

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 671/TT/2020**

**Coram:**

**Shri I. S. Jha, Member  
Shri Arun Goyal, Member  
Shri P. K. Singh, Member**

**Date of Order: 03.02.2022**

**In the matter of:**

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of **Asset-I:** 1x500 MVA, 400/220 kV ICT along with associated transformer bays and 220 kV line bays at Itarsi Sub-station, **Asset-II:** 1x500 MVA, 400/220 kV ICT-2 along with associated bays and 2 numbers 220 kV line bays at 400/220 kV Indore Sub-station, **Asset-III:** 2 numbers 220 kV line bays at 400/220 kV Indore Sub-station, **Asset-IV:** 1x500 MVA, 400/220 kV ICT-1 along with associated bays at 400/220 kV Indore Sub-station, **Asset-V:** 1 number 220 kV line bay at 400/220 kV Indore Sub-station and **Asset-VI:** 1 number 220 kV line bay at 400/220 kV Indore Sub-station under Western Region System Strengthening Scheme-XIV in Western Region.

**And in the matter of:**

Power Grid Corporation of India Limited,  
'SAUDAMINI', Plot No-2, Sector 29,  
Gurgaon-122001 (Haryana).

**.....Petitioner**

**Versus**

1. Madhya Pradesh Power Management Company Limited,  
Shakti Bhawan, Rampur, Jabalpur-482008.
2. Madhya Pradesh Power Transmission Company Limited,  
Shakti Bhawan, Rampur, Jabalpur-482008.
3. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited,  
3/54, Press Complex, Agra-Bombay Road, Indore-452008.
4. Maharashtra State Electricity Distribution Company Limited,  
3<sup>rd</sup> Floor, Hongkong Bank Building, M.G. Road, Fort, Mumbai-400001.
5. Maharashtra State Electricity Transmission Company Limited,  
6<sup>th</sup> Floor, Prakashganga, Plot No. C-19, E-Block,



Bandra Kurla Complex, Bandra (East), Mumbai-400051.

6. Gujarat Urja Vikas Nigam Limited,  
Sardar Patel Vidyut Bhawan,  
Race Course Road, Vadodara-390007.
7. Electricity Department,  
Government of Goa, Vidyut Bhawan, Panaji,  
Near Mandvi Hotel, Goa-403001.
8. Electricity Department,  
Administration of Daman & Diu,  
Daman-396210.
9. DNH Power Distribution Corporation Limited,  
Vidyut Bhawan, 66 kV Road, Near Secretariat Amli,  
Silvassa-396230.
10. Chhattisgarh State Power Transmission Company Limited,  
State Load Despatch Building, Dangania, Raipur-492013.
11. Chhattisgarh State Power Distribution Company Limited,  
P.O. Sunder Nagar, Dangania, Raipur,  
Chhattisgarh-492013.

.....Respondent(s)

**For Petitioner** : Shri S. S. Raju, PGCIL  
Shri D. K. Biswal, PGCIL  
Shri Ved Prakash Rastogi, PGCIL  
Shri Amit Yadav, PGCIL

**For Respondents** : Shri Anindya Khare, MPPMCL

### **ORDER**

The Petitioner, Power Grid Corporation of India Limited, has filed the instant petition for truing up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect



of the following transmission assets under Western Region System Strengthening Scheme-XIV in Western Region (hereinafter referred to as “the transmission project”):

**Asset-I:** 1x500 MVA, 400/220 kV ICT along with associated transformer bays and 220 kV line bays at Itarsi Sub-station;

**Asset-II:** 1x500 MVA, 400/220 kV ICT-2 along with associated bays and 2 number 220 kV line bays at 400/220 kV Indore Sub-station;

**Asset-III:** 2 numbers 220 kV line bays at 400/220 kV Indore Sub-station;

**Asset-IV:** 1x500 MVA, 400/220 kV ICT-1 along with associated bays at 400/220 kV Indore Sub-station;

**Asset-V:** 1 number 220 kV line bay at 400/220 kV Indore Sub-station; and

**Asset-VI:** 1 number 220 kV line bay at 400/220 kV Indore Sub-station.

2. The Petitioner has made the following prayers in this petition:

“1) *Allow the Add cap for 2014-19 and 2019-24 tariff block as claimed as per Para 5 and 7 above.*

2) *Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 6 and 7 above.*

3) *Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before Hon’ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 5 and 6 above for respective block.*

4) *Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*

5) *Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the beneficiaries in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*

6) *Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.*

7) *Allow the petitioner to file a separate petition before Hon’ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 6.6 above.*

8) *Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*

9) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the beneficiaries, if GST on transmission is withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc.*



*imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*

*and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice."*

### 3. **Backdrop of the case**

a) The Petitioner was entrusted with the implementation of the transmission project and it was discussed and agreed during the 37<sup>th</sup> Standing Committee Meeting (SCM) on Power System in Western Region held on 5.9.2014. Further, the transformation capacity of 400/220 kV ICT of Itarsi Sub-station has been modified from 315 MVA to 500 MVA in the 38<sup>th</sup> SCM on Power System Planning in Western Region held on 17.7.2015. The proposal pertaining to the said modification was also discussed and agreed in the 29<sup>th</sup> Western Regional Power Committee meeting held on 24.7.2015.

b) Investment Approval (I.A.) for the transmission project was accorded by Board of Directors of the Petitioner's company (in its 325<sup>th</sup> meeting held on 27.1.2016) vide Memorandum Ref. No. C/CP/WRSSXIV dated 11.2.2016 at an estimated cost of ₹12067.00 lakh including IDC of ₹758.00 lakh (based on August 2015 Price Level) with the broad scope of work as follows:

**i. Extension of 400/220 kV Indore (POWERGRID) Sub-station:**

- Installation of 2x500 MVA, 400/220 kV, ICTs along with associated transformer bays; and
- 220 kV Line bays: 6 numbers.

**ii. Extension of 400/220 kV Itarsi (POWERGRID) Sub-station:**

- Installation of 1x500 MVA, 400/220 kV, ICT along with associated transformer bays; and
- 220 kV Line bays: 2 numbers.

c) The transmission tariff of Asset-I from COD (14.8.2017) to 31.3.2019 was approved by the Commission vide order dated 15.11.2018 in Petition No. 37/TT/2018. There was no time over-run for Asset-I.

d) The Petitioner had filed Petition No. 311/TT/2018 for approval of transmission tariff of *2x500 MVA, 400/220 kV ICTs along with associated bays and 6 numbers 220 kV line bays at 400/220 kV Indore Sub-station* from anticipated COD (1.9.2018) to 31.3.2019. However, due to different dates of



commercial operation, the Petitioner vide affidavit dated 21.6.2019 had split the forenamed asset into five assets as follows:

<b>Asset as filed in Petition No. 311/TT/2018</b>	<b>Asset split as per affidavit dated 21.6.2019</b>
2x500 MVA, 400/220 kV ICTs along with associated bays and 6 numbers 220 kV line bays at 400/220 kV Indore Sub-station	<b>Asset-1:</b> 1x500 MVA, 400/220 kV ICT-2 along with associated bays and 2 numbers 220 kV line bays at 400/220 kV Indore Sub-station
	<b>Asset-2:</b> 2 numbers 220 kV line bays at 400/220 kV Indore Sub-station
	<b>Asset-3:</b> 1x500 MVA, 400/220 kV ICT-1 along with associated bays at 400/220 kV Indore Sub-station
	<b>Asset-4:</b> 1 number 220 kV line bay at 400/220 kV Indore Sub-station
	<b>Asset-5:</b> 1 number 220 kV line bay at 400/220 kV Indore Sub-station

e) The transmission tariff of Asset-1, Asset-2, Asset-3, Asset-4 and Asset-5 from their respective COD of 2.9.2018, 2.9.2018, 14.10.2018, 14.10.2018 and 5.12.2018 to 31.3.2019 was allowed vide order dated 21.1.2020 in Petition No. 311/TT/2018. The respective COD of Asset-1 to Asset-5 was approved under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations due to non-commissioning of the associated downstream transmission system of MPPTCL, which is expected to be completed by 2022-23.

f) As per I.A. dated 27.1.2016, the scheduled COD of the transmission assets was 27.7.2018 against which Asset-1, Asset-2, Asset-3, Asset-4 and Asset-5 were commissioned with a time over-run of 37 days, 37 days, 79 days, 79 days and 131 days respectively. The entire time over-run in case of of Asset-1, Asset-2, Asset-3, Asset-4 and Asset-5 was dis-allowed vide order dated 21.1.2020 in Petition No. 311/TT/2018.

g) The Petitioner in this petition has used new nomenclature for assets of Petition No. 311/TT/2018 as follows:

<b>Asset nomenclature in Petition No. 311/TT/2018</b>	<b>Asset nomenclature in this petition</b>
Asset-1	Asset-II
Asset-2	Asset-III
Asset-3	Asset-IV
Asset-4	Asset-V
Asset-5	Asset-VI

h) Further, the trued-up transmission tariff of Asset-I to Asset-VI for the 2014-19 tariff period has been sought by the Petitioner in this petition. The



approval of transmission tariff with respect to Combined Asset (comprising of Asset-I to Asset-VI) for the 2019-24 tariff period has also been sought by the Petitioner in this petition.

i) As per I.A., the entire scope of work is complete and is covered in this petition.

4. The Respondents are transmission utilities, distribution licensees and power departments, which are procuring transmission services from the Petitioner, mainly beneficiaries of Western Region.

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or objections have been received from the general public in response to the aforesaid notices. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No. 1 has filed its reply vide affidavit dated 3.11.2020 and has raised the issues of effective Income Tax rates for grossing up of Return on Equity (RoE) during the 2014-19 tariff period and effect of CGST. The Petitioner vide affidavit dated 11.11.2020 has filed rejoinder to MPPMCL's reply.

6. It has been placed before us that MPPMCL has been raising the same issues in other petitions as well despite clear findings of the Commission. The contentions of MPPMCL have been rejected by the Commission in other petitions including order dated 21.9.2021 in Petition No. 326/TT/2020. As MPPMCL has not challenged the findings, the same have attained finality. In view of this, the pleas raised by MPPMCL are rejected. Further, MPPMCL's submissions, Petitioner's clarifications thereto and the Commission's findings on the said issues have not been repeated herein for the sake of brevity.



7. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 29.6.2020, MPPMCL's reply filed vide affidavit dated 3.11.2020, the Petitioner's rejoinder filed vide affidavit dated 11.11.2020, the Petitioner's affidavit dated 11.2.2021 and 28.7.2021 filed in reply to technical validation letter dated 28.1.2021 and Record of Proceedings dated 9.7.2021 respectively.

8. The hearing in this matter was held on 9.7.2021 through video conference and the order was reserved. Having heard the representatives of the Petitioner, MPPMCL and after perusal of the materials on record, we proceed to dispose of the petition.

