28.1 Operation and Maintenance Expenses shall be determined for the Tariff period based on normative O&M expenses specified by the Commission in these Regulations.
- 28.2 The cost components for employee expenses, repair & maintenance expenses and administrative and general expenses are considered as per Regulations 38.1 of these Regulations. The figures of 0&M expenditure provided for FY 2018-19 in MPERC Terms & conditions for Determination of Transmission Tariff Regulations, 2016 shall be escalated by the escalation rate of 3.51% to arrive at the figures for FY 2019-20.

- 28.3 Thereafter, the O&M expenses for the subsequent years of control period shall be determined by escalating the O&M norms arrived for FY 2019-20 with the escalation factor @ 3.51% as considered by the Central Commission for Transmission Licensees in its Tariff Regulations, 2019 for the respective financial years to arrive at permissible O&M expenses for each year of the Control Period.
- 28.4 The employee expenses considered in the above Operation and Maintenance expenses are excluding the pension and other terminal benefits. The Commission has notified MPERC (Terms and Condition for allowing Pension and Terminal Liabilities of Personal of Board and Successor Entities) Regulations, 2012 (G-38 of 2012) on 20th April, 2012. The expenses towards pension and terminal liabilities shall be allowed as per the provisions of aforesaid Regulations. The Security Expenses for transmission system shall be allowed separately after prudence check.
- 28.5 Increase in O&M charges on account of war, insurgency or changes in laws, or like eventualities where the Commission is of the opinion that an increase in O&M charges is justified, may be considered by the Commission for such a specified period.
- 28.6 Any saving achieved by a Transmission Company in any Year shall be allowed to be retained by it. The Transmission Company shall bear the loss if it exceeds the targeted O&M expenses for that Year.

Further Regulations 38 of the MYT Regulations provide as under:

38. Operation & Maintenance (0&M) expenses:

38.1 The O&M expenses comprise of employee cost, repairs & maintenance (R&M) cost and administrative & general (A&G) cost. The norms for O&M expenses have been fixed on the basis of circuit kilometers of transmission lines and number of bays in substation. These norms exclude Pension, Terminal Benefits and arrears, if any, to be paid to employees, taxes payable to the Government and fee payable to MPERC. The Transmission Licensee shall claim the taxes payable to the Government, fees to be paid to MPERC and any arrears paid to employees separately as actuals. If the O&M expenses as per norms provided in these Regulations are more than the actual total O&M expenses including arrears if any, as per audited accounts of Transmission Licensee, the O&M expenses to the extent of normative O&M expenses shall be allowed. The claim of pension and terminal benefits shall be dealt-with as per Regulation 28.4. The Security Expenses for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, at the time of truing up with appropriate justification.

The norms for 0&M expenses per 100 ckt-km and per bay shall be as under:

S. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24			
	Lines	Rs. Lakh / 100	 Ockt km / annum						
1.	400 kV Lines	35.92	37.18	38.48	39.83	41.23			
2.	220 kV Lines	33.54	34.71	35.93	37.19	38.50			
3.	132 kV Lines	35.30	36.54	37.82	39.15	40.52			
	Bays	Rs. Lakh / Bay	Rs. Lakh / Bay / annum						
1.	400 kV Bay	10.75	11.13	11.52	11.93	12.35			
2.	220 kV Bay	12.48	12.92	13.38	13.84	14.33			
3.	132 kV Bay	12.52	12.96	13.42	13.89	14.38			

38.2 The total allowable O&M expenses for the Transmission Licensee shall be calculated by multiplying the average number of bays and 100 ckt-km of line length for the Year with the applicable norms for O&M expenses per bay and per 100 ckt-km, respectively. In support of its claim for allowable O&M expenses, the Licensee shall submit before the Commission, the actual or projected circuit kilometers of line lengths and number of bays for each voltage level separately for each Year of the Tariff Period as the case may be.

Commission's Analysis:

29. On perusal of the subject petition with regard to the components of the capital cost, the information gaps/ infirmities in the claims made by MPPTCL were communicated by the Commission and the response of MPPTCL on all such issues has been detailed in earlier paragraphs of this order.

Vide Commission's letter No. 1013 dated 4/09/2020, the actual 0&M expenses for FY 2019-20 with head wise details were sought. In response, vide its letter No. 3464 dated 09/10/2020, MPPTCL submitted that "The accounts for FY 2019-20 are yet to be finalized, as such, the provisional 0&M Expenses for FY 2019-20 are Rs. 580.41 Crores i.e. R&M Rs. 79.32 Crores, Employee Cost Rs. 390.88 Crores and A&G Rs. 110.21 Crores. These figures are however provisional and subject to reconciliation and accounting adjustments".

It was observed that the normative 0&M expenses of Rs 556.68 Cr. claimed for FY 2019-20 in the subject petition is reasonable in comparison to the provisional 0&M expenses of Rs 580.41 Cr expected to be incurred during this period.

30. It was observed that the Commission has allowed MPPTCL's Capex plan in the petition No. 42/2020. The petitioner has considered the addition to Lines and Bays for purpose of O & M expenses in accordance with the Capex Plan and has claimed O&M expenses as per the norms prescribed in Regulation 38.1 of the MYT Regulations.

In view of the above, the following O&M expenses are considered:

(Rs. in Lacs)

S. No.	Voltage Class	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
A.	EHV Lines				•	
I	400KV	1273.69	1385.34	1493.50	1545.90	1600.24
Ii	220KV	4447.97	4808.77	5147.89	5421.26	5634.69
Iii	132KV	6883.38	7458.67	8045.05	8595.15	9099.21
Sub-To EHV lin	tal of O&M Cost for es	12605.04	13652.78	14686.44	15562.31	16334.14
B.	Bays	•				•
I	400 KV	1644.75	1853.15	2021.76	2099.68	2173.60
Ii	220 KV	9222.72	10239.10	11098.71	11660.20	12173.34
Iii	132 KV	32195.18	35095.68	38139.64	40899.11	43420.41
Sub-To Bays	tal of O&M Cost for	43062.65	47187.93	51260.11	54658.99	57767.35
Grand '	Гotal	55667.68	60840.71	65946.56	70221.30	74101.48
Say in I	Rs. Crores	556.68	608.41	659.47	702.21	741.01

However, the above figures have been considered provisionally for the purpose of calculation of the normative O&M expenses in this MYT Order only. The O&M expenses shall be trued up in the future true up petitions to be filed by MPPTCL, after prudence check by the Commission, in accordance with the provisions of the Regulations.

TERMINAL BENEFITS EXPENSES -

31. Petitioner's submission:

31.1 Hon'ble Commission notified the MPERC (Terms & Conditions for allowing Pension & Terminal Benefit liabilities of personnel of the Board and successor Entities 2012) (G-38 of 2012) on 20th April 2012, prescribing the funding of Pension and Gratuity of Pensioners of various categories through ARR of different unbundled entities of the Board. Accordingly, the Petitioner (MPPTCL) is required to make provisions in its ARR for the following categories;

i. For the Pensioners, retired up to 01.06.2005 from services of MPSEB, Pension liabilities shall form part of ARR of MPPTCL (Petitioner).

- ii. For the Pensioners retired after 01.06.2005, the liabilities corresponding to their service in Board (i.e. up to 01.06.2005) are to be contributed by MPPTCL
- iii. Remaining liabilities against S. No. (ii) above for the persons retired after 01.06.2005 for Pensioners of MPPTCL, MPPMCL.
- iv. Provisioning for future service for the employees of MPPTCL, MPPMCL
- v. For contribution to be made for Pension and Terminal Benefit Trust Fund for past services till 31.05.2005 based on Actuarial Analysis.

31.2 PRESENT PRACTICE OF ALLOWING PENSION & TERMINAL BENEFITS -

- i. At present, the actual Pension and Terminal Benefits of all the Companies i.e. unbundled entities of MPSEB, are being allowed in the MYT/ True-up of MPPTCL on "Pay as you go" principle.
- ii. The Hon'ble Commission have been pleased to allow pension and other terminal benefits to all retirees of erstwhile MPEB / MPSEB forming the part of ARR of MPPTCL vide Para 3.63 of MYT order dated 02.04.2013 for control period FY 2013-14 to FY 2015-16 read with Para 3.86 of Retail Supply order dated 17.04.2015 on provisional basis on "Pay as you go" principle. Further, the same was also approved for the control period FY 2016-17 to FY 2018-19 vide Para 47 of MYT order dated 10.06.2016 on the MYT petition of MPPTCL.
- iii. Hon'ble Commission may kindly be pleased to allow pension and other terminal benefits in light of the above and in line with "Pay as you go" principle for control period FY 2019-20 to FY 2023-24.

31.3 CRITERIA AND ASSUMPTIONS FOR ESTIMATION OF TERMINAL BENEFIT LIABILITIES-

The estimation of Terminal Benefits has been done considering following assumptions;

- i. The actual payment towards Pension / Gratuity / Commutation disbursed during FY 2019-20 has been considered.
- ii. The anticipation of pension and gratuity disbursement for the FY 2020-21 onwards has been done by escalating by 3.51%, the figures of disbursement of terminal benefits during FY 2019-20 which is based on the figures of accounts under finalization for the FY 2019-20. The escalation figure has been considered based on clause No. 28.3 of tariff regulations 2020 applicable for O&M expenses.
- iii. The payment towards DCRG arrears in view of the decision of Hon'ble Supreme court have been taken actual for FY 2019-20 and for remaining financial years provisions have been made to match with the anticipated difference disbursement of more than Rs. 273 Cr.
- iv. Pension amount includes Pension & Family Pension.
- v. Estimation of Terminal Benefits has been done without taking effect of mortality rate of existing pensioners, VRS and death cases of employees.

31.4 COMPUTATION OF LIABILITIES:-

Based on above assumptions, the following are the estimations for **Pension & Gratuity** Liabilities for FY 2020-21 to FY 2023-24 and are actual for FY 2019-20: -

(Rs. in Crore)

Particulars	FY 2019-20	FY	FY	FY	FY	
Furticulars	(Actual)	2020-21	2021-22	2022-23	2023-24	
Pension	1703.463	1763.255	1825.145	1889.207	1955.518	
Gratuity	124.973	129.359	133.900	138.600	143.465	
Difference in Gratuity payment as	5.570	80.394	80.394	80.394	26.798	
per Gratuity Act 1972 (Arrear)	3.370	00.394	00.334	00.334	20.798	
Grand Total	1834.006	1973.008	2039.439	2108.201	2125.781	
di ana Total	Say 1834.01	Say 1973.01	Say 2039.44	Say 2108.20	Say 2125.78	

The details of Terminal Benefit for FY 2019-20 to FY 2023-24 is shown in Annexure-IX.

Details of yearly liabilities for DCRG during the period FY 2020-21 to FY 2023-24 is shown in Annexure-X.

Details of yearly liabilities for pension during the period FY 2020-21 to FY 2023-24 is shown in Annexure-XI.

Details of actual payments of Terminal Benefit made to retirees of all companies during FY 2019-20 is shown in Annexure-XII.

