CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 327/TT/2020

Coram:

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

Date of Order: 19.02.2021

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 of **Asset-A1**: 400/220 kV, 1X315 MVA Transformer at Mapusa (ICT III) Sub-station along with 2 nos. 220 kV line bays, **Asset-B1**: 400/220 kV 1X500 MVA Transformer at Navsari Sub-station, **Asset-B2(a)**: 1 no. 400 kV line bays at 765/400 kV Indore Sub-station, **Asset-B2(b)**: 1 no. 400 kV line bays at 765/400 kV Indore Sub-station and **Asset-B3**: 2 nos. 220 kV line bays at 400/220 kV Pirana Sub-station under "Augmentation of Transformer and Bays in Western Region".

And in the matter of:

Power Grid Corporation of India Ltd., "Saudamini", Plot No. 2, Sector 29, Gurgaon-122001, Haryana.

....Petitioner

Vs

- Madhya Pradesh Power Management Company Ltd., Shakti Bhawan, Rampur, Jabalpur-482 008
- 2. Madhya Pradesh Power Transmission Company Ltd., Shakti Bhawan, Rampur, Jabalpur-482 008.
- Madhya Pradesh Audyogik Kendra,
 Vikas Nigam (Indore) Ltd.,
 3/54, Press Complex, Agra-Bombay Road, Indore-452008.



- Maharashtra State Electricity Distribution Co. Ltd., Hongkong Bank Building, 3rd Floor, M.G. Road, Fort, Mumbai-400 001.
- Maharashtra State Electricity Transmission Co. Ltd., Prakashganga, 6th Floor, Plot No. C-19, E-Block, Bandra Kurla Complex, Bandra (East) Mumbai-400 051.
- Gujarat Urja Vikas Nigam Ltd.,
 Sardar Patel Vidyut Bhawan,
 Race Course Road, Vadodara-390 007
- 7. Electricity Department, Government of Goa, Vidyut Bhawan, Panaji, Near Mandvi Hotel, Goa-403 001
- 8. Electricity Department,
 Administration of Daman & Diu,
 Daman-396210.
- 9. DNH Power Distribution Corporation Ltd., Vidyut Bhawan, 66 kV Road, Near Secretariat Amli, Silvassa-396 230.
- Chhattisgarh State Power Transmission Co. Ltd.,
 State Load Despatch Building,
 Dangania, Raipur-492013.
- Chhattisgarh State Power Distribution Co. Ltd.,
 P. O. Sunder Nagar, Dangania, Raipur,
 Chhattisgarh-492 013.

... Respondents

For Petitioner : Shri S. S. Raju, PGCIL

Shri A. K. Verma, PGCIL Shri B. Dash, PGCIL

For Respondents : None

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd. (hereinafter referred to as "the Petitioner"), a deemed transmission licensee, for truing-up of the transmission tariff for the 2014-19 period under the Central Electricity



Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and determination of tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following assets under Augmentation of Transformer and Bays in Western Region" (hereinafter referred to as "the transmission project"):

Asset-A1: 400/220 kV, 1X315 MVA Transformer at Mapusa (ICT III) Sub-station along with 2 nos. 220 kV line bays;

Asset-B1: 400/220 kV 1X500 MVA Transformer at Navsari Sub-station; Asset-

B2(a): 1 no. 400 kV line bays at 765/400 kV Indore Sub-station; **Asset-B2(b)**: 1 no. 400 kV line bays at 765/400 kV Indore Sub-station; and

Asset-B3: 2 nos. 220 kV line bays at 400/220 kV Pirana Sub-station.

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

- "1) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 10.2 and 11.1 above.
- 2) 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 10.2 and 11.1 above for respective block.
- 3) 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.
- 4) Allow the Initial Spare for the entire project.
- 5)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 respondents.



- 6) 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 11.1 above.
- 7) Allow the Petitioner to claim the capital spares at the end of tariff block as per actual.
- 8) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate 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

- 3. The brief facts of the case are as under:
 - a. The Investment Approval (IA) and expenditure sanction for the transmission project was accorded by the Board of Directors of the Petitioner company vide Memorandum No C/CP/WR-240 dated 4.6.2012 with an estimated cost of ₹6551 lakh including an IDC of ₹227 lakh at February 2012 price level. Further, Revised Cost Estimate (RCE) for the transmission project was accorded by Board of Directors of the Petitioner vide letter dated 9.12.2014 for ₹9771 lakh including an IDC of ₹322 lakh based on February 2014 price level.
 - b. The transmission tariff of Asset A-1 for the 2014-19 tariff period was approved vide order dated 22.2.2016 in Petition No. 86/TT/2015. The transmission tariff for the 2014-19 tariff period of Assets-B1, B2(a), B2(b) and B3 was allowed vide order dated 23.5.2016 in Petition No. 109/TT/2014.
 - c. The scope of works under the transmission project is as under:

Sub-stations

- a) Installation of 400/220 kV 1X315 MVA Transformer at Mapusa Substation along with 2 nos 220 kV line bays;
- b) Installation of 400/220 kV 1X500 MVA transformer at Navsari Substation;
- c) 2 Nos. 400 kV line bays at 765/400 kV Indore Sub-station;
- d) 2 Nos. 220 kV line bays at 400/220 kV Pirana Sub-station;



- d. The entire scope of the work is covered under the transmission project "Augmentation of Transformer and Bays in Western Region" is covered under the instant petition.
- e. Asset-A1 was put into commercial operation on 1.11.2013 during the 2009-14 tariff period and the trued-up tariff was allowed vide order dated 22.2.2016 in Petition No. 86/TT/2015. Assets-B1, B2(a), B2(b) and B3 were put into commercial operation on 10.7.2014, 9.8.2014, 6.9.2014 and 21.3.2015 respectively, during the 2014-19 tariff period and the final tariff for said assets was allowed vide order dated 23.5.2016 in Petition No. 109/TT/2014. The time overrun in case of Asset-B2(a), Asset-B2(b) and Asset B3 was condoned by the Commission, whereas the time over-run in case of Asset-B1 was not condoned in the order dated 23.5.2016 in Petition No. 109/TT/2014.
- f. The details of the petitions (order dated 22.2.2016 in Petition No. 86/TT/2015 and order dated 23.5.2016 in Petition No. 109/TT/2014) in which tariff for the transmission assets was determined and their nomenclature is given here under:

SI. No.	Description of the asset	Asset nomenclature in in Petition Nos. 86/TT/2015 and 109/TT/2014	Asset nomenclature in instant petition
1	400/220 kV, 1X315 MVA Transformer at Mapusa (ICT III) Sub-station along with 2 nos. 220 kV line bays	Asset	Asset-A1
2	400/220 kV 1X500 MVA Transformer at Navsari Sub-station	Asset-1	Asset-B1
3	1 no. 400 kV line bays at 765/400 kV Indore Substation	Asset-2(a)	Asset-B2(a)
4	1 no. 400 kV line bays at 765/400 kV Indore Substation	Asset-2(b)	Asset-B2(b)
5	2 nos. 220 kV line bays at 400/220 kV Pirana Substation	Asset-3	Asset-B3



g. The details of commercial operation along with time over-run of the assets covered in the instant petition are as follows:

Asset	SCOD	COD	Time over-run
A 1	3.6.2014	1.11.2013	Nil
B1	3.6.2014	10.7.2014	1 month and 7 days
B2(a)	3.6.2014	9.8.2014	2 months and 6 days
B2(b)	3.6.2014	6.9.2014	3 months and 3 days
В3	3.6.2014	21.3.2015*	9 months and 18 days

^{*}COD approved under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations.

h. The transmission tariff in respect of the above assets approved *vide* order dated 22.2.2016 in Petition No. 86/TT/2015 and order dated 23.5.2016 in Petition No. 109/TT/2014 and the trued-up tariff claimed by the Petitioner in the instant Petition is as under:

Assets	Tariff	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-	AFC approved vide order	478.58	525.00	524.41	523.52	522.31
A1	dated 22.2.2016 in					
	86/TT/2015					
	AFC claimed by the	454.93	494.05	512.02	510.96	513.36
	Petitioner based on true-up					
•	in the instant Petition	504.05	055.05	070.05	050 70	222.24
Asset-	AFC approved vide order	581.25	855.67	872.95	856.72	839.21
B1	dated 23.5.2016 in					
	109/TT/2014	E07.20	000.40	005.00	074.65	002.22
	AFC claimed by the	587.38	868.42	885.09	871.65	863.22
	Petitioner based on true-up in the instant Petition					
Asset-	AFC approved vide order	74.64	148.48	165.01	169.76	169.13
B2(a)	dated 23.5.2016 in	74.04	140.40	100.01	109.70	109.13
D _L (u)	109/TT/2014					
	AFC claimed by the	75.21	142.73	156.82	169.88	175.81
	Petitioner based on true-up					
	in the instant Petition					
Asset-	AFC approved vide order	65.83	148.45	164.95	169.69	169.06
B2(b)	dated 23.5.2016 in					
	109/TT/2014					
	AFC claimed by the	66.36	142.94	156.65	169.57	175.53
	Petitioner based on true-up					
	in the instant Petition					4== 40
Asset-	AFC approved vide order	4.04	152.76	171.85	174.17	175.18
В3	dated 23.5.2016 in					
	109/TT/2014	4.04	141 70	156.66	160.60	172.52
	AFC claimed by the	4.04	141.73	156.66	168.68	173.53
	Petitioner based on true-up in the instant Petition					
	in the motant retition					

- 4. The Respondents are the transmission utilities, distribution licensees and power departments who are procuring transmission services from the Petitioner, mainly beneficiaries of the Western Region.
- 5. The Petitioner has served the petition on the Respondents and notice has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the notices published in the newspapers by the Petitioner. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No. 1, has filed its reply vide affidavit dated 8.6.2020 and has raised issues of grossing up of RoE, IT assessment orders, GST and expenditure on PLCC. The Petitioner has also filed its rejoinder to the reply of MPPMCL vide affidavit dated 5.8.2020.
- 6. This order is issued considering the submissions made by the Petitioner in the petition dated 18.1.2020, Petitioner's affidavits dated 5.6.2020 and 27.8.2020, MPPMCL's reply and Petitioner's rejoinder to the same.
- 7. The hearing in this matter was held on 10.8.2020 via video conference and the order was reserved.
- 8. 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 FOR THE 2014-19 TARIFF PERIOD

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

Asset-A1							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Depreciation	82.68	93.15	97.64	97.64	97.64		
Interest on Loan	71.50	79.19	79.84	71.99	66.96		
Return on Equity	97.70	111.38	117.18	117.18	117.49		
Interest on working capital	16.12	17.20	17.81	17.99	18.26		
O & M Expenses	186.93	193.13	199.55	206.16	213.01		
Total	454.93	494.05	512.02	510.96	513.36		

(₹ in lakh)

Asset-B1							
Particulars	2014-15 (Pro-rata for 265 days)	2015-16	2016-17	2017-18	2018-19		
Depreciation	165.29	249.12	257.83	258.48	259.63		
Interest on Loan	155.36	222.35	217.15	199.22	184.21		
Return on Equity	183.30	277.50	286.96	287.69	289.76		
Interest on working capital	15.36	22.59	23.07	22.87	22.79		
O & M Expenses	68.07	96.86	100.08	103.39	106.83		
Total	587.38	868.42	885.09	871.65	863.22		

(₹ in lakh)

Asset-B2(a)							
Particulars	2014-15 (Pro-rata for 235 days)	2015-16	2016-17	2017-18	2018-19		
Depreciation	10.55	25.25	30.06	34.65	36.83		
Interest on Loan	11.95	24.54	26.43	27.40	26.36		
Return on Equity	10.97	25.47	30.40	35.40	37.79		
Interest on working capital	2.92	5.17	5.56	5.92	6.12		
O & M Expenses	38.82	62.30	64.37	66.51	68.71		
Total	75.21	142.73	156.82	169.88	175.81		

Asset-B2(b)							
Particulars	2014-15 (Pro-rata for 207 days)	2015-16	2016-17	2017-18	2018-19		
Depreciation	9.29	25.25	30.06	34.65	36.83		
Interest on Loan	10.61	24.74	26.36	27.10	26.08		
Return on Equity	9.69	25.47	30.40	35.40	37.79		
Interest on working capital	2.57	5.18	5.56	5.91	6.12		
O & M Expenses	34.20	62.30	64.37	66.51	68.71		
Total	66.36	142.94	156.75	169.57	175.53		



Asset-B3								
Particulars	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19			
Depreciation	0.40	15.28	20.05	23.74	24.99			
Interest on Loan	0.49	17.11	19.68	20.95	19.93			
Return on Equity	0.44	16.18	20.45	24.16	25.48			
Interest on working capital	0.17	5.94	6.36	6.73	6.93			
O & M Expenses	2.54	87.22	90.12	93.10	96.20			
Total	4.04	141.73	156.66	168.68	173.53			

10. The details of the Interest on Working Capital claimed by the Petitioner in respect of the transmission assets are as under:

(₹ in lakh)

Asset-A1							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
O & M Expenses	15.58	16.09	16.63	17.18	17.75		
Maintenance Spares	28.04	28.97	29.93	30.92	31.95		
Receivables	75.82	82.34	85.34	85.16	85.56		
Total	119.44	127.40	131.90	133.26	135.26		
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50		
Pro-rate Interest on Working Capital	16.12	17.20	17.81	17.99	18.26		

Asset-B1							
Particulars	2014-15 (Pro-rata for 265 days)	2015-16	2016-17	2017-18	2018-19		
O & M Expenses	7.81	8.07	8.34	8.62	8.90		
Maintenance Spares	14.06	14.53	15.01	15.51	16.02		
Receivables	134.84	144.74	147.51	145.28	143.87		
Total	156.71	167.34	170.86	169.41	168.79		
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50		
Pro-rate Interest on Working Capital	15.36	22.59	23.07	22.87	22.79		

/ Till land							
Asset-B2(a)							
Particulars	2014-15 (Pro-rata for 235 days)	2015-16	2016-17	2017-18	2018-19		
O & M Expenses	5.03	5.19	5.36	5.54	5.73		
Maintenance Spares	9.05	9.35	9.66	9.98	10.31		
Receivables	19.47	23.79	26.14	28.31	29.30		
Total	33.55	38.33	41.16	43.83	45.34		
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50		
Pro-rate Interest on Working Capital	2.92	5.17	5.56	5.92	6.12		

(₹ in lakh)

Asset-B2(b)							
Particulars	2014-15 (Pro-rata for 207 days)	2015-16	2016-17	2017-18	2018-19		
O & M Expenses	5.03	5.19	5.36	5.54	5.73		
Maintenance Spares	9.05	9.35	9.66	9.98	10.31		
Receivables	19.50	23.82	26.13	28.26	29.26		
Total	33.58	38.36	41.15	43.78	45.30		
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50		
Pro-rate Interest on Working Capital	2.57	5.18	5.56	5.91	6.12		

Asset-B3									
Particulars	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19				
O & M Expenses	7.04	7.27	7.51	7.76	8.02				
Maintenance Spares	12.66	13.08	13.52	13.97	14.43				
Receivables	22.37	23.62	26.11	28.11	28.92				
Total	42.07	43.97	47.14	49.84	51.37				
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50				
Pro-rate Interest on Working Capital	0.17	5.94	6.36	6.73	6.93				

Capital Cost

11. The capital cost as on COD and ACE approved by the Commission vide order dated 22.2.2016 in Petition No. 85/TT/2015 for Asset-A1 and vide order dated 23.5.2016 in Petition No. 109/TT/2014 for Assets-B1, B2(a), B2(b) and B3 are as under:

(₹ in lakh)

	Apportioned	Apportioned	Expenditure	Capital cost		ap 2014- nitted by	Estimated	
Asset Details	approved cost as per FR	approved cost as per RCE	up to COD (As claimed)	allowed as on COD	2014- 15	2015- 16	2016-17	Completion Cost (as allowed)
		Order	dated 22.2.2016	in Petition	No. 86/T	Γ/2015		
A1	2292.72	2246.67	1534.75	1534.75	609.18	-	-	2143.93
		Order (dated 23.5.2016	in Petition I	No. 109/T	T/2014		
B1	2584.54	5154.27	4141.55	4047.11	395.86	392.60	-	4835.57
B2(a)	610.62	921.98	173.28	172.18	234.68	127.66	59.95	594.47
B2(b)	610.62	921.98	173.28	173.23	233.63	127.66	59.95	594.47
B3	452.34	526.10	256.35	248.57	0.00	182.85	15.80	447.22
	6551.00	9771.00						8615.66

12. The Petitioner vide Auditor's Certificate dated 26.7.2019 has submitted the capital cost incurred up to 31.3.2014 along with ACE during 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 of the assets covered in the instant petition as follows:

(₹ in lakh)

	Apportioned	Apportioned	Expenditure up	ACE					0
Assets	approved, cost as per FR	approved, cost as per RCE	to COD/ 31.3.2014	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	Completion Cost as on 31.3.2019
A1	2292.72	2246.67	1534.75	249.34	198.10	0.00	0.00	0.00	1982.19
B1	2584.54	5154.27	4141.55	395.86	324.72	0.00	24.78	18.92	4905.83
B2 (a)	610.62	921.98	173.28	233.28	47.59	119.79	49.07	28.55	651.86
B2(b)	610.62	921.98	173.28	233.58	47.59	119.79	49.07	28.55	651.86
В3	452.34	526.10	256.35	0.00	42.18	94.89	30.47	11.96	435.85
Total	6551.84	9771.00	6279.21	1112.06	660.18	334.47	153.39	87.98	8627.59

13. The completion cost including ACE is within RCE approved apportioned capital cost as mentioned in Table under paragraph 12 above, in respect of assets covered under the instant petition. Therefore, there is no cost over-run in respect of the transmission assets.