#### **TRUING UP OF ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD**

9. The details of the trued-up transmission charges claimed by the Petitioner in respect of the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

<b>Asset-I</b>		
<b>Particulars</b>	<b>2017-18 (Pro-rata for 230 days)</b>	<b>2018-19</b>
Depreciation	83.15	148.81
Interest on Loan	83.78	141.31
Return on Equity	91.31	163.73
Interest on Working Capital	12.22	20.70
O&M Expenses	129.90	213.01
<b>Total</b>	<b>400.36</b>	<b>687.56</b>

(₹ in lakh)

<b>Particulars</b>	<b>Asset-II</b>	<b>Asset-III</b>	<b>Asset-IV</b>	<b>Asset-V</b>	<b>Asset-VI</b>
	<b>2018-19 (Pro-rata for 211 days)</b>	<b>2018-19 (Pro-rata for 211 days)</b>	<b>2018-19 (Pro-rata for 169 days)</b>	<b>2018-19 (Pro-rata for 169 days)</b>	<b>2018-19 (Pro-rata for 117 days)</b>
Depreciation	96.78	18.10	48.28	7.00	4.93
Interest on Loan	92.77	15.75	45.89	6.27	4.47
Return on Equity	106.00	18.68	53.39	7.41	5.22
Interest on Working Capital	12.27	3.86	5.76	1.54	1.07
O&M Expenses	123.14	55.61	54.08	22.27	15.42
<b>Total</b>	<b>430.96</b>	<b>112.00</b>	<b>207.40</b>	<b>44.49</b>	<b>31.11</b>

10. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission assets for the 2014-19 tariff period are as follows:





(₹ in lakh)

Asset-I		
Particulars	2017-18 (Pro-rata for 230 days)	2018-19
O&M Expenses	17.18	17.75
Maintenance Spares	30.92	31.95
Receivables	105.90	114.59
Total	154.00	164.29
Rate of Interest (in %)	12.60	12.60
<b>Interest on Working Capital</b>	12.22	20.70

(₹ in lakh)

Particulars	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI
	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 117 days)
O&M Expenses	17.75	8.02	9.73	4.01	4.01
Maintenance Spares	31.95	14.43	17.52	7.22	7.22
Receivables	124.25	32.29	74.66	16.01	16.17
<b>Total Working Capital</b>	<b>173.95</b>	<b>54.74</b>	<b>101.91</b>	<b>27.24</b>	<b>27.40</b>
Rate of Interest (in %)	12.20	12.20	12.20	12.20	12.20
<b>Interest on Working Capital</b>	<b>12.27</b>	<b>3.86</b>	<b>5.76</b>	<b>1.54</b>	<b>1.17</b>

### Date of Commercial Operation

11. The Commission vide order 15.11.2018 and 21.1.2020 in Petition No. 37/TT/2018 and Petition No. 311/TT/2018 respectively had approved COD for the transmission assets as follows:

Asset	SCOD	COD
Asset-I	27.7.2018	14.8.2017
Asset-II		2.9.2018*
Asset-III		2.9.2018*
Asset-IV		14.10.2018*
Asset-V		14.10.2018*
Asset-VI		5.12.2018*

\*COD approved under proviso (ii) to Regulation 4(3)(ii) of 2014 Tariff Regulations.

12. The Commission had approved COD of Asset-II and Asset-III as 2.9.2018, of Asset-IV and Asset-V as 14.10.2018 and of Asset-VI as 5.12.2018 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations due to non-commissioning of the associated downstream transmission system under the scope of MPPTCL. The Petitioner has submitted that the downstream system is expected to be completed by 2022-23.





## **Capital Cost**

13. The details of the approved cost (FR) along with capital cost as on COD and estimated capital cost as on 31.3.2019, including projected Additional Capital Expenditure (ACE) during the 2014-19 period, as admitted by the Commission vide order dated 15.11.2018 and 21.1.2020 in Petition No. 37/TT/2018 and Petition No. 311/TT/2018 respectively are as follows:

Asset	Approved Cost (FR)	Capital Cost admitted (as on COD)	ACE admitted		Estimated Capital Cost admitted (as on 31.3.2019)
			2017-18	2018-19	
Asset-I	3507.44	2278.30	489.46	396.20	3163.96
Asset-II	3841.48	2928.25	0.00	312.43	3240.70
Asset-III	876.51	505.26	0.00	77.47	582.73
Asset-IV	2964.98	1818.99	0.00	212.07	2030.30
Asset-V	438.25	247.21	0.00	33.84	281.04
Asset-VI	438.25	257.68	0.00	28.13	285.74

14. Based on the Auditor's Certificates dated 13.4.2020, the details of capital cost as on COD and as on 31.3.2019 (including actual ACE during the 2014-19 period) claimed by the Petitioner are as follows:

Asset	Approved Cost (FR)	Capital Cost (as on COD)	Actual ACE		Capital Cost (as on 31.3.2019)
			2017-18	2018-19	
Asset-I	3507.44	2293.16	330.66	277.05	2900.87
Asset-II	3841.48	2990.50	0.00	277.29	3267.79
Asset-III	876.51	516.12	0.00	71.18	587.30
Asset-IV	2964.98	1883.59	0.00	173.76	2057.35
Asset-V	438.25	259.01	0.00	31.28	290.29
Asset-VI	438.25	270.15	0.00	24.26	294.41
<b>Total</b>	<b>12066.91</b>				<b>9398.01</b>

15. We have considered the submissions and claims of the Petitioner regarding capital cost and ACE and have given our findings on the same in the relevant portions of this order.

## **Cost Over-run**

16. Based on the Auditor's Certificates dated 13.4.2020, the capital cost as on COD claimed by the Petitioner for Asset-I, Asset-II, Asset-III, Asset-IV, Asset-V and Asset-VI is ₹2293.16 lakh, ₹2990.50 lakh, ₹516.12 lakh, ₹1883.59 lakh, ₹259.01 lakh and ₹270.15 lakh respectively. Further, the completion cost as on 31.3.2019 (including ACE during the 2014-19 period) in respect of the transmission assets as



per the said Auditor's Certificates is ₹9398.01 lakh against the approved FR cost of ₹12066.91 lakh.

17. We observe that the completion cost as on 31.3.2019 in respect of all the transmission assets is within the approved cost as per FR. Therefore, there is no cost over-run in this case.

### **Time Over-run**

18. As per I.A. dated 27.1.2016, the scheduled COD of the transmission assets was 27.7.2018 against which Asset-I, Asset-II, Asset-III, Asset-IV, Asset-V and Asset-VI were commissioned with a time over-run of 0 days, 37 days, 37 days, 79 days, 79 days and 131 days respectively. The entire time over-run in the commissioning of Asset-II to Asset-V was dis-allowed vide order dated 21.1.2020 in Petition No. 311/TT/2018.

### **Interest During Construction (IDC)**

19. The Petitioner has submitted the details of IDC discharged up to COD and discharged during 2017-18 and 2018-19 in respect of the transmission assets in this petition. IDC on cash basis has also been submitted. Further, the accrued IDC discharged during 2017-18 and 2018-19 has not been included in ACE for the respective year in respect of the transmission assets as per the Auditor's Certificates.

20. The Petitioner has submitted that the entire IDC has been discharged during 2017-18, 2018-19 and 2019-20 in respect of the transmission assets. Also, the transmission tariff has been recalculated with the claim of IDC on cash basis and un-discharged IDC on COD has been reduced from the expenditure up to COD and claimed as ACE during the respective year i.e. 2017-18 for Asset-I and 2018-19 and 2019-20 for Asset-II to Asset-VI.

21. The Petitioner vide affidavit dated 11.2.2021 has submitted the cash IDC statements in respect of the transmission assets.



22. We have considered the submissions and claims of the Petitioner and note that the Petitioner has submitted the Auditor's Certificates dated 13.4.2020 in support of its claim of IDC. The Petitioner has also submitted the computation of IDC along with year-wise details of the IDC discharged.

23. In view of the foregoing, IDC allowed has been worked out considering the information submitted by the Petitioner for the transmission assets separately on cash basis. Further, the loan details submitted in Form-9C for the 2014-19 tariff period and the IDC computation sheet have been considered for the purpose of IDC calculation on cash and accrued basis. Also, the un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged and, accordingly, based on the information furnished by the Petitioner, IDC considered, is summarized as follows:

Asset	IDC as per Auditor's Certificates	IDC admissible	IDC dis-allowed due to computational difference/ time overrun not condoned	IDC discharged as on COD	IDC un-discharged as on COD	IDC discharge during		
						2017-18	2018-19	2019-20
	A	B	C=A-B	D				
Asset-I	41.86	44.93	0.00	27.00	14.86	14.86	-	-
Asset-II	208.63	195.05	13.58	159.68	35.37	-	29.92	5.45
Asset-III	34.21	31.50	2.70	25.17	6.33	-	5.38	0.95
Asset-IV	91.54	73.40	18.14	67.19	6.21	-	5.14	1.07
Asset-V	17.91	14.99	2.92	12.46	2.53	-	2.15	0.38
Asset-VI	21.48	16.43	5.05	12.64	3.80	-	3.23	0.57

### **Incidental Expenditure During Construction (IEDC)**

24. The Petitioner has submitted that entire IEDC amount mentioned in the Auditor's Certificates is on cash basis and is paid up to COD in respect of the transmission assets.

25. We have considered the submissions and claim of the Petitioner and note that on the issue of "IEDC to be considered in tariff", the Appellate Tribunal for Electricity (APTEL) vide its judgment dated 2.12.2019 in Appeal Nos. 95 and 140 of 2018 held that IEDC should be computed only on actual basis after due prudence check based



on the data submitted in accordance with the Tariff Regulations. Further, vide paragraph 7.12 of the said judgment, APTEL, *inter-alia*, observed as follow:

*“.....without prejudice to the contention that hard costs should not be considered, even if hard cost is to be seen then, at least “IEDC” including contingencies should be applied.”*

26. In view of the above-mentioned judgment of APTEL, computation of IEDC is to be made on actual basis after due prudence check. As a part of prudence exercise, IEDC allowed as per respective tariff orders for all the transmission assets of the transmission project has been compared with IEDC (including contingencies) for the transmission project as a whole as per the Revised Cost Estimate.

27. We further note that Regulation 11(B)(3) of the 2014 Tariff Regulations provides as follows:

*“In case the time over-run beyond SCOD is not admissible after due prudence, the increase of capital cost on account of cost variation corresponding to the period of time over run may be excluded from capitalization irrespective of price variation provisions in the contracts with supplier or contractor of the generating company or the transmission licensee.”*

28. Since there was time over-run in the commissioning of Asset-II to Asset-VI which was not condoned by the Commission, IEDC claimed in respect of the transmission assets has been disallowed on pro-rata basis. The details of claimed and allowed IEDC are as follows:

(₹ in lakh)			
Asset	IEDC claimed as per Auditor's Certificates	IEDC disallowed due to time over-run not condoned	IEDC allowed as on COD
	1	2	3=(1-2)
Asset-I	109.31	0.00	109.31
Asset-II	183.27	7.14	176.13
Asset-III	28.66	1.12	27.54
Asset-IV	115.12	9.17	105.95
Asset-V	14.34	1.14	13.20
Asset-VI	14.88	1.87	13.01
<b>Total</b>	<b>466.58</b>	<b>22.44</b>	<b>13.01</b>

### **Initial Spares**

29. The Petitioner has submitted that Initial Spares with respect to the transmission assets were admitted under sub-station head vide orders dated 15.11.2018 and 21.1.2020 in Petition No. 37/TT/2018 and Petition No. 311/TT/2018



respectively. Also, the Initial Spares have been revised as per the revised Auditor's Certificates as submitted in this petition and the revised amount of Initial Spares have been used for computation of tariff.

