CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

PETITION NO. 167/TT/2020

Coram:

Shri P. K. Pujari, Chairperson Shri I. S. Jha, Member Shri Arun Goyal, Member

Date of Order: 11.02.2021

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Combined Asset consisting of Asset-I: 400 kV D/C Solapur (STPP)-Solapur (PG) Transmission Line along with bay extension at Solapur (PG) Sub-station and Asset-II: Extension of 400/220 kV Solapur Sub-station—Augmentation of Sub-station by 1 x 315 MVA (3rd) Transformer (by shifting of 500 MVA Transformer from Wardha to Solapur) covered under "Transmission System for Solapur STPP (2x660 MW)" in the Western Region.

And in the matter of:

Power Grid Corporation of India Ltd., SAUDAMINI, Plot No-2, Sector-29, Gurgaon-122 001 (Harvana).

.....Petitioner

Versus

- Madhya Pradesh Power Management Company Ltd., Shakti Bhawan, Rampur, Jabalpur - 482008, Madhya Pradesh.
- Madhya Pradesh Power Transmission Company Ltd., Shakti Bhawan, Rampur, Jabalpur – 482008, Madhya Pradesh.



- Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd.,
 3/54, Press Complex, Agra-Bombay Road, Indore-452008, Madhya Pradesh.
- Maharashtra State Electricity Distribution Co. Ltd., Hongkong Bank Building, 3rd Floor, M.G. Road, Fort, Mumbai-400001, Maharashtra.
- Maharashtra State Electricity Transmission Co. Ltd., Prakashganga, 6th Floor, Plot No. C-19, E-Block, Bandra Kurla Complex, Bandra (East) Mumbai-400041, Maharashtra.
- Gujarat Urja Vikas Nigam Ltd., Sardar Patel, Vidyut Bhawan, Race Course Road, Vadodara-390007, Gujarat.
- 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 Ltd., Vidyut Bhawan, 66 kV Road, Near Secretariat Amli, Silvassa-396230.
- 10. Chhattisgarh State Power Transmission Co. Ltd., Office of the Executive Director (C&P), State Load Despatch Building, Dangania, Raipur-492013, Chhattisgarh.
- 11. Chhattisgarh State Power Distribution Co. Ltd. P.O. Sunder Nagar, Dangania, Raipur-492013 Chhattisgarh

....Respondents

For Petitioner : Shri S S Raju, PGCIL Shri A K Verma, PGCIL

Shri B. Dash, PGCIL



For Respondent : None.

<u>ORDER</u>

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as "the Petitioner"), a deemed transmission licensee, for truing-up of tariff of 2014-19 tariff period under Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of tariff of 1.4.2019 to 31.3.2024 tariff period under Regulation 8 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following assets under "Transmission System for Solapur STPP (2x660 MW)" in the Western Region (hereinafter referred to as 'the transmission project'):

Asset-I: 400 kV D/C Solapur (STPP)-Solapur (PG) Transmission Line along with bay extension at Solapur (PG) Sub-station; and

Asset-II: Extension of 400/220 kV Solapur Sub-station-Augmentation of Substation by 1 x 315 MVA (3rd) Transformer (by shifting of 500 MVA Transformer from Wardha to Solapur)

- 2. The Petitioner has made the following prayers:
 - "1) Allow the add cap for 2014-19 and 2019-24 tariff block as claimed as per Para 5 and 7 of the petition.
 - 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.
 - 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 the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 6 and 7 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 respondents 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 7.6 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 levied 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."

Background

- The brief facts of the case are as follows:
 - a) The Investment Approval for the transmission project was accorded by the Board of Directors of Petitioner Company vide their letter C/CP/Investment/Solapur dated 31.10.2013 at an estimated cost of ₹6332.00 lakh including IDC of ₹318.00 lakh based on June 2013 price level. The total approved apportioned cost for Asset-I and Asset-II is ₹4850.89 lakh and ₹1480.85 lakh respectively. The tariff from the date of commercial operation to 31.3.2019 for the assets was allowed vide order dated 30.5.2016 in Petition No. 415/TT/2014. The scope of work falling under the transmission project "Transmission System for Solapur STPP 2x660 MW" in the Western Region is as under:

Transmission line

i. Solapur (STPP)-Solapur (PG) 400 kV D/C (Quad) line – 12 km

Sub-station

- Extension of 400/220 kV Solapur Sub-station Augmentation of Sub-station by 1X315 MVA (3rd) Transformer (by shifting of 500 MVA Transformer from Wardha to Solapur)
- b) The transmission assets were scheduled to be put into commercial operation on 31.10.2015 while Assets-I and II were put into commercial operation on 3.4.2015 and 2.11.205 respectively. Thus, there was no time over-run in case of transmission assets.
- c) The Commission vide its order dated 30.5.2016 in Petition No. 415/TT/2014 had approved the capital cost of the transmission assets for the 2014-19 tariff period as under:

(₹ in lakh)

	Apportioned	Admitted			ACE			Total
Asset	Approved Capital Cost (FR)	Capital Cost as on COD	2015-16 2016-17 201			2018- 19	Total	Capital Cost as on 31.3.2019
	4850.89	3012.75**	899.59	562.11	25.00	0.00	1486.70	4499.45
II	1480.85	507.00*	352.07	501.56	0.00	0.00	853.63	1360.63
Total	6331.74	3519.75	1251.66	1063.67	25.00	0.00	2340.33	5860.08

^{*}After adjustment of accrual IDC discharged after COD

#After adjustment of excess initial spares of ₹41.03 lakh under transmission line head

d) The annual fixed charges approved by the Commission vide order dated 30.5.2016 in Petition No. 415/TT/2014 and trued-up tariff claimed by the Petitioner in this petition is as under:

Asset	Particulars	2015- 16	2016- 17	2017- 18	2018- 19
Asset-I	Annual Fixed Charges (AFC) approved vide order dated 30.5.2016	747.62	863.73	899.66	886.11
	AFC claimed by the Petitioner based on truing up in the instant petition	755.89	861.50	894.38	891.74
Asset-	AFC approved vide order dated 30.5.2016	134.69	405.83	451.85	452.40
II	AFC claimed by the Petitioner based on truing up in the instant petition	135.94	373.34	399.31	418.58



- 4. The Respondents are distribution licensees and power departments, which are procuring transmission service from the Petitioner, mainly beneficiaries of the Western Region.
- 5. The Petitioner has served the petition on the Respondents and notice of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments / objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. Reply to the petition has been filed by Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No.1, vide affidavit dated 13.2.2020 and has raised issues of grossing up of Return on Equity (RoE), effect of GST and proposed Additional Capital Expenditure (ACE) during 2015-16 in Asset-I and 2016-17 in Asset-II. Reply has also been filed by Maharashtra State Electricity Distribution Company Ltd. (MSEDCL), Respondent No. 4, vide affidavit dated 19.3.2020, in which issues of grossing up of RoE, proposed ACE for the 2019-24 tariff period, capital cost of PLCC, calculation of Interest on Loan (IoL) and the effect of GST and additional taxes. The Petitioner vide affidavit dated 11.5.2020 has filed rejoinder to the reply of MPPMCL and vide affidavit dated 13.5.2020 has filed rejoinder to the reply of MSEDCL. The issues raised by MPPMCL, MSEDCL, and the clarifications given by the Petitioner are dealt in relevant paragraphs of this order. None of the other respondents/ beneficiaries, except MPPMCL and MSEDCL, have filed reply though a general notice dated 12.3.2020 was posted on the Commission's website, directing the beneficiaries/ Respondents to file reply.

- 6. This order is issued after considering the submissions made by the Petitioner in the petition dated 6.1.2020, Petitioner's affidavits dated 12.3.2020, 20.5.2020 and 10.6.2020, the replies of MPPMCL and MSEDCL and the Petitioner's rejoinders to replies of MPPMCL and MSEDCL.
- 7. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.