Time Over-run

14. As per the Investment Approval, the scheduled COD of the transmission project was within 24 months from the date of investment approval. The investment approval was accorded on 4.6.2012 and hence the schedule COD of assets under the transmission project was 3.6.2014. There is time over-run in case of Assets-B1, B2(a), B2(b) and B3. The time over-run of 37 days in case of Asset-B1 was not condoned while it was condoned in the case of Assets-B2(a), B2(b) and B3.

15. Details of time over-run for the transmission assets are tabulated as under:

Assets	Scheduled COD	Actual COD	Time over-run
A1	3.6.2014	1.11.2013	Nil
B1	3.6.2014	10.7.2014	1 month and 7 days not condoned
B2(a)	3.6.2014	9.8.2014	2 month and 6 days condoned
B2(b)	3.6.2014	6.9.2014	3 month and 3 days Condoned
B3	3.6.2014	21.3.2015	9 month and 18 days condoned.

Interest During Construction (IDC) and Incidental expenditure during construction (IEDC)

- 16. The Petitioner has claimed Interest During Construction (IDC) for the transmission assets and has submitted the Auditor's Certificates in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the IDC discharged.
- 17. The allowable IDC has been worked out considering the information submitted by the Petitioner for the individual assets separately on cash basis. The loan details submitted in Form-9C for the 2014-19 tariff period and the IDC computation sheet have been considered for the purpose of IDC calculation on cash and accrued basis. The

un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.

18. Accordingly, based on the information furnished by the Petitioner, IDC considered is summarized as under:

(₹ in lakh) **IDC IDC** claimed IDC Entitled **Un-discharged** allowed by Petitioner disallowed as portion of IDC up to on cash **Assets** (as per on COD due to COD entitled IDC as basis as **Auditor** computation on COD on COD difference Certificate) В C=A-B E=B-D Asset-B1 115.59 93.04 22.55 70.25 22.79 Asset-4.43 0.83 0.27 5.26 4.16 B2(a) Asset-5.26 0 0.05 5.21 5.26 B2(b) 7.78 7.78 0 7.78 0 Asset-B3

19. The Petitioner has claimed an IEDC of ₹22.89 lakh for Asset-B1 and has submitted Auditor's certificate in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of this asset. The Commission vide order dated 23.5.2016 in Petition No. 109/TT/2014 has disallowed IEDC of ₹1.11 lakh on account of time-over run. Hence, IEDC allowed is ₹21.78 lakh. The Petitioner has not claimed IEDC for Assets-B2(a), Asset B2(b) and Asset B3.

Initial Spares

20. Regulation 13(d) of the 2014 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of the plant and machinery cost up to the cut-off date, subject to the following ceiling norms:

"(d) Transmission System Transmission line: 1.00%

Transmission sub-station (Green Field): 4.00%



Transmission sub-station (Brown Field): 6.00% GIS Sub-station: 5.00%"

21. The Petitioner has claimed the following Initial Spares for the transmission assets and prayed to allow the Initial Spares as per actuals:

Asset Name	Particulars	Estimated Completion Cost (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)
Asset-B1	Sub-station (GIS)	4767.35	287.00
Asset-B2(a)	Sub-station (AIS)	594.58	35.00
Asset-B2(b)	Sub-station (AIS)	594.58	35.00
Asset-B-3	Sub-station (AIS)	410.24	26.00

22. We have considered the submissions of the Petitioner. The details of commercial operation of the transmission assets covered under the instant petition and their cut-off dates are as under:

Assets	COD	Cut-off Date
Asset-A1	1.11.2013	31.3.2016
Asset-B1	10.7.2014	31.3.2017
Asset-B2(a)	9.8.2014	31.3.2017
Asset-B2(b)	6.9.2014	31.3.2017
Asset-B3	21.3.2015	31.3.2018

23. The plant & machinery cost up to the cut-off date has been considered for computation of Initial Spares. The Petitioner has claimed the initial spares for Asset-B1 considering it as a brownfield sub-station. It is observed that the Asset-B1 is GIS substation and as per the norms, the allowable initial spares for GIS sub-station is 5%. Accordingly, the initial spares for Asset-B1 is allowed @ 5% under GIS sub-station. The initial spares claimed by the Petitioner for Asset-B2(a), Asset-B2(b) and Asset-B3 are within norms specified in the 2014 tariff Regulations and accordingly it is allowed. The Initial Spares approved for the transmission assets as per Regulation 13(d) of the 2014 Tariff Regulations are as under:



Asset	Plant & machinery cost up to cut-off date (excluding IDC and IEDC as per Auditor certificate) (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Ceiling Limit (%) (C)	Allowable Initial Spares worked out D = [(A-B)*C /(100-C)]	Excess Initial Spares (₹ in lakh)	Initial Spares allowed (₹ in lakh)
Asset- B1	4723.65	287.00	5	233.51	53.49	233.51
Asset- B2(a)	568.98	35.00	6	34.08	0.92	34.08
Asset- B2(b)	568.98	35.00	6	34.08	0.92	34.08
Asset- B-3	416.11	26.00	6	24.90	1.10	24.90

Capital cost as on COD

24. Accordingly, the capital cost allowed as on COD is summarized as under:

(₹ in lakh)

	Capital cost as	Less: IDC as o	on COD due to			Capital cost
Asset Name	on 1.4.2014 or COD whichever is later as per Auditor Certificate	Computation difference	Un- discharged	Less: IEDC disallowed as on COD	Excess Initial Spares	considered as on 1.4.2014/ COD whichever is later
Asset- A1	1534.75	0.00	0.00	0.00	0.00	1534.75
Asset- B1	4141.55	22.55	70.25	1.11	53.49	3994.15
Asset- B2 (a)	173.28	0.83	0.27	0.00	0.92	171.26
Asset- B2 (b)	173.28	0.00	0.05	0.00	0.92	172.31
Asset-B3	256.35	0.00	7.78	0.00	1.10	247.47

Additional Capital Expenditure (ACE)

25. The Petitioner has claimed the following ACE for the assets covered in the instant petition and submitted the Auditor's Certificates in support of the same:

Assets	Additional Capital Expenditure 2014-19 (as per Auditor's certificate)								
	2014-15 2015-16 2016-17 2017-18 2018-19								
Asset-A1	249.34	198.10	0.00	0.00	0.00				
Asset-B1	395.86	324.72	0.00	24.78	18.92				
Asset-B2(a)	233.28	47.59	119.79	49.07	28.55				
Asset-B2(b)	233.58	47.59	119.79	49.07	28.55				
Asset-B3	0.00 42.18 94.89 30.47 11.96								
Total	1112.06	660.18	334.47	153.39	87.98				



- 26. The admissibility of ACE incurred after COD and upto cut-off date has been claimed under Regulation 14(1)(i) of the 2014 Tariff Regulations. ACE is on account of un-discharged liability towards final payment due to contractual exigencies for works executed with in the cut-off date.
- 27. ACE for Assets-B1, B2(a) and B2(b) for 2017-18 and 2018-19 and for Asset-B3 for 2018-19 has been claimed under Regulation 14(2)(iv) of the 2014 Tariff Regulations.

(₹ in lakhs)

Assets	Party wise payment	2017-18	2018-19
Asset-B1	ABB India Limited	24.78	18.92
Asset-B2 (a)	TBEA Shenyang Transformer Group	49.07	24.78
	Co. Ltd.		
Asset-B2 (b)	TBEA Shenyang Transformer Group	49.07	24.78
	Co. Ltd.		
Asset-B3	TBEA Shenyang Transformer Group	0.00	11.96
	Co. Ltd.		