31.5 PROVISIONING FOR WORKING EMPLOYEES –

The Actuarial Analysis-2009 mentions percentage of salary to be contributed for Pension and Gratuity for each Company. The following is estimated towards provisioning of working employees pertaining to MPPMCL & MPPTCL at the rate mentioned in the said analysis is given as under;

(Rs. in Crore)

	Service Cos	t				Inter-		
	MPPTCL			MPPTCL	Opening	est		
Financial Year	Pension	Gratuity	MP PMCL	Leave Encash- ment	Balance	Cost @ 7%	Provision	
FY 2019-20	23.82	11.14	11.16	1.03	696.81	48.78	95.93	
FY 2020-21	25.88	11.95	11.28	1.09	742.93	52.01	102.20	
FY 2021-22	28.09	12.81	11.39	1.16	792.04	55.44	108.89	
FY 2022-23	30.46	13.73	11.51	1.23	844.33	59.10	116.03	
FY 2023-24	32.99	14.72	11.62	1.31	900.03	63.00	123.64	

31.6 TOTAL TERMINAL BENEFIT LIABILITIES CLAIMED -

The claims in foregoing Paras are summarized in the following table;

(Rs. in Crore)

S. No.	Particulars	FY 2019-20 (Actual)	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
1	Current Terminal Benefit Liabilities	1834.01	1973.01	2039.44	2108.20	2125.78
2	Provisioning for working employees	95.93	102.20	108.89	116.03	123.64
	TOTAL -	1929.94	2075.21	2148.33	2224.23	2249.42

However, it is most respectfully submitted that the Hon'ble Commission in earlier Tariff orders have not considered the provisions towards terminal benefits of working employees as the same are allowed on Pay as You Go principle. Therefore, the provisioning as above is being not considered in working out the final ARR.

Provisions under Regulations:

Regulations 28.4 of the MYT Regulations provide as under:

28.4 The Commission has notified MPERC (Terms and Condition for allowing Pension and Terminal Liabilities of Personal of Board and Successor Entities) Regulations, 2012 (G-38 of 2012) on 20th April, 2012. The expenses towards pension and terminal liabilities shall be allowed as per the provisions of aforesaid Regulations.

Commission's Analysis:

32. On perusal of the filing with regard to Terminal benefits claimed by the petitioner, the information gaps/ infirmities in the claims made by MPPTCL were communicated by the Commission and the response of MPPTCL on all such issues has been detailed in earlier paragraphs of this order.

It is worth mentioning that vide Commission's letter No. 1013 dated 04/09/2020, it was pointed out that the actual pension payment of Rs 1739.56 Cr during FY 2018-19 has been mentioned in P. No. 45/2019. However in para 6.4 of the subject petition, the actual pension payment is mentioned as Rs 1875.18 Cr for FY 2019-20. Further, it has been projected to Rs 3533.58 Cr in FY 2023-24. Therefore, detailed reasons along with calculations for steep rise under this head within a control period was sought from the petitioner.

In response, vide its letter No. 3464 dated 09/10/2020, MPPTCL submitted that "This is to submit that claim towards Terminal Benefits during FY 2018-19 as per actual Audited Accounts has been Rs. 2024.33 Crores which included Rs. 1739.56 Crores for Pension, Rs. 284.75 Crores for Gratuity and Rs. 0.02 Crores for Annuity for additional Family Pension. The aforesaid claims are as per Para 7.3 of the True up Petition No. 45/2019. The expenses of Rs. 1875.18 Crore

towards Pension, Rs. 185.04 Crore towards Gratuity and Rs. 6 Crore for difference of Gratuity as per 1972 Gratuity Act, totaling Rs. 2066.22 Crores for Terminal Benefits have been claimed for FY 2019-20 as per Para 6.4 of the MYT Petition No. 45/2020.

The actual pay out towards Pension from FY 2014-15 to FY 2019-20 has been considered for working out average factor of increase in Pension, which worked out to an annual escalation factor of 1.17 for the control period in the subject matter. Based on the above factor, the Pension of Rs. 1875.18 Crores (Actual pay out) increased to Rs. 3533.58 Crore in FY 2023-24".

33. Vide Commission's letter No. 1544 dated 29/12/2020, it was pointed out that the average escalation factor of 1.17 used for projection of pension amounts to 17 % increase every year, which is much higher than escalation factor of 3.51 % mentioned in Regulation 28.3. It has been observed that it is based on the arrears of pay revision in the FY 2017-18 and FY 2018-19. However, there is no increase on account of the arrears of pay revision in FY 2019-20. The petitioner was asked to consider the actual figures as per the latest audited accounts and escalate it with 3.51 % for submitting the revised & updated figures for pension and gratuity for remaining period of the subject MYT petition.

Vide letter No. 5902 dated 29.01.2021, MPPTCL filed its response that "The expenses towards Terminal Benefits in FY 2019-20 are almost freezed during the process of finalization of Accounts for FY 2019-20. The actual pay-outs according to aforesaid data for FY 2019-20 and provided by Terminal Benefit Trust is Rs. 1834.01 Crore which is inclusive of arrears amounting to Rs. 5.57 Crores paid towards difference of gratuity arising out of the order of the Hon'ble Supreme Court. As directed by the Hon'ble Commission conveyed vide above referred letter No. 1544 dated 29.12.2020, the average escalation factor for pension and gratuity has been taken as 3.51% for the subsequent years i.e. FY 2020-21 to FY 2023-24. The amount of pension and gratuity is indicated in the Annexure-I, which is submitted herewith".

34. It was observed that the petitioner updated the petition and claimed the revised amounts for terminal benefits as mentioned in this MYT order. The Commission in earlier Tariff orders has allowed terminal benefits on Pay as You Go principle. Therefore, the terminal benefits as under has been considered in this MYT Order:

(Rs. in Crore)

S.	Particulars	FY	FY	FY	FY	FY
No.		2019-20	2020-21	2021-22	2022-23	2023-24
1	Terminal Benefit Liabilities	1834.01	1973.01	2039.44	2108.20	2125.78

The above figures have been considered provisionally for the purpose of this MYT Order only. The terminal benefit liabilities shall be trued up in the future true up petitions to be filed by MPPTCL, after prudence check by the Commission, in accordance with the provisions of the Regulations.

DEPRECIATION:

35. Petitioner's submission:

35.1 OPENING BALANCE SHEET -

The Government of Madhya Pradesh has notified the final Opening Balance Sheet on 12th June 2008 in the position of 31.05.2005. The fixed assets transferred are shown as hereunder;

(i) Opening Gross Block Rs. 2932.75 Crores
 (ii) Accumulated Depreciation Rs. 1205.95 Crores
 (iii) Net Fixed Assets Rs. 1726.81 Crores

Hon'ble Commission had directed the Petitioner to reconcile the Asset Register and work out the Depreciation during the year on the above. The details of this Asset Register was submitted during the Truing-up process of 2012-13 for perusal of the Hon'ble Commission. The Opening Gross Blocks and Net Blocks of the Asset Register were reconciled & were of the same value as given in the Final Opening Balance Sheet. There was no change in Assets capitalized after 1.6.2005 which in turn were the same as submitted earlier and reconciled with the accounts. The depreciation for FY 2018-19 was also worked out on the basis of this reconciled Asset Register.

Continuing with the Asset Register thus submitted, by extending the figures of GFA - Depreciation for the year, Accumulated Depreciation & Net Fixed Assets up to FY 2018-19 has been worked out for the True-up Petition, same is tabulated hereunder:

				(Rs. in Crores)
S. No.	Date as on	Gross Fixed Accumulated Net F		Net Fixed Assets
3. NO.	Dute as on	Assets	Depreciation	Net Fixed Assets
1	31-03-2017	8837.80	3503.16	5334.64
2	31-03-2018	9606.08	3864.34	5741.74
3	31-03-2019	11512.35	4248.24	7264.11

The figures upto Sr. No. 1 & Sr. No 2 are as per 'True-up' Orders / Petition. Whereas for S. No. 3 i.e. as on 31.03.2019 are as per the True-up Petition filed for FY 2018-19.

35.2 ASSET DATA BASE FOR WORKING OUT DEPRECIATION -

The Petitioner has maintained an Asset Register in the form of Database for working out Depreciation for a particular year. The salient features of the database are;

(i) The database is as per Final Opening Balance Sheet figures notified on 12th June 2008 in the position of 31.05.05.

- (ii) The works Capitalized during subsequent years have been entered in the data base till 31.03.2019.
- (iii) The Depreciation rates after 31.05.05 have been taken as per Hon'ble MPERC's Regulations applicable time to time.
- (iv) Depreciation working formula is as per Straight Line Method of Depreciation
- (v) The Depreciation ceases to add further as soon as the Depreciation reaches 90% of Opening Gross Block. 10% is taken as salvage value. Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable.
- (vi) In case of the existing Projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by commission upto 31.3.2019 from gross depreciable value of the assets. The rate of depreciation shall be continued to be charged at the rate specified in Appendix-I.
- (vii) The Opening Balance Sheet notified on 12th June 2008, transferred no Asset value out of Gross Block of `2932.75 Crores funded through contribution from consumers. In Asset capitalized from FY 2005-06 to FY 2009-10 too, no works have been capitalized as funded through consumer's contribution. No Depreciation is being charged by MPPTCL against contributory works and the works funded through Grant.
- (viii) The useful life for AC and DC substations and GIS is considered as 25 years.

35.3 UPDATION IN VIEW OF CURRENT REGULATIONS -

In accordance to above, necessary changes in software of Depreciation Model has been made for calculating depreciable value on year to year basis.

35.4 DEPRECIATION FOR CONTROL PERIOD -

The figures of Gross Block, Depreciation and Net Block up to FY 2018-19 have been taken from the True-up Petition filed for FY 2018-19.

- (i) For control period under consideration, the Asset addition is taken from Table 4.4 of the Transmission Plan. The category-wise details of Depreciation for control period are calculated by continuing the existing data base as on 31.03.2019 & incorporating rate of depreciation specified in Appendix-I and after a period of 12 years from date of commercial operation, shall be spread over the remaining life of the asset/s such that the maximum depreciation does not exceed 90%. The major head-wise summary is given in Format TUT-7 & TUT-8.
- (ii) The summary of GFA, Depreciation without Consumer Contribution works and Net Block is given in the following table;

		Gross Fixed Assets			Provision fo	or Deprecia	Net Fixed Assets		
S. N.	YEAR	At the beginning of Year	Addition During Year	At End of Year	At the beginning of Year	Addition During Year	At End of Year	At the beginning of Year	At the End of Year
1	2019-20	11512.35	934.10	12446.45	4248.24	455.50	4703.74	7264.11	7742.70
2	2020-21	12446.45	1349.58	13796.02	4703.74	509.18	5212.92	7742.70	8583.10
3	2021-22	13796.02	1065.73	14861.75	5212.92	538.97	5751.89	8583.10	9109.86
4	2022-23	14861.75	507.59	15369.34	5751.89	559.02	6310.91	9109.86	9058.43
5	2023-24	15369.34	489.47	15858.81	6310.91	568.16	6879.07	9058.43	8979.74

It is therefore prayed to allow Depreciation for control period as under;

- *i.* FY 2019-20 Rs. **455.50 Crores**
- *ii.* FY 2020-21 Rs. **509.18 Crores**
- *iii.* FY 2021-22 Rs. **538.97 Crores**.
- iv. FY 2022-23 Rs. **559.02 Crores**
- v. FY 2023-24 Rs. **568.16 Crores**

36. Provisions under Regulations:

Regulations 26 of the MYT Regulations provide as under:

26. Depreciation:

- 26.1 For the purpose of Tariff, depreciation shall be computed in the following manner:
- (a) Depreciation shall be computed from the date of commercial operation of a Transmission System including Communication System or element thereof. In case of the tariff of a Transmission System including Communication System for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial Operation of the Transmission System taking into consideration the depreciation of individual units or elements thereof:
 - Provided that effective date of Commercial Operation shall be worked out by considering the actual date of Commercial Operation and installed capacity or capital cost of all elements of the Transmission System, for which single tariff needs to be determined.
- (b) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple elements of Transmission System, weighted average life Transmission System shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

- (c) The approved/accepted cost shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed.
- (d) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:
 - Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable:
 - Provided further that any depreciation disallowed on account of lower availability of the transmission system shall not be allowed to be recovered at a later stage during the useful life or the extended life.
- (e) Land other than land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (f) Depreciation shall be calculated annually based on 'Straight Line Method' and at rates specified in Appendix-I to these Regulations for the assets of the Transmission System:
 - 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 equitably in the balance useful life of the assets:
 - Provided further that the Consumer contribution or capital subsidy/ grant etc for asset creation shall be treated as per the Accounting Rules notified and in force from time to time.
- (g) In case of the existing Projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets. The rate of Depreciation shall be continued to be charged at the rate specified in Appendix-I.
- (h) Depreciation shall be chargeable from the first Year of commercial operation. In case of commercial operation of the asset for part of the Year, depreciation shall be charged on pro rata basis.
- (i) In case of de-capitalization of assets in respect of Transmission System or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful services.