TRUING UP OF ANNUAL FIXED CHARGES OF THE 2014-19 PERIOD

8. The Petitioner has claimed the following trued up tariff for the transmission assets for the period from COD to 31.3.2019:

(₹ in lakh)

Asset-I								
Particulars	2015-16 (pro-rata 364 days)	2016-17	2017-18	2018-19				
Depreciation	185.12	220.85	236.42	240.36				
Interest on Loan	207.28	228.09	221.64	204.80				
Return on Equity	206.09	247.32	265.49	270.82				
Interest on Working Capital	21.29	23.84	24.73	24.82				
O&M Expenses	136.11	141.40	146.10	150.94				
Total	755.89	861.50	894.38	891.74				

(₹ in lakh)

	Asset-II									
Particulars	2015-16 (pro-rata 151 days)	2016-17	2017-18	2018-19						
Depreciation	15.92	50.37	58.74	64.33						
Interest on Loan	18.11	54.70	55.37	55.00						
Return on Equity	16.67	54.03	63.56	70.11						
Interest on Working Capital	5.57	14.69	15.48	16.13						
O&M Expenses	79.67	199.55	206.16	213.01						
Total	135.94	373.34	399.31	418.58						

9. The Petitioner has claimed the following Interest on Working Capital (IWC) for the transmission assets for the period from COD to 31.3.2019:



Asset-I								
Particulars	2015-16 (pro-rata 364 days)	2016-17	2017-18	2018-19				
O&M Expenses	11.40	11.78	12.18	12.18				
Maintenance Spares	20.53	21.21	21.92	22.64				
Receivables	126.67	143.58	149.06	148.62				
Total Working Capital	158.60	176.57	183.16	183.84				
Rate of Interest (%)	13.50	13.50	13.50	13.50				
Interest on working capital	21.29	23.84	24.73	24.82				

(₹ in lakh)

Asset-II									
Particulars	2015-16 (pro-rata 151 days)	2016-17	2017-18	2018-19					
O&M Expenses	16.09	16.63	17.18	17.75					
Maintenance Spares	28.97	29.93	30.92	31.95					
Receivables	54.92	62.22	66.55	69.76					
Total Working Capital	99.98	108.78	114.65	119.46					
Rate of Interest (%)	13.50	13.50	13.50	13.50					
Interest on working capital	5.57	14.69	15.48	16.13					

The details of FR apportioned approved capital cost, actual expenditure upto 10. date of commercial operation and actual ACE incurred during the 2014-19 tariff period as claimed by the Petitioner are as follows:

	Apportioned	Actual Capital		Actual ACE				
Assets	Approved Capital Cost	Cost as on COD	2015-16	2016-17	2017-18	2018-19	Cost as on 31.3.2019	
Asset-I	4850.89	3053.78*#	867.59	499.37	153.83	2.07	4570.01	
Asset-II	1480.85	506.99*	352.03	104.29	212.63	2.61	1184.18	
Total	6331.74	3560.77	867.59	499.37	153.83	2.07	5765.62	

^{*}After adjustment of accrual IDC discharged after COD. # After adjustment of excess initial spares of ₹41.03 lakh under Transmission Line head

Interest During Construction (IDC)

11. The Petitioner has submitted certified statements in respect of actual discharge of IDC up to date of commercial operation as well as accrual IDC discharged after the date of commercial operation as under:

(₹ in lakh)

Asset	COD	IDC as per Auditor certificate	IDC discharged upto COD	IDC discharged during 2015-16	IDC discharged during 2016- 17
1	3.4.2015	32.00	0.00	32.00	0.00
II	2.11.2015	29.00	23.36	0.04	5.60
Total		61.00	23.36	32.04	5.60

12. The Petitioner has requested to allow IDC on the basis of cash outflow. The Petitioner has further submitted that the accrued IDC discharged during 2015-16 and 2016-17 has not been included in ACE for the respective years as given in the Auditor Certificates dated 31.7.2019. IDC claimed by the Petitioner is allowed.

Incidental Expenditure During Construction (IEDC)

- 13. The Petitioner has claimed IEDC for the transmission assets as per the tabulation given below. The Petitioner has claimed IEDC as on COD, which is within the percentage of hard cost as indicated in the abstract cost estimate. Further, the Petitioner submitted that entire IEDC claimed as per the Auditor Certificate dated 31.7.2019 is on cash basis and is paid up to the COD of the transmission assets.
- 14. Hence, the entire amount of IEDC has been allowed. Accordingly, IEDC considered for the purpose of tariff calculation is as under:

Assets	IEDC claimed as per Auditor Certificate	IEDC considered as on COD	IEDC discharged Up to COD	
Asset-I	23.00	23.00	23.00	
Asset-II	63.39	63.39	63.39	
Total	86.39	86.39	86.39	

Initial Spares

15. The Petitioner has claimed the following Initial Spares for the transmission assets:

Asset	Particulars	Plant & Machinery (P&M) cost (excluding IDC and IEDC, Land cost and cost of civil works) (₹ in lakh)	Initial Spares (₹ in lakh)	Ceiling as per the Regulations 2014 (%)	Initial Spares worked out (₹ in lakh)	Excess Initial Spares (₹ in lakh)
	Transmission Line	3491.98	73.16	1	34.53	38.63
'	Brownfield Sub-station	1002.40	40.27	6	61.41	-
II	Brownfield Sub-station	834.38	10.61	6	52.58	1

16. However, the Initial Spares as per the Auditor Certificate dated 31.7.2019 are as under:

(₹ in lakh)

Asset	Particulars	Plant & Machinery (P&M) cost (excluding IDC and IEDC, Land cost and cost of civil works)	Initial Spares
	Transmission Line	3491.98	73.16
'	Brownfield Sub-station	753.14	10.61
П	Brownfield Sub-station	966.79	40.27

17. It is observed that the Initial Spares claimed by the Petitioner for the substations in case of Assets-I and II are different from the Initial Spares given in the Auditor Certificate dated 31.7.2019. The Initial Spares approved by the Commission vide order dated 30.5.2016 in Petition No. 415/TT/2014 are as under:

Asset	Particulars	P&M cost as on cut- off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Ceiling as per the Regulations 2014 (%)	Initial spares worked out (₹ in lakh)	Excess initial spares (₹ in lakh)	Initial Spares approved (₹ in lakh)
,	Transmission Line	3253.88	73.16	1	32.13	41.03	32.13
'	Brownfield Sub-station	967.58	10.61	6	61.08	1	10.61
II	Brownfield Sub-station	1175.34	40.27	6	72.45	1	40.27

18. The Petitioner's claim of Initial Spares in the instant petition is the same as in Petition No. 415/TT/2014. It is observed from the Form 7 that un-discharged Initial Spares are claimed as ACE as and when they are discharged. As per the 2014 Tariff Regulations, the ceiling limit for Initial Spares for the Transmission Line and Brownfield Sub-station is 1% and 6% respectively. The Initial Spares worked out as per the 2014 Tariff Regulations for the transmission assets are as under:

(₹ in lakh)

Asset	Particulars	P&M cost as on cut- off date (₹ in lakh) (A)	Initial Spares claimed (₹ in lakh) (B)	Ceiling as per the Regulations 2014 (%) (C)	Initial spares worked out (₹ in lakh) D=[(A- B)*C/(100- C)]	Excess initial spares (₹ in lakh) E=B-C (if B>C)
	Transmission Line	3491.98	73.16	1	34.53	38.63
'	Brownfield Sub-station	753.14	10.61	6	47.40	-
II	Brownfield Sub-station	966.79	40.27	6	59.14	-

19. The Petitioner has submitted during the hearing that Initial Spares of ₹12.41 lakh and ₹7.52 lakh were discharged up to the COD of Asset-I and Asset-II and balance initial spares were discharged in the subsequent years. The Petitioner has also submitted in the petition that the excess Initial Spares were reduced from the ACE during 2016-17. However, as per the Form-7 submitted for the 2014-19 period,

the Petitioner has claimed the Initial Spares without deducting the excess Initial Spares. The excess Initial Spares, as worked out above based on the details submitted by the Petitioner, have been deducted for Asset-I from ACE in 2015-16 and 2016-17.