- 28. MPPMCL has submitted that PLCC does not fall under the purview of asset as PLCC is a communication system and hence the expenditure of PLCC cannot be claimed as ACE and there are provisions to claim the same under O&M Expenses.
- 29. In response, the Petitioner vide its rejoinder has submitted that PLCC system used in the instant petition is meant for protection and telemetry purpose and not for optical fibre communication. PLCC system is integral part of the scope of the instant petition. Further, separate O&M for PLCC has been claimed for the 2019-24 tariff period as per the extant tariff regulations.
- 30. We have considered the submissions of the Petitioner and MPPMCL. ACE claimed by the Petitioner is allowed as per Regulation 14(2)(iv) of the 2014 Tariff Regulations. With respect to MPPMCL's contention, we are of the view that PLCC is considered under sub-station equipment. Accordingly, ACE towards PLCC is

approved. The capital cost allowed as on 31.3.2019 after including ACE in respect of the transmission assets is as under:

(₹ in lakh)

Asset-A1	Capital cost as on			Total capital cost including ACE as on 31.3.2019			
	31.3.2014	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	
Approved earlier vide order dated 22.2.2016 in Petition No. 86/TT/2015	1534.75	609.18	0.00	0.00	0.00	0.00	2143.93
As claimed in the instant petition	1534.75	249.34	198.10	0.00	0.00	0.00	1982.19
Approved in this order	1534.75	249.34	198.10	0.00	0.00	0.00	1982.19

(₹ in lakh)

Asset-B1	Capital cost as on COD		Total capital cost including ACE as on 31.3.2019				
		2014-15	2015-16	2016-17	2017-18	2018- 19	
Approved earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	4047.11	395.86	392.60	0.00	0.00	0.00	4835.57
As claimed in the instant petition	4141.55	395.86	324.72	0.00	24.78	18.92	4905.83
Approved in this order	3994.15	465.72**	325.11**	0.00	24.78	18.92	4828.68

^{**} Includes IDC Discharge

Asset-B2(a)	Capital cost as on COD	ACE					ACE cost inc			Total capital cost including ACE as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19				
Approved earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	172.18	234.68	127.66	59.95	0.00	0.00	594.47			
As claimed in the instant petition	173.28	233.28	47.59	119.79	49.07	28.55	651.86			
Approved in this order	171.26	233.85*	47.59	119.79	49.07	28.55	650.11			

^{**} Includes IDC Discharge



Asset- B2(b)	Capital cost as on COD		Total capital cost including ACE as on 31.3.2019				
		2014-15	2015-16	2016-17	2017-18	2018-19	
Approved earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	173.23	233.63	127.66	59.95	0.00	0.00	594.47
As claimed in the instant petition	173.28	233.58	47.59	119.79	49.07	28.55	651.86
Approved in this order	172.31	233.63*	47.59	119.79	49.07	28.55	650.94

^{**} Includes IDC Discharge

(₹ in lakh)

Asset-B3	Capital cost as on COD		Total capital cost including ACE as on 31.3.2019				
		2014-15	2015-16	2016-17	2017-18	2018-19	
Approved earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	248.57	0.00	182.85	15.80	0.00	0.00	447.22
As claimed in the instant petition	256.35	0.00	42.18	94.89	30.47	11.96	435.85
Approved in this order	247.47	0.00	49.96**	94.89	30.47	11.96	434.75

^{**} Includes IDC Discharge

Debt-Equity Ratio

31. The Petitioner has considered a debt-equity ratio of 70:30 as on COD and for ACE post COD. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during the 2014-19 period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of Debt-Equity ratio in respect of the transmission assets as on the date of commercial operation and as on 31.3.2019 is as under:

	As on 1.4.	2014	As on 31.3.	2019
Asset-A1	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	1074.33	70.00	1387.54	70.00
Equity	460.42	30.00	594.65	30.00
Total	1534.75	100.00	1982.19	100.00
	As on Co	OD	As on 31.3.	2019
Asset-B1	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	2795.91	70.00	3380.09	70.00
Equity	1198.24	30.00	1448.58	30.00
Total	3994.15	100.00	4828.68	100.00
Accet	As on Co	OD	As on 31.3.	2019
Asset- B2(a)	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	119.89	70.00	455.09	70.00
Equity	51.37	30.00	195.02	30.00
Total	171.26	100.00	650.11	100.00
Asset-	As on Co	OD	As on 31.3.	2019
B2(b)	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	120.62	70.00	455.68	70.00
Equity	51.69	30.00	195.27	30.00
Total	172.31	100.00	650.94	100.00
	As on Co	OD	As on 31.3.	2019
Asset-B3	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	173.23	70.00	304.33	70.00
Equity	74.24	30.00	130.42	30.00
Total	247.47	100.00	434.75	100.00

Interest on Loan (IoL)

- 32. The Petitioner has claimed IoL based on actual interest rates for each year during the 2014-19 period. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2019 for respective loans. We have considered the submissions of the Petitioner and accordingly calculated IoL based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out as detailed below:
 - (i) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition.



- (ii) The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period.
- 33. The details of trued up IoL approved for the transmission assets for the 2014-19 tariff period is given below and it is followed by a table containing IoL approved earlier, claimed by the Petitioner in the instant petition and trued up IoL approved for each transmission assets in the instant petition:

	Asset-A1							
Particular	2014-15	2015-16	2016-17	2017-18	2018-19			
Gross Normative Loan	1074.33	1248.87	1387.54	1387.54	1387.54			
Cumulative Repayments upto Previous Year	27.04	109.71	202.86	300.50	398.13			
Net Loan-Opening	1047.29	1139.16	1184.68	1087.04	989.41			
Addition due to Additional Capitalization	174.54	138.67	0.00	0.00	0.00			
Repayment during the year	82.67	93.15	97.64	97.64	97.64			
Net Loan-Closing	1139.16	1184.68	1087.04	989.41	891.77			
Average Loan	1093.22	1161.92	1135.86	1038.23	940.59			
Weighted Average Rate of Interest on Loan (%)	6.540	6.816	7.029	6.934	7.119			
Interest on Loan	71.50	79.19	79.84	71.99	66.96			

(₹ in lakh)

					1
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 22.2.2016 in Petition No. 86/TT/2015	76.32	83.59	76.40	68.71	60.46
Claimed by the Petitioner in the instant petition	71.50	79.19	79.84	71.99	66.96
Allowed after true-up in this order	71.50	79.19	79.84	71.99	66.96

	Asset-B1							
		er-Dı						
	2014-15							
Particular	(Pro-rata for	2015-16	2016-17	2017-18	2018-19			
	265 days)							
Gross Normative Loan	2795.91	3121.91	3349.49	3349.49	3366.84			
Cumulative Repayments								
upto Previous Year	0.00	162.04	406.10	658.75	912.05			
Net Loan-Opening	2795.91	2959.87	2943.39	2690.74	2454.79			
Addition due to Additional								
Capitalization	326.00	227.58	0.00	17.35	13.26			
Repayment during the year	162.04	244.06	252.65	253.30	254.45			
Net Loan-Closing	2959.87	2943.39	2690.74	2454.79	2213.59			



Average Loan	2877.89	2951.63	2817.06	2572.76	2334.19
Weighted Average Rate of					
Interest on Loan (%)	7.331	7.423	7.607	7.647	7.801
Interest on Loan	153.17	219.09	214.29	196.74	182.08

Particulars	2014-15 (Pro-rata for 265 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	153.91	218.63	210.28	191.00	170.33
Claimed by the Petitioner in the instant petition	155.36	222.35	217.15	199.22	184.21
Allowed after true-up in this order	153.17	219.09	214.29	196.74	182.08

(₹ in lakh)

	Asset-B2(a)							
Particular	2014-15 (Pro-rata for 235 days)	2015-16	2016-17	2017-18	2018-19			
Gross Normative Loan	119.89	283.58	316.90	400.75	435.10			
Cumulative Repayments upto Previous Year	0.00	9.93	33.01	60.62	92.68			
Net Loan-Opening	119.89	273.65	283.88	340.13	342.42			
Addition due to Additional Capitalization	163.70	33.31	83.85	34.35	19.99			
Repayment during the year	9.93	23.08	27.60	32.07	34.12			
Net Loan-Closing	273.65	283.88	340.13	342.42	328.29			
Average Loan	196.77	278.77	312.01	341.28	335.35			
Weighted Average Rate of Interest on Loan (%)	9.403	8.819	8.544	8.156	8.051			
Interest on Loan	11.91	24.59	26.66	27.83	27.00			

Particulars	2014-15 (Pro-rata for 235 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	11.97	27.75	31.18	30.26	27.37
Claimed by the Petitioner in the instant petition	11.95	24.54	26.43	27.40	26.36
Allowed after true-up in this order	11.91	24.59	26.66	27.83	27.00