Commission's Analysis:

37. On perusal of the Depreciation claimed by the petitioner, the information gaps/infirmities in the claims made by MPPTCL were communicated by the Commission and the response of MPPTCL on all such issues has been detailed in earlier paragraphs of this order.

It is worth mentioning that vide Commission's letter No. 1013 dated 4/09/2020, it was pointed out that in P. No. 45/2019 in the matter of true up of transmission tariff for FY 2018-19, Depreciation for FY 2018-19 was claimed as Rs 383.90 Cr. However, in the subject petition Depreciation for FY 2019-20 is claimed as Rs 475.44 Cr showing an increase of 24%. However, the GFA has increased from Rs 11512.35 Cr to Rs 13201.44 Cr showing an increase of 14% only. The petitioner was asked to submit the basis and methodology for computation of depreciation on projected GFA for each year of control period and to confirm that the rate of depreciation has been applied as per provisions under MPERC (terms and conditions for determination of transmission tariff) (Revision – IV) Regulations, 2020. Further the calculations for arriving at the depreciation amount was sought in excel sheet.

In response, vide its letter No. 3464 dated 09/10/2020, MPPTCL submitted that "addition of GFA in a particular year and cumulative Depreciation till that year has no fixed line relationship". It further submitted that "the cumulative Depreciation till the end of FY 2018-19 forms the basis for calculation of Depreciation in subsequent years. The Depreciation as on 31.3.2019 shall be carried forward in subsequent years at the applicable rates. From FY 2019-20 onwards, it is presumed that average time of six months may be considered for applicability of Depreciation i.e. presuming that the capitalized amount for that particular year will be depreciable from the mid of that financial year yielding the Depreciation for six months of the financial year. This amount of Depreciation for FY 2019-20 will be added to the cumulative Depreciation as on 31.3.2020 (the Depreciation as on 31.3.2019 will be accumulated as per applicable rates of Depreciation till 31.3.2020) so as to evaluate the cumulative Depreciation as on 31.3.2020. This process has been carried forward for remaining financial years of the control period".

MPPTCL confirmed that the rate of Depreciation has been applied as per the Tariff Regulations 2020 and submitted the calculations for arriving at the Depreciation amount in excel sheet/soft copy.

38. Vide Commission's letter No. 1544 dated 29/12/2020, the petitioner was asked to reconcile the depreciation for FY 2019-20 claimed in the subject petition with the unaudited / audited accounts for FY 2019-20 and if required, the depreciation claims for future years of the subject MYT petition may also be adjusted accordingly.

Vide letter No. 5902 dated 29.01.2021, MPPTCL submitted that "The depreciation figures on the basis of capitalization amount obtained in the process of finalization of Accounts for the FY 2019-20 has been **updated** and the depreciation for the subsequent years has also been adjusted accordingly".

39. It was observed that due to change in GFA as per the actual addition during FY 2019-20, the petitioner also recalculated the Depreciation in accordance with the provisions of the Regulations. Summary of the Depreciation claimed in the original petition with that in the updated and amended petition is as under:

(Rs. in Crore)

S.		Depreciation for the Financial Year					
No.	Particulars	FY	FY	FY	FY	FY	
NO.		2019-20	2020-21	2021-22	2022-23	2023-24	
1	2	3	4	5	6	7	
	Depreciation						
1	claimed in the	475.44	549.04	578.84	598.88	608.02	
	original petition						
	Depreciation						
2	claimed in the	455.50	509.18	538.97	559.02	568.16	
	updated &	433.30	309.10	330.97	339.02	200.10	
	amended petition						

The depreciation claimed in the updated and amended petition as mentioned at serial no. 2 of the table above has been considered provisionally for the purpose of calculation of ARR in this MYT Order only. The actual annual capitalization and Depreciation as per the Audited accounts and Regulatory provisions for each financial year, after prudence check by the Commission shall be considered appropriately in the true up petitions in accordance with the provisions of the Regulations.

INTEREST & FINANCE CHARGES:

40. **Petitioner's Submission:**

40.1 LOANS TRANSFERRED THROUGH OPENING BALANCE SHEET -

The Govt. of M.P. has notified the final Opening Balance Sheet on 12th June 2008, as referred in Chapter 1 of this Petition. Loan liabilities of Rs. 1313.21 Crores are indicated in the Balance Sheet and a liability of Rs. 5.53 Crores is indicated in the footnote as loan from MP Power Generating Company Ltd., making a total of Rs.1318.74 Crores. Details of these are mentioned hereunder;

As on 31.05.2005 (Rs. in Lacs)

S.		Opening Balance at the beginning of the year					
No.	Particulars	Principal Not Due	Principal overdue	Interest overdue	TOTAL		
1	Loan from PFC - Unsecured	30990.54	0.00	0.00	30990.54		
2	Loan from SADA Gwalior	720.00	480.00	302.80	1502.80		
3	Bonds & Debentures	29692.14	7655.06	11545.70	48892.90		
4	MP Genco	553.00	0.00	0.00	553.00		
5	ADB	20844.32	0.00	0.00	20844.32		
6	NABARD	7619.10	1215.02	0.00	8834.32		
7	General Loans	2876.59	214.78	0.00	3091.37		
8	Market Bonds	15964.95	1200.55	0.00	17165.50		
TOTA	L -	109260.64	10765.41	11848.50	131874.55		

40.2 There have been fresh loans received in subsequent years, and repayments have also been done during these years. The year-wise growth has been shown in the 'True-up' Petitions of earlier years. Position of outstanding loans as per latest available Audited Accounts for FY 2018-19 and True-up Petition for FY 2018-19 is given in the following table;

(Rs. in Lacs)

		Opening Ba	Opening Balance at the beginning of 2018-19					
S. No.	Particulars	Principal Not Due	Principal overdue	Interest overdue	Total Rs Lacs			
1	Loan from REC-I Secured	13816.00	0.00	0.00	13816.00			
2	Loan from REC-II Secured	1635.00	0.00	0.00	1635.00			
3	Loan from UBI	17789.45	0.00	0.00	17789.45			
4	Bonds & Debentures	0.00	105.00	134.68	239.68			
5	Direct Loan	0.00	1629.22	2144.80	3774.02			
6	ADB-1869	14663.49	22624.36	41156.02	78443.87			
7	NABARD	0.00	9285.15	12799.34	22084.49			
8	General Loan	0.00	29024.37	35054.69	64079.06			
9	Market Bond	304.64	16860.87	23567.93	40733.44			
10	GOMP ADB 2323	32897.94	10657.80	9927.45	53483.20			
11	GOMP ADB 2346	48891.13	15819.98	14626.30	79337.41			
12	TSP	0.00	6075.00	7135.76	13210.76			
13	SCSP	0.00	7345.00	8895.01	16240.01			
14	GOMP JICA IDP-217	54648.33	8743.73	35034.02	98426.08			
15	GOMP JICA IDP-250	4255.40	0.00	89.44	4344.84			
16	GOMP KfW (GEC)	13411.85	0.00	36.36	13448.21			
17	GOMP ADB 3066	54485.13	0.00	14447.38	68932.51			
TOTAL -		256798.36	128170.48	205049.18	590018.03			

40.3 PROJECTIONS FOR CONTROL PERIOD -

The source-wise loans are projected for the five years of control period is based on the anticipated closure of 2019-20 and the following basis;

- i. Loan receipts are projected as per the Plan table given in Para 4.4 of the Petition.
- ii. Principal repayment due is assessed approximately on the basis of repayment terms.
- iii. Actual repayments are mentioned in full for loans taken from various Institutions. Default in loan payments is also not ruled out since Discoms are not making full payment of bills of Transmission charges.
- iv. Interest due is worked out as rate of interest in general.

 Based on above, the year-wise loans details are projected and enclosed as Annexure-XIII(a) to (e) for FY 2019-20 to FY 2023-24.

40.4 WEIGHTED AVERAGE RATE OF INTEREST -

Hon'ble Commission has desired that the Rate of Interest for each category of loans such as PFC, ADB, State Govt. etc. should be worked out by considering rate of interest of various loan installments applicable during the year. Accordingly, 'Weighted Average Rate of Interest' is worked out based on 'Principal Not Due' only, therefore, it may differ from actual/entire loan portfolio.

The Weighted Average Rate of Interest for five years is worked on the basis of 'Principal Not Due' at the beginning of year, applying the rate of interest available.

FY-2019-20 (Rs. in Lacs)

S. No.	Particulars	Principal not due as on 31.03.2020	Rate of interest (%)	Interest
1	REC-I Secured	25966.00	9.75	2531.69
2	REC-II Secured	12297.00	9.75	1198.96
3	Union Bank of India	59696.46	8.18	4883.17
4	ADB-1869	12459.90	10.59	1319.50
5	GOMP ADB 2323	30740.59	3.27	1005.22
6	GOMP ADB 2346	45681.06	3.27	1493.77
7	GOMP ADB 3066	72798.13	12.00	8735.78
8	GOMP JICA IDP-217	50276.46	12.00	6033.18
9	GOMP JICA IDP-250	11122.40	12.00	1334.69
10	GOMP KfW (GEC)	42195.41	11.50	4852.47
11	Market Bond	228.48	8.30	18.96
Tota	Î-	363461.89		33407.39

Weighted Average Rate of Interest for FY 2019-20 = (33407.39/363461.89)*100 = 9.19%

FY-2020-21 (Rs. in Lacs)

S. No.	Particulars	Principal not due as on 31.03.2021	Rate of interest (%)	Interest
1	REC-I Secured	35100.00	9.75	3422.25
2	REC-II Secured	29678.00	9.75	2893.61
3	Union Bank of India	90041.46	8.18	7365.39
4	Canara Bank	46142.00	8.20	3783.64
5	ADB-1869	10256.31	10.59	1086.14
6	GOMP ADB 2323	28583.24	3.27	934.67
7	GOMP ADB 2346	42470.99	3.27	1388.80
8	GOMP ADB 3066	73974.13	12.00	8876.90
9	GOMP JICA IDP-217	45904.6	12.00	5508.55
10	GOMP JICA IDP-250	56634.4	12.00	6796.13
11	GOMP KfW (GEC)	79965.41	11.50	9196.02
12	Market Bond	152.32	8.30	12.64
13	Unfunded	21370	8.20	1752.34
Tota	Ī-	560272.86		53017.08