30. In view of the above, the Petitioner has requested to allow the following Initial Spares in respect of the transmission assets:

Asset	Element	Plant & Machinery Cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Ceiling Limit (in %)
Asset-I	sub-station	2861.38	171.50	6.00
Asset-II	sub-station	2943.75	54.82	6.00
Asset-III	sub-station	562.68	18.44	6.00
Asset-IV	sub-station	1883.62	36.38	6.00
Asset-V	sub-station	281.35	9.22	6.00
Asset-VI	sub-station	281.36	9.22	6.00

31. We have considered the submissions and claim of the Petitioner. Initial Spares are allowable subject to the ceiling specified in Regulation 13(d) of the 2014 Tariff Regulations. The Petitioner's claim of Initial Spares with respect to the transmission assets is within the norms specified and are, accordingly, allowed as follows:

Asset	Element	Capital Cost/P&M cost considered as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2014 Tariff Regulations (in %)	Initial Spares allowable as per the 2014 Tariff Regulations (₹ in lakh)	Initial Spares allowed (₹ in lakh)
Asset-I	sub-station	2861.38	171.50	6.00	171.69	171.50
Asset-II	sub-station	2943.75	54.82	6.00	184.40	54.82
Asset-III	sub-station	562.68	18.44	6.00	34.74	18.44
Asset-IV	sub-station	1883.62	36.38	6.00	117.91	36.38
Asset-V	sub-station	281.35	9.22	6.00	17.37	9.22
Asset-VI	sub-station	281.36	9.22	6.00	17.37	9.22

### **Capital Cost allowed as on COD**

32. Accordingly, the details of the capital cost approved as on COD after adjustment of IDC, IEDC and Initial Spares are as follows:

Asset	Capital Cost as on COD as per Auditor's Certificates	Less: IDC disallowed as on COD due to		IEDC disallowed	Capital Cost as on COD (on cash basis)
		Time over-run not condoned	Un-discharged IDC		
	1	2	3	4	5=(1-2-3-4)
Asset-I	2293.16	0.00	14.86	0.00	2278.30
Asset-II	2990.50	13.56	35.37	7.14	2934.41
Asset-III	516.12	2.70	6.33	1.12	505.96
Asset-IV	1883.59	18.14	6.21	9.17	1850.07
Asset-V	259.01	2.92	2.53	1.14	252.42
Asset-VI	270.15	5.05	3.80	1.87	259.44



### **Additional Capital Expenditure**

33. The Petitioner vide Auditor's Certificates dated 13.4.2020 has claimed ACE during the 2014-19 tariff period in respect of the transmission assets as follows:

(₹ in lakh)

Asset	ACE	
	2017-18	2018-19
Asset-I	330.66	277.05
Asset-II	0.00	277.29
Asset-III	0.00	71.18
Asset-IV	0.00	173.76
Asset-V	0.00	31.28
Asset-VI	0.00	24.26

34. The Petitioner has submitted that the admissibility of ACE incurred after COD and up to cut-off date is to be dealt in accordance with Regulation 14(1)(i) of the 2014 Tariff Regulations and the admissibility of ACE incurred after cut-off date is to be dealt in accordance with Regulation 14(3)(i) of the 2014 Tariff Regulations. Further, in this case, ACE incurred is within cut-off date and is, accordingly, claimed as per Regulation 14(1)(i) of the 2014 Tariff Regulations.

35. The Petitioner vide affidavit dated 11.2.2021 has submitted that ACE claimed for 2017-18 and 2018-19 is within the cut-off date and is mainly on account of un-discharged liability for the works executed prior to cut-off date and is claimed as per Regulation 14(1)(i) of 2014 Tariff Regulations. Further, ACE is also on account of unexecuted works that are considered as addition in gross block which is on account of the works executed after COD and the same is claimed under Regulation 14(1)(ii) of 2014 Tariff Regulations.

36. The Petitioner vide affidavit dated 11.2.2021 has submitted that there are many works in sub-station such as roads, drains, township, cable trench cover, service room of control room building other than main control room, landscaping works which are normally completed after COD. At the same time, for many works which are completed till COD, payments are made after COD. Final amendments to



the work which involve some new items and, therefore, under negotiable rate, are not completed by COD. Hence, it is not possible to freeze the liability of all the works by COD.

37. The Petitioner vide affidavit dated 11.2.2021 has submitted that during true up of tariff which is undertaken after 1 to 5 years, most of the final amendments are issued, payments and material reconciliation get completed, final payments get released and contracts get closed. It is only at that stage that the actual status of payments are reconciled and value of works beyond cut-off date (i.e. value of un-executed works) and the actual liability as on COD are exactly known. Also, the justification for ACE claimed during the 2014-19 period on account of balance and retention payment and un-executed/ balance works (party-wise) has been submitted. Further, ACE claimed during the 2014-19 has been submitted by the Petitioner in the format wherein head-wise/ party-wise, year of actual capitalization, outstanding liability as on COD, discharge and reversal (year-wise), additional liability recognized and outstanding liability as on 31.3.2019 has been mentioned.

38. We have considered the submissions and claims of the Petitioner. ACE claimed by the Petitioner is allowed under Regulation 14(1)(i) for un-discharged liabilities and under Regulation 14(1)(ii) for unexecuted works of the 2014 Tariff Regulations.

**Capital Cost for the 2014-19 tariff period**

39. In view of the above, the details of the allowed capital cost as on COD, as on 31.3.2019 and ACE during the 2014-19 tariff period in respect of the transmission assets are as follows:

Asset	Particulars	Capital cost as on COD on cash basis	ACE allowed		Capital Cost as on 31.3.2019
			2017-18	2018-19	
Asset-I	Allowed vide order dated 15.11.2018 in Petition No. 37/TT/2018	2278.30	489.46	396.20	3163.96
	Claimed by the Petitioner in the instant petition	2293.16	330.66	277.05	2900.87
	Approved in the instant order	2278.30	345.53	277.05	2900.88





Asset-II	Allowed earlier in order dated 21.1.2020 in Petition No. 311/TT/2018	2928.25	0.00	312.43	3240.70
	Claimed by the Petitioner in the instant petition	2990.50	0.00	277.29	3267.79
	Approved in the instant order	2934.41	0.00	307.21	3241.62
Asset-III	Allowed earlier in order dated 21.1.2020 in Petition No. 311/TT/2018	505.26	0.00	77.47	582.73
	Claimed by the Petitioner in the instant petition	516.12	0.00	71.18	587.30
	Approved in the instant order	505.96	0.00	76.56	582.52
Asset-IV	Allowed earlier in order dated 21.1.2020 in Petition No. 311/TT/2018	1818.99	0.00	212.07	2030.30
	Claimed by the Petitioner in the instant petition	1883.59	0.00	173.76	2057.35
	Approved in the instant order	1850.07	0.00	178.90	2028.97
Asset-V	Allowed earlier in order dated 21.1.2020 in Petition No. 311/TT/2018	247.21	0.00	33.84	281.04
	Claimed by the Petitioner in the instant petition	259.01	0.00	31.28	290.29
	Approved in the instant order	252.42	0.00	33.43	285.85
Asset-VI	Allowed earlier in order dated 21.1.2020 in Petition No. 311/TT/2018	257.68	0.00	28.13	285.74
	Claimed by the Petitioner in the instant petition	270.15	0.00	24.26	294.41
	Approved in the instant order	259.44	0.00	27.49*	286.92

\*including un-discharged IDC liability as on COD, discharged in 2018-19

### Debt-Equity Ratio

40. The Petitioner has claimed debt-equity ratio of 70:30 as on COD and for ACE post 31.3.2014. Debt-equity ratio has been considered in accordance with Regulation 19 of the 2014 Tariff Regulations. The details of the debt-equity as on COD and 31.3.2019 in respect of the transmission assets considered for the purpose of truing up of tariff for the 2014-19 tariff period is as follows:

Funding	Capital Cost (as on COD) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)
<b>Asset-I</b>				
Debt	1594.82	70.00	2030.63	70.00
Equity	683.48	30.00	870.25	30.00
<b>Total</b>	<b>2278.30</b>	<b>100.00</b>	<b>2900.88</b>	<b>100.00</b>
<b>Asset-II</b>				
Debt	2054.09	70.00	2269.14	70.00
Equity	880.32	30.00	972.48	30.00
<b>Total</b>	<b>2934.41</b>	<b>100.00</b>	<b>3241.62</b>	<b>100.00</b>
<b>Asset-III</b>				
Debt	354.18	70.00	407.77	70.00
Equity	151.78	30.00	174.75	30.00
<b>Total</b>	<b>505.96</b>	<b>100.00</b>	<b>582.52</b>	<b>100.00</b>
<b>Asset-IV</b>				
Debt	1295.05	70.00	1420.28	70.00
Equity	555.02	30.00	608.69	30.00
<b>Total</b>	<b>1850.07</b>	<b>100.00</b>	<b>2028.97</b>	<b>100.00</b>
<b>Asset-V</b>				



Debt	176.69	70.00	200.09	70.00
Equity	75.72	30.00	85.75	30.00
<b>Total</b>	<b>252.42</b>	<b>100.00</b>	<b>285.85</b>	<b>100.00</b>
<b>Asset-VI</b>				
Debt	181.61	70.00	200.85	70.00
Equity	77.83	30.00	86.07	30.00
<b>Total</b>	<b>259.44</b>	<b>100.00</b>	<b>286.92</b>	<b>100.00</b>

### Depreciation

41. The depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations after considering capital expenditure as on COD and approved ACE during the 2014-19 tariff period. The Gross Block during the 2014-19 tariff period with respect to the transmission assets has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD at Annexure-I (Colly.) has been worked out after taking into account the depreciation rates of assets as specified in the 2014 Tariff Regulations and the trued-up depreciation allowed for the transmission assets during the 2014-19 tariff period is as follows:

Particulars	(₹ in lakh)	
	Asset-I	
	2017-18 (Pro-rata for 230 days)	2018-19
Opening Gross Block	2278.30	2623.83
Additional Capitalisation	345.53	277.05
Closing Gross Block	2623.83	2900.88
Average Gross Block	2451.07	2762.36
Weighted average rate of Depreciation (WAROD) (in %)	5.29	5.29
Elapsed useful life of the Asset-at the beginning of the year (Year)	0	0
Balance useful life of the Asset-at the beginning of the year (Year)	25	25
Aggregated Depreciable Value	2205.96	2486.12
<b>Combined Depreciation during the year</b>	<b>81.68</b>	<b>146.06</b>
Remaining Aggregated Depreciable Value	2124.28	2258.39

Particulars	(₹ in lakh)				
	Asset-II 2018-19 (Pro-rata for 211 days)	Asset-III 2018-19 (Pro-rata for 211 days)	Asset-IV 2018-19 (Pro-rata for 169 days)	Asset-V 2018-19 (Pro-rata for 169 days)	Asset-VI 2018-19 (Pro-rata for 117 days)
Opening Gross Block	2934.41	505.96	1850.07	252.42	259.44
Additional Capitalisation	307.21	76.56	178.90	33.43	27.49



Closing Gross Block	3241.62	582.52	2028.97	285.85	286.92
Average Gross Block	3088.02	544.24	1939.52	269.13	273.18
Weighted average rate of Depreciation (WAROD) (in %)	5.29	5.31	5.28	5.31	5.31
Elapsed useful life of the Asset-at the beginning of the year (Year)	0	0	0	0	0
Balance useful life of the Asset-at the beginning of the year (Year)	25	24	25	24	24
Aggregated Depreciable Value	2779.21	489.82	1745.57	242.22	245.86
<b>Combined Depreciation during the year</b>	<b>94.36</b>	<b>16.72</b>	<b>47.42</b>	<b>6.62</b>	<b>4.65</b>
Remaining Aggregated Depreciable Value	2684.85	473.10	1698.15	235.60	241.21

42. Depreciation with respect to the transmission assets as allowed vide orders dated 15.11.2018 and 21.1.2020 in Petition No. 37/TT/2018 and Petition No. 311/TT/2018 respectively, claimed by the Petitioner in the instant petition and true-up in the instant order is as follows:

(₹ in lakh)

Particulars	Asset-I	
	2017-18 (Pro-rata for 230 days)	2018-19
Allowed vide order dated 15.11.2018 in Petition No. 37/TT/2018	83.98	156.19
Claimed by the Petitioner in the instant petition	83.15	148.81
Approved after true-up in this order	81.68	146.06

(₹ in lakh)

Particulars	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI
	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 117 days)
Allowed vide order dated 21.1.2020 in Petition No. 311/TT/2018	94.25	16.71	47.05	6.50	4.63
Claimed by the Petitioner in the instant petition	96.78	18.10	48.28	7.00	4.93
Approved after true-up in this order	94.36	16.72	47.42	6.62	4.65

### **Interest on Loan (IoL)**

43. The Petitioner has claimed Weighted Average Rate of Interest (WAROI) on loan based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rates in accordance with Regulation 26 of the 2014 Tariff Regulations. The true-up IoL allowed in respect of the transmission assets for the 2014-19 tariff period is as follows:



(₹ in lakh)

Particulars	Asset-I	
	2017-18 (Pro-rata for 230 days)	2018-19
Gross Normative Loan	1594.82	1836.69
Cumulative Repayments upto Previous Year	0.00	81.68
Net Loan-Opening	1594.82	1755.01
Addition due to Additional Capitalization	241.87	193.94
Repayment during the year	81.68	146.06
Net Loan-Closing	1755.01	1802.90
Average Loan	1674.91	1778.95
Weighted Average Rate of Interest on Loan (in %)	7.941	7.956
<b>Interest on Loan</b>	<b>83.81</b>	<b>141.54</b>