Capital Cost

20. The capital cost of the transmission assets has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations. The Commission vide order dated 30.5.2016 in Petition No. 415/TT/2014 had approved the transmission tariff for the transmission assets for the 2014-19 period based on the admitted capital cost as on date of commercial operation and projected ACE during the 2014-19 period as shown under:

(₹ in lakh)

Asset	Apportioned Approved Capital Cost	Admitted Capital Cost as on COD*	Admitted ACE for 2015-16	Admitted ACE for 2016-17	Admitted ACE for 2017-18	Admitted Capital Cost as on 31.3.2019
Asset-I	4850.89	3012.75	899.59	562.11	25.00	4499.45
Asset-II	1480.85	507.00	352.07	501.56	0.00	1360.63
Total	6331.74	3519.75	1251.66	1063.67	25.00	5860.08

^{*}After adjustment of Accrual IDC discharged after COD

21. The details of the capital cost as on date of commercial operation now approved after adjustment of IDC are as under:

Asset	Capital Cost claimed as on COD* (A)	Un-discharged IDC as on COD (B)	Capital Cost allowed as on COD (C) = (A-B)
Asset-I	3085.78	32.00	3053.78
Asset-II	512.64	5.64	506.99

	Total	3598.42	37.64	3560.77
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^{*} Includes discharged portion of Initial Spares only

Additional Capital Expenditure (ACE)

22. The Commission vide order dated 30.5.2016 in Petition No. 415/TT/2014 had allowed ACE of ₹1486.70 lakh for Asset-I and ₹853.63 lakh for Asset-II during the 2014-19 period towards balance and retention payments for the works executed within the cut-off date. The Petitioner has claimed the following ACE during the 2014-19 period based on actual expenditure:

(₹ in lakh)

	ACE as	per the Aud	ACE approved				
Asset	2015-16	2016-17	2017-18	2018-19	Total	vide order dated 30.5.2016	
Asset-I	867.59	499.37	153.83	2.07	1522.86	1486.70	
Asset-II	352.03	104.29	212.63	2.61	671.56	853.63	

23. The Petitioner has claimed ACE after adjustments of accrual IDC discharged and disallowed initial spares as under:

(₹ in lakh)

Asset	2015-16	2016-17	2017-18	2018-19	Total ACE claimed for the 2014-19 period
Asset-I	899.58	460.74	153.83	2.07	1516.22
Asset-II	352.06	109.89	212.63	2.61	667.19

24. The Petitioner has claimed ACE towards undischarged liabilities for works executed within the cut-off date under Regulation 14(3)(v) of the 2014 Tariff Regulations. However, the Petitioner has not deducted the excess Initial Spares disallowed as claimed in the instant petition from ACE during 2016-17 and, therefore, ACE for the 2014-19 period has been allowed after deducting the excess Initial Spares as under:



Particulars	2015-16	2016-17	2017-18	2018-19	Total
	Α	sset-l			
ACE claimed by the Petitioner in the instant petition	899.58	460.74	153.83	2.07	1516.22
Less: Excess Initial Spares	38.22	0.41	0.00	0.00	38.63
ACE allowed in the instant petition	861.36	460.33	153.83	2.07	1477.59
	As	sset-II			
ACE claimed by the Petitioner in the instant petition	352.06	109.89	212.63	2.61	667.19
Less: Excess Initial Spares	0.00	0.00	0.00	0.00	0.00
ACE allowed in the instant petition	352.06	109.89	212.63	2.61	667.19

25. We have considered the capital cost up to 31.3.2019 for Asset-I and Asset-II for the computation of tariff after adjustments related to IDC, IEDC, excess initial spares and ACE as under:

(₹ in lakh)

Asset	Admitted Capital Cost		Total Capital Cost as on			
	as on COD	2015-16	2016-17	2017-18	2018-19	31.3.2019
Asset-I	3053.78	861.36	460.33	153.83	2.07	4531.38
Asset-II	506.99	352.06	109.89	212.63	2.61	1184.18
Total	3560.77	1213.42	570.22	366.46	4.68	5715.56

Debt-Equity ratio

26. The Petitioner has claimed Debt-Equity ratio of 70:30 as on the date of commercial operation. However, the Commission vide order dated 30.5.2016 in Petition No. 415/TT/2014 has approved the Debt-Equity ratio of 70.73:29.27 for Asset-I and 70.78:29.22 for Asset-II as on the date of commercial operation. Further, the Petitioner has not substantiated or provided any justification for variation in the Debt-Equity ratio claimed in the instant petition vis-à-vis the Debt-Equity ratio approved by the Commission vide order dated 30.5.2016 in Petition No. 415/TT/2014, even though the Petitioner, in the instant petition, has claimed IDC amount of ₹32.00 lakh as

approved by the Commission in the said order. Therefore, the Debt-Equity ratio has been considered in accordance with Regulation 19 of the 2014 Tariff Regulations and as approved vide order dated 30.5.2016 in Petition No. 415/TT/2014. The Debt-Equity ratio of 70:30 has been considered for ACE allowed during the 2014-19 period in accordance with Regulation 19(3) of the 2014 Tariff Regulations. In view of the above, the details of the debt and equity as on date of commercial operation and as on 31.3.2019 considered for the purpose of truing up of tariff for the 2014-19 tariff period for the transmission assets are as under:

Particulars	Capital Cost as on COD (₹ in lakh)	(%)	Additional Capital Expenditure during 2014-19 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2019 (₹ in lakh)	(%)				
			Asset-I							
Debt	2160.05	70.73	1034.31	70.00	3194.36	70.49				
Equity	893.74	29.27	443.28	30.00	1337.02	29.51				
Total	3053.79	100.00	1477.59	100.00	4531.38	100.00				
	Asset-II									
Debt	358.83	70.78	474.03	70.00	832.87	70.33				
Equity	148.16	29.22	203.16	30.00	351.31	29.67				
Total	506.99	100.00	677.19	100.00	1184.18	100.00				

Interest on Loan (IoL)

27. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest. IoL is allowed based on actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations. Trued up IoL allowed in respect of the transmission assets is as under:

				12 111 1411111
	Asset-I			
Particulars	2015-16 (pro-rata 364 days)	2016-17	2017-18	2018-19
Gross Normative Loan	2160.05	2763.00	3085.23	3192.92

Asset-I								
Particulars	2015-16 (pro-rata 364 days)	2016-17	2017-18	2018-19				
Cumulative Repayments upto Previous Year	0.00	181.23	397.14	628.61				
Net Loan-Opening	2160.05	2581.77	2688.09	2564.31				
Additions	602.95	322.23	107.68	1.45				
Repayment during the year	181.23	215.91	231.46	235.41				
Net Loan-Closing	2581.77	2688.09	2564.31	2330.35				
Average Loan	2370.91	2634.93	2626.20	2447.33				
Weighted Average Rate of Interest on Loan (%)	8.8315	8.6625	8.4612	8.4082				
Interest on Loan	208.24	228.25	222.21	205.78				

	Asset-II			
Particulars	2015-16 (pro-rata 151 days)	2016-17	2017-18	2018-19
Gross Normative Loan	358.83	605.27	682.20	831.04
Cumulative Repayments upto Previous Year	0.00	14.56	61.64	117.07
Net Loan-Opening	358.83	590.71	620.55	713.97
Additions	246.44	76.92	148.84	1.83
Repayment during the year	14.56	47.08	55.43	61.01
Net Loan-Closing	590.71	620.55	713.97	654.78
Average Loan	474.77	605.63	667.26	684.38
Weighted Average Rate of Interest on Loan (%)	9.3350	9.1370	8.4266	8.1991
Interest on Loan	18.29	55.34	56.23	56.11

28. The details of IoL approved vide order dated 30.5.2016 in Petition No. 415/TT/2014, IoL claimed by the Petitioner in the instant petition and trued up IoL allowed in the instant order is given below:

Asset	Particular	2015-16 (Pro rata)	2016-17	2017-18	2018-19
	Approved vide order dated 30.5.2016 in Petition No. 415/TT/2014	209.70	236.49	234.70	215.31
Asset-I	Claimed by the Petitioner in the instant petition	207.28	228.09	221.64	204.80
	Allowed after true-up in this order	208.24	228.25	222.21	205.78
	Approved vide order dated 30.5.2016 in Petition No. 415/TT/2014	18.34	68.87	79.32	72.79
Asset-II	Claimed by the Petitioner in the instant petition	18.11	54.70	55.37	55.00
	Allowed after true-up in this order	18.29	55.34	56.23	56.11

Return on Equity (RoE)

29. The Petitioner is entitled to RoE for the transmission assets in terms of Regulation 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed the following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax rate (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	21.02	19.624
2015-16	21.38	19.715
2016-17	21.34	19.705
2017-18	21.34	19.705
2018-19	21.55	19.758

30. MPPMCL has submitted that the Petitioner has grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 and has not placed on record the assessment orders for 2016-17 and 2017-18. For 2018-19, it has grossed up RoE and has not claimed the effective tax rate based on actual taxes paid for 2018-19. In response, the Petitioner vide affidavit dated 11.5.2020 has submitted that effective

rate of tax considered for 2015-16 is based on assessment order issued by Income Tax authorities for the purpose of grossing up of RoE rate. The effective rates of tax considered for 2016-17 and 2017-18 are based on the Income Tax returns filed for the purpose of grossing up of RoE rate of respective years. Further, for 2018-19, effective tax rate is calculated based the applicable MAT rate (i.e. MAT 18.50% + Surcharge 12.00% + Cess 4%) for the purpose of grossing up of RoE rate. The Petitioner has also submitted a copy of the Assessment Orders for 2014-15 to 2016-17.