Weighted Average Rate of Interest for FY 2020-21 = (53017.08/560272.86)*100 = 9.46%

FY- 2021-22 (Rs. in Lacs)

S. No.	Particulars	Principal not due as on 31.03.2022	Rate of interest (%)	Interest
1	REC-I Secured	33930.00	9.75	3308.18
2	REC-II Secured	48028.00	9.75	4682.73
3	Union Bank of India	95362.46	8.18	7800.65
4	Canara Bank	93789.00	8.20	7690.70
5	ADB-1869	8052.72	10.59	852.78
6	GOMP ADB 2323	26425.89	3.27	864.13
7	GOMP ADB 2346	39260.92	3.27	1283.83
8	GOMP ADB 3066	70275.13	12.00	8433.02
9	GOMP JICA IDP-217	41532.73	12.00	4983.93
10	GOMP JICA IDP-250	106818.40	12.00	12818.21
11	GOMP KfW (GEC)	72349.66	11.50	8320.21
12	Market Bond	76.16	8.30	6.32
13	Unfunded	57557.00	8.20	4719.67
Tota	Ī-	693458.07		65764.36

Weighted Average Rate of Interest for FY 2021-22 = (65764.36/693458.07)*100 = 9.48%

FY-2022-23 (Rs. in Lacs)

S. No.	Particulars	Principal not due as on 31.03.2023	Rate of interest (%)	Interest
1	REC-I Secured	31590.00	9.75	3080.03
2	REC-II Secured	62610.00	9.75	6104.48
3	Union Bank of India	92450.46	8.18	7562.45
4	Canara Bank	89651.00	8.20	7351.38
5	ADB-1869	5849.14	10.59	619.42
6	GOMP ADB 2323	24268.55	3.27	793.58
7	GOMP ADB 2346	36050.86	3.27	1178.86
8	GOMP ADB 3066	66576.13	12.00	7989.14
9	GOMP JICA IDP-217	37160.86	12.00	4459.30
10	GOMP JICA IDP-250	99317.40	12.00	11918.09
11	GOMP KfW (GEC)	64733.91	11.50	7444.40
12	Unfunded	119556.00	8.20	9803.59
Tota	Î-	729814.31		68304.72

Weighted Average Rate of Interest for FY 2022-23 = (68304.72/729814.31)*100 = 9.36%

FY-2023-24 (Rs. in Lacs)

S. No.	Particulars	Principal not due as on 31.03.2024	Rate of interest (%)	Interest
1	REC-I Secured	29250.00	9.75	2851.88
2	REC-II Secured	75987.96	9.75	7408.83
3	Union Bank of India	85627.46	8.18	7004.33
4	Canara Bank	82791.00	8.20	6788.86
5	ADB-1869	3645.55	10.59	386.06
6	GOMP ADB 2323	22111.20	3.27	723.04
7	GOMP ADB 2346	32840.79	3.27	1073.89
8	GOMP ADB 3066	62877.13	12.00	7545.26
9	GOMP JICA IDP-217	32789.00	12.00	3934.68
10	GOMP JICA IDP-250	91816.40	12.00	11017.97
11	GOMP KfW (GEC)	59008.16	11.50	6785.94
12	Unfunded	186003.00	8.20	15252.25
Tota	I -	764747.65		70772.99

Weighted Average Rate of Interest for FY 2023-24 = (70772.99/764747.65)*100 = 9.25%

40.5 INTEREST CALCULATION FOR CONTROL PERIOD -

As per Clause 25.5 of the Transmission Tariff Regulations;

"The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment or interest capitalized.".

Accordingly, the Weighted Rate of Interest is worked out on the basis of the principal not due outstanding at the end of each financial year of the control period with the applicable interest rate of each loan.

With the aforesaid methodology, the position of loans up to 31.03.2024 has been worked out, considering the loan repayments deemed to be equal to Depreciation claims for each year.

Further, Hon'ble Commission vide its order dtd. 12.12.2013 for True Up of FY 2011-12 has directed to adopt this approach. In line with the above, the interest claims in subsequent control periods i.e. FY 2013-14 to FY 2015-16 and FY 2016-17 to FY 2018-19 were allowed. Now, with the same methodology interest liabilities have been worked out as below:-

(Rs. in Crores)

S. N.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
1	Principal not due on 1 st April of year	3286.59	3484.95	3920.48	4127.52	3923.81
2	Loan received during the year (equal to 70% of Capitalization considered)	653.87	944.70	746.01	355.32	342.63
3	Principal repayment deemed equal to Depreciation during that year	455.50	509.18	538.97	559.02	568.16
4	Principal Not Due on 31st March of year (S. No. 1+2 – 3)	3484.95	3920.48	4127.52	3923.81	3698.28
5	Average Loan	3385.77	3702.72	4024.00	4025.67	3811.05
6	Weighted Average Rate of Interest for the year	9.19%	9.46%	9.48%	9.36%	9.25%
7	Interest eligibility for the year	311.15	350.28	381.47	376.80	352.52

40.6 NORMATIVE LOAN -

If the average Equity is more than the eligible Equity, the same is to be treated as Normative Loan, and this "Normative loan" is eligible for interest at the rates indicated in Para 8.4 covering overall Weighted Average Rate of Interest for the respective Year. On this basis, above lines True up for FY 2016-17 to FY 2017-18 was finalized and with opening figures from True up filed for FY 2018-19, the following is obtained;

(Rs. in Crores)

S. N.	Particulars	FY 2019-20	FY 2020- 21	FY 2021- 22	FY 2022- 23	FY 2023- 24
A	Gross Block of Assets at beginning of year	10542.57	11476.67	12826.24	13891.97	14399.56
В	Gross Block of Assets at end of year Net of Consumer Contribution, PSDF & NCEF grant	11476.67	12826.24	13891.97	14399.56	14889.03
С	Gross Block of Assets (Average)	11009.62	12151.45	13359.11	14145.77	14644.30
D	Maximum Qualifying Equity (30%) with 70:30 Debt:Equity ratio	3302.89	3645.44	4007.73	4243.73	4393.29
Е	Equity at the beginning of the year employed on Capitalized Works	3078.80	3359.03	3763.90	4083.62	4235.90
F	Equity at the end of the year employed on Capitalized Works	3359.03	3763.90	4083.62	4235.90	4382.74
G	Average Equity employed on Capitalized Works	3218.91	3561.46	3923.76	4159.76	4309.32
Н	Qualifying Equity	3302.89	3645.44	4007.73	4243.73	4393.29
I	Normative Loan component (only if (g)>(h))	0.00	0.00	0.00	0.00	0.00

40.7 NET INTEREST CLAIM -

(Rs. in Crores)

S.	Particulars	FY 2019-	FY 2020-	FY 2021-	FY 2022-	FY 2023-
No.	Particulars	20	21	22	23	24
1	Interest Eligibility	311.15	350.28	381.47	376.80	352.52
2	Interest on normative loan	0.00	0.00	0.00	0.00	0.00
3	Bank & Finance charge *	0.25	0.25	0.25	0.25	0.25
4	Total Interest & Finance charges	311.40	350.53	381.72	377.05	352.77

^{*} On the basis of last Audited Accounts (i.e. 2018-19)

40.8 INTEREST ON WORKING CAPITAL -

Clause 28.1 of the regulation states that Interest on working capital shall be payable on normative basis notwithstanding that the Transmission Licensee has not taken loan for working capital from any outside agency. The Interest on working capital for the five years on Normative basis is worked out in the following table;

(Rs. in Crores)

S. No.	Particulars	FY 2019- 20	FY 2020- 21	FY 2021- 22	FY 2022- 23	FY 2023-24
1	O&M Expenses for One month	46.39	50.70	54.96	58.52	61.75
2	Maintenance Spare @ 15% of O&M Expenses	83.50	91.26	98.92	105.33	111.15
3	Receivables equivalent to 45 days month's Transmission charges	476.27	520.05	550.76	572.10	580.72
4	Total Working Capital (1+2+3)	606.17	662.01	704.64	735.95	753.63
5	SBI's Base Rate + 3½% on 1st April of year (8.50% + 3.50% = 12.00%)*	12.00%	12.00%	12.00%	12.00%	12.00%
6	Interest on Working Capital for the year	72.74	79.44	84.56	88.31	90.44

(*) REMARK-

Bank rate (MCLR of SBI as on 1.4.2019 i.e. @8.50% for one year plus 350 basis point) and the same is considered for all five years.

40.9 TOTAL INTEREST CLAIMED -

(Rs. in Crore)

S. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
1	Interest & Finance charges	311.40	350.53	381.72	377.05	352.77
2	Interest on Working Capital (Normative)	72.74	79.44	84.56	88.31	90.44
3	Total Interest	384.14	429.97	466.28	465.36	443.21

41. **Provisions under Regulations**

Regulation 25 of the MYT Regulations provides as under:

25.Interest and finance charges on loan capital:

- 25.1 The loans arrived at in the manner indicated in Regulation 22 shall be considered as gross normative loan for calculation of interest on loan.
- 25.2 The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

- 25.3 The repayment for each year of the tariff period FY 2019-20 to FY 2023-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro-rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalization of such asset.
- 25.4 Notwithstanding any moratorium period availed by the Transmission Licensee, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.
- 25.5 The rate of interest shall be the weighted average rate of interest calculated on the basis of the **actual loan portfolio** after providing appropriate accounting adjustment or interest capitalized:

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

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

- 25.6 The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- 25.7 The Transmission Licensee shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the Beneficiaries and the net savings shall be shared between the Beneficiaries and the Transmission Licensee, in the ratio of 50:50.
- 25.8 The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.
- 25.9 In case of dispute, any of the parties may make an application in accordance with the MPERC (Conduct of Business) Regulation, 2004, as amended from time to time:

Provided that the Transmission Customers shall not withhold any payment on account of the interest claimed by the Transmission Licensee during the pendency of any dispute arising out of re-financing of loan.

Further Regulations 29 and 39 of the MYT Regulations provide as under:

29. Interest charges on working capital

- 29.1 Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period FY 2019-20 to FY 2023-24 in which the Transmission System including Communication System or element thereof is declared under commercial operation, whichever is later.
- 29.2 Interest on working capital shall be payable on normative basis notwithstanding that the Transmission Licensee has not taken loan for working capital from any outside agency.

39. Working capital

For each Year of the Tariff Period working capital shall cover the following:

- (1) Maintenance spares @ 15% of the O&M expenses specified in Regulation 38.1;
- (2) Receivables equivalent to 45 days of transmission charges calculated on Target Availability Level; and
- (3) *Operation and Maintenance expenses for one month.*

Commission's Analysis

- 42. On perusal of filing in the subject petition with regard to interest and finance charges claimed by the petitioner, the information gaps/ infirmities in the claims made by MPPTCL were communicated by the Commission and the response of MPPTCL on all such issues has been detailed in earlier paragraphs of this order.
 - 42.1 It is worth mentioning that vide Commission's letter No. 1013 dated 4/09/2020, it was observed that in P. No. 45/2019 regarding True up of transmission tariff for FY 2018-19, Principal not due as on 31/03/2019 has been claimed as Rs 2567.97 Cr. and the weighted average rate of interest has been calculated as 4.50%. However, in the subject petition principal overdue of Rs 1281.70 Cr and interest overdue of Rs 2050.49 Cr have been shown over and above the aforesaid principal not due amounting to Rs 2567.97 Cr. Therefore, calculations for arriving at the weighted average rate of interest was sought.