(₹ in lakh)

Particulars	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI
	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 117 days)
Gross Normative Loan	2054.09	354.18	1295.05	176.69	181.61
Cumulative Repayments upto Previous Year	0.00	0.00	0.00	0.00	0.00
Net Loan-Opening	2054.09	354.18	1295.05	176.69	181.61
Addition due to Additional Capitalization	215.04	53.59	125.23	23.40	19.24
Repayment during the year	94.36	16.72	47.42	6.62	4.65
Net Loan-Closing	2174.78	391.05	1372.87	193.47	196.20
Average Loan	2114.44	372.62	1333.96	185.08	188.91
Weighted Average Rate of Interest on Loan (in %)	7.580	7.315	7.543	7.308	7.340
<b>Interest on Loan</b>	<b>92.65</b>	<b>15.76</b>	<b>46.59</b>	<b>6.26</b>	<b>4.44</b>

44. IoL in respect of the transmission assets as allowed vide orders dated 15.11.2018 and 21.1.2020 in Petition No. 37/TT/2018 and Petition No. 311/TT/2018 respectively, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	Asset-I	
	2017-18 (Pro-rata for 230 days)	2018-19
Allowed vide order dated 15.11.2018 in Petition No. 37/TT/2018	85.17	150.06
Claimed by the Petitioner in the instant petition	83.78	141.31
Approved after true-up in this order	83.81	141.54

(₹ in lakh)

Particulars	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI
	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 117 days)
Allowed vide order dated 21.1.2020 in Petition No. 311/TT/2018	91.61	15.73	45.99	6.15	4.43
Claimed by the Petitioner in the instant petition	92.77	15.75	45.89	6.27	4.47



Approved after true-up in this order	92.65	15.76	46.59	6.26	4.44
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### **Return on Equity**

45. The Petitioner has claimed RoE in respect of the transmission assets in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it liable to pay income tax at Minimum Alternate Tax (MAT) rates and has claimed the effective tax rates for the 2014-19 tariff period as follows:

<b>Year</b>	<b>Claimed effective tax (in %)</b>	<b>Grossed-up RoE (in %) [(Base Rate)/(1-t)]</b>
2014-15	21.018	19.625
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

46. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 had arrived at the effective tax rates based on the notified MAT rates for the Petitioner which are as follows:

<b>Year</b>	<b>Notified MAT rates (in %) (inclusive of surcharge &amp; cess)</b>	<b>Effective tax (in %)</b>
2014-15	20.961	20.961
2015-16	21.342	21.342
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

47. MAT rates considered in order dated 27.4.2020 for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period, in terms of the provisions of the 2014 Tariff Regulations, have been considered in the instant case which are as follows:

<b>Year</b>	<b>MAT Rate (in %)</b>	<b>Grossed-up RoE (in %) [(Base Rate)/(1-t)]</b>
2014-15	20.961	19.610
2015-16	21.342	19.705
2016-17	21.342	19.705
2017-18	21.342	19.705
2018-19	21.549	19.758



48. In view of the above, RoE is trued-up on the basis of the MAT rates applicable in the respective years and is allowed in respect of the transmission assets for the 2014-19 tariff period as follows:

(₹ in lakh)

Particulars	Asset-I	
	2017-18 (Pro-rata for 230 days)	2018-19
Opening Equity	683.48	787.14
Addition due to Additional Capitalization	103.66	83.11
Closing Equity	787.14	870.25
Average Equity	735.31	828.70
Return on Equity (Base Rate) (in %)	15.500	15.500
Tax Rate applicable (in %)	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.758
<b>Return on Equity (Pre-tax)</b>	<b>91.30</b>	<b>163.73</b>

(₹ in lakh)

Particulars	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI
	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 117 days)
Opening Equity	880.32	151.78	555.02	75.72	77.83
Addition due to Additional Capitalization	92.16	22.97	53.67	10.03	8.25
Closing Equity	972.48	174.75	608.69	85.75	86.07
Average Equity	926.40	163.27	581.85	80.74	81.95
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	21.549	21.549	21.549	21.549	21.549
Rate of Return on Equity (Pre-tax)	19.758	19.758	19.758	19.758	19.758
<b>Return on Equity (Pre-tax)</b>	<b>105.81</b>	<b>18.65</b>	<b>53.23</b>	<b>7.39</b>	<b>5.19</b>

49. RoE in respect of the transmission assets as allowed vide orders dated 15.11.2018 and 21.1.2020 in Petition No. 37/TT/2018 and Petition No. 311/TT/2018 respectively, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	Asset-I	
	2017-18 (Pro-rata for 230 days)	2018-19
Allowed vide order dated 15.11.2018 in Petition No. 37/TT/2018	93.53	174.48
Claimed by the Petitioner in the instant petition	91.31	163.73
Approved after true-up in this order	91.30	163.73



(₹ in lakh)

Particulars	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI
	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 117 days)
Allowed vide order dated 21.1.2020 in Petition No. 311/TT/2018	104.90	18.50	52.42	7.19	5.12
Claimed by the Petitioner in the instant petition	106.00	18.68	53.39	7.41	5.22
Approved after true-up in this order	105.81	18.65	53.23	7.39	5.19

### **Operation & Maintenance Expenses (O&M Expenses)**

50. O&M Expenses in respect of the various elements covered under the transmission assets as claimed by the Petitioner in this petition are within the norms specified in Regulation 29(4)(a) of the 2014 Tariff Regulations and the allowable O&M Expenses are as follows:

(₹ in lakh)

Asset-I		
Particulars	2017-18 (Pro-rata for 230 days)	2018-19
<b>Sub-station Bays</b>		
Itarsi: 400 kV ICT Bay at Itarsi	1	1
Itarsi: 220 kV ICT Bay at Itarsi	1	1
Itarsi: Itarsi MPPTCL Downstream Bay	1	1
Itarsi: Hoshangabad MPPTCL Downstream Bay	1	1
<b>Norm (₹ lakh/bay)</b>		
400 kV	66.51	68.71
220 kV	46.55	48.10
<b>Total Sub-station O&amp;M</b>	<b>129.91</b>	<b>213.01</b>
<b>Total O&amp;M Expenses</b>	<b>129.91</b>	<b>213.01</b>

(₹ in lakh)

Asset-II	
Particulars	2018-19 (Pro-rata for 211 days)
<b>Sub-station Bays</b>	
Indore: 220 kV Line Bays at Indore	1
Indore: 400 kV Line Bays at Indore	1
Indore: 220 kV ICT-2 Bays at Indore	1
<b>Norm (₹ lakh/bay)</b>	
400 kV	68.71
220 kV	48.10
<b>Total Sub-station O&amp;M</b>	<b>123.14</b>
<b>Total O&amp;M Expenses</b>	<b>123.14</b>





(₹ in lakh)

Asset-III	
Particulars	2018-19 (Pro-rata for 211 days)
<b>Sub-station Bays</b>	
Indore: 220 kV Line Bays at Indore	2
<b>Norm (₹ lakh/bay)</b>	
220kV	48.10
<b>Total Sub-station O&amp;M</b>	<b>55.61</b>
<b>Total O&amp;M Expenses</b>	<b>55.61</b>

(₹ in lakh)

Asset-IV	
Particulars	2018-19 (Pro-rata for 169 days)
<b>Sub-station Bays</b>	
Indore: 400 kV ICT-I Bay at Indore	1
Indore: 220 kV ICT-I Bay at Indore	1
<b>Norm (₹ lakh/bay)</b>	
400 kV	68.71
220 kV	48.10
<b>Total Sub-station O&amp;M</b>	<b>54.08</b>
<b>Total O&amp;M Expenses</b>	<b>54.08</b>

(₹ in lakh)

Asset-V	
Particulars	2018-19 (Pro-rata for 169 days)
<b>Sub-station Bays</b>	
Indore: 220 kV Line Bay at Indore	1
<b>Norm (₹ lakh/bay)</b>	
220 kV	48.10
<b>Total Sub-station O&amp;M</b>	<b>22.27</b>
<b>Total O&amp;M Expenses</b>	<b>22.27</b>

(₹ in lakh)

Asset-VI	
Particulars	2018-19 (Pro-rata for 117 days)
<b>Sub-station Bays</b>	
Indore: 220 kV Line Bay at Indore	1
<b>Norm (₹ lakh/bay)</b>	
220 kV	48.10
<b>Total Sub-station O&amp;M</b>	<b>15.42</b>
<b>Total O&amp;M Expenses</b>	<b>15.42</b>

51. O&M Expenses in respect of the transmission assets as allowed vide orders dated 15.11.2018 and 21.1.2020 in Petition No. 37/TT/2018 and Petition No. 311/TT/2018 respectively, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:



(₹ in lakh)

Particulars	Asset-I	
	2017-18 (Pro-rata for 169 days)	2018-19
Allowed vide order dated 15.11.2018 in Petition No. 37/TT/2018	129.91	213.01
Claimed by the Petitioner in the instant petition	129.90	213.01
Approved after true-up in this order	129.91	213.01

(₹ in lakh)

Particulars	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI
	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 117days)
Allowed vide order dated 21.1.2020 in Petition No. 311/TT/2018	123.13	55.61	54.08	22.27	15.41
Claimed by the Petitioner in the instant petition	123.14	55.61	54.08	22.27	15.42
Approved after true-up in this order	123.14	55.61	54.08	22.27	15.42

### Interest on Working Capital

52. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations. The details of the trued-up IWC approved in respect of the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	Asset-I	
	2017-18 (Pro-rata for 230 days)	2018-19
Working Capital for O&M Expenses (1 month of O&M expenses)	17.18	17.75
Working Capital for Maintenance Spares (15% of O&M expenses)	30.92	31.95
Working Capital for Receivables (Equivalent to 2 months of annual fixed cost / annual transmission charges)	105.51	114.16
<b>Total Working Capital</b>	<b>153.61</b>	<b>163.87</b>
Rate of Interest (in %)	12.60	12.60
<b>Interest of Working Capital</b>	<b>12.20</b>	<b>20.65</b>

(₹ in lakh)

Particulars	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI
	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 117 days)
Working Capital for O&M Expenses (1 month of O&M expenses)	17.75	8.02	9.73	4.01	4.01
Working Capital for Maintenance Spares (15% of O&M expenses)	31.95	14.43	17.52	7.22	7.22
Working Capital for Receivables (Equivalent to 2 months of	123.45	31.88	74.54	15.86	16.00



annual fixed cost / annual transmission charges)					
<b>Total Working Capital</b>	173.15	54.32	101.79	27.09	27.22
Rate of Interest (in %)	12.20	12.20	12.20	12.20	12.20
<b>Interest of Working Capital</b>	<b>12.21</b>	<b>3.83</b>	<b>5.75</b>	<b>1.53</b>	<b>1.06</b>

53. IWC in respect of the transmission assets as allowed vide orders dated 15.11.2018 and 21.1.2020 in Petition No. 37/TT/2018 and Petition No. 311/TT/2018 respectively, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

Particulars	Asset-I	
	2017-18 (Pro-rata for 230 days)	2018-19
Allowed vide order dated 15.11.2018 in Petition No. 37/TT/2018	12.32	21.28
Claimed by the Petitioner in the instant petition	12.22	20.70
Approved after true-up in this order	12.20	20.65

Particulars	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI
	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 117 days)
Allowed vide order dated 21.1.2020 in Petition No. 311/TT/2018	12.17	3.83	5.71	1.52	1.06
Claimed by the Petitioner in the instant petition	12.27	3.86	5.76	1.54	1.07
Approved after true-up in this order	12.21	3.83	5.75	1.53	1.06

### Approved Annual Fixed Charges for the 2014-19 Tariff Period

54. The trued-up Annual Fixed Charges (AFC) in respect of the transmission assets for the 2014-19 tariff period are as follows:

Particulars	Asset-I	
	2017-18 (Pro-rata for 230 days)	2018-19
Depreciation	81.68	146.06
Interest on Loan	83.81	141.54
Return on Equity	91.30	163.73
Interest on Working Capital	12.20	20.65
O&M Expenses	129.91	213.01
<b>Total</b>	<b>398.90</b>	<b>684.99</b>



Particulars	(₹ in lakh)				
	Asset-II 2018-19 (Pro-rata for 211 days)	Asset-III 2018-19 (Pro-rata for 211 days)	Asset-IV 2018-19 (Pro-rata for 169 days)	Asset-V 2018-19 (Pro-rata for 169 days)	Asset-VI 2018-19 (Pro-rata for 117 days)
Depreciation	94.36	16.72	47.42	6.62	4.65
Interest on Loan	92.65	15.76	46.59	6.26	4.44
Return on Equity	105.81	18.65	53.23	7.39	5.19
Interest on Working Capital	12.21	3.83	5.75	1.53	1.06
O&M Expenses	123.14	55.61	54.08	22.27	15.42
<b>Total</b>	<b>428.17</b>	<b>110.56</b>	<b>207.07</b>	<b>44.07</b>	<b>30.77</b>

55. Accordingly, the Annual Transmission Charges as allowed vide orders dated 15.11.2018 and 21.1.2020 in Petition No. 37/TT/2018 and Petition No. 311/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

Particulars	(₹ in lakh)	
	Asset-I	
	2017-18 (Pro-rata for 230 days)	2018-19
Allowed vide order dated 15.11.2018 in Petition No. 37/TT/2018	404.92	715.02
Claimed by the Petitioner in the instant petition	400.36	687.56
Approved after true-up in this order	398.90	684.99

Particulars	(₹ in lakh)				
	Asset-II 2018-19 (Pro-rata for 211 days)	Asset-III 2018-19 (Pro-rata for 211 days)	Asset-IV 2018-19 (Pro-rata for 169 days)	Asset-V 2018-19 (Pro-rata for 169 days)	Asset-VI 2018-19 (Pro-rata for 117 days)
Allowed vide order dated 21.1.2020 in Petition No. 311/TT/2018	426.06	110.38	205.26	43.63	30.66
Claimed by the Petitioner in the instant petition	430.96	112.00	207.40	44.49	31.11
Approved after true-up in this order	428.17	110.56	207.07	44.07	30.68

### **DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD**

56. The Petitioner has combined the transmission assets into one single asset and has claimed combined tariff and has submitted the tariff forms. During the course of hearing held on 9.7.2021, the Petitioner submitted that the downstream systems of MPPTCL with respect to Asset-V and Asset-VI are yet to be commissioned. Accordingly, as per proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations, tariff



for Combined Asset (consisting of Asset-I, Asset-II, Asset-III and Asset-IV) and Asset-V, Asset-VI has been worked out separately for the 2019-24 tariff period in this order.

57. The details of the transmission charges for Combined Asset, Asset-V and Asset-VI for the 2019-24 tariff period as claimed by the Petitioner vide affidavit dated 28.7.2021 are as follows:

(₹ in lakh)

<b>Combined Asset</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Depreciation	480.36	487.74	490.38	490.38	490.38
Interest on Loan	432.00	401.32	368.40	332.67	293.24
Return on Equity	499.20	507.30	510.38	510.38	510.38
Interest on Working Capital	57.66	58.84	59.75	60.62	61.29
O&M Expenses	836.04	866.04	896.43	928.62	959.79
<b>Total</b>	<b>2305.26</b>	<b>2321.24</b>	<b>2325.34</b>	<b>2322.67</b>	<b>2315.08</b>

(₹ in lakh)

<b>Asset-V</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Depreciation	16.34	16.98	17.44	17.44	17.44
Interest on Loan	13.87	13.26	12.48	11.24	9.94
Return on Equity	16.36	17.04	17.53	17.53	17.53
Interest on Working Capital	1.68	1.73	1.77	1.78	1.80
O&M Expenses	22.51	23.30	24.12	24.96	25.84
<b>Total</b>	<b>70.76</b>	<b>72.31</b>	<b>73.34</b>	<b>72.95</b>	<b>72.55</b>

(₹ in lakh)

<b>Asset-VI</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Depreciation	16.46	17.10	17.57	17.57	17.57
Interest on Loan	14.17	13.55	12.79	11.59	10.26
Return on Equity	16.49	17.16	17.64	17.64	17.64
Interest on Working Capital	1.69	1.74	1.78	1.79	1.81
O&M Expenses	22.51	23.30	24.12	24.96	25.84
<b>Total</b>	<b>71.32</b>	<b>72.85</b>	<b>73.90</b>	<b>73.55</b>	<b>73.12</b>

58. The details of IWC for Combined Asset, Asset-V and Asset-VI for the 2019-24 tariff period as claimed by the Petitioner vide affidavit dated 28.7.2021 are as follows for the 2019-24 tariff period:



(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	69.67	72.17	74.70	77.39	79.98
Maintenance Spares	125.41	129.91	134.46	139.29	143.97
Receivables	283.43	286.18	286.69	286.36	284.64
<b>Total Working Capital</b>	<b>478.51</b>	<b>488.26</b>	<b>495.85</b>	<b>503.04</b>	<b>508.59</b>
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>57.66</b>	<b>58.84</b>	<b>59.75</b>	<b>60.62</b>	<b>61.29</b>

(₹ in lakh)

Asset-V					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	1.88	1.94	2.01	2.08	2.15
Maintenance Spares	3.38	3.50	3.62	3.74	3.88
Receivables	8.70	8.91	9.04	8.99	8.92
<b>Total Working Capital</b>	<b>13.96</b>	<b>14.35</b>	<b>14.67</b>	<b>14.81</b>	<b>14.95</b>
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>1.68</b>	<b>1.73</b>	<b>1.77</b>	<b>1.78</b>	<b>1.80</b>

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	1.88	1.94	2.01	2.08	2.15
Maintenance Spares	3.38	3.50	3.62	3.74	3.88
Receivables	8.77	8.98	9.11	9.07	8.99
<b>Total Working Capital</b>	<b>14.03</b>	<b>14.42</b>	<b>14.74</b>	<b>14.89</b>	<b>15.02</b>
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>1.69</b>	<b>1.74</b>	<b>1.78</b>	<b>1.79</b>	<b>1.81</b>

### Effective Date of Commercial Operation (E-COD)

59. The Petitioner has claimed E-COD of Combined Asset as 8.5.2018. However, based on the trued-up capital cost and COD of Asset-I, Asset-II, Asset-III and Asset-IV, E-COD of Combined Asset has been worked out as follows:

Asset	COD	Admitted Capital Cost (as on 31.3.2019) (₹ in lakh)	Weightage of cost (in %)	Number of days from last COD	Weighted Days
Asset-I	14.8.2017	2900.88	33.14	426.00	141.17
Asset-II	2.9.2018	3241.62	37.03	42.00	15.55
Asset-III	2.9.2018	582.52	6.65	42.00	2.79
Asset-IV	14.10.2018	2028.97	23.18	0.00	0.00
<b>Total</b>		<b>8753.99</b>	<b>100.00</b>		<b>159.51</b>
<b>E-COD (Latest COD - Total Weighted Days) 7.5.2018</b>					

60. E-COD is used to determine the lapsed life of the project as a whole, which works out as zero (0) year as on 1.4.2019 (i.e. the number of completed years as on



1.4.2019 from E-COD). Further, as tariff for the 2019-24 period in respect of Asset-V and Asset-VI has been worked out separately, E-COD for the transmission project as a whole will be worked out and considered in the next tariff period while determining tariff for combined assets for the transmission project.

### **Weighted Average Life (WAL)**

61. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of WAL.

62. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have different span of life. Therefore, the concept of WAL has been used as the useful life of the transmission project as a whole.

63. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. Accordingly, WAL of Combined Asset has been worked out as 25 years as follows:

Particulars	Combined Asset Cost (₹ in lakh) (1)	Life (in Years) (2)	Weighted Cost (₹ in lakh) (3)=(1) x(2)
Building	0.00	25	0.00
Transmission Line	0.00	35	0.00
Sub-Station Equipment	8577.00	25	214425.00
PLCC	53.86	15	807.91
IT Equipment and Software	123.13	6.66	820.86
<b>Total</b>	<b>8753.99</b>		<b>216053.77</b>
<b>WAL (in years) (4)=(3)/(1)</b>			<b>25.00 Years</b>

64. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for the 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed, E-COD of Combined Asset is 7.5.2018 and the lapsed life of the transmission project as a whole works out as zero (0) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 25 years.





65. Further, as tariff for the 2019-24 period in respect of Asset-V and Asset-VI has been worked out separately, WAL for the transmission project as a whole will be worked out and considered in the next tariff period while determining tariff for the combined assets for the whole transmission project.

### **Capital Cost**

66. Regulation 19 of the 2019 Tariff Regulations provides as follows:

**“19. Capital Cost:** (1) *The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.*

(2) *The Capital Cost of a new project shall include the following:*

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (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;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) *Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) *Expenditure on account of change in law and force majeure events; and*
- (o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission*



*subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

*(3) The Capital cost of an existing project shall include the following:*

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
- (c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;*
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

*(4) The capital cost in case of existing or new hydro generating station shall also include:*

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*

*(5) The following shall be excluded from the capital cost of the existing and new projects:*

- (a) The assets forming part of the project, but not in use, as declared in the tariff petition;*
- (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*

*Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be de-capitalised only after its redeployment;*

*Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.*

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and*
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."*



67. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, sub-station and PLCC) as admitted by the Commission as on 31.3.2019 in this order for Asset-I, Asset-II, Asset-III and Asset-IV are clubbed together as follows:

(₹ in lakh)					
Element	Asset-I	Asset-II	Asset-III	Asset-IV	Capital Cost for Combined Asset (as on 31.3.2019)
Sub-station	2851.75	3177.80	537.08	2010.37	8577.00
PLCC	19.33	17.27	17.26	0.00	53.86
IT Equipment and Software	29.79	46.55	28.18	18.60	123.13
<b>Total</b>	<b>2900.88</b>	<b>3241.62</b>	<b>582.52</b>	<b>2028.97</b>	<b>8753.99</b>

68. Similarly, capital cost as on 31.3.2019 for Asset-V and Asset-VI as admitted in this order is as follows:

(₹ in lakh)		
Element	Asset-V	Asset-VI
Sub-station	267.92	269.09
PLCC	8.56	8.47
IT Equipment and Software	9.36	9.36
<b>Total</b>	<b>285.85</b>	<b>286.92</b>

69. The trued-up capital cost of ₹8753.99 lakh, ₹285.85 lakh and ₹286.92 lakh for Combined Asset, Asset-V and Asset-VI respectively has been considered as admitted capital cost as on 1.4.2019 for working out tariff for the 2019-24 tariff period.

### **Additional Capital Expenditure**

70. Regulation 24 of the 2019 Tariff Regulations provides as follows:

**“24. Additional Capitalisation within the original scope and upto the cut-off date**

(1) *The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

- (a) *Undischarged liabilities recognized to be payable at a future date;*
- (b) *Works deferred for execution;*
- (c) *Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;*
- (d) *Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;*
- (e) *Change in law or compliance of any existing law; and*



(f) Force Majeure events:

*Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.*

*(2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.”*

71. Based on the Auditor's Certificates dated 13.4.2020, ACE claimed by the Petitioner in respect of the transmission assets in 2019-20 and 2020-21 is as follows:

Asset	ACE (as per Auditor's Certificates)	
	2019-20	2020-21
Asset-I	178.47	109.17
Asset-II		
Asset-III		
Asset-IV		
Asset-V	6.12	17.19
Asset-VI	6.12	17.19

72. The Petitioner has submitted that ACE incurred in 2019-20 and 2020-21 is within cut-off date and is accordingly claimed as per Regulation 24(1)(a) of the 2019 Tariff Regulations. Further, ACE incurred is on account of any un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date.