- 31. MSEDCL has submitted that Petitioner has submitted the effective tax rate only for 2014-15 and 2015-16. However, the actual tax paid on income from other business activities of the Petitioner are required to be excluded for the computation of the effective tax rate which has not been done by the Petitioner. Thus, in accordance with the above Regulation, income from other business stream during the tariff block 2014-19 shall not be considered in calculation of effective tax rate. MSEDCL has further submitted that the Petitioner had submitted grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 and the Petitioner had not submitted the assessment order for 2014-15, 2015-16, 2016-17 and 2017-18. For 2018-19, the claimed grossed up RoE is not on the basis of actual taxes paid for the year.
- 32. In response to MSEDCL's reply, the Petitioner vide affidavit dated 13.5.2020 has clarified that it has submitted effective tax rates for all the years of the 2014-19 tariff period. Further, the Petitioner submitted that during 2014-15 to 2018-19, the Company/ Petitioner was liable to pay tax under the provisions of Section 115JB of the Income Tax Act, 1961, i.e., the entire income of the Petitioner was liable to be taxed at Minimum Alternate Tax ('MAT') rate. Therefore, income from all streams of

business is taxable at a uniform tax rate. The Petitioner has submitted that while computing the adjusted book profits liable to be taxed as income under the MAT provisions, no specific deduction/ exemption/ relief was claimed/ allowed for any specific stream of income. Hence, inclusion/ exclusion of non-transmission income does not impact the computation of effective tax rate used for the purpose of grossing up of RoE. The Petitioner has submitted that the Income Tax assessment of the Petitioner was completed and assessment orders have been issued by the Income Tax Department for the years 2014-15, 2015-16 and 2016-17 and that the Income Tax returns have been filed with the Income Tax Department for 2017-18 and 2018-19. Basis of year-wise effective tax rate and grossed up RoE for 2014-19 period is mentioned as a part of the instant petition. Further, Assessment Orders of 2014-15 and 2015-16 were submitted in Petition No. 20/TT/2020 and copy of Assessment Order of financial year 2016-17 has been submitted along with the rejoinder.

33. We have considered the contentions of MPPMCL and MSEDCL and the clarifications given by the Petitioner. As regards MPPMCL's contention that the grossed up rate of RoE for the period 2016-17 to 2018-19 is not based on the MAT rates approved by the Income Tax Authorities, it is observed that the effective rate of tax considered by the Petitioner for 2014-15, 2015-16 and 2016-17 are based on Assessment Orders issued by Income Tax authorities and the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed for the purpose of grossing up the RoE rate of respective years. In view of the clarification given by the Petitioner, we are of the view that there is no merit in the contention of MPPMCL.

- 34. As regards MSEDCL's contention that the actual tax paid on income from other business activities of the Petitioner are required to be excluded for the computation of the effective tax rate and income from other business stream should not be considered in calculation of effective tax rate, it is observed that the entire income of the Petitioner is liable to be taxed at MAT rate and therefore income from all streams of business are taxable at a uniform tax rate. Further, it appears that the Petitioner has neither claimed nor allowed any exemption under the MAT provisions and therefore it does not impact the computation of effective tax rate used for the purpose of grossing up of RoE. As regards the other contention of MSEDCL that Petitioner has not submitted the income tax assessment order for the years 2014-15, 2015-16, 2016-17 and 2017-18 and that the grossed up RoE claimed for the year 2018-19 is not on the basis of actual taxes paid for the year, it is observed that the Income Tax assessment of the Petitioner was completed and assessment orders were issued for the years 2014-15, 2015-16 and 2016-17 and returns have been filed for 2017-18 and 2018-19 and the Petitioner has filed the Assessment Orders of 2014-15 and 2015-16 and copy of Assessment Order of the year 2016-17. Thus, in view of the clarification given by the Petitioner, there is no merit in the contentions of MSEDCL.
- 35. The Commission, *vide* order dated 27.4.2020 in Petition No. 274/TT/2019, had arrived at the effective tax rate for the Petitioner based on the notified MAT rates. The relevant extract of the order dated 27.4.2020 in Petition No. 274/TT/2019 are as under:

"26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to

some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. 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 transmission customers / DICs as the case may be on year to year basis.

27. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up of rate of return on equity:

Year	Notified MAT rates (inclusive of surcharge & cess)	Effective tax (in %)
2014-15	20.961	20.961
2015-16	21.342	21.3 4 2
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

36. The MAT rates considered in order dated 27.4.2020 in Petition No.274/TT/2019 are considered 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. Accordingly, the grossed up RoE rate is as follows:

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	Base rate of RoE (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	20.9605	15.50	19.610
2015-16	21.3416	15.50	19.705
2016-17	21.3416	15.50	19.705
2017-18	21.3416	15.50	19.705
2018-19	21.5488	15.50	19.758

37. Trued up RoE is trued up on the basis of the MAT rate applicable for the respective years for the transmission assets and is allowed as under:

(₹ in lakh)

Asset-I					
Particulars	2015-16	2016-17	2017-18	2018-19	



Order in Petition No.167/TT/2020

	(pro-rata 364 days)			
Opening Equity	893.74	1152.15	1290.25	1336.40
Additions	258.41	138.10	46.15	0.62
Closing Equity	1152.15	1290.25	1336.40	1337.02
Average Equity	1022.95	1221.20	1313.32	1336.71
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.705	19.705	19.705	19.758
Return on Equity	200.47	240.64	258.80	264.10

Asset-II						
Particulars	2015-16 (pro-rata 151 days)	2016-17	2017-18	2018-19		
Opening Equity	148.16	253.78	286.74	350.53		
Additions	105.62	32.97	63.79	0.78		
Closing Equity	253.78	286.74	350.53	351.31		
Average Equity	200.97	270.26	318.64	350.92		
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500		
MAT Rate for respective year (%)	21.342	21.342	21.342	21.549		
Rate of Return on Equity (%)	19.705	19.705	19.705	19.758		
Return on Equity	16.34	53.26	62.79	69.33		

^{38.} The details of RoE approved vide order dated 30.5.2016 in Petition No. 415/TT/2014, RoE claimed by the Petitioner in the instant petition and the trued up

RoE allowed in the instant order is shown in the table below:

Asset	Particular	2015-16 (Pro rata)	2016-17	2017-18	2018-19
	Approved vide order dated 30.5.2016 in Petition No. 415/TT/2014	199.79	243.54	260.90	261.64
Asset-I	Claimed by the Petitioner in the instant petition	206.09	247.32	265.49	270.82
	Allowed after true-up in this order	200.47	240.64	258.80	264.10
Asset-II	Approved vide order dated 30.5.2016 in Petition No. 415/TT/2014	16.30	64.83	79.66	79.66
	Claimed by the Petitioner in the instant petition	16.67	54.03	63.56	70.11



Allowed after true-up in this order	16.34	53.26	62.79	69.33
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Depreciation

39. The Petitioner's claim of depreciation in the instant petition is higher than the depreciation allowed for the transmission assets in the order dated 30.5.2016 in Petition No. 415/TT/2014. The Petitioner has not given any justification for claiming higher depreciation and has not made any specific prayer for allowing higher depreciation in this petition. It is observed that the transmission assets were put into commercial operation during the 2014-19 period and the tariff from the respective dates of commercial operation to 31.3.2019 was allowed vide order dated 30.5.2016 in Petition No. 415/TT/2014. Similar issue had come up in Petition No. 19/TT/2020 wherein the Commission vide order dated 9.5.2020 decided as under:

"31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012 and 9.5.2013 in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014-19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations(the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred up to 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the sub-station up to 31.3.2019while

truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations."