	Asse	t-B2(b)			(*
Particular	2014-15 (Pro-rata for 207 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	120.62	284.17	317.48	401.34	435.69
Cumulative Repayments upto Previous Year	0.00	8.78	31.90	59.55	91.66
Net Loan-Opening	120.62	275.39	285.58	341.78	344.02
Addition due to Additional Capitalization	163.55	33.31	83.85	34.35	19.99
Repayment during the year	8.78	23.13	27.65	32.11	34.16
Net Loan-Closing	275.39	285.58	341.78	344.02	329.85
Average Loan	198.01	280.49	313.68	342.90	336.94
Weighted Average Rate of Interest on Loan (%)	9.425	8.849	8.489	8.035	7.935
Interest on Loan	10.58	24.82	26.63	27.55	26.74

(₹ in lakh)

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Particulars	2014-15 (Pro-rata for 207 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	10.59	27.86	31.28	30.36	27.47
Claimed by the Petitioner in the instant petition	10.61	24.74	26.36	27.10	26.08
Allowed after true-up in this order	10.58	24.82	26.63	27.55	26.74

Asset-B3								
Particular	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19			
Gross Normative Loan	173.23	173.23	208.20	274.63	295.96			
Cumulative Repayments upto Previous Year	0.00	0.40	14.90	33.24	54.91			
Net Loan-Opening	173.23	172.83	193.30	241.39	241.04			
Addition due to Additional Capitalization	0.00	34.97	66.42	21.33	8.37			
Repayment during the year	0.40	14.51	18.33	21.68	22.83			
Net Loan-Closing	172.83	193.30	241.39	241.04	226.58			



Average Loan	173.03	183.07	217.34	241.22	233.81
Weighted Average Rate of Interest on Loan (%)	9.300	9.327	9.089	8.788	8.704
Interest on Loan	0.48	17.07	19.76	21.20	20.35

Particulars	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	0.49	21.25	25.79	24.11	21.90
Claimed by the Petitioner in the instant petition	0.49	17.11	19.68	20.95	19.93
Allowed after true-up in this order	0.48	17.07	19.76	21.20	20.35

Return on Equity (RoE)

34. The Petitioner has claimed RoE for the transmission assets in terms of Regulations 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 (%)	Grossed up RoE [Base Rate/(1-t)] (%)
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757

35. MPPMCL has submitted that the Petitioner has not got its Income Tax assessment order finalized for 2016-17, 2017-18 and 2018-19. It further submitted that the Petitioner has grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18, whereas, for 2018-19 it has been grossed up on the applicable rate of MAT, surcharge and Cess. It also submitted that the Petitioner has not placed on record the assessment order for the period 2016-17 and 2017-18. Further, it has been

submitted by MPPMCL, that the Petitioner has not claimed grossed up RoE on the basis of actual tax paid for the year 2018-19. It also submitted that the Petitioner has also not submitted a copy of the assessment order for 2014-15 and 2015-16. Similarly, the audited accounts in respect of actual taxes paid for 2016-17 and 2017-18 have also not been enclosed along with the current petition as per the MPPMCL. MPPMCL has further submitted that in absence of these essential documents, the Petitioner's claim cannot be scrutinised properly.

- 36. In response, the Petitioner has submitted that the Income Tax assessment of the Petitioner has been completed and assessment orders have been issued by Income Tax Department in case of 2014-15, 2015-16 and 2016- 17 and the Income Tax returns have been filed with the Income Tax Department for the years 2017-18 & 2018-19. On the basis of the year wise effective tax rate and grossed up RoE trued up accordingly for the 2014-19 tariff period has already been mentioned in the instant petition for prudence check. Further, the Petitioner submitted that it has submitted the assessment order of 2014-15 and 2015-16 along with the TV Reply in Petition No. 20/TT/2020. The Petitioner further enclosed the assessment order for the year 2016-17 as an enclosure to the rejoinder.
- 37. The Petitioner has also requested to allow it to claim the differential tariff on account of the trued-up RoE based on effective rate calculated on completion of Income tax assessment/ reassessment for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of the respective assessment orders, directly from the beneficiaries, on year to year basis as provided in the regulation.

- 38. We have considered the submissions of the Petitioner and MPPMCL. It is observed that this issue of MPPMCL has already been dealt in order dated 2.2.2021 in Petition No. 312/TT/2020. The relevant portion of the order dated 2.2.2021 is extracted hereunder:
 - "39. We have considered the submissions of the Petitioner and MPPMCL. As regards MPPMCL's contention, it is observed that the Petitioner has submitted the assessment orders issued by the Income Tax Department for the years 2014-15, 2015-16 and 2016-17 and the Income Tax returns filed by the Petitioner for years 2017-18 and 2018-19. The Petitioner has submitted the documents pointed out by MPPMCL."
- 39. It is pertinent to mention that the Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has already arrived at the effective tax rate based on the notified MAT rates for the Petitioner. The relevant portion of the order dated 27.4.2020 is 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	21.342
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

"



40. 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 period in terms of the provisions of the 2014 Tariff Regulations as under:

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	Base rate of RoE (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	20.961	15.50	19.610
2015-16	21.342	15.50	19.705
2016-17	21.342	15.50	19.705
2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758

41. Accordingly, the details of trued up RoE approved for the transmission assets for the 2014-19 tariff period is given below and it is followed by a table containing the RoE approved earlier, claimed by the Petitioner in the instant petition and trued-up RoE approved for each transmission assets in the instant petition:

(₹ in lakh)

Asset-A1								
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19			
Opening Equity	460.42	535.22	594.65	594.65	594.65			
Addition due to Additional Capitalization	74.80	59.43	0.00	0.00	0.00			
Closing Equity	535.22	594.65	594.65	594.65	594.65			
Average Equity	497.82	564.94	594.65	594.65	594.65			
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500			
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549			
Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758			
Return on Equity (Pre-tax)	97.62	111.32	117.18	117.18	117.49			

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 22.2.2016 in Petition No. 86/TT/2015	108.21	126.13	126.13	126.13	126.13
Claimed by the Petitioner in the instant petition	97.70	111.38	117.18	117.18	117.49
Allowed after true-up in this order	97.62	111.32	117.18	117.18	117.49

Asset-B1							
Particulars	2014-15 (Pro-rata for 265 days)	2015-16	2016-17	2017-18	2018-19		
Opening Equity	1198.24	1337.96	1435.49	1435.49	1442.92		
Addition due to Additional Capitalization	139.72	97.53	0.00	7.43	5.66		
Closing Equity	1337.96	1435.49	1435.49	1442.92	1448.58		
Average Equity	1268.10	1386.72	1435.49	1439.21	1445.75		
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500		
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549		
Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758		
Return on Equity (Pre- tax)	180.54	273.25	282.86	283.60	285.65		

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 265 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	181.32	272.93	284.48	284.48	284.48
Claimed by the Petitioner in the instant petition	183.30	277.50	286.96	287.69	289.76
Allowed after true-up in this order	180.54	273.25	282.86	283.60	285.65

Asset-B2(a)								
Particulars	2014-15 (Pro-rata for 235 days)	2015-16	2016-17	2017-18	2018-19			
Opening Equity	51.37	121.52	135.80	171.74	186.46			
Addition due to Additional Capitalization	70.15	14.28	35.94	14.72	8.56			
Closing Equity	121.52	135.80	171.74	186.46	195.02			
Average Equity	86.45	128.66	153.77	179.10	190.74			
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500			
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549			
Rate of Return on Equity (Pretax)	19.610	19.705	19.705	19.705	19.758			
Return on Equity (Pre-tax)	10.91	25.35	30.30	35.29	37.69			



Particulars	2014-15 (Pro-rata for 235 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	10.97	27.83	33.37	35.14	35.14
Claimed by the Petitioner in the instant petition	10.97	25.47	30.40	35.40	37.79
Allowed after true-up in this order	10.91	25.35	30.30	35.29	37.69

(₹ in lakh)

	Ass	et-B2(b)			•
Particulars	2014-15 (Pro-rata for 207 days)	2015-16	2016-17	2017-18	2018-19
Opening Equity	51.69	121.77	136.05	171.99	186.71
Addition due to Additional Capitalization	70.08	14.28	35.94	14.72	8.56
Closing Equity	121.77	136.05	171.99	186.71	195.27
Average Equity	86.73	128.91	154.02	179.35	190.99
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pretax)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax)	9.65	25.40	30.35	35.34	37.74

Particulars	2014-15 (Pro-rata for 207 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	9.68	27.69	33.21	34.97	34.97
Claimed by the Petitioner in the instant petition	9.69	25.47	30.40	35.40	37.79
Allowed after true-up in this order	9.65	25.40	30.35	35.34	37.74