It was further observed that the weighted average rate of interest is calculated as 9.19% in FY 2019-20. The petitioner was asked to justify the reasons for increase in weighted average rate of interest.

42.2 In response, vide its letter No. 3464 dated 09/10/2020, MPPTCL submitted that "The desired calculation for working out Weighted Average Rate of Interest @ 4.50% for FY 2018-19 is tabulated below";

(Rs. in Crores)

S.		Principal not	Rate of	
No.	Particulars	due as on	interest	Interest
NO.		31.03.2019	(%)	
1	REC-I Secured	138.16	9.50%	13.14
2	REC-II Secured	16.35	9.50%	1.55
3	Union Bank of India	177.89	8.76%	15.58
4	ADB-1869	146.63	10.59%	15.40
5	GOMP ADB 2323	328.98	4.08%	13.42
6	GOMP ADB 2346	488.91	4.08%	19.95
7	GOMP ADB 3066	544.85	2.14%	11.66
8	GOMP JICA IDP-217	546.48	1.50%	8.20
9	GOMP JICA IDP-250	42.55	1.80%	0.77
10	GOMP KfW (GEC)	134.12	11.50%	15.42
11	Market Bond	3.05	8.30%	0.25
TOTA	AL -	2567.97	-	115.34

Weighted Average Rate of Interest = (115.34/2567.97) *100 = 4.50 %

42.3 Further in support of its claim for weighted average rate of 9.19% for FY 2019-20, MPPTCL resubmitted the calculation table submitted by it in the petition. It also submitted that "The rate of interest in respect of JICA IDP 217 & 250 and ADB 3066 loans has been considered @ 12% per annum instead of lending agencies rates @ 1.5% & 1.80% (JICA loans) and @ 2.14% for ADB 3066 loan. The interest rate @ 12% has been considered in compliance to the directives of the Energy Department, Govt. of MP order No. F-5-15/2014/13 dtd. 31.3.2017. The calculation for working out Weighted Average Rate of Interest @ 4.5% per annum considered in True up Petition for FY 2018-19 has been done in compliance to directives of the Hon'ble Commission for True up order dtd. 4.5.2018 for FY 2016-17 and dtd. 4.1.2020 for FY 2017-18. It is to submit that accounts of MPPTCL are being finalized based on the interest @ 12% in respect of these loans and creation of liabilities to the Govt. of MP have occurred accordingly. In view of the above, to meet out those obligations towards interest payment on these loans, though the on-lending agreements as per directives of Hon'ble Commission in True up orders for FY 2016-17 and FY 2017-18 are yet to be executed, the interest rate @ 12% per annum in respect of JICA IDP 217 & 250 and ADB 3066 loans has been considered in framing the MYT Petition".

42.4 It was also observed that vide order dated 08/02/2021 in petition No. 45/2019 in the matter of True-up of Transmission Tariff for FY 2018-19, the Commission has considered the petitioner's submission and allowed interest by considering weighted average rate of 4.50% only.

42.5 In view of the aforesaid the Commission observed that since the on-lending agreements as per directives of the Commission in True up orders for FY 2016-17 and FY 2017-18 are yet to be executed, therefore considering the calculation provided by the petitioner, the weighted average rate has been considered as 4.50% for purpose of this MYT order also. Accordingly, the interest on loan is considered as under:

(Rs. in Crore)

					(No. III di ore)				
S.	Doutinulous	FY	FY	FY	FY	FY			
N.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
1	Principal not due on	2207 50	2404.05	2020.40	4127 52	2022.01			
1	1st April of year	3286.59	3484.95	3920.48	4127.52	3923.81			
	Loan received		944.71						
	during the year			746.01					
2	(equal to 70% of	653.87			355.31	342.63			
	Capitalization								
	considered)				97 559.02				
	Principal repayment					568.16			
3	deemed equal to	455.50	509.18	538.97	550.02				
3	Depreciation during	433.30	307.10	330.77	337.02				
	that year								
	Principal Not Due on								
4	31st March of year (S.	3484.95	3920.48	4127.52	3923.81	3698.28			
	No. 1+2 – 3)								
5	Average Loan	3385.77	3702.72	4024.00	4025.67	3811.05			
	Weighted Average								
6	Rate of Interest for	4.50%	4.50%	4.50%	4.50%	4.50%			
	the year								
7	Interest eligibility	152.36	166.62	181.08	181.15	171.50			
	for the year	132.30	100.02	101.00	101.13	1/1.30			

43. Interest on Working Capital:

43.1 It was observed that MPPTCL has claimed the interest on working capital by considering rate as 8.50% + 3.50% = 12.00% on the basis of SBI MCLR being 8.50% on 01/04/2019. However, SBI MCLR was 7.75% as on 01/04/2020 and it is 7.00% as on date. Therefore, vide Commission's letter No. 1013 dated 04/09/2020, the petitioner was asked to submit the details of the actual rate of interest for working capital for FY 2019-20. The reasons for not considering the reduced SBI MCLR as on date was also sought.

43.2 In response, vide its letter No. 3464 dated 09/10/2020, MPPTCL submitted that "The SBI MCLR rate as on 1.4.2019 @ 8.5% has been considered to work out the Bank rate for each financial year of the control period. As per the monetary policy of the RBI announced from time to time, the MCLR rate of the Commercial Banks keep on changing. The SBI MCLR rate can not be predicted for the balance period of the control period at the time of filing the Petition, as such,

the basic rate as on 1.4.2019 has been considered for balance control period also. However, it is submitted that in view of uncertainty involved in this matter, the **Hon'ble Commission is prayed to kindly take a view on that**".

43.3 The Commission has considered SBI's 1 year MCLR rate of 8.55% as on 01/04/2019, 7.75% as on 01/04/2020 and 7.00% as on 01/04/2021 for subsequent years. Further 3.50% has been added as per the provisions of the Regulations. Thus the effective rate has been considered as 12.05%, 11.25%, 10.50%, 10.50% & 10.50% for the five years of the control period. Therefore, the Interest on working capital has been considered as under:

(Rs. in Crore)

S.	Particulars	FY 2019-	FY 2020-	FY 2021-	FY 2022-	FY 2023-
No.		20	21	22	23	24
1	O&M Expenses for One month	46.39	50.70	54.95	58.52	61.75
2	Maintenance Spare @ 15% of	83.50	91.26	98.92	105.33	111.15
	O&M Expenses					
	Receivables equivalent to 45					
3	days month's Transmission	451.28	490.65	517.70	539.03	549.06
	charges					
4	Total Working Capital (1+2+3)	581.17	632.61	671.57	702.88	721.96
	SBI's Base Rate + 3½% on 1st					
5	April of year $(8.50\% + 3.50\% =$	12.05%	11.25%	10.50%	10.50%	10.50%
	12.00%)*					
6	Interest on Working Capital for	70.03	71.17	70.51	73.80	75.81
U	the year	70.03	/1.1/	/0.31	/3.00	/3.01

43.4 It is worth mentioning that a report with covering letter dated 31/12/2020 regarding FOR working group on "Analysis of factors impacting Retail Tariff and measures to address them" is available on the website of the Forum of Regulators. The report contains issues related to Transmission charges also. MPPTCL may make efforts in light of the recommendations of this report to reduce the transmission charges.

43.5 Further Regulation 25.7 of the MYT Regulations also provides that "The Transmission Licensee shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the Beneficiaries and the net savings shall be shared between the Beneficiaries and the Transmission Licensee, in the ratio of 50:50". The interest rates have reduced during last year and may remain low in future. Therefore, MPPTCL shall make efforts to reduce the interest cost and other elements of transmission charges.

43.6 The aforesaid figures including rate of interest for interest and finance charges and interest on working capital have been considered provisionally for the purpose of the subject MYT Order only. These shall be trued up in the future true up petitions to be filed by MPPTCL, after prudence check by the Commission, in accordance with the provisions of the Regulations.

Return on Equity

44. Petitioner's submissions:

44.1 **EQUITY INVESTED** –

The Equity held as per the Audited Accounts for FY 2018-19 provide for following figures for Equity;

- (i). Equity held on 31.03.2018 Rs. 2786.47 Crores
- (ii). Equity held on 31.03.2019 Rs. 3294.35 Crores

Eligible Equity for claim of RoE in line with the approach adopted by Hon'ble Commission in True up order of Previous Years is worked out taking opening figures as per the True-up petition filed for 2018-19, and assuming 30% of the Asset capitalized, as mentioned in Para 4.4, as equity infusion year to year; the following tabulation is obtained;

The Equity growth is accordingly given in following table;

(Rs. in Crores)

S.	Particulars	FY	FY	FY	FY 2022-	FY 2023-
No.	Furuculars	2019-20	2020-21	2021-22	23	24
1	Equity at the beginning of the year employed on capitalized works	3078.80	3359.03	3763.90	4083.62	4235.90
2	Assets capitalized during the year	934.10	1349.58	1065.73	507.59	489.47
3	Equity received during the year	280.23	404.87	319.72	152.28	146.84
4	Equity at the end of the year	3359.03	3763.90	4083.62	4235.90	4382.74

44.2 RATE FOR CLAIMING ROE -

- (i). Base Rate 15.5%
- (ii). M.A.T. Rate 15.00% + Surcharge of 3% on the same = 15.45%
- (iii). Gross Rate <u>15.50</u>

$$(1 - 0.1545) = 18.33\%$$

44.3 CLAIM OF ROE FOR CONTROL PERIOD -

(Rs. in Crore)

Sr. No.	Particular Opening Equity	Unit Rs.	Amount for FY 2019-20	Amount for FY 2020-21	Amount for FY 2021-22	Amount for FY 2022-23	Amount for FY 2023-24
1	(closing equity of previous year)	Cr.	3078.80	3359.03	3763.90	4083.62	4235.90
2	Equity addition due to capitalization during the year i.e. Equity employed on Capitalized works at the end of year	Rs. Cr.	280.23	404.87	319.72	152.28	146.84
3	Closing Equity	Rs. Cr.	3359.03	3763.90	4083.62	4235.90	4382.74
4	Average Equity employed during the year	Rs. Cr.	3218.91	3561.46	3923.76	4159.76	4309.32
5	Return on equity base rate	%	15.50 %	15.50 %	15.50 %	15.50 %	15.50 %
6	Tax rate actually paid during the year	%	15.00%	15.00%	15.00%	15.00%	15.00%
7	Rate of return on Equity	%	18.33%	18.33%	18.33%	18.33%	18.33%
8	Total Return on equity	Rs. Cr.	590.03	652.82	719.23	762.48	789.90

44.4 TOTAL RoE CLAIMED FOR CONTROL PERIOD -

(Rs. in Crore)

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	Total RoE	590.03	652.82	719.23	762.48	789.90

Thus the claim for RoE for five years of the control period under consideration is submitted as follows;

- (i). FY 2019-20 Rs. 590.03 Crores
- (ii). FY 2020 -21- Rs. 652.82 Crores
- (iii). FY 2021-22 Rs. 719.23 Crores
- (iv) FY 2022-23 Rs. 762.48 Crores
- (v) FY 2023-24- Rs. 789.90 Crores

45. **Provisions under Regulation:**

Regulation 24 of the MYT Regulations provide as under:

24. Return on Equity:

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

24.2 Return on equity shall be computed at the base rate of 15.5% to be grossed up as per clause 24.3 of these Regulations:

Provided that:

- (i) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the Transmission System is found to be declared under Commercial Operation without commissioning of any of the data telemetry and Communication System up to Load Dispatch Centre or protection system:
- (ii) as and when the above requirement is found lacking in a Transmission System based on the report submitted by SLDC, RoE shall be reduced by 1% for the period for which the deficiency continues.
- 24.3 The base rate of return on equity as allowed by the Commission under Regulation 24.2 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respective financial year in line with the provisions of the relevant Finance Acts by the concerned Transmission Licensee, The actual income tax on other income stream including deferred tax (i.e., income of non transmission business) shall not be considered for the calculation of "effective tax rate".
- 24.4 Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate /(1-t)

Where t is the effective tax rate in accordance with clause 24.3 of this Regulation, and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of or non-transmission business, as the case may be, and the corresponding tax thereon. In case of Transmission Licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

Illustration.-

- (i) In case of the Transmission Licensee paying Minimum Alternate Tax (MAT) say, @ 21.55% including surcharge and cess:

 Rate of return on equity = 15.50/(1-0.2155) = 19.758%
- (ii) In case of the Transmission Licensee paying normal corporate tax including surcharge and cess:

- (a) Estimated Gross Income from transmission business for FY 2019-20 is Rs 1000 Crore.
- (b) Estimated Advance Tax for the year on above is Rs 240 Crore
- (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%
- (d) Rate of return on equity = 15.50/(1-0.24) = 20.395%
- (iii) The Transmission Licensee shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period FY 2019-20 to FY 2023-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the Transmission Licensee. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to the Long Term Transmission Customers on year to year basis.