40. In line with the above said order dated 9.5.2020 in Petition No. 19/TT/2020, the depreciation has been considered @5.28% for IT Equipment as part of the sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations. The calculation of weighted average rate of depreciation (WAROD) is placed in Annexure-1. The Gross Block during the tariff period 2014-19 has been depreciated at WAROD (Annexure-1). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and the trued up depreciation allowed during the 2014-19 tariff period is as under:

(₹ in lakh)

Asset-I						
Particulars	2015-16 (pro-rata 364 days)	2016-17	2017-18	2018-19		
Opening Gross Block	3053.79	3915.15	4375.48	4529.31		
Additional Capitalisation	861.36	460.33	153.83	2.07		
Closing Gross Block	3915.15	4375.48	4529.31	4531.38		
Average Gross Block	3484.47	4145.32	4452.40	4530.35		
Freehold Land	0.00	0.00	0.00	0.00		
Weighted Average Rate of Depreciation (%)	5.23	5.21	5.20	5.20		
Balance useful life of the asset	34	34	33	32		
Elapsed life	0	0	1	2		
Aggregated Depreciable Value	3136.02	3730.79	4007.16	4077.31		

Combined Depreciation during the year	181.23	215.91	231.46	235.41
Cumulative Depreciation	181.23	397.14	628.61	864.02
Remaining Aggregate Depreciable Value	2954.79	3333.64	3378.55	3213.30

Asset-II						
Particulars	2015-16 (pro-rata 151 days)	2016-17	2017-18	2018-19		
Opening Gross Block	506.99	859.05	968.94	1181.57		
Additional Capitalisation	352.06	109.89	212.63	2.61		
Closing Gross Block	859.05	968.94	1181.57	1184.18		
Average Gross Block	683.02	914.00	1075.26	1182.88		
Freehold Land	0.00	0.00	0.00	0.00		
Weighted Average Rate of Depreciation (%)	5.17	5.15	5.15	5.16		
Balance useful life of the asset	23	23	22	21		
Elapsed life	0	0	1	2		
Aggregated Depreciable Value	614.72	822.60	967.73	1064.59		
Combined Depreciation during the year	14.56	47.08	55.43	61.01		
Cumulative Depreciation	14.56	61.64	117.07	178.08		
Remaining Aggregate Depreciable Value	600.16	760.95	850.66	886.50		

41. The details of depreciation approved vide order dated 30.5.2016 in Petition No. 415/TT/2014, depreciation claimed by the Petitioner in the instant petition and trued up depreciation allowed in the instant order is shown in the table below:

Assets	Particular	2015-16 (Pro rata)	2016-17	2017-18	2018-19
	Approved vide order dated 30.5.2016 in Petition No. 415/TT/2014	180.57	218.41	233.12	233.53
Asset-I	Claimed by the Petitioner in the instant petition	185.12	220.85	236.42	240.36
	Allowed after true-up in this order	181.23	215.91	231.46	235.41
Asset-II	Approved vide order dated 30.5.2016 in Petition No.	14.60	57.15	70.05	70.05

415/TT/2014				
Claimed by the Petitioner in the instant petition	15.92	50.37	58.74	64.33
Allowed after true-up in this order	14.56	47.08	55.43	61.01

Operation & Maintenance Expenses (O&M Expenses)

42. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. Norms specified in respect of the elements covered in the transmission assets are as under:

Particulars	Norms for 2015-16	Norms for 2016-17	Norms for 2017-18	Norms for 2018-19	Asset-I	Asset-II
Bays						
400 kV Sub-station (Three 400 kV bays at Solapur Sub-station)	₹ 62.30 lakh/ bay	₹ 64.37 lakh/ bay	₹ 66.51 lakh/ bay	₹ 68.71 lakh/ bay	2	1
Three 220 kV bays at Solapur Substation	₹ 43.61 lakh/ bay	₹ 45.06 lakh/ bay	₹ 46.55 lakh/ bay	₹ 48.10 lakh/ bay	0	3
Transmission Line						
400 kV D/C (Bundled (4 or more sub-conductor) Solapur (STPP) - Solapur (PG) T/L (Line length 11.17 km)	₹ 1.097 lakh/ km	₹ 1.133 lakh/ km	₹ 1.171 lakh/ km	₹ 1.210 lakh/ km	11.17	

43. We have considered the submissions of the Petitioner. The O&M Expenses are allowed for the transmission assets as per the norms specified in the 2014 Tariff Regulations are as under:

	2015-16 (Pro rata 364 days)	2016-17	2017-18	2018-19
Asset-I				

	2015-16 (Pro rata 364 days)	2016-17	2017-18	2018-19
Asset-I				
O&M Expenses (₹ in lakh)	136.11	141.40	146.10	150.94
	2015-16 (Pro rata 151 days)	2016-17	2017-18	2018-19
Asset-II				
O&M Expenses (₹ in lakh)	79.68	199.55	206.16	213.01

44. The details of the O&M Expenses approved vide order dated 30.5.2016 in Petition No. 415/TT/2014, claimed by the Petitioner in the instant petition and trued up O&M Expenses allowed in the instant order is shown in the table below:

(₹ in lakh)

Assets	Particular	2015-16 (Pro rata)	2016-17	2017-18	2018-19
	Approved vide order dated 30.5.2016 in Petition No. 415/TT/2014	136.48	141.40	146.10	150.94
Asset-I	Claimed by the Petitioner in the instant petition	136.11	141.40	146.10	150.94
	Allowed after true-up in this order	136.11	141.40	146.10	150.94
Accet II	Approved vide order dated 30.5.2016 in Petition No. 415/TT/2014	79.90	199.55	206.16	213.01
Asset-II	Claimed by the Petitioner in the instant petition	79.67	199.55	206.16	213.01
	Allowed after true-up in this order	79.68	199.55	206.16	213.01

Interest on Working Capital (IWC)

45. IWC for the 2014-19 tariff period has been worked out as per the methodology provided in the Regulation 28 of the 2014 Tariff Regulations and is allowed as under:

Asset-I					
Particulars	2015-16 (Pro rata 364 days)	2016-17	2017-18	2018-19	
O & M Expenses	11.40	11.78	12.18	12.58	



Maintenance Spares	20.53	21.21	21.92	22.64
Receivables	125.21	141.63	147.17	146.80
Total Working Capital	157.14	174.62	181.26	182.02
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest on working capital	21.10	23.57	24.47	24.57

Asset-II						
Particulars	2015-16 (Pro rata 151 days)	2016-17	2017-18	2018-19		
O & M Expenses	16.09	16.63	17.18	17.75		
Maintenance Spares	28.97	29.93	30.92	31.95		
Receivables	54.29	61.64	66.00	69.26		
Total Working Capital	99.36	108.20	114.10	118.96		
Rate of Interest (%)	13.50	13.50	13.50	13.50		
Interest on working capital	5.53	14.61	15.40	16.06		

46. The details of IWC approved vide order dated 30.5.2016 in Petition No. 415/TT/2014, IWC claimed by the Petitioner in the instant petition and trued up IWC allowed in the instant order is shown in the table below:

Assets	Particular	2015-16 (Pro rata)	2016-17	2017-18	2018-19
	Approved vide order dated 30.5.2016 in Petition No. 415/TT/2014	21.07	23.89	24.84	24.69
Asset-I	Claimed by the Petitioner in the instant petition	21.29	23.84	24.73	24.82
	Allowed after true-up in this order	21.10	23.57	24.47	24.57
	Approved vide order dated 30.5.2016 in Petition No. 415/TT/2014	5.55	15.42	16.66	16.89
Asset-II	Claimed by the Petitioner in the instant petition	5.57	14.69	15.48	16.13
	Allowed after true-up in this order	5.53	14.61	15.40	16.06

Approved Annual Fixed Charges of the 2014-19 Tariff Period

47. The trued up annual fixed charges for the transmission assets for the 2014-19 tariff period are shown as under:

(₹ in lakh)

Particulars	2015-16 (Pro rata 364 days)	2016-17	2017-18	2018-19
Depreciation	181.23	215.91	231.46	235.41
Interest on Loan	208.24	228.25	222.21	205.78
Return on Equity	200.47	240.64	258.80	264.10
Interest on Working Capital	21.10	23.57	24.47	24.57
O&M Expenses	136.11	141.40	146.10	150.94
Total (Asset-I)	747.15	849.78	883.04	880.80

(₹ in lakh)