	Asset-B3									
Particulars	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19					
Opening Equity	74.24	74.24	89.23	117.70	126.84					
Addition due to Additional Capitalization	0.00	14.99	28.47	9.14	3.59					
Closing Equity	74.24	89.23	117.70	126.84	130.42					
Average Equity	74.24	81.73	103.46	122.27	128.63					
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500					
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549					
Rate of Return on Equity (Pretax)	19.610	19.705	19.705	19.705	19.758					
Return on Equity (Pre-tax)	0.44	16.11	20.39	24.09	25.41					

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	0.44	20.00	25.85	26.31	26.31
Claimed by the Petitioner in the instant petition	0.44	16.18	20.45	24.16	25.48
Allowed after true-up in this order	0.44	16.11	20.39	24.09	25.41

Depreciation

42. The Gross Block during the 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is given in Annexure-1. The depreciation for the 2014-19 period is trued-up for the transmission assets as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Accordingly, the details of trued-up depreciation approved for the transmission assets for the 2014-19 tariff period is given below and it is followed by a table containing the depreciation approved earlier, claimed by the Petitioner in the instant petition and trued up depreciation approved for each transmission assets in the instant petition:

	Asset-A1								
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19				
Opening Gross Block	1534.75	1784.09	1982.19	1982.19	1982.19				
Additional Capitalisation	249.34	198.10	0.00	0.00	0.00				
Closing Gross Block	1784.09	1982.19	1982.19	1982.19	1982.19				
Average Gross Block	1659.42	1883.14	1982.19	1982.19	1982.19				
Weighted Average Rate of Depreciation (WAROD) (%)	4.982	4.947	4.926	4.926	4.926				
Balance useful life at the beginning of the year	25.00	24.00	23.00	22.00	21.00				
Aggregated Depreciable Value	1493.48	1694.83	1783.97	1783.97	1783.97				
Combined Depreciation during the year	82.67	93.15	97.64	97.64	97.64				
Remaining Aggregated Depreciable Value	1383.77	1491.97	1483.47	1385.84	1288.20				

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 86/TT/2015	90.46	104.25	104.25	104.25	104.25
Claimed by the Petitioner in the instant petition	82.68	93.15	97.64	97.64	97.64
Allowed after true-up in this order	82.67	93.15	97.64	97.64	97.64

Asset-B1									
Particulars	2014-15 (Pro-rata for 265 days)	2015-16	2016-17	2017-18	2018-19				
Opening Gross Block	3994.15	4459.87	4784.98	4784.98	4809.76				
Additional Capitalisation	465.72	325.11	0.00	24.78	18.92				
Closing Gross Block	4459.87	4784.98	4784.98	4809.76	4828.68				
Average Gross Block	4227.01	4622.42	4784.98	4797.37	4819.22				
Weighted Average Rate of Depreciation (WAROD) (%)	5.280	5.280	5.280	5.280	5.280				
Balance useful life at the beginning of the year	25.00	25.00	24.00	23.00	22.00				
Aggregated Depreciable Value	3804.31	4160.18	4306.48	4317.63	4337.30				
Combined Depreciation during the year	162.04	244.06	252.65	253.30	254.45				
Remaining Aggregated Depreciable Value	3642.27	3754.08	3647.73	3405.58	3170.79				



Particulars	2014-15 (Pro-rata for 265 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	162.73	244.95	255.32	255.32	255.32
Claimed by the Petitioner in the instant petition	165.29	249.12	257.83	258.48	259.63
Allowed after true-up in this order	162.04	244.06	252.65	253.30	254.45

(₹ in lakh)

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	Asset-B2(a)									
Particulars	2014-15 (Pro-rata for 235 days)	2015-16	2016-17	2017-18	2018-19					
Opening Gross Block	171.26	405.11	452.70	572.49	621.56					
Additional Capitalisation	233.85	47.59	119.79	49.07	28.55					
Closing Gross Block	405.11	452.70	572.49	621.56	650.11					
Average Gross Block	288.18	428.90	512.59	597.02	635.83					
Weighted Average Rate of Depreciation (WAROD) (%)	5.352	5.382	5.385	5.371	5.366					
Balance useful life at the beginning of the year	25.00	25.00	24.00	23.00	22.00					
Aggregated Depreciable Value	259.37	386.01	461.34	537.32	572.25					
Remaining Aggregated Depreciable Value	249.44	353.00	400.72	444.64	445.45					
Combined Depreciation during the year	9.93	23.08	27.60	32.07	34.12					

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 235 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	9.98	25.30	30.35	31.94	31.94
Claimed by the Petitioner in the instant petition	10.55	25.25	30.06	34.65	36.83
Allowed after true-up in this order	9.93	23.08	27.60	32.07	34.12

Asset-B2(b)									
2014-15 Particulars (Pro-rata for 2015-16 2016-17 2017-18 2018-207 days)									
Opening Gross Block	172.31	405.94	453.53	573.32	622.39				
Additional Capitalisation	233.63	47.59	119.79	49.07	28.55				
Closing Gross Block	405.94	453.53	573.32	622.39	650.94				



Average Gross Block	289.13	429.74	513.43	597.86	636.67
Weighted Average Rate of Depreciation (WAROD) (%)	5.352	5.382	5.385	5.371	5.366
Balance useful life at the beginning of the year	25.00	25.00	24.00	23.00	22.00
Aggregated Depreciable Value	260.22	386.76	462.09	538.07	573.00
Remaining Aggregated Depreciable Value	251.44	354.86	402.53	446.41	447.17
Combined Depreciation during the year	8.78	23.13	27.65	32.11	34.16

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Particulars	2014-15 (Pro-rata for 207 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	8.80	25.30	30.35	31.94	31.94
Claimed by the Petitioner in the instant petition	9.29	25.25	30.06	34.65	36.83
Allowed after true-up in this order	8.78	23.13	27.65	32.11	34.16

Asset-B3									
Particulars	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19				
Opening Gross Block	247.47	247.47	297.43	392.32	422.79				
Additional Capitalisation	0.00	49.96	94.89	30.47	11.96				
Closing Gross Block	247.47	297.43	392.32	422.79	434.75				
Average Gross Block	247.47	272.45	344.88	407.56	428.77				
Weighted Average Rate of Depreciation (WAROD) (%)	5.328	5.325	5.316	5.319	5.325				
Balance useful life at the beginning of the year	25.00	25.00	24.00	23.00	22.00				
Aggregated Depreciable Value	222.72	245.21	310.39	366.80	385.89				
Remaining Aggregated Depreciable Value	222.33	230.30	277.15	311.89	308.15				
Combined Depreciation during the year	0.40	14.51	18.33	21.68	22.83				



Particulars	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	0.40	18.11	23.39	23.80	23.80
Claimed by the Petitioner in the instant petition	0.40	15.28	20.05	23.74	24.99
Allowed after true-up in this order	0.40	14.51	18.33	21.68	22.83

Operation & Maintenance Expenses (O&M Expenses)

43. The details of the O&M Expenses approved for the transmission assets under Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of tariff are as under:

(₹ in lakh)

					(\				
Asset-A1									
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19				
Sub-station bays									
400 kV Mapusa ICT III Bay No	1	1	1	1	1				
220 kV Mapusa ICT III Bay No.	1	1	1	1	1				
220 kV Mapusa line Bay Nos.	2	2	2	2	2				
Norm (₹ lakh/bay)									
400 kV (AIS)	60.30	62.30	64.37	66.51	68.71				
220 kV (AIS)	42.21	43.61	45.06	46.55	48.10				
Total Sub-station O&M Expenses	186.93	193.13	199.55	206.16	213.01				
Total O&M Expenses	186.93	193.13	199.55	206.16	213.01				

(₹ in lakh)

Asset-B1								
Particulars	2014-15 (Pro-rata for 265 days)	2015-16	2016-17	2017-18	2018-19			
Sub-station bays								
400 kV Navsari: 500 MVA 400/ 220 kV ICT Bay Nos.	1	1	1	1	1			
220 kV kV Navsari: 500 MVA 400/ 220 kV ICT Bay Nos	1	1	1	1	1			
Norm (₹ lakh/bay)								
400 kV (GIS)	51.54	53.25	55.02	56.84	58.73			
220 kV *	42.21	43.61	45.06	46.55	48.10			
Total Sub-station O&M Expenses	93.75	96.86	100.08	103.39	106.83			
Total O&M Expenses	68.07	96.86	100.08	103.39	106.83			

^{*} Separate norms for 220 kV GIS is not available. So norms for 220 kV Bays is considered.