73. The Petitioner vide affidavit dated 11.2.2021 has submitted that ACE claimed is mainly on account of un-discharged liability for the works executed prior to cut-off date and is claimed as per Regulation 24(1)(a) of the 2019 Tariff Regulations. Also, the justification for ACE claimed during the 2019-24 period on account of balance and retention payment and works deferred for execution (party-wise) has been submitted by the Petitioner. Further, ACE during the 2019-24 period is also on account of unexecuted works that are considered as addition in gross block which is on account of the works executed after COD and the same is claimed under Regulation 24(1)(b) of the 2019 Tariff Regulations



74. We have considered the submissions and claim of the Petitioner. ACE claimed is towards balance and retention payments and un-executed works and the same is allowed under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations, subject to true-up. Therefore, ACE with respect to Combined Asset, Asset-V and Asset-VI is allowed as follows:

(₹ in lakh)

Asset	ACE	
	2019-20	2020-21
Combined Asset	178.47	109.17
Asset-V	6.50*	17.19
Asset-VI	6.69*	17.19

\* includes discharged liabilities

### **Capital Cost considered for the 2019-24 tariff period**

75. In view of the above, the capital cost of Combined Asset, Asset-V and Asset-VI considered for the 2019-24 tariff period, subject to true-up, is as follows:

(₹ in lakh)

Asset	Capital Cost allowed (as on 1.4.2019)	ACE allowed during		Capital Cost (as on 31.3.2024)
		2019-20	2020-21	
Combined Asset	8753.99	178.47	109.17	9041.63
Asset-V	285.85	6.50	17.19	309.54
Asset-VI	286.92	6.69	17.19	310.80

### **Debt-Equity Ratio**

76. Regulation 18 of the 2019 Tariff Regulations provides as follows:

**“18. Debt-Equity Ratio:** (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. 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, 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:
- 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 generating company or the



transmission licensee, as the case may be, 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 utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation.”

77. The debt-equity considered for the purpose of computation of tariff for Combined Asset, Asset-V and Asset-VI for the 2019-24 tariff period is as follows:

Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	6127.82	70.00	6329.17	70.00
Equity	2626.17	30.00	2712.46	30.00
<b>Asset-V</b>				
<b>Total</b>	<b>8753.99</b>	<b>100.00</b>	<b>9041.63</b>	<b>100.00</b>
Debt	200.09	70.00	216.68	70.00





Equity	85.75	30.00	92.86	30.00
<b>Total</b>	<b>285.85</b>	<b>100.00</b>	<b>309.54</b>	<b>100.00</b>
<b>Asset-VI</b>				
Debt	200.85	70.00	217.57	70.00
Equity	86.07	30.00	93.23	30.00
<b>Total</b>	<b>286.92</b>	<b>100.00</b>	<b>310.80</b>	<b>100.00</b>

## **Depreciation**

78. Regulation 33 of the 2019 Tariff Regulations provides as follows:

**“33. Depreciation:** (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements 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 generating station or the transmission system taking into consideration the depreciation of individual units:

*Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.*

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the 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.

(3) 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 in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:*

*Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:*

*Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.*

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) 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 generating



*station and transmission system:*

*Provided that the remaining depreciable value as on 31<sup>st</sup> March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.*

*(6) 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.*

*(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.*

*(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.*

*(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.*

*(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of-*

*a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or  
b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or  
c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”*

79. Depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The IT equipment has been considered as a part of the Gross Block and depreciated using WAROD. WAROD at Annexure-II (Colly.) has been worked out after considering the depreciation rates of IT and non-IT assets as specified in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been





considered as 100% depreciable. The depreciation allowed for Combined Asset, Asset-V and Asset-VI for the 2019-24 tariff period is as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	8753.99	8932.46	9041.63	9041.63	9041.63
Addition during the year 2019-24 due to projected Additional Capitalisation	178.47	109.17	0.00	0.00	0.00
Closing Gross Block	8932.46	9041.63	9041.63	9041.63	9041.63
Average Gross Block	8843.22	8987.04	9041.63	9041.63	9041.63
Weighted average rate of Depreciation (WAROD) (in %)	5.42	5.42	5.41	5.41	5.41
Elapsed useful life at the beginning of the year (Year)	0	1	2	3	4
Balance useful life at the beginning of the year (Year)	25	24	23	22	21
Aggregated Depreciable Value	7971.22	8100.66	8149.79	8149.79	8149.79
<b>Combined Depreciation during the year</b>	<b>479.48</b>	<b>486.86</b>	<b>489.51</b>	<b>489.51</b>	<b>489.51</b>
Aggregate Cumulative Depreciation at the end of the year	865.70	1352.57	1842.07	2331.58	2821.09
Remaining Aggregate Depreciable Value at the end of the year	7105.52	6748.10	6307.72	5818.21	5328.70

(₹ in lakh)

Asset-V					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	285.85	292.35	309.54	309.54	309.54
Addition during the year 2019-24 due to projected Additional Capitalisation	6.50	17.19	0.00	0.00	0.00
Closing Gross Block	292.35	309.54	309.54	309.54	309.54
Average Gross Block	289.10	300.94	309.54	309.54	309.54
Weighted average rate of Depreciation (WAROD) (in %)	5.63	5.62	5.61	5.61	5.61
Elapsed useful life at the beginning of the year (Year)	0	1	2	3	4
Balance useful life at the beginning of the year (Year)	24	23	22	21	20
Aggregated Depreciable Value	261.12	271.78	279.52	279.52	279.52
<b>Combined Depreciation during the year</b>	<b>16.26</b>	<b>16.90</b>	<b>17.36</b>	<b>17.36</b>	<b>17.36</b>
Aggregate Cumulative Depreciation at the end of the year	22.89	39.79	57.15	74.51	91.87

(₹ in lakh)

Asset-VI					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	286.92	293.61	310.80	310.80	310.80
Addition during the year 2019-24 due to projected Additional Capitalisation	6.69	17.19	0.00	0.00	0.00
Closing Gross Block	293.61	310.80	310.80	310.80	310.80
Average Gross Block	290.27	302.21	310.80	310.80	310.80



Weighted average rate of Depreciation (WAROD) (in %)	5.62	5.61	5.61	5.61	5.61
Elapsed useful life at the beginning of the year (Year)	0	1	2	3	4
Balance useful life at the beginning of the year (Year)	24	23	22	21	20
Aggregated Depreciable Value	262.18	272.92	280.66	280.66	280.66
<b>Combined Depreciation during the year</b>	<b>16.33</b>	<b>16.97</b>	<b>17.43</b>	<b>17.43</b>	<b>17.43</b>
Aggregate Cumulative Depreciation at the end of the year	20.98	37.94	55.37	72.80	90.23
Remaining Aggregate Depreciable Value at the end of the year	241.20	234.98	225.29	207.86	190.43

### **Interest on Loan**

80. Regulation 32 of the 2019 Tariff Regulations provides as follows:

**“32. Interest on loan capital:** (1) *The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*

(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.*

(3) *The repayment for each of the year of the tariff period 2019-24 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 de-capitalisation of such asset.*

(4) *Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*

(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 for 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 generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.*

(5a) *The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.*

(6) *The interest on loan shall be calculated on the normative average loan of the*



year by applying the weighted average rate of interest.

(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.”

81. WAROI on loan has been considered on the basis of the rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for Combined Asset, Asset-V and Asset-VI for the 2019-24 tariff period is as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	6127.82	6252.75	6329.17	6329.17	6329.17
Cumulative Repayments upto Previous Year	386.22	865.70	1352.57	1842.07	2331.58
Net Loan-Opening	5741.60	5387.04	4976.60	4487.09	3997.59
Addition due to Additional Capitalization	124.93	76.42	0.00	0.00	0.00
Repayment during the year	479.48	486.86	489.51	489.51	489.51
Net Loan-Closing	5387.04	4976.60	4487.09	3997.59	3508.08
Average Loan	5564.32	5181.82	4731.85	4242.34	3752.83
Weighted Average Rate of Interest on Loan (in %)	7.761	7.743	7.785	7.843	7.817
<b>Interest on Loan</b>	<b>431.84</b>	<b>401.23</b>	<b>368.38</b>	<b>332.71</b>	<b>293.35</b>

(₹ in lakh)

Asset-V					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	200.09	204.65	216.68	216.68	216.68
Cumulative Repayments upto Previous Year	6.62	22.89	39.79	57.15	74.51
Net Loan-Opening	193.47	181.76	176.89	159.53	142.17
Addition due to Additional Capitalization	4.55	12.03	0.00	0.00	0.00
Repayment during the year	16.26	16.90	17.36	17.36	17.36
Net Loan-Closing	181.76	176.89	159.53	142.17	124.81
Average Loan	187.62	179.33	168.21	150.85	133.49
Weighted Average Rate of Interest on Loan (in %)	7.374	7.374	7.399	7.432	7.429
<b>Interest on Loan</b>	<b>13.84</b>	<b>13.22</b>	<b>12.45</b>	<b>11.21</b>	<b>9.92</b>

(₹ in lakh)

Asset-VI					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	200.85	205.54	217.57	217.57	217.57
Cumulative Repayments upto Previous Year	4.65	20.98	37.94	55.37	72.80
Net Loan-Opening	196.20	184.56	179.63	162.20	144.77



Addition due to Additional Capitalization	4.69	12.03	0.00	0.00	0.00
Repayment during the year	16.33	16.97	17.43	17.43	17.43
Net Loan-Closing	184.56	179.63	162.20	144.77	127.34
Average Loan	190.38	182.09	170.91	153.48	136.06
Weighted Average Rate of Interest on Loan (in %)	7.392	7.392	7.436	7.505	7.502
<b>Interest on Loan</b>	<b>14.07</b>	<b>13.46</b>	<b>12.71</b>	<b>11.52</b>	<b>10.21</b>

### **Return on Equity**

82. Regulations 30 and 31 of the 2019 Tariff Regulations provide as follows:

**“30. Return on Equity:** (1) *Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.*

(2) *Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:*

*Provided that return on equity in respect of additional capitalization after cutoff date beyond the original scope, excluding additional capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.*

*Provided further that:*

- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;*
- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;*
- iii. in case of a thermal generating station, with effect from 1.4.2020:*
  - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;*
  - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%;*

*Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.*



(3) The return on equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (ODe) occurs plus 350 basis point, subject to ceiling of 14%;

**“31. Tax on Return on Equity.** (1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations 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 respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

(2) Rate of return on equity shall be rounded off to three decimal places and shall 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 (1) 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 non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.

#### **Illustration-**

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

Rate of return on equity =  $15.50 / (1 - 0.2155) = 19.758\%$

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 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 =  $15.50 / (1 - 0.24) = 20.395\%$ .

(3) The generating company or the transmission licensee, as the case may be, 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 2019-24 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 generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”



83. The Petitioner has submitted that it is liable to pay Income Tax at MAT rate prescribed under the Taxation laws (Amendment) Ordinance 2019. Further, RoE has been calculated @18.782% after grossing up RoE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given in Regulation 31(2) of the 2019 Tariff Regulations for 2019-24 tariff period. As per Regulation 31(3) of the 2019 Tariff Regulations, the grossed-up rate of RoE at the end of every financial year shall be trued up 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 IT authorities pertaining to 2019-24 tariff period on actual gross income. However, if any penalty arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the Petitioner. Any under-recovery or over-recovery of grossed up rate on RoE after truing up shall be recovered or refunded to beneficiaries or the long term customers on yearly basis. The Petitioner has further submitted that any adjustment due to additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable/ adjustable during 2019-24 tariff period on yearly basis on receipt of Income Tax assessment order.