				<u> </u>
Particulars	2015-16 (Pro rata 151 days)	2016-17	2017-18	2018-19
Depreciation	14.56	47.08	55.43	61.01
Interest on Loan	18.29	55.34	56.23	56.11
Return on Equity	16.34	53.26	62.79	69.33
Interest on Working Capital	5.53	14.61	15.40	16.06
O&M Expenses	79.68	199.55	206.16	213.01
Total (Asset-II)	134.40	369.83	396.01	415.53

48. Accordingly, the Annual Transmission Charges approved order vide dated 30.5.2016 in Petition No. 415/TT/2014, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is shown in the table below:

Assets	Particular	2015-16 (Pro rata)	2016-17	2017-18	2018- 19
	Approved vide order dated 30.5.2016 in Petition No. 415/TT/2014	747.62	863.73	899.66	886.11
Asset-I	Claimed by the Petitioner in the instant petition	755.89	861.50	894.38	891.74
	Allowed after true-up in this order	747.15	849.78	883.04	880.80
Asset-II	Approved vide order dated 30.5.2016 in Petition No. 415/TT/2014	134.69	405.83	451.85	452.40
7.0001 11	Claimed by the Petitioner in the instant petition	135.94	373.34	399.31	418.58

Allowed after true-up in this order	134.40	369.83	396.01	415.53
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Determination of Annual Fixed Charges of the 2019-24 Tariff Period

49. The Petitioner has claimed the following transmission charges for the Combined Asset for the 2019-24 tariff period:

(₹ in lakh)

Combined Asset									
Particulars 2019-20 2020-21 2021-22 2022-23 2023-2									
Depreciation	305.11	305.41	305.29	295.79	295.79				
Interest on Loan	235.50	209.79	184.35	159.29	134.54				
Return on Equity	324.55	324.87	324.87	324.87	324.87				
Interest on Working Capital	28.71	28.94	29.12	29.20	29.36				
O&M Expenses	360.18	372.95	385.96	399.67	413.12				
Total	1254.05	1241.96	1229.59	1208.82	1197.68				

50. The Petitioner has claimed the following IWC for the Combined Asset for the 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	24.50	25.36	26.24	27.17	28.09
Maintenance Spares	44.09	45.65	47.24	48.91	50.56
Receivables	145.69	144.29	142.45	139.56	137.50
Total Working Capital	214.28	215.30	215.93	215.64	216.15
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on working capital	28.71	28.94	29.12	29.20	29.36

Effective Date of Commercial Operation (E-COD)

51. The Petitioner has stated that E-COD of the combined asset works out to be 17.5.2015. E-COD has been worked out based on the trued-up capital cost as on 1.4.2019 of the transmission assets as follows:

Assets	Trued-up Capital Cost as on 1.4.2019 (₹ in lakh)	COD	No. of days from COD of Asset from COD of Project	Weight of cost	Weighted days				
Asset-I	4531.38	3.4.2015	213	79.28%	168.87				
Asset-II	1184.19	2.11.2015	0	20.72%	0.00				
Total	5715.56			100.00%	168.87				
	Effective COD (latest COD less weighted days) - 17.5.2015								

Weighted Average Life (WAL) of the Assets

52. The Weighted Average Life (WAL) has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as specified in the 2019 Tariff Regulations. Accordingly, WAL of the assets put into commercial operation during the 2014-19 period has been worked out as 31 years as under:

Particulars	Useful Life (in years) (A)	Capital Cost as admitted on 31.3.2019 (₹ in lakh) (B)	Weighted cost (₹ in lakh) (C)	Weighted Avg. Life of Asset (in years) (D) = (C)/(B)
Building Civil Works & Colony	25	335.97	8399.25	
Transmission Line	35	3453.02	120855.82	
Sub Station	25	1740.95	43523.75	
PLCC	15	121.50	1822.50	
IT Equipment (Incl. Software)	6.67	64.12	427.68	
Total		5715.56	175029.00	30.62 years (rounded off to 31 years)

Capital Cost

- 53. Regulation 19 of the 2019 Tariff Regulations provides as under:
 - "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;
- (I) 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 ash disposal and utilization including handling and transportation facility;
- (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 up to 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 decapitalised 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."
- 54. The Petitioner has a claimed capital cost of ₹4570.01 lakh as on 31.3.2019 for Asset-I and ₹1184.18 lakh for Asset-II as per the Auditor Certificates dated 31.7.2019. The total capital cost for Asset-I and Asset-II thus comes to ₹5754.19 lakh. However, the capital cost of the Combined Asset has been worked out as ₹5715.56 lakh as on 31.3.2019 and the same has been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

55. Regulation 25(1) of the 2019 Tariff Regulations provides as under:



- "25 (1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:
 - (a) 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;
 - (b) Change in law or compliance of any existing law;
 - (c) Deferred works relating to ash pond or ash handling system in the original scope of work;
 - (d) Liability for works executed prior to the cut-off date;
 - (e) Force Majeure events;
 - (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and
 - (g) Raising of ash dyke as a part of ash disposal system."
- 56. The Petitioner has claimed ACE of ₹11.43 lakh for the 2019-24 period for Asset-I under Regulations 25(1)(a) and 25 (1)(d) of the 2019 Tariff Regulations on account of un-discharged liability towards final payment for works executed within cut-off date as under:

A 4	Capital	1.10,001.04 /1.02					
Asset	Cost as on 1.4.2019	2019-20	2020-21	2021-22	2022-23	2023-24	Cost as on 31.3.2024
I	4570.01	11.43	0.00	0.00	0.00	0.00	4581.44
II	1184.20	0.00	0.00	0.00	0.00	0.00	1184.20
Total	5754.21	11.43	0.00	0.00	0.00	0.00	5765.64

- 57. MSEDCL has submitted that ACE of ₹11.43 lakh has been proposed for 2019-20 without proper details and justification for the same. In response, the Petitioner vide affidavit dated 13.5.2020 has submitted that estimated ACE for ₹11.43 lakh has been claimed for 2019-20 under Regulation 25(1)(a) and 25(1)(d) of the 2019 Tariff Regulations on account of un-discharged liabilities due to contractual exigencies for works executed within the cut-off date.
- 58. The Petitioner has submitted the details of ACE incurred/ projected to be incurred after cut-off date as follows:



Srl. No.	Work Description	Agency	ACE in 2019-20 (₹ in lakh)	Reasons for expenditure beyond cut- off date
1	Land Compensation in 400 kV Solapur Solapur TL	Farmers	8.75	As per GR of Maharashtra State 2010 later revised in 2017, Land Compensation for tower base (and for corridor also as per revised GR 2017) has to be paid for all the transmission lines. For payment of Land Compensation, revenue department has to verify the land details and ownership details for each and every tower as per their records and to finalize the compensation amount for each farmer as per total area of land and type of land involved. However, Land Compensation assessment from revenue department not received till date, hence payments could not be made earlier. Rigorous follow ups are being made with revenue department for finalization of Land Compensation and is expected to be completed during 2019-20
2	Civil Works	Various Agencies	2.68	Payments against minor repair works were withheld. Later, after completion of punch points payments released during 2018-19. Presently security deposits and few withhold payments against minor punch points pending which are expected to be disbursed in 2019-20
	Total		11.43	

- 59. The Petitioner has claimed ACE as un-discharged liabilities for works executed within the cut-off date under Regulation (25)(1)(d) of the 2019 Tariff Regulations. The total capital expenditure as on 31.3.2024 is within the apportioned approved capital cost of ₹6331.74 lakh. Therefore, ACE claimed by the Petitioner has been allowed for the purpose of determination of transmission tariff for the 2019-24 period.
- 60. The details of the approved ACE and the capital cost as on 31.3.2024 is as follows:

	Capital		Admitted ACE					
Asset	1.4.2019	2019-20	2020-21	2021-22	2022-23	2023-24	Cost as on 31.3.2024	
Asset-I	4531.38	11.43	0.00	0.00	0.00	0.00	4542.81	
Asset-II	1184.18	0.00	0.00	0.00	0.00	0.00	1184.18	
Total	5715.56	11.43	0.00	0.00	0.00	0.00	5726.99	

Debt-Equity ratio

- 61. Regulation 18 of the 2019 Tariff Regulations provides as under:
 - "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.
- (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."
- 62. The details of the debt and equity considered for the purpose of tariff for the 2019-24 period are as under:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	Additional Capital Expenditure truing 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	4027.23	70.46	8.00	70.00	4035.23	70.46
Equity	1688.33	29.54	3.43	30.00	1691.76	29.54
Total	5715.56	100.00	11.43	100.00	5726.99	100.00

Return on Equity (RoE)

63. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide as under:

"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 runof 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 cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system; 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.