Commission's Analysis:

- 46. The information gaps/ infirmities regarding this issue were communicated to the petitioner and the petitioner's response on all such issues have been discussed in earlier paragraphs of this order.
 - 46.1 It is worth to mention that vide Commission's letter No. 1013 dated 04/09/2020, it was observed that in table under para 9.4 of the petition, the opening equity for FY 2019-20 (closing Equity for previous year) is mentioned as Rs 3078.80 Cr for Return on Equity. However, in table under para 10.3 of the True-up petition for FY 2018-19, the closing Equity in FY 2018-19 was mentioned as Rs 3072.04 Cr. The correct figures and reason for discrepancy was sought from the petitioner.
 - 46.2 In response, vide its letter No. 3464 dated 09/10/2020, MPPTCL submitted that "the Equity as on 31.3.2019 is Rs. 3078.80 Crores which has been rectified in True up Petition for FY 2018-19 and it was submitted to the Commission vide letter No. 3192 dated 29.9.2020".
 - 46.3 It is worth mentioning that a report with covering letter dated 31/12/2020 regarding FOR working group on "Analysis of factors impacting Retail Tariff and measures to address them" is available on the website of the Forum of Regulators. The report contains issues related to return on equity in Transmission charges also. MPPTCL may make efforts in light of the recommendations of this report to reduce the transmission charges.

46.4 It was observed that due to change in GFA as per the actual addition during FY 2019-20, the petitioner also recalculated the opening equity and equity addition due to capitalization during the year in accordance with the provisions of the Regulations. However, the petitioner has claimed rate of return on equity considering grossed up rate of 18.33% over and above the base rate of 15.50%.

The Regulations 24.4 provides grossed up grossed up rate of return on equity at the **end** of every financial year based on actual tax paid during the financial year.

- 46.5 It was also observed that vide order dated 08/02/2021 in petition No. 45/2019 in the matter of True-up of Transmission Tariff for FY 2018-19, the Commission has considered the petitioner's submission and has found that **No Tax was actually paid during the year** and so the return on equity was allowed at base rate only.
- 46.6 In view of the aforesaid, the Return of Equity is calculated as under:

(Rs. in Crore)

Sr. No.	Particular	Unit	Amount for FY 2019-20	Amount for FY 2020-21	Amount for FY 2021-22	Amount for FY 2022-23	Amount for FY 2023-24
1	Opening Equity (closing equity of previous year)	Rs. Cr.	3078.80	3359.03	3763.90	4083.62	4235.90
2	Equity addition due to capitalization during the year i.e. Equity employed on Capitalized works at the end of year	Rs. Cr.	280.23	404.87	319.72	152.28	146.84
3	Closing Equity	Rs. Cr.	3359.03	3763.90	4083.62	4235.90	4382.74
4	Average Equity employed during the year	Rs. Cr.	3218.91	3561.46	3923.76	4159.76	4309.32
5	Return on equity base rate	%	15.50 %	15.50 %	15.50 %	15.50 %	15.50 %
6	Total Return on equity	Rs. Cr.	498.93	552.03	608.18	644.76	667.94

46.7 The aforesaid figures for return on equity have been considered provisionally for the purpose of the subject MYT Order only. These shall be trued up in the future true up petitions to be filed by MPPTCL, after prudence check by the Commission, in accordance with the provisions of the Regulations.

OTHERS -

47. Petitioner's submission:

47.1 SECURITY EXPENSES –

Clause 28.4 of the regulation states that the security expenses for transmission system shall be allowed separately after prudence check. In line with the above, security expenses may kindly be allowed in addition to the normative 0&M expenses claimed vide Para 5.4 of the petition. The security expenses for FY 2019-20 are on actual basis while the expenses for subsequent years have been worked out for existing and upcoming new substations besides existing 04 Nos. Transmission stores and workshop premises at Sehore (Annexure-XIV). The year wise anticipated expenses are tabulated hereunder

(Rs. in Crore)

S. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	Security Expense	22.74	26.94	26.96	27.02	27.08

47.2 MPERC's FEES -

MPPMCL on behalf of the DISCOMS has anticipated the following energy requirement for five years of the control period under consideration. Hon. MPERC presently has fixed a fee at the rate of `100/- per million unit, which will be paid every year for the ensuing year. Based on this figure of Energy expected to be handled by MPPTCL during this control period, the working of MPERC Fees are as shown in the following table;

S. No.	Particulars	Units	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
1	Energy handled during the year inclusive of energy of RE Generators	MU	76545.18	86083.00	94093.70	101334.93	108091.88
2	Rate of fees	Rs. / MU	100	100	100	100	100
3	Amount towards MPERC fees	Rs. Crore	0.77	0.86	0.94	1.01	1.08

47.3 **TAXES** -

As per the clause 38.1 of the Regulations, taxes etc. payable to the Government are not covered through 0&M expenses and thus are being claimed separately. Therefore, as per Clause 28.3 of regulations, after escalation of the claim@ 3.51% in abovesaid head of FY 2018-19, the following amount towards taxes & fees (other than MPERC fee) are proposed for the control period under consideration;

S. No.	Particulars	Units	FY 2019- 20	FY 2020- 21	FY 2021- 22	FY 2022- 23	FY 2023- 24
1	Taxes & fees (other than MPERC fee)	Rs. Crore	1.98	2.05	2.12	2.19	2.27

47.4 INCENTIVES -

As per the Regulations, the incentive is linked to the Transmission System Availability and the same is billed to the beneficiaries every month depending on the target and achievements of the Transmission System Availability. Therefore, this is not being claimed through this Petition.

47.5 NON-TARIFF INCOME -

The Petitioner is earning certain income on account of incidental income other than Transmission & Allied charges. These are to be reduced from the Gross ARR for Net ARR.

Based on the True-up petition of 2018-19, the treatment in Non-Tariff Income is projected @ 4% increment, accordingly excluding the claim of consultancy charges filed in true up petition of FY 2018-19, as no consultancy services are expected during the control period.

(Rs. in Crore)

		FY	FY	FY	FY	FY
S.	Particulars	2019-	2020-	2021-	2022-	2023-
No.		20	21	22	23	24
I	Application fees for Open Access	0.74	0.77	0.80	0.84	0.87
Ii	Hire charges for contractors etc.	2.09	2.17	2.26	2.35	2.44
Iii	Consultant services charges received	0.00	0.00	0.00	0.00	0.00
iv.	Sale of Tender forms	0.88	0.91	0.95	0.99	1.03
V	Interest received from Income Tax refund	5.27	5.48	5.70	5.93	6.16
vi.	Recovery of transport facilities	0.07	0.07	0.07	0.07	0.07
vii.	Ground rent	0.00	0.00	0.00	0.00	0.00
viii.	Rent of Staff quarters / Water charges/ Guest House	0.85	0.89	0.92	0.96	1.00
ix.	Recovery of telephone charges	0.05	0.05	0.05	0.05	0.05
Х.	Other MISC receipts	2.60	2.70	2.81	2.92	3.04
xi.	Profit on Sale of Store's scrap	10.94	11.37	11.83	12.30	12.79
_	TOTAL -	23.49	24.41	25.39	26.41	27.45
Say		23.00	24.00	25.00	26.00	27.00

48. Provisions under Regulations

Regulations 33 and 38 of the MYT provides as under:

33. Non-Tariff Income:

- 33.1 A schedule for other income as provided in the schedule of Miscellaneous Charges and General Charges under MPERC (Details to be furnished by licensees for determination of Tariff and manner of making an application) Regulation 2004 as amended from time to time shall be classified under 'Non-Tariff Income'. The non-tariff income shall include income from investments, Fixed and other deposits and any other non-tariff income.
- 33.2 Revenue from other business shall be treated as income to the extent authorized by the Commission under Section 41 of the Act.
- The O&M expenses comprise of employee cost, repairs & maintenance (R&M) cost and 38. administrative & general (A&G) cost. The norms for O&M expenses have been fixed on the basis of circuit kilometers of transmission lines and number of bays in substation. These norms exclude Pension, Terminal Benefits and arrears, if any, to be paid to employees, taxes payable to the Government and fee payable to MPERC. The Transmission Licensee shall claim the taxes payable to the Government, fees to be paid to MPERC and any arrears paid to employees separately as actuals. If the O&M expenses as per norms provided in these Regulations are more than the actual total O&M expenses including arrears if any, as per audited accounts of Transmission Licensee, the O&M expenses to the extent of normative O&M expenses shall be allowed. The claim of pension and terminal benefits shall be dealt-with as per Regulation 28.4. The Security Expenses for transmission system shall be allowed separately after prudence check. Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, at the time of truing up with appropriate justification.

Commission's Analysis:

- 49. The information gaps/ infirmities regarding above issues were communicated to the petitioner and the petitioner's response on all such issues have been discussed in earlier paragraphs of this order.
 - 49.1 Vide Commission's letter No. 1013 dated 04/09/2020, it was observed that the non-tariff income of Rs 23 Cr for FY 2019-20 and Rs 27 Cr for FY 2023-24 is mentioned in the subject petition. However, the actual non-tariff income of Rs 61.35 Cr has been reported for FY 2018-19 in P. No. 45/2019. The actual non-tariff income for FY 2019-20 along-with the reason for lower projections was sought.

49.2 In response, vide its letter No. 3464 dated 09/10/2020, MPPTCL submitted that "There was steep increase in Non-Tariff Income of Rs. 61.35 Crores in FY 2018-19 because of receipts of consultancy charges from Rewa Ultra Mega Solar Project (RUMS). The amount of Non-Tariff Income for FY 2018-19 considered in True up Petition for different heads excluding consultancy charges has been projected to be increased uniformly by 4% as detailed out in format TUT-2 appended with the Petition".