84. We have considered the submissions of the Petitioner. MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for Combined Asset, Asset-V and Asset-VI for the 2019-24 tariff period is as follows:

(₹ in lakh)					
<b>Combined Asset</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Opening Equity	2626.17	2679.71	2712.46	2712.46	2712.46
Addition due to Additional Capitalization	53.54	32.75	0.00	0.00	0.00
Closing Equity	2679.71	2712.46	2712.46	2712.46	2712.46





Average Equity	2652.94	2696.09	2712.46	2712.46	2712.46
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	17.470	17.470	17.470	17.470	17.470
Rate of Return on Equity (Pre-tax)	18.780	18.780	18.780	18.780	18.780
<b>Return on Equity (Pre-tax)</b>	<b>498.28</b>	<b>506.38</b>	<b>509.45</b>	<b>509.45</b>	<b>509.45</b>

(₹ in lakh)

<b>Asset-V</b>					
<b>Particulars</b>	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	85.75	87.70	92.86	92.86	92.86
Addition due to Additional Capitalization	1.95	5.16	0.00	0.00	0.00
Closing Equity	87.70	92.86	92.86	92.86	92.86
Average Equity	86.73	90.28	92.86	92.86	92.86
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	17.470	17.470	17.470	17.470	17.470
Rate of Return on Equity (Pre-tax)	18.780	18.780	18.780	18.780	18.780
<b>Return on Equity (Pre-tax)</b>	<b>16.29</b>	<b>16.96</b>	<b>17.44</b>	<b>17.44</b>	<b>17.44</b>
<b>Asset-VI</b>					
Opening Equity	86.07	88.07	93.23	93.23	93.23
Addition due to Additional Capitalization	2.00	5.16	0.00	0.00	0.00
Closing Equity	88.07	93.23	93.23	93.23	93.23
Average Equity	87.07	90.65	93.23	93.23	93.23
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	17.470	17.470	17.470	17.470	17.470
Rate of Return on Equity (Pre-tax)	18.780	18.780	18.780	18.780	18.780
<b>Return on Equity (Pre-tax)</b>	<b>16.35</b>	<b>17.03</b>	<b>17.51</b>	<b>17.51</b>	<b>17.51</b>

### **Operation & Maintenance Expenses**

85. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as follows:

**35. Operation and Maintenance Expenses (3) Transmission system:** (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:

<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>Norms for sub-station Bays (Rs Lakh per bay)</b>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<b>Norms for Transformers (Rs Lakh per MVA)</b>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<b>Norms for AC and HVDC lines (Rs Lakh per km)</b>					



Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
<i>Norms for HVDC stations</i>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (Rs. Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh)(3000 MW)	2,563	2,653	2,746	2,842	2,942

*Provided that the O&M expenses for the GIS bays shall be allowed as worked out by multiplying 0.70 of the O&M expenses of the normative O&M expenses for bays;*

*Provided further that:*

- (i) the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- (ii) the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- (iii) the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2500 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*





(iv) the O&M expenses of  $\pm 800$  kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for  $\pm 800$  kV, Bishwanath-Agra HVDC bi-pole scheme;

(v) the O&M expenses of  $\pm 800$  kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for  $\pm 800$  kV, Bishwanath-Agra HVDC bi-pole scheme; and

(vi) the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

(b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

(c) The Security Expenses and Capital Spares 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, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.”

86. The O&M Expenses in respect of the various elements covered under Combined Asset, Asset-V and Asset-VI as claimed by the Petitioner for the 2019-24 tariff period are within the norms specified in the 2019 Tariff Regulations and, accordingly, the O&M Expenses allowed for the 2019-24 tariff period are as follows:

(₹ in lakh)					
<b>Combined Asset</b>					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Sub-station Bays</b>					
Itarsi: 400 kV ICT Bay at Itarsi	1	1	1	1	1
Itarsi: 220 kV ICT Bay at Itarsi	1	1	1	1	1
Itarsi: Itarsi MPPTCL Downstream Bay	1	1	1	1	1
Itarsi: Hoshangabad MPPTCL Downstream Bay	1	1	1	1	1
Indore: 220 kV Line Bay at Indore	2	2	2	2	2
Indore: 400 kV ICT Bay at Indore	1	1	1	1	1
Indore: 220 kV ICT-2 Bay at Indore	1	1	1	1	1
Indore: 220 kV Line Bay at Indore	2	2	2	2	2



Indore: 400 kV ICT-I Bay at Indore	1	1	1	1	1
Indore: 220 kV ICT-I Bay at Indore	1	1	1	1	1
<b>Norm (₹ lakh/bay)</b>					
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
<b>Total Sub-station Expenses</b>	<b>299.04</b>	<b>309.54</b>	<b>320.43</b>	<b>331.62</b>	<b>343.29</b>
<b>Transformers</b>					
Itarsi: ICT (MVA)	500	500	500	500	500
Indore: ICT 1 and 2 (MVA)	1000	1000	1000	1000	1000
<b>Norm (₹ lakh/transformer)</b>					
400 kV sub-station ICT	0.358	0.371	0.384	0.398	0.411
<b>Total Transformer O&amp;M</b>	<b>537.00</b>	<b>556.50</b>	<b>576.00</b>	<b>597.00</b>	<b>616.50</b>
<b>Total O&amp;M Expenses</b>	<b>836.04</b>	<b>866.04</b>	<b>896.43</b>	<b>928.62</b>	<b>959.79</b>

(₹ in lakh)

<b>Asset-V</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>Sub-station Bays</b>					
Indore: 220 kV Line Bay at Indore	1	1	1	1	1
<b>Norm (₹ lakh/bay)</b>					
220 kV	22.51	23.30	24.12	24.96	25.84
<b>Total Sub-station O&amp;M</b>	<b>22.51</b>	<b>23.30</b>	<b>24.12</b>	<b>24.96</b>	<b>25.84</b>
<b>Total O&amp;M Expenses</b>	<b>22.51</b>	<b>23.30</b>	<b>24.12</b>	<b>24.96</b>	<b>25.84</b>

(₹ in lakh)

<b>Asset-VI</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>Sub-station Bays</b>					
Indore: 220 kV Line Bay at Indore	1	1	1	1	1
<b>Norm (₹ lakh/bay)</b>					
220 kV	22.51	23.30	24.12	24.96	25.84
<b>Total Sub-station O&amp;M</b>	<b>22.51</b>	<b>23.30</b>	<b>24.12</b>	<b>24.96</b>	<b>25.84</b>
<b>Total O&amp;M Expenses</b>	<b>22.51</b>	<b>23.30</b>	<b>24.12</b>	<b>24.96</b>	<b>25.84</b>

### Interest on Working Capital

87. Regulations 34(1)(c), 34(3), 34(4) and 3(7) of the 2019 Tariff Regulations provide as follows:

**“34. Interest on Working Capital: (1) The working capital shall cover:**

**(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:**

- (i) Receivables equivalent to 45 days of annual fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and



(iii) Operation and maintenance expenses, including security expenses for one month.”

“(3) 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 1<sup>st</sup> April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.”

“(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.”

“3. Definitions ...

(7) ‘**Bank Rate**’ means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;”

88. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Petitioner has considered the rate of IWC as 12.05%. The Rate of Interest considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, for 2020-21 has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) whereas 2021-22 onwards has been considered as 10.50% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon for Combined Asset, Asset-V and Asset-VI for the 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	Combined Asset				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M expenses for 1 month)	69.67	72.17	74.70	77.39	79.98
Maintenance Spares (15% of O&M Expenses)	125.41	129.91	134.46	139.29	143.97
Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	283.19	285.45	285.50	285.16	283.45
<b>Total Working Capital</b>	<b>478.26</b>	<b>487.53</b>	<b>494.67</b>	<b>501.84</b>	<b>507.40</b>



Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
<b>Interest of Working Capital</b>	<b>57.63</b>	<b>54.85</b>	<b>51.94</b>	<b>52.69</b>	<b>53.28</b>

(₹ in lakh)

<b>Asset-V</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
O&M Expenses (O&M Expenses for 1 month)	1.88	1.94	2.01	2.08	2.15
Maintenance Spares (15% of O&M Expenses)	3.38	3.50	3.62	3.74	3.88
Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	8.68	8.88	8.99	8.94	8.87
<b>Total Working Capital</b>	<b>13.93</b>	<b>14.31</b>	<b>14.62</b>	<b>14.77</b>	<b>14.90</b>
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
<b>Interest of Working Capital</b>	<b>1.68</b>	<b>1.61</b>	<b>1.53</b>	<b>1.55</b>	<b>1.56</b>

(₹ in lakh)

<b>Asset-VI</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
O&M Expenses (O&M expenses for 1 month)	1.88	1.94	2.01	2.08	2.15
Maintenance Spares (15% of O&M expenses)	3.38	3.50	3.62	3.74	3.88
Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	8.72	8.92	9.04	9.00	8.92
<b>Total Working Capital</b>	<b>13.98</b>	<b>14.36</b>	<b>14.67</b>	<b>14.82</b>	<b>14.95</b>
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
<b>Interest of Working Capital</b>	<b>1.68</b>	<b>1.62</b>	<b>1.54</b>	<b>1.56</b>	<b>1.57</b>

### Annual Fixed Charges of the 2019-24 Tariff Period

89. The transmission charges allowed for Combined Asset, Asset-V and Asset-VI for the 2019-24 tariff period are as follows:

(₹ in lakh)

<b>Combined Asset</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Depreciation	479.48	486.86	489.51	489.51	489.51
Interest on Loan	431.84	401.23	368.38	332.71	293.35
Return on Equity	498.28	506.38	509.45	509.45	509.45
Interest on Working Capital	57.63	54.85	51.94	52.69	53.28
O&M Expenses	836.04	866.04	896.43	928.62	959.79
<b>Total</b>	<b>2303.27</b>	<b>2315.36</b>	<b>2315.71</b>	<b>2312.98</b>	<b>2305.38</b>

(₹ in lakh)

<b>Asset-V</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Depreciation	16.26	16.90	17.36	17.36	17.36
Interest on Loan	13.84	13.22	12.45	11.21	9.92
Return on Equity	16.29	16.96	17.44	17.44	17.44
Interest on Working Capital	1.68	1.61	1.53	1.55	1.56



O&M Expenses	22.51	23.30	24.12	24.96	25.84
<b>Total</b>	<b>70.58</b>	<b>71.99</b>	<b>72.90</b>	<b>72.52</b>	<b>72.12</b>

(₹ in lakh)

<b>Asset-VI</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Depreciation	16.33	16.97	17.43	17.43	17.43
Interest on Loan	14.07	13.46	12.71	11.52	10.21
Return on Equity	16.35	17.03	17.51	17.51	17.51
Interest on Working Capital	1.68	1.62	1.54	1.56	1.57
O&M Expenses	22.51	23.30	24.12	24.96	25.84
<b>Total</b>	<b>70.95</b>	<b>72.37</b>	<b>73.31</b>	<b>72.97</b>	<b>72.56</b>

### **Filing Fee and Publication Expenses**

90. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

### **Licence Fee & RLDC Fees and Charges**

91. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner shall also be entitled for recovery of RLDC fee and charges in accordance with Regulation 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

### **Goods and Services Tax**

92. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further, additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory authorities, the same may be allowed to be recovered from the beneficiaries. The Petitioner has prayed to bill and recover GST on transmission charges separately



from the beneficiaries, if at any time GST on transmission is withdrawn from negative list at any time in future.

93. We have considered the submissions of the Petitioner. Since GST is not levied on transmission services at present, we are of the view that Petitioner's prayer is premature.

### **Security Expenses**

94. The Petitioner has submitted that security expenses for the transmission assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC.

95. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved security expenses from 1.4.2019 to 31.3.2024. Therefore, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. Accordingly, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

### **Capital Spares**

96. The Petitioner has sought reimbursement of capital spares at the end of tariff period. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

### **Sharing of Transmission Charges**

97. The Petitioner vide affidavit dated 28.7.2021 has submitted that the Commission vide order dated 21.1.2020 in Petition No. 311/TT/2020 had decided that in respect of Asset-II, Asset-III and Asset-IV, the transmission charges from COD up



to the actual charging of downstream system (i.e. 10.12.2018, 12.12.2018 and 10.12.2018 for Asset-II, III and IV respectively) shall be borne by MPPTCL and, thereafter, it will be shared under PoC mechanism. Also, the Commission had decided that transmission charges for Asset-V and Asset-VI shall be borne by MPPTCL up to COD of downstream transmission system under the scope of MPPTCL and thereafter shared under PoC mechanism. Further, the Petitioner has been raising bilateral bills on MPPTCL in respect of Asset-V and Asset-VI. MPPTCL has filed a Writ Petition before the Hon'ble High Court of Madhya Pradesh against the Commission's order dated 21.1.2020 in Petition No. 311/TT/2018. For Asset-V and Asset-VI, MPPTCL has not made any payment of transmission charges to the Petitioner so far.