Asset-B2(a)									
Particulars	2014-15 (Pro-rata for 235 days)	2015-16	2016-17	2017-18	2018-19				
Sub-station bays									
400 kV Line Bay for Indore- Pithampura	1	1	1	1	1				
Norm (₹ lakh/bay)									
400 kV (AIS)	60.30	62.30	64.37	66.51	68.71				
Total Sub-station O&M Expenses	60.30	62.30	64.37	66.51	68.71				
Total O&M Expenses	38.82	62.30	64.37	66.51	68.71				

Asset-B2(B)									
Particulars	2014-15 (Pro-rata for 207 days)	2015-16	2016-17	2017-18	2018-19				
Sub-station bays									
400 kV Line Bay for Indore-	1	1	1	1	1				
Pithampura .	I I	·	·	·	ı				
Norm (₹ lakh/bay)									
400 kV (AIS)	60.30	62.30	64.37	66.51	68.71				
Total Sub-station O&M	60.20	62.20	64.27	CC E4	60.74				
Expenses	60.30	62.30	64.37	66.51	68.71				
Total O&M Expenses	34.20	62.30	64.37	66.51	68.71				

(₹ in lakh)

Asset-B3								
Particulars	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19			
Sub-station bays								
220 kV Line Bay for Pirana- Barajadi .	2	2	2	2	2			
Norm (₹ lakh/bay)								
220 kV (AIS)	42.21	43.61	45.06	46.55	48.10			
Total Sub-station O&M Expenses	84.42	87.22	90.12	93.10	96.20			
Total O&M Expenses	2.54	87.22	90.12	93.10	96.20			

44. The O&M Expenses approved for the transmission assets earlier, the Petitioner's claim in the instant petition and the trued-up O&M Expense approved for the 2014-19 tariff period in the instant petition are the same.



Interest on Working Capital (IWC)

45. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under:

i. Maintenance spares:

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses specified in Regulation 28.

ii. O & M Expenses:

O&M Expenses have been considered for one month of the allowed O&M Expenses.

iii. Receivables:

The receivables have been worked out on the basis of 2 months of annual transmission charges as worked out above.

iv. Rate of interest on working capital:

Rate of interest on working capital is considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

46. Accordingly, the details of trued-up IWC approved for the transmission assets for the 2014-19 tariff period is given below and it is followed by a table containing the IWC approved earlier, claimed by the Petitioner in the instant petition and trued up IWC approved for each transmission assets in the instant petition:

Asset-A1									
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19				
O & M Expenses	15.58	16.09	16.63	17.18	17.75				
Maintenance Spares	28.04	28.97	29.93	30.92	31.95				
Receivables	75.81	82.33	85.34	85.16	85.56				
Total	119.42	127.40	131.90	133.26	135.26				
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50	13.50				
Interest of Working Capital	16.12	17.20	17.81	17.99	18.26				

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 22.2.2016 in Petition No. 86/TT/2015	16.66	17.90	18.08	18.27	18.46
Claimed by the Petitioner in the instant petition	16.12	17.20	17.81	17.99	18.26
Allowed after true-up in this order	16.12	17.20	17.81	17.99	18.26

(₹ in lakh)

(X III lakii									
Asset-B1									
Particulars	2014-15 (Pro-rata for 265 days)	2015-16	2016-17	2017-18	2018-19				
O & M Expenses	7.81	8.07	8.34	8.62	8.90				
Maintenance Spares	14.06	14.53	15.01	15.51	16.02				
Receivables	132.91	142.59	145.44	143.27	141.92				
Total	154.79	165.20	168.80	167.39	166.85				
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50	13.50				
Interest of Working Capital	15.17	22.30	22.79	22.60	22.52				

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 265 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 22.2.2016 in Petition No. 109/TT/2014	15.22	22.30	22.79	22.53	22.25
Claimed by the Petitioner in the instant petition	15.36	22.59	23.07	22.87	22.79
Allowed after true-up in this order	15.17	22.30	22.79	22.60	22.52

Asset-B2(a)								
Particulars	2014-15 (Pro-rata for 235 days)	2015-16	2016-17	2017-18	2018-19			
O & M Expenses	5.03	5.19	5.36	5.54	5.73			
Maintenance Spares	9.05	9.35	9.66	9.98	10.31			
Receivables	19.28	23.41	25.74	27.93	28.93			
Total	33.35	37.94	40.76	43.45	44.96			
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50	13.50			
Interest of Working Capital	2.90	5.12	5.50	5.87	6.07			



Particulars	2014-15 (Pro-rata for 235 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 22.2.2016 in Petition No. 109/TT/2014	2.90	5.30	5.74	5.91	5.97
Claimed by the Petitioner in the instant petition	2.92	5.17	5.56	5.92	6.12
Allowed after true-up in this order	2.90	5.12	5.50	5.87	6.07

(₹ in lakh)

	Asset-B2(b)									
Particulars	2014-15 (Pro-rata for 207 days)	2015-16	2016-17	2017-18	2018-19					
O & M Expenses	5.03	5.19	5.36	5.54	5.73					
Maintenance Spares	9.05	9.35	9.66	9.98	10.31					
Receivables	19.33	23.46	25.75	27.90	28.90					
Total	33.40	38.00	40.77	43.41	44.93					
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50	13.50					
Interest of Working Capital	2.56	5.13	5.50	5.86	6.07					

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 207 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 22.2.2016 in Petition No. 109/TT/2014	2.56	5.30	5.74	5.91	5.97
Claimed by the Petitioner in the instant petition	2.57	5.18	5.56	5.91	6.12
Allowed after true-up in this order	2.56	5.13	5.50	5.86	6.07

Asset-B3								
Particulars	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19			
O & M Expenses	7.04	7.27	7.51	7.76	8.02			
Maintenance Spares	12.66	13.08	13.52	13.97	14.43			
Receivables	22.32	23.47	25.82	27.79	28.61			



Total	42.02	43.82	46.85	49.52	51.06
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50	13.50
Interest of Working Capital	0.17	5.92	6.32	6.68	6.89

Particulars	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 22.2.2016 in Petition No. 109/TT/2014	0.17	6.18	6.70	6.85	6.97
Claimed by the Petitioner in the instant petition	0.17	5.94	6.36	6.73	6.93
Allowed after true-up in this order	0.17	5.92	6.32	6.68	6.89

Approved Annual Fixed Charges for the 2014-19 Tariff Period

47. Accordingly, the details of trued-up AFC approved for the transmission assets for the 2014-19 tariff period is given below and it is followed by a table containing the AFC approved earlier, claimed by the Petitioner in the instant petition and trued-up AFC approved for each transmission assets in the instant petition:

(₹ in lakh)

Asset-A1									
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19				
Depreciation	82.67	93.15	97.64	97.64	97.64				
Interest on Loan	71.50	79.19	79.84	71.99	66.96				
Return on Equity	97.62	111.32	117.18	117.18	117.49				
Interest on Working Capital	16.12	17.20	17.81	17.99	18.26				
O & M Expenses	186.93	193.13	199.55	206.16	213.01				
Total	454.84	493.99	512.01	510.95	513.35				

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 22.2.2016 in Petition No. 86/TT/2015	478.58	525.00	524.41	523.52	522.31
Claimed by the Petitioner in the instant petition	454.93	494.05	512.02	510.96	513.36
Allowed after true-up in this order	454.84	493.99	512.01	510.95	513.35



Asset-B1									
Particulars	2014-15 (Pro-rata for 265 days)	2015-16	2016-17	2017-18	2018-19				
Depreciation	162.04	244.06	252.65	253.30	254.45				
Interest on Loan	153.17	219.09	214.29	196.74	182.08				
Return on Equity	180.54	273.25	282.86	283.60	285.65				
Interest on Working Capital	15.17	22.30	22.79	22.60	22.52				
O & M Expenses	68.07	96.86	100.08	103.39	106.83				
Total	578.99	855.57	872.67	859.62	851.55				

(₹ in lakh)

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Particulars	2014-15 (Pro-rata for 265 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	581.25	855.67	872.95	856.72	839.21
Claimed by the Petitioner in the instant petition	587.38	868.42	885.09	871.65	863.22
Allowed after true-up in this order	578.99	855.57	872.67	859.62	851.55

(₹ in lakh)

Asset-B2(a)									
Particulars	2014-15 (Pro-rata for 235 days)	2015-16	2016-17	2017-18	2018-19				
Depreciation	9.93	23.08	27.60	32.07	34.12				
Interest on Loan	11.91	24.59	26.66	27.83	27.00				
Return on Equity	10.91	25.35	30.30	35.29	37.69				
Interest on Working Capital	2.90	5.12	5.50	5.87	6.07				
O & M Expenses	38.82	62.30	64.37	66.51	68.71				
Total	74.48	140.44	154.44	167.57	173.59				