49.3 It was observed that MPPTCL has claimed security expenses, fees, taxes, non-tariff income as per the provisions of the Regulations.

49.4 In view of the aforesaid, the figures for security expenses, MPERC fees, taxes and non – tariff income as claimed by the petitioner have been considered provisionally for the purpose of calculating the ARR in the subject MYT Order only. MPPTCL shall submit details including details of the actual POC charges, other charges from Open Access and the charges received for use of its infrastructure for inter state transmission in the true-up petitions. These shall be trued up in the future true up petitions to be filed by MPPTCL, after prudence check by the Commission, in accordance with the provisions of the Regulations.

50. PAYMENT TOWARDS PPP LICENSEE M/s KSTPL -

Petitioner's submission:

Hon. MPERC vide order dated 08.10.2013 under Petition No. 45/2013 has adopted the base unitary charge of Rs. 3.15 Crores per month determined through a transparent process of bidding in accordance with the guideline issued by the Central Government under Section 63 of the Electricity Act 2003. Further, Hon. MPERC, vide its Order dated 01.11.2013, under Petition No. 32/2013 has granted transmission Licence to M/s KSTPL. The Licensee has started its commercial operation from April 2015. The claim has been indicated in TUT-12. Submitted that only base unitary charges of M/s KSTPL are included in the MYT Petition as follows:-

(i). FY 2019-20 - Rs. 37.80 Crores (ii). FY 2020 -21 - Rs. 37.80 Crores (iii). FY 2021-22 - Rs. 37.80 Crores (iv). FY 2022-23 - Rs. 37.80 Crores (v). FY 2023-24 - Rs. 37.80 Crores

Commission's Analysis:

51. It was observed that the Commission vide order dated 08.10.2013 in Petition No. 45/2013 has adopted the base unitary charge of Rs. 3.15 Crore per month determined through a transparent process of bidding in accordance with the guideline issued by the Central Government under Section 63 of the Electricity Act 2003 mentioning the following:

"The Commission hereby adopts the Base Unitary Charge of Rs. 3.15 Crore per month determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government under Section 63 of the Electricity Act, 2003. The aforesaid Base Unitary Charge and other applicable associated charges payable by the petitioner as per Transmission Agreement entered into by the M.P. Power Transmission Company Ltd., Jabalpur and the Concessionaire on 6th June 2013 for 400 KV DCDS Satpura - Ashta transmission line PPP Project, may be claimed by the petitioner in its petition for determination of Transmission tariff for recovery of these charges from the DISCOMs and other long term customers. The adoption of the aforesaid charges in this Order is subject to fulfilment of all other conditions in the "Guidelines for Encouraging Competition in the Development of Transmission Projects" by the petitioner and the selected Bidder/ Concessionaire."

52. In view of the aforesaid, as claimed by the petitioner, an amount of Rs 37.80 Cr for each year of the control years has been considered as PPP Unitary Charges in this order. These shall be trued up in the future true up petitions to be filed by MPPTCL, after prudence check by the Commission.

53. PAYMENT TOWARDS OPGW CHARGES TO PGCIL:-

Petitioner's submission:

Hon'ble CERC has approved transmission tariff for the control period of FY 2014-15 to FY 2018-19 vide their Order dated 22.2.2019 for OPGW links constructed for state sector of MPPTCL under "Establishment of Fiber Optic Communication System in Western Region" (Annexure-XV). In compliance to abovesaid order, an amount of Rs 1.21 Crores & Rs 0.06 Crores during FY 2019-20 & FY 2020-21 have been paid by MPPTCL. Now, Petition in abovesaid matter for the period of FY 2019-20 to FY 2023-24 has also been filed by PGCIL before Hon'ble CERC. The details of charges for the period under consideration is tabulated hereunder;

Rs. in Crore

S. No.	Particulars	FY 2019- 20	FY 2020- 21	FY 2021- 22	FY 2022- 23	FY 2023- 24
1	Transmission tariff paid by MPPTCL to PGCIL (actual basis)	1.21	0.06	-	-	-
2.	Petition filed by PGCIL for Control period of FY 2019-20 to FY 2023-24 before CERC	1.15	1.12	1.09	1.06	1.02
Sub-7	Total	2.36	1.18	1.09	1.06	1.02
3.	True Up charges claimed as per Petition No. 264/2020	0.11*				
Grand-Total		2.47	1.18	1.09	1.06	1.02

• True Up Charges 0.0043 Crores for FY 2017-18 and 0.1028 Crores for FY 2018-19

Commission's Analysis

54. It is observed that the petitioner has claimed these charges in accordance with the CERC's Order in the matter. In view of the aforesaid, as claimed by the petitioner, these charges for each year of the control year are considered in this order. These shall be trued up in the future true up petitions to be filed by MPPTCL, after prudence check by the Commission. The petitioner shall submit all relevant documents like the latest orders along with the proof of payments in the true-up petitions.

Annual Revenue Requirement (ARR)

55. The summary of the ARR approved by the Commission for the Control period of MYT Regulations from FY 2019-20 to FY 2023-24, as per detailed analysis in this Order is as under: (Rs. in Crore)

S.		ARR for the Financial Year								
S. No.	Particulars	FY	FY	FY	FY	FY				
110.		2019-20	2020-21	2021-22	2022-23	2023-24				
1	2	3	4	5	6	7				
1	O&M Expenses	556.68	608.41	659.47	702.21	741.01				
2	Terminal benefits Against Current Liabilities	1834.01	1973.01	2039.44	2108.20	2125.78				
3	Depreciation	455.50	509.18	538.97	559.02	568.16				
4	Interest & Finance Charges	152.36	166.62	181.08	181.15	171.50				
5	Interest on Working Capital	70.03	71.17	70.51	73.80	75.81				
6	Return on Equity	498.93	552.03	608.18	644.76	667.94				
7	Expenses Towards payment to PPP Licensee	37.80	37.80	37.80	37.80	37.80				
8	Expenses Towards payment to OPGW Charges to PGCIL	2.47	1.18	1.09	1.06	1.02				
9	MPERC's Fee	0.77	0.86	0.94	1.01	1.08				
10	Taxes & fees (other than MPERC fee)	1.98	2.05	2.12	2.19	2.27				
11	Security Expenses	22.74	26.94	26.96	27.02	27.08				
	TOTAL -	3633.27	3949.25	4166.56	4338.22	4419.45				
12	Less Non-Tariff Income (-)	-23.00	-24.00	-25.00	-26.00	-27.00				
	ARR -	3610.27	3925.25	4141.56	4312.22	4392.45				

TRANSMISSION CHARGES FOR LONG TERM / SHORT TERM CUSTOMERS -

56. Petitioner's submission:

These are tabulated as below;

S	PARTICULARS	FY	FY	FY	FY	FY
No	PARTICULARS	2019-20	2020-21	2021-22	2022-23	2023-24
1	Annual Fixed Cost in Rs. Crores	3863.11	4218.20	4467.29	4640.37	4710.31
2	Transmission System Capacity (MW)	19742.32	22607.44	23421.24	24657.15	25676.01
3	Transmission Charges for Long Term Customers Rs. Lacs per MW per Annum	19.57	18.66	19.07	18.82	18.35
4	Transmission Charges for Long Term Customers Rs. per MW per Day	5361.01	5111.91	5225.67	5156.05	5026.08
5	Short Term Rates (25% of above) Rs. per MW per Day	1340.25	1277.98	1306.42	1289.01	1256.52
6	Short Term Rates for 6 hour block Rs. per MW	335.06	319.49	326.60	322.25	314.13
7	Short Term Rates for more than 6 hour to 12 hour in one block – Rs. per MW	670.13	638.99	653.21	644.51	628.26
8	Short Term Rates for more than 12 hour upto 24 hour in Rs. per MW	1340.25	1277.98	1306.42	1289.01	1256.52
9	Units expected to be transmitted in a year (MU)	69,828	75,705	80,963	86,056	91,028
10	Short Term Open Access Rates in Rs. per MWH (S. No. 1/ S. No. 9)*0.25	138.31	139.30	137.94	134.81	129.36

Commission's Analysis

57. The Commission has determined ARR for the control period of MYT in this Order. Based on the approved ARR, the submissions of the petitioner and the provisions of the applicable Regulations, the Commission approves the charges as under:

S.	DADTICIII ADC	FY	FY	FY	FY	FY
No.	PARTICULARS	2019-20	2020-21	2021-22	2022-23	2023-24
1	Annual Fixed Cost in Rs.					
1	Crores	3610.27	3925.25	4141.56	4312.22	4392.45
2	Transmission System	19742.32	22607.44	23421.24	24657.15	25676.01
	Capacity (MW)	19/42.32	22007.44	23421.24	24037.13	230/0.01
	Transmission Charges					
3	for Long Term					
3	Customers (Rs. Lacs per					
	MW per Annum)	18.29	17.36	17.68	17.49	17.11
	Transmission Charges					
4	for Long Term					
1	Customers (Rs. per MW					
	per Day)	5010.13	4756.89	4844.64	4791.43	4686.91
	Short Term Rates (25%					
5	of above)					
	(Rs. per MW per Day)	1252.53	1189.22	1211.16	1197.86	1171.73
	Short Term Rates for 6					
6	hour block					
	Rs. per MW	313.13	297.31	302.79	299.46	292.93
	Short Term Rates for					
7	more than 6 hour to 12					
′	hour in one block -					
	Rs. per MW	626.27	594.61	605.58	598.93	585.86
	Short Term Rates for					
8	more than 12 hour upto					
	24 hour in Rs. per MW	1252.53	1189.22	1211.16	1197.86	1171.73
	Units expected to be					
9	transmitted in a year					
	(MU)	69828.00	75705.00	80963.00	86056.00	91028.00
	Short Term Open Access					
10	Rates in Rs. per MWH					
	(S.No. 1/ S.No. 9)*0.25	129.26	129.62	127.88	125.27	120.63

ANNUAL FIXED COST ALLOCATED TO THE LONG-TERM CUSTOMERS -

58. **Petitioner's submission:**

These are tabulated as below;

	Rs. in Crores										
S.	Customers	FY 2019-20		FY 2020-2	FY 2020-21		2	FY 2022-2.	3	FY 2023-2	4
s. No.		Capacity	Amount	Capacity	Amount	Capacity	Amount	Capacity	Amount	Capacity	Amount
NO.		MW	Rs. Cr.	MW	Rs. Cr.	MW	Rs. Cr.	MW	Rs. Cr.	MW	Rs. Cr.
	MP Poorva										
1	KVVCL	5703.02	1115.95	6505.14	1213.76	6791.39	1295.37	7194.15	1353.91	7518.10	1379.21
	Jabalpur										
	MP										
2	Madhya	6710.84	6710.84 1313.16	7836.94 146	1462.25	8090.46	1543.15	8474.15	1594.80	8764.27	1607.82
2	KVVCL	0710.04	1313.10	7030.74	1402.23	0000.40	1545.15	0474.13	1374.00	0704.27	1007.02
	Bhopal										
	MP										
3	Paschim	7003.46	1370.41	7890.37	1472.22	8149.39	1554.39	8588.85	1616.38	8993.64	1649.90
5	KVVCL	7005.10	15/0.11	7050.57	1172.22	0115.55	1331.37	0300.03	1010.50	0775.01	1015.50
	Indore										
4	WCR	270.00	52.83	320.00	59.71	330.00	62.94	340.00	63.99	340.00	62.37
5	MPIDC	55.00	10.76	55.00	10.26	60.00	11.44	60.00	11.29	60.00	11.01
Tota	1 -	19742.32	3863.11	22607.44	4218.20	23421.24	4467.29	24657.15	4640.37	25676.01	4710.31

59. **Commission's Analysis:**

In para 2.3(ii) of the petition, MPPTCL has cited communication with the Respondents MPIDC and WCR regarding allocation of transmission capacity to them. The Respondents have not submitted any reply to the petition during hearings of the petition. Therefore, the allocation has been considered as per petitioner's submissions.