98. In view of the above, the Petitioner has prayed to allow recovery of transmission charges from COD up to the actual charging of the downstream system from MPPTCL and thereafter, to be shared under PoC mechanism as allowed by the Commission vide order dated 21.01.2020 in Petition no. 311/TT/2018.

99. We have considered the submissions of the Petitioner and note that the Commission vide order dated 21.1.2020 in Petition No. 311/TT/2020 had approved COD of Asset-1, Asset-2, Asset-3, Asset-4 and Asset-5 (which have been nomenclature of Asset-II, Asset-III, Asset-IV, Asset-V and Asset-VI respectively in this petition). The relevant extracts of the said order are as follows:

*"75. The transmission charges in case of Asset-1 from 2.9.2018 (COD) to 9.12.2018 (one day before actual charging of downstream system) will be borne by the MPPTCL and thereafter from 10.12.2018 (Date of Power flow) onwards it will be shared under POC mechanism.*

*76. The transmission charges in case of Asset-2 from 2.9.2018 (COD) upto 11.12.2018 (one day before actual charging of downstream system) will be borne by the MPPTCL and thereafter from 12.12.2018 (Date of Power flow) onwards it will be shared under POC mechanism.*

*77. The transmission charges in case of Asset-3 from 14.10.2018 (COD) upto 9.12.2018 (one day before actual charging of downstream system) will be borne by the*





*MPPTCL and thereafter from 10.12.2018 (Date of Power flow) onwards it will be shared under POC mechanism.*

*78. The transmission charges in case of Asset-4 from 14.10.2018 (COD) upto commissioning of downstream transmission system under the scope of MPPTCL shall be borne by MPPTCL and thereafter it will be shared under POC mechanism.*

*79. The transmission charges in case of Asset-5 from 5.12.2018 (COD) upto commissioning of downstream network under the scope of MPPTCL will be borne by the MPPTCL and thereafter it will be shared under POC mechanism.”*

100. In line of the afore-stated decision, we are of the considered view that the transmission charges with respect to Asset-II to Asset-VI shall be shared as follows:

- a) In case of Asset-II, from 2.9.2018 (COD) up to 9.12.2018 (one day before actual charging of downstream system) to be borne by MPPTCL and thereafter from 10.12.2018 (date of power flow) onwards, to be shared under POC mechanism.
- b) In case of Asset-III, from 2.9.2018 (COD) up to 11.12.2018 (one day before actual charging of downstream system) to be borne by MPPTCL and thereafter from 12.12.2018 (date of power flow) onwards, to be shared under POC mechanism.
- c) In case of Asset-IV, from 14.10.2018 (COD) up to 9.12.2018 (one day before actual charging of downstream system) to be borne by MPPTCL and thereafter from 10.12.2018 (date of power flow) onwards, to be shared under POC mechanism.
- d) In case of Asset-V, from 14.10.2018 (COD) up to commissioning of downstream system under the scope of MPPTCL to be borne by MPPTCL and thereafter will be shared under POC mechanism.
- e) In case of Asset-VI, from 5.12.2018 (COD) up to commissioning of downstream system under the scope of MPPTCL to be borne by MPPTCL and thereafter will be shared under POC mechanism.

101. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of transmission charges





determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of the transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

102. We also note that MPPTCL has filed a Writ Petition before the Hon'ble High Court of Madhya Pradesh against the Commission's order dated 21.1.2020 in Petition No. 311/TT/2018. Accordingly, the sharing of transmission charges as mentioned above shall be subject to the outcome of the Writ Petition pending before Hon'ble High Court of Madhya Pradesh.

103. To summarise:

- a) The trued-up AFC approved for the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)	
Asset-I	
2018-19 (Pro-rata for 230 days)	2018-19
398.90	684.99

(₹ in lakh)				
Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI
2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 211 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 169 days)	2018-19 (Pro-rata for 117 days)
428.17	110.56	207.07	44.07	30.77

- b) AFC allowed for Combined Asset, Asset-V and Asset-VI for the 2019-24 tariff period in this order are as follows:

(₹ in lakh)					
Asset	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset	2303.27	2315.36	2315.71	2312.98	2305.38
Asset-V	70.58	71.99	72.90	72.52	72.12
Asset-VI	70.95	72.37	73.31	72.97	72.56



104. Annexure-I (Colly.) and Annexure-II (Colly.) given hereinafter shall form part of the order.

105. This order disposes of Petition No. 671/TT/2020 in terms of the above discussions and findings.

**sd/-**  
**(P. K. Singh)**  
**Member**

**sd/**  
**(Arun Goyal)**  
**Member**

**sd/-**  
**(I. S. Jha)**  
**Member**



<b>Asset-I</b>					<b>Annexure-I (Colly.)</b>					
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2014 Tariff Regulations				
Capital Expenditure as on COD		2017-18	2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Sub Station	2237.90	339.62	274.23	2851.75	5.28	-	-	-	127.13	143.33
PLCC	19.20	0.13	0.00	19.33	6.33	-	-	-	1.22	1.22
IT Equipment and software	21.19	5.78	2.82	29.79	5.28	-	-	-	1.27	1.50
<b>TOTAL</b>	<b>2278.30</b>	<b>345.53</b>	<b>277.05</b>	<b>2900.88</b>		-	-	-	<b>129.62</b>	<b>146.06</b>
				Average Gross Block (₹ in lakh)		-	-	-	2451.07	2762.36
				Weighted Average Rate of Depreciation (in %)		-	-	-	5.29	5.29

<b>Asset-II</b>										
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2014 Tariff Regulations					
Capital Expenditure as on COD		2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)	
Sub-station	2884.03	293.76	3177.80	5.28	-	-	-	-	160.03	
PLCC	17.09	0.17	17.27	6.33	-	-	-	-	1.09	
IT Equipment and software	33.28	13.27	46.55	5.28	-	-	-	-	2.11	
<b>TOTAL</b>	<b>2934.41</b>	<b>307.21</b>	<b>3241.62</b>		-	-	-	-	<b>163.23</b>	
				Average Gross Block (₹ in lakh)		-	-	-	-	3088.02
				Weighted Average Rate of Depreciation (in %)		-	-	-	-	5.29



<b>Asset-III</b>									
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2014 Tariff Regulations				
Capital Expenditure as on COD		2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Sub-station	468.68	68.40	537.08	5.28	-	-	-	-	26.55
PLCC	17.08	0.18	17.26	6.33	-	-	-	-	1.09
IT Equipment and software	20.20	7.97	28.18	5.28	-	-	-	-	1.28
<b>TOTAL</b>	<b>505.96</b>	<b>76.56</b>	<b>582.52</b>		-	-	-	-	<b>28.92</b>
			Average Gross Block (₹ in lakh)		-	-	-	-	544.24
			Weighted Average Rate of Depreciation (in %)		-	-	-	-	5.31

<b>Asset-IV</b>									
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2014 Tariff Regulations				
Capital Expenditure as on COD		2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Sub-station	1836.68	173.69	2010.37	5.28	-	-	-	-	101.55
IT Equipment and software	13.40	5.21	18.60	5.28	-	-	-	-	0.84
<b>TOTAL</b>	<b>1850.07</b>	<b>178.90</b>	<b>2028.97</b>		-	-	-	-	<b>102.39</b>
			Average Gross Block (₹ in lakh)		-	-	-	-	1939.52
			Weighted Average Rate of Depreciation (in %)		-	-	-	-	5.28



<b>Asset-V</b>									
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2014 Tariff Regulations				
Capital Expenditure as on COD		2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Sub Station	237.21	30.71	<b>267.92</b>	5.28	-	-	-	-	13.32
PLCC	8.49	0.07	<b>8.56</b>	6.33	-	-	-	-	0.54
IT Equipment and software	6.71	2.65	<b>9.36</b>	5.28	-	-	-	-	0.43
<b>TOTAL</b>	<b>252.42</b>	<b>33.43</b>	<b>285.85</b>		-	-	-	-	<b>14.29</b>
				Average Gross Block (₹ in lakh)	-	-	-	-	269.13
				Weighted Average Rate of Depreciation (in %)	-	-	-	-	5.31

<b>Asset-VI</b>									
2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2014 Tariff Regulations				
Capital Expenditure as on COD		2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Sub-station	244.38	24.71	<b>269.09</b>	5.28	-	-	-	-	13.56
PLCC	8.36	0.11	<b>8.47</b>	6.33	-	-	-	-	0.53
IT Equipment and software	6.69	2.67	<b>9.36</b>	5.28	-	-	-	-	0.42
<b>TOTAL</b>	<b>259.44</b>	<b>27.49</b>	<b>286.92</b>		-	-	-	-	<b>14.51</b>
				Average Gross Block (₹ in lakh)	-	-	-	-	273.18
				Weighted Average Rate of Depreciation (in %)	-	-	-	-	5.31



Combined Asset						Annexure-II (Colly.)				
2019-24	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2019 Tariff Regulations				
Capital Expenditure as on COD		2019-20	2020-21			2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Building	0.00	0.00	28.07	<b>28.07</b>	3.34	0.00	0.47	0.94	0.94	0.94
Sub Station	8577.00	174.61	74.46	<b>8826.07</b>	5.28	457.48	464.05	466.02	466.02	466.02
PLCC	53.86	3.75	6.64	<b>64.25</b>	6.33	3.53	3.86	4.07	4.07	4.07
IT Equipment and software	123.13	0.11	0.00	<b>123.24</b>	15.00	18.48	18.49	18.49	18.49	18.49
<b>TOTAL</b>	<b>8753.99</b>	<b>178.47</b>	<b>109.17</b>	<b>9041.63</b>		<b>479.48</b>	<b>486.86</b>	<b>489.51</b>	<b>489.51</b>	<b>489.51</b>
<b>Average Gross Block (₹ in lakh)</b>						8843.22	8987.04	9041.63	9041.63	9041.63
<b>Weighted Average Rate of Depreciation (in %)</b>						5.42	5.42	5.41	5.41	5.41



## Asset-V

2019-24 Capital Expenditure as on COD	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2019 Tariff Regulations				
		2019-20	2020-21			2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Sub Station	267.92	6.48	15.53	289.93	5.28	14.32	14.90	15.31	15.31	15.31
PLCC	8.56	0.01	1.66	10.23	6.33	0.54	0.60	0.65	0.65	0.65
IT Equipment and software	9.36	0.01	0.00	9.37	15.00	1.41	1.41	1.41	1.41	1.41
<b>TOTAL</b>	<b>285.85</b>	<b>6.50</b>	<b>17.19</b>	<b>309.54</b>		<b>16.26</b>	<b>16.90</b>	<b>17.36</b>	<b>17.36</b>	<b>17.36</b>
<b>Average Gross Block (₹ in lakh)</b>						289.10	300.94	309.54	309.54	309.54
<b>Weighted Average Rate of Depreciation (in %)</b>						5.63	5.62	5.61	5.61	5.61



### Asset-VI

2019-24	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per the 2019 Tariff Regulations				
		2019-20	2020-21			2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Capital Expenditure as on COD										
Sub-station	269.09	6.66	15.53	291.27	5.28	14.38	14.97	15.38	15.38	15.38
PLCC	8.47	0.02	1.66	10.15	6.33	0.54	0.59	0.64	0.64	0.64
IT Equipment and software	9.36	0.01	0.00	9.38	15.00	1.41	1.41	1.41	1.41	1.41
<b>TOTAL</b>	<b>286.92</b>	<b>6.69</b>	<b>17.19</b>	<b>310.80</b>		<b>16.33</b>	<b>16.97</b>	<b>17.43</b>	<b>17.43</b>	<b>17.43</b>
				<b>Average Gross Block (₹ in lakh)</b>		290.27	302.21	310.80	310.80	310.80
				<b>Weighted Average Rate of Depreciation (%)</b>		5.62	5.61	5.61	5.61	5.61