- 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."
- 64. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. MSEDCL has submitted that the Petitioner has calculated ROE considering the MAT @18.5% for the whole period under consideration but it has been already declared that for 2019-20, the MAT rate is 15%. Thus, it would change the Effective Tax Rate. This would in turn affect the grossed-up ROE rate and thereby the entire truing-up for the period under consideration. In response, the Petitioner has submitted that the ROE has been calculated @18.782% after grossing up ROE with MAT rate of 17.472% (15% plus applicable Surcharge and Health and Education Cess) based on the formula given in Regulation 31(2) of the 2019 Tariff Regulations. Therefore, the Petitioner requested to allow the cost and tariff as claimed in the instant petition.
- 65. We have considered the submissions of the Petitioner and MSEDCL. 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 the Combined Asset is as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Opening Equity	1688.33	1691.76	1691.76	1691.76	1691.76	
Additions	3.43	0.00	0.00	0.00	0.00	
Closing Equity	1691.76	1691.76	1691.76	1691.76	1691.76	
Average Equity	1690.05	1691.76	1691.76	1691.76	1691.76	
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500	
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472	
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782	
Return on Equity	317.42	317.74	317.74	317.74	317.74	

Interest on Loan (IoL)

- 66. Regulation 32 of the 2019 Tariff Regulations provides as under:
 - "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.

- (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."
- Average Rate of interest shall be considered but the Petitioner has considered the rate of IoL on annual basis for the whole period. This has increased the tariff of the 2019-24 tariff period. Hence, IoL may be allowed only after prudence check. The Petitioner in response, has submitted that while calculating the tariff, the weighted average rate of interest on loan is used mentioned in Form 9E on annual basis for the whole period under consideration. Therefore, the Petitioner has requested to allow the cost and tariff as claimed in the instant petition.
- 68. We have considered the submissions of the Petitioner and MSEDCL. The weighted average rate of IoL has been considered on the basis of 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 worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the 2019-24 period for the Combined Asset is as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	4027.23	4035.23	4035.23	4035.23	4035.23
Cumulative Repayments upto Previous Year	1042.10	1345.17	1648.55	1951.93	2255.30
Net Loan-Opening	2985.13	2690.06	2386.68	2083.31	1779.93
Additions	8.00	0.00	0.00	0.00	0.00

Repayment during the year	303.07	303.38	303.38	303.38	303.38
Net Loan-Closing	2690.06	2386.68	2083.31	1779.93	1476.55
Average Loan	2837.59	2538.37	2234.99	1931.62	1628.24
Weighted Average Rate of Interest on Loan (%)	8.3888	8.3713	8.3771	8.3833	8.3860
Interest on Loan	238.04	212.49	187.23	161.93	136.54

Depreciation

- 69. Regulation 33 of the 2019 Tariff Regulations provides as under:
 - "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 there of 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 31st 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 decapitalized asset during its useful services."
- 70. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD) (as placed in Annexure-2). WAROD has been worked out after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100 per cent depreciable. The depreciation has been worked out

considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed for the Combined asset is as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	5715.56	5726.99	5726.99	5726.99	5726.99
Additional Capitalisation	11.43	0.00	0.00	0.00	0.00
Closing Gross Block	5726.99	5726.99	5726.99	5726.99	5726.99
Average Gross Block	5721.28	5726.99	5726.99	5726.99	5726.99
Freehold Land	0.00	0.00	0.00	0.00	0.00
Weighted Average Rate of Depreciation (WAROD)	5.30	5.30	5.30	5.30	5.30
Balance useful life at the beginning of the year	28	27	26	25	24
Elapsed Life	3	4	5	6	7
Aggregate Depreciable value	5155.56	5160.71	5160.71	5160.71	5160.71
Combined Depreciation during the year	303.07	303.38	303.38	303.38	303.38
Aggregated Cumulative Depreciation	1345.17	1648.55	1951.93	2255.30	2558.68
Remaining Aggregated Depreciable Value	3810.39	3512.16	3208.78	2905.40	2602.03

Operation & Maintenance Expenses (O&M Expenses)

71. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as under:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24					
Norms for sub-s	Norms for sub-station Bays (₹ lakh per bay)									
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	16.08	16.64	17.23	17.83	18.46					
Norms for Trans	sformers (₹ lakh j	per MVA)								
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	0.245	0.254	0.263	0.272	0.282					
Norms for AC a	Norms for AC and HVDC lines (₹ lakh per km)									

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
Norms for HVDC stations					
HVDC Back- to-Back stations (Rs lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back- to-Back station (₹ lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913

500 kV Rihand-Dadri HVDC bipole scheme (₹ lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (₹ lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (₹ lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath- Agra HVDC bipole scheme (₹ 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 (2000 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 ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of ±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 ±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.

- (4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up."
- 72. The O&M Expenses claimed by the Petitioner for the various elements included in the Combined Asset for the 2019-24 period are as under:

	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station Bays					
3 No of 400 kV bays at					
Solapur Sub-station	96.45	99.84	103.35	106.98	110.73
3 No of 220 kV bays at					
Solapur Sub-station	67.53	69.90	72.36	74.88	77.52
1 no 500 MVA Transformer at					
Solapur	179.00	185.50	192.00	199.00	205.50
Transmission line					
400kV D/C Bundled (4 or					
more sub-conductors)					
Solapur (STPP) - Solapur	14.77	15.28	15.82	16.38	16.94
(PG) (11.17 km)					
PLCC (2% of ₹121.50 lakh)	2.43	2.43	2.43	2.43	2.43
Total O&M Expenses (₹ in	360.18	372.95	385.96	399.67	413.12
lakh)	300.10	372.93	303.90	339.07	713.12

73. We have considered the submission of the Petitioner. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 Tariff Regulation

@2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulation and the 2019 Tariff Regulations and the norms for sub-station has been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The relevant portions of the order dated 24.1.2021 in Petition No.126/TT/2020 are extracted hereunder:

"103. Thus, although PLCC equipment is a communication system, it has been considered as a part of sub-station, as it is used both for protection and communication. Therefore, we are of the considered view that rightly, it was not considered for separate O&M Expenses while framing norms of O&M for 2019-24 tariff period. While specifying norms for bays and transformers, O&M Expenses for PLCC have been included within norms for O&M Expenses for sub-station. Norms of O&M Expenses @2% of the capital cost in terms of Regulation 35(4) of the 2019 Tariff Regulations have been specified for communication system such as PMU, RMU, OPGW etc. and not for PLCC equipment."

"105. In our view, granting of O&M Expenses for PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations under the communication system head would tantamount to granting O&M Expenses twice for PLCC equipment as PLCC equipment has already been considered as part of the sub-station. Therefore, the Petitioner's prayer for grant of O&M Expenses for the PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations is rejected.

106. The principle adopted in this petition that PLCC is part of sub-station and accordingly no separate O&M Expenses is admissible for PLCC equipment in the 2019-24 tariff period under Regulation 35(4) of the 2019 Tariff Regulations shall be applicable in case of all petitions where similar claim is made by the Petitioner. As already mentioned, the Commission, however, on the basis of the claim made by the Petitioner has inadvertently allowed O&M Expenses for PLCC equipment @2% of its original project cost, which is applicable for other "communication system", for 2019-24 period in 31 petitions given in Annexure-3 of this order. Therefore, the decision in this order shall also be applicable to all the petitions given in Annexure-3. Therefore, PGCIL is directed to bring this decision to the notice of all the stakeholders in the 31 petitions given in Annexure-3 and also make revised claim of O&M Expenses for PLCC as part of the sub-station at the time of truing up of the tariff allowed for 2019-24 period in respective petitions."

Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.

74. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and are as under:

	2019-20	2020-21	2021- 22	2022- 23	2023- 24	
O&M Expenses						
Sub-station Bays						
3 No of 400 kV bays at Solapur	Sub-station					
Norms (₹ lakh/Bay)	60.3	62.3	64.37	66.51	68.71	
3 No of 220 kV bays at Solapur	Sub-station					
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.1	
1 no 500 MVA Transformer at	Solapur					
400 kV						
Capacity (MVA)	500	500	500	500	500	
Norms (₹ lakh/MVA)	0.358	0.371	0.384	0.398	0.411	
Transmission line						
400 kV D/C Bundled (4 or more Line (11.17 km)	400 kV D/C Bundled (4 or more sub-conductors) Solapur (STPP) - Solapur (PG) Transmissio Line (11.17 km)					
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517	
Total O&M Expense (₹ in lakh)	357.75	370.52	383.53	397.24	410.69	

Interest on Working Capital (IWC)

- 75. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations provide as under:
 - "34. Interest on Working Capital
 - (1)...
 - (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
 - i. Receivables equivalent to 45 days of 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 1st 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;"
- 76. 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 rate of IWC considered is 12.05%.
- 77. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. ROI considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, ROI for 2020-21 onwards has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of the working capital and interest thereon allowed are as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	29.81	30.88	31.96	33.10	34.22
Maintenance Spares	53.66	55.58	57.53	59.59	61.60
Receivables	153.05	151.76	150.27	148.86	147.01
Total Working Capital	236.52	238.21	239.76	241.55	242.84

Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	28.50	26.80	26.97	27.17	27.32

Annual Fixed Charges for the 2019-24 Tariff Period

78. The transmission charges allowed for the transmission assets for the 2019-24 tariff period are summarised as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	303.07	303.38	303.38	303.38	303.38
Interest on Loan	238.04	212.49	187.23	161.93	136.54
Return on Equity	317.42	317.74	317.74	317.74	317.74
Interest on Working Capital	28.50	26.80	26.97	27.17	27.32
O & M Expenses	357.75	370.52	383.53	397.24	410.69
Total	1244.78	1230.93	1218.84	1207.46	1195.67

Filing Fee and the Publication Expenses

79. 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

80. 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 & charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for the 2019-24 period.

Security Expenses

- 81. 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 Interest on Working Capital. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.
- 82. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. It is observed that the Petitioner has already filed the Petition No. 260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

Goods and Services Tax

83. 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.

- 84. MPPMCL has submitted that the demand of the Petitioner is premature and need not be considered at this juncture. In response, the Petitioner has submitted that currently transmission of electricity by an electric transmission utility is exempted from GST. Hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately.
- 85. MSEDCL has submitted that the Petitioner has demanded to bill and recover GST on Transmission Charges separately from the Respondents, if GST on transmission is levied at any rate in future. Further, Petitioner has also demanded that 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. MSEDCL has submitted that the demand of the Petitioner at this stage is pre-mature. In response, the Petitioner has submitted that currently transmission of electricity by an electric transmission utility is exempted from GST, hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately.

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

Capital Spares

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

Sharing of Transmission Charges

- 88. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.
- 89. To summarise, the trued-up Annual Fixed Charges allowed for the transmission assets for the 2014-19 tariff period are as under:

(₹ in lakh)

Asset	2015-16 (Pro rata)	2016-17	2017-18	2018-19
Annual Fixed Charges for Asset-I	747.15	849.78	883.04	880.80
Annual Fixed Charges for Asset-II	134.40	369.83	396.01	415.53

The Annual Fixed Charges allowed for the Combined Asset for the 2019-24 tariff period in this order are as under:



(₹ in lakh)

Combined Asset	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	1244.78	1230.93	1218.84	1207.46	1195.67

90. This order disposes of Petition No. 167/TT/2020.

Sd/ Sd/ Sd/
(Arun Goyal) (I. S. Jha) (P. K. Pujari)
Member Member Chairperson

ANNEXURE-1

DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION FOR THE 2014-19 PERIOD

Asset-I

Petition No.:	167/TT/2020											
Period	2014-19 True-u	р								ANNEXUR	E-1	
2014-19	Admitted ACE Capital Cost as (₹ in lakh)					Admitted Capital	Rate of Depreciati	Annual Depreciation as per Regulations (₹ in lakh)				
Capital Expenditure	on 1.4.2014 / COD (₹ in lakh)	2015-16	2016-17	2017-18	2018-19	Cost as on 31.3.2019 (₹ in lakh)	on as per Regulation s	2015-16	2016-17	2017-18	2018-19	
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	
Building Civil Works & Colony	68.15	92.79	54.85	23.57	0.59	239.95	3.34%	3.83	6.29	7.60	8.00	
Transmission Line	2734.44	377.50	340.28	0.57	0.23	3453.02	5.28%	154.34	173.29	182.29	182.31	
Sub Station	195.48	353.69	59.02	117.39	1.13	726.71	5.28%	19.66	30.55	35.21	38.34	
PLCC	26.04	37.07	6.18	12.30	0.12	81.71	6.33%	2.82	4.19	4.78	5.17	
IT Equipment (Incl. Software)	29.68	0.31	0.00	0.00	0.00	29.99	5.28%	1.58	1.58	1.58	1.58	
Total	3053.79	861.36	460.33	153.83	2.07	4531.38	Total	182.23	215.91	231.46	235.41	
Average Gross Block (₹ in lakh)									4145.32	4452.40	4530.35	
Weighted Average Rate of Depreciation									5.21%	5.20%	5.20%	

Asset-II

Petition No.:	167/TT/2020					•	•					
Period	2014-19 True-u	o								ANNEXUR	E-1	
2014-19	Admitted Capital Cost as	pital Cost as (₹ in lakh) Capital						Annual Depreciation as per Regulations (₹ in lakh)				
Capital Expenditure	on 1.4.2014 / COD (₹ in lakh)	2015-16	2016-17	2017-18	2018-19	Cost as on 31.3.2019 (₹ in lakh)	on as per Regulation s	2015-16	2016-17	2017-18	2018-19	
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	
Building Civil Works & Colony	33.87	39.63	9.49	12.64	0.39	96.02	3.34%	1.79	2.61	2.98	3.20	
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	
Sub Station	417.93	302.67	97.83	193.59	2.22	1014.24	5.28%	30.06	40.63	48.32	53.49	
PLCC	21.43	9.76	2.20	6.40	0.00	39.79	6.33%	1.67	2.04	2.32	2.52	
IT Equipment (Incl. Software)	33.76	0.00	0.37	0.00	0.00	34.13	5.28%	1.78	1.79	1.80	1.80	
Total	506.99	352.06	109.89	212.63	2.61	1184.18	Total	35.30	47.08	55.43	61.01	
Average Gross Block (₹ in lakh									914.00	1075.26	1182.88	
Weighted Average Rate of Depreciation									5.15%	5.15%	5.16%	

ANNEXURE-2

DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION FOR THE 2019-24 PERIOD

Petition No.:	167/TT/2020												
Period	2019-24 Tariff											ANNEXUR	E-2
2019-24	Combined Admitted Capital			ojected A0 (₹ in lakh)			Admitted Capital Cost	Rate of Depreciatio	Ar	nnual Depre	ciation as pe (₹ in lakh)	r Regulation	ıs
Capital Expenditure	Cost as on 1.4.2019 (₹ in lakh)	2019-20	119-20 2020-21 2021-22 2022-23 2023-24	as on 31 3 2024	n as per Regulations	2019-20	2020-21	2021-22	2022-23	2023-24			
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	335.97	0.00	0.00	0.00	0.00	0.00	335.97	3.34%	11.22	11.22	11.22	11.22	11.22
Transmission Line	3453.02	11.43	0.00	0.00	0.00	0.00	3464.45	5.28%	182.62	182.92	182.92	182.92	182.92
Sub Station	1740.95	0.00	0.00	0.00	0.00	0.00	1740.95	5.28%	91.92	91.92	91.92	91.92	91.92
PLCC	121.50	0.00	0.00	0.00	0.00	0.00	121.50	6.33%	7.69	7.69	7.69	7.69	7.69
IT Equipment (Incl. Software)	64.12	0.00	0.00	0.00	0.00	0.00	64.12	15.00%	9.62	9.62	9.62	9.62	9.62
Total	5715.56	11.43	0.00	0.00	0.00	0.00	5726.99	Total	303.07	303.38	303.38	303.38	303.38
Average Gross Block (₹ in lakh									5721.28	5726.99	5726.99	5726.99	5726.99
Weighted Average Rate of Depreciation								Depreciation	5.30%	5.30%	5.30%	5.30%	5.30%