The Commission has determined ARR for the control period of MYT in this Order. Based on the approved ARR, the submissions of the petitioner and the provisions of the applicable Regulations, the Commission approves the charges as under:

									Rs.	in Crores
Customers	FY 2019-20		FY 2020-21		FY 2021-22		FY 202	22-23	FY 202	23-24
	Capacity	Amount	Capacity	Amount	Capacity	Amount	Capacity	Amount	Capacity	Amount
	MW	Rs. Cr.	MW	Rs. Cr.	MW	Rs. Cr.	MW	Rs. Cr.	MW	Rs. Cr.
MP Poorva										
KVVCL										
Jabalpur	5703.02	1042.91	6505.14	1129.46	6791.39	1200.92	7194.15	1258.16	7518.10	1286.14
MP										
Madhya										
KCCVL										
Bhopal	6710.84	1227.21	7836.94	1360.70	8090.46	1430.63	8474.15	1482.02	8764.27	1499.32
MP										
Paschim										
KVVCL										
Indore	7003.46	1280.72	7890.37	1369.98	8149.39	1441.05	8588.85	1502.08	8993.64	1538.56
WCR	270.00	49.37	320.00	55.56	330.00	58.35	340.00	59.46	340.00	58.16
MPIDC	55.00	10.06	55.00	9.55	60.00	10.61	60.00	10.49	60.00	10.26
l -	10742.22	2610.27	22605.45	2025.25	22424.24	414156	2465545	4242.22	25.55.04	4392.45
	MP Poorva KVVCL Jabalpur MP Madhya KCCVL Bhopal MP Paschim KVVCL Indore WCR MPIDC	Customers Capacity MW MP Poorva KVVCL Jabalpur 5703.02 MP Madhya KCCVL Bhopal 6710.84 MP Paschim KVVCL Indore 7003.46 WCR 270.00 MPIDC 55.00	Customers Capacity Amount MP Poorva Rs. Cr. KVVCL 1042.91 Jabalpur 5703.02 1042.91 MP 1042.91 MAGhya 1042.91 KCCVL 1042.91 Bhopal 6710.84 1227.21 MP Paschim KVVCL Indore 7003.46 1280.72 WCR 270.00 49.37 MPIDC 55.00 10.06	Customers Capacity Amount Capacity MW Rs. Cr. MW MP Poorva KVVCL Jabalpur 5703.02 1042.91 6505.14 MP Madhya KCCVL Bhopal 6710.84 1227.21 7836.94 MP Paschim KVVCL Indore 7003.46 1280.72 7890.37 WCR 270.00 49.37 320.00 MPIDC 55.00 10.06 55.00	Customers Capacity Amount Capacity Amount MP Poorva KVVCL Jabalpur 5703.02 1042.91 6505.14 1129.46 MP Madhya KCCVL Bhopal 6710.84 1227.21 7836.94 1360.70 MP Paschim KVVCL Indore 7003.46 1280.72 7890.37 1369.98 WCR 270.00 49.37 320.00 55.56 MPIDC 55.00 10.06 55.00 9.55	Customers Capacity Amount Capacity Amount Capacity Amount Capacity MP Poorva KVVCL Jabalpur 5703.02 1042.91 6505.14 1129.46 6791.39 MP Madhya KCCVL Bhopal 6710.84 1227.21 7836.94 1360.70 8090.46 MP Paschim KVVCL Indore 7003.46 1280.72 7890.37 1369.98 8149.39 WCR 270.00 49.37 320.00 55.56 330.00 MPIDC 55.00 10.06 55.00 9.55 60.00	Customers Capacity Amount Capacity Amount Capacity Amount Capacity Amount MP Poorva KVVCL Jabalpur 5703.02 1042.91 6505.14 1129.46 6791.39 1200.92 MP Madhya KCCVL Bhopal 6710.84 1227.21 7836.94 1360.70 8090.46 1430.63 MP Paschim KVVCL Indore 7003.46 1280.72 7890.37 1369.98 8149.39 1441.05 WCR 270.00 49.37 320.00 55.56 330.00 58.35 MPIDC 55.00 10.06 55.00 9.55 60.00 10.61	Customers Capacity Amount Capacity MW Rs. Cr. MW MW MW Rs. Cr. MW Amount Capacity MW Rs. Cr. MW Rs. Cr. MW Amount Capacity Amount Capacity MW Rs. Cr. MW Rs. Cr. MW Amount Capacity Amount Capacity	Customers Capacity Amount Capacity Mw Rs. Cr. MW Rs. Cr. MW Rs. Cr. MW Amount Capacity Amount Capacity Rs. Cr. MW Rs. Cr. MW Rs. Cr. MW Amount Capacity Capacity Amount Capacity Capacity Capacity Capacity Capacity Capacity Capacity Capacity Capacity	Customers Capacity Amount Amount Capacity Amount Amount Amount Capacity Amount Amount Amount Amount Amount Capacity Amount Amount </td

TRANSMISSION CHARGES FOR NON-CONVENTIONAL ENERGY SOURCE BASED GENERATING UNITS / OPEN ACCESS CUSTOMERS CONNECTED ON 132 KV OR ABOVE -

60. **Petitioner's submission:**

Based on the AFC worked out in Para 11.1 above, the Transmission Charges for Non-Conventional Energy Source based generating units / Open Access Customers connected on 132 KV or above and supplying energy to customers other than Discoms / MPPMCL have also been worked out. The same is in line with Energy Based Pooled method which was approved by the Hon'ble Commission for earlier control period vide MYT order dated 10.06.2016 for Non-Conventional Energy Source based generating units. The same is now proposed to be made applicable for the Non-Conventional Energy Source based Open Access Customers also. These revised Transmission Charges shall be recoverable from the date as approved by the Hon'ble Commission as the same are not part of ARR and over & above the receipts of the Transmission licensee worked out in ARR. Thus, 50% of the Revenue earned shall be utilized to reduce the Transmission Charges of the Long Term Open Access Customers and remaining 50% Revenue shall be utilized by the MPPTCL for making capital expenditure for development of the infrastructure as approved in MYT order dated 10.6.2016.

The MPPMCL has provided the information regarding Renewable Capacity expected to be added during the control period under consideration which is tabulated below

S. No	Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
1	RE Capacity (in MW)	3834.11	5923.49	7494.84	8720.75	9739.61

The Transmission Charges for this control period FY 2019-20 to FY 2023-24 are also worked out on the same methodology approved vide MYT order dated 10.06.2016 and is given here as under;

S.	Particulars	Unit	FY 2019-	FY 2020-	FY 2021-	FY 2022-	FY 2023-
			20	21	22	23	24
1	Annual Fixed Cost as per Tariff	Rs. Crores	3863.11	4218.20	4467.29	4640.37	4710.31
2	Transmission System capacity	MW	19742.32	22607.44	23421.24	24657.15	25676.01
3	Transmission charges per MW per Annum	Rs. Lacs/ MW	19.57	18.66	19.07	18.82	18.35
4	Capacity of Non- conventional Energy based Plants connected at 132 KV & above	MW	3834.11	5923.49	7494.84	8720.75	9739.61
5	Total Pooled Capacity	MW	23576.43	28530.94	30916.08	33377.90	35415.62
6	Pooled Cost Addition	Rs. Cr.	0.00	0.00	0.00	0.00	0.00
7	Total Pooled Cost	Rs. Cr.	3863.11	4218.20	4467.29	4640.37	4710.31

8	Energy expected to be transmitted	MU	69827.83	75705.04	80962.75	86056.17	91028.09
9	Energy generated by Non-conventional Energy based Plant at 20% CUF with MW capacity	MU	6717.36	10377.96	13130.95	15278.76	17063.80
10	Total Energy Handled	MU	76545.18	86083.00	94093.70	101334.93	108091.88
11	Transmission Charges per Unit	Rs. / Unit	0.505 (Say 0.51)	0.490 (Say 0.49)	0.475 (Say 0.48)	0.458 (Say 0.46)	0.436 (Say 0.44)

61. Commission's Analysis

The Commission has determined ARR for the control period of MYT in this Order. Based on the approved ARR, the submissions of the petitioner and the provisions of the applicable Regulations, the Commission approves the charges as under:

S.	Particulars	Unit	FY 2019- 20	FY 2020- 21	FY 2021- 22	FY 2022- 23	FY 2023- 24
1	Annual Fixed Cost as per Tariff	Rs. Cr.	3610.27	3925.25	4141.56	4312.22	4392.45
2	Transmission System capacity	MW	19742.32	22607.44	23421.24	24657.15	25676.01
3	Transmission charges per MW per Annum	Rs.Lacs/ MW	18.29	17.36	17.68	17.49	17.11
4	Capacity of Non- conventional Energy based Plants connected at 132 KV & above	MW	3834.11	5923.49	7494.84	8720.75	9739.61
5	Total Pooled Capacity	MW	23576.43	28530.94	30916.08	33377.90	35415.62
6	Pooled Cost Addition	Rs. Cr.	0.00	0.00	0.00	0.00	0.00
7	Total Pooled Cost	Rs. Cr.	3610.27	3925.25	4141.56	4312.22	4392.45
8	Energy expected to be transmitted	MU	69827.83	75705.04	80962.75	86056.17	91028.09
9	Energy generated by Non- conventional Energy based Plant at 20% CUF with MW capacity	MU	6717.36	10377.96	13130.95	15278.76	17063.80
10	Total Energy Handled	MU	76545.18	86083.00	94093.70	101334.93	108091.88
11	Transmission Charges per	Rs. /	0.472	0.456	0.440	0.426	0.406
11	Unit	Unit	(Say 0.47)	(Say 0.46)	(Say 0.44)	(Say 0.43)	(Say 0.41)

These revised Transmission Charges shall be recoverable in respect of the renewable energy sources from the date of issue of the subject MYT order. As the same are not part of ARR and over & above the receipts of the Transmission licensee worked out in ARR, so 50% of the Revenue earned shall be utilized to reduce the Transmission Charges of the Long Term Open

Access Customers and remaining 50% Revenue shall be utilized by the MPPTCL for making capital expenditure for development of the infrastructure. MPPTCL shall submit information of actual receipt in the True-up petitions.

62. In exercise of the powers vested in it under Section 64 of the Electricity Act, 2003, the Commission directs that the transmission tariff determined in this order shall be applicable from 1st April, 2019 and will continue to be operative till 31st March, 2024 in accordance with the provisions of the MPERC (Terms and conditions for Determination of Transmission Tariff) (Revision-IV) Regulations, 2020. The petitioner must take steps to implement this Order after giving public notice in accordance with clause 1.30 of MPERC (Details to be furnished and fees payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004 and its amendment. The petitioner must also provide information to the Commission in support of having complied with this order. MPPTCL shall upload the Order & petition along with annexures on its website.

Ordered accordingly.

(Shashi Bhushan Pathak) Member (Mukul Dhariwal) Member (S. P. S. Parihar) Chairman

Date: 19th May, 2021

Place: Bhopal