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 235 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	74.64	148.48	165.01	169.76	169.13
Claimed by the Petitioner in the instant petition	75.21	142.73	156.82	169.88	175.81
Allowed after true-up in this order	74.48	140.44	154.44	167.57	173.59



Asset-B2(b)							
Particulars	2014-15 (Pro-rata for 207 days)	2015-16	2016-17	2017-18	2018-19		
Depreciation	8.78	23.13	27.65	32.11	34.16		
Interest on Loan	10.58	24.82	26.63	27.55	26.74		
Return on Equity	9.65	25.40	30.35	35.34	37.74		
Interest on Working Capital	2.56	5.13	5.50	5.86	6.07		
O & M Expenses	34.20	62.30	64.37	66.51	68.71		
Total	65.76	140.78	154.50	167.37	173.41		

Particulars	2014-15 (Pro-rata for 207 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	65.83	148.45	164.95	169.69	169.06
Claimed by the Petitioner in the instant petition	66.36	142.94	156.75	169.57	175.53
Allowed after true-up in this order	65.76	140.78	154.50	167.37	173.41

(₹ in lakh)

Asset-B3							
Particulars	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19		
Depreciation	0.40	14.51	18.33	21.68	22.83		
Interest on Loan	0.48	17.07	19.76	21.20	20.35		
Return on Equity	0.44	16.11	20.39	24.09	25.41		
Interest on Working Capital	0.17	5.92	6.32	6.68	6.89		
O & M Expenses	2.54	87.22	90.12	93.10	96.20		
Total	4.04	140.82	154.92	166.75	171.69		

Particulars	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 23.5.2016 in Petition No. 109/TT/2014	4.04	152.76	171.85	174.17	175.18
Claimed by the Petitioner in the instant petition	4.04	141.73	156.66	168.68	173.53
Allowed after true-up in this order	4.04	140.82	154.92	166.75	171.69



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

48. The Petitioner has combined the transmission assets into one single asset and has claimed combined tariff and has also submitted the tariff forms for the Combined Asset. During the course of hearing held on 10.8.2020, the Petitioner has submitted that the downstream system with respect to Asset-B3 was not yet ready. As such, Assets-A1, B1, B2(a) and B2(b) are combined into one asset and tariff for Asset-B3 is approved separately as the tariff for Asset-B3 has to be recovered from GETCO, which has not put into commercial operation the downstream transmission assets under its scope. Accordingly, as per the proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations, combined tariff has been worked out for the 2019-24 tariff period for Assets A1, B1, B2(a) and B2(b).

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

<u>(</u>₹ in lakh)

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Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	458.25	458.25	457.72	444.58	444.58
Interest on Loan	290.32	252.85	216.43	180.83	145.51
Return on Equity	485.68	485.68	485.68	485.68	485.68
Interest on Working Capital	42.17	42.52	42.82	42.98	43.26
Operation and Maintenance	541.71	560.99	580.58	601.25	621.50
Total	1818.13	1800.29	1783.23	1755.32	1740.53

50. The Petitioner has claimed the following 'Interest on Working Capital' for the Combined Asset for the 2019-24 tariff period:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	45.14	46.75	48.38	50.10	51.79
Maintenance Spares	81.26	84.15	87.09	90.19	93.23
Receivables	223.54	221.95	219.85	216.41	214.00
Total	349.94	352.85	355.32	356.70	359.02
Rate of Interest on working capital (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	42.17	42.52	42.82	42.98	43.26



Effective Date of Commercial Operation (E-COD)

51. Based on the trued-up admitted capital cost and actual COD of the transmission Assets-A1, B1, B2(a) and B2(b), Effective COD of the Combined Asset is worked out as under:

	Computation of Effective COD							
Assets	Actual COD	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Weight of the cost (%)	No. of Days from last COD	Weighted Days	Effective COD (Latest COD - Total weighted Days)		
Asset-A1	1.11.2013	1982.19	24.44	309.00	75.51			
Asset-B1	10.7.2014	4828.68	59.53	58.00	34.52			
Asset-B2(a)	9.8.2014	650.11	8.01	28.00	2.24	16.5.2014		
Asset-B2(b)	6.9.2014	650.94	8.02	0.00	0.00			
Total		8111.92	100.00		112.27			

52. E-COD of the Combined Asset is used to determine the lapsed life, which works out as four (4) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (WAL)

- 53. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of Weighted Average Life.
- 54. The Combined Asset may have multiple elements such as land, building, transmission line, Sub-station and PLCC and each element may have different span of life. Therefore, the concept of Weighted Average Life (WAL) has been used as the useful life of the project as a whole.
- 55. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff

Regulations. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 25 years:

Admitte				
Particulars (1)	Combined Cost (₹ in lakh) (2)	Life as per the 2019 Tariff Regulations (Years) (3)	Weighted Cost (4)=(2) x (3)	Weighted Avg. Life of Asset (in years) (5)=(4)/(2)
Building & Other Civil Works	367.83	25	9195.75	25
Sub-Station Equipment	7559.57	25	188989.16	25
PLCC	115.13	15	1726.93	15
IT Equipment and Software	69.40	7	462.65	6.66
Total	8111.92		200374.48	24.70 years, rounded to 25 years

56. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for the 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed above, the Effective COD of the Combined Asset is 16.5.2014 and the lapsed life works out as four (4) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from Effective COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 21 years.

Capital Cost

- 57. Regulations 19(3) and 19(5) of the 2019 Tariff Regulations provide as follows:
 - "19 Additional Capitalization
 - (3) The Capital cost of an existing project shall include the following:
 - (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
 - (b) Additional Capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
 - (c) Capital expenditure on account of renovation and modernisation as



admitted by this Commission in accordance with these regulations;

- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (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."
- 58. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, Substation and PLCC) as admitted by the Commission as on 31.3.2019 for the individual transmission assets are clubbed together and the capital cost has been considered for the Combined Asset as on 1.4.2019, as per the following details:



Element	Asset-A1	Asset-B1	Asset- B2(a)	Asset- B2(b)	Capital cost for Combined Assets as on 31.3.2019
Building & Other Civil Works	367.83	0.00	0.00	0.00	367.83
Sub-Station Equipment	1603.72	4813.06	571.00	571.79	7559.57
PLCC	10.64	0.00	52.22	52.27	115.13
IT Equipment and Software	0.00	15.62	26.89	26.89	69.39
Total	1982.19	4828.68	650.11	650.94	8111.91

59. Similarly, capital cost for Asset-B3 as on 31.3.2019 has been considered as follows:

(₹ in lakh)

Element	Capital cost for Asset B3 as on 31.3.2019
Sub-Station Equipment	394.89
PLCC	18.18
IT Equipment and Software	21.68
Total	434.75

- 60. The trued-up capital cost of ₹8111.91 lakh for Combined Asset {Asset-A1, Asset-B1, Asset-B2(a), Asset-B2(b)} and ₹434.75 lakh for Asset-B3 has been considered as admitted capital cost as on 1.4.2019 for working out tariff for the 2019-24 tariff period.
- 61. The Petitioner has not claimed any ACE for the transmission assets during the 2019-24 tariff period.

Capital cost for the 2019-24 tariff period

62. Accordingly, the capital cost considered for the 2019-24 tariff period, subject to truing-up, is as follows:

Particulars	Capital Cost allowed as on 1.4.2019	ACE allowed for the year 2019-24	Total Estimated Completion Cost up to 31.3.2024
Combined Asset A-I, B1, B2(a) & B2(b)	8111.92	0.00	8111.92
Asset-B3	434.75	0.00	434.75

63. Against the overall RCE approved capital cost of ₹9771.00 lakh, the estimated project cost of the Combined Asset and Asset-B3 including ACE is ₹8546.66 lakh which is within the RCE cost.

Initial Spares

64. Initial Spares were allowed for the 2014-19 period on the basis of the cost of individual assets. The tariff for Asset-B3 is allowed separately as it has to be bilaterally billed on GETCO as the transmission assets under the scope of GETCO were not ready. As all the transmission assets are not combined in the 2019-24 tariff period, initial spares are allowed on the plant and machinery cost of the individual assets as on the cut-off date. The Petitioner is at liberty to seek reconsideration of the same at the time of truing of tariff of the 2019-24 tariff period on the basis of overall project cost as per APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017.

Debt-Equity Ratio

- 65. Regulation 18 of the 2019 Tariff Regulations provides as under:
 - "18. Debt-Equity Ratio: (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."
- 66. The details of the debt-equity considered for the purpose of tariff for the 2019-24 tariff period for Combined Asset and Asset-B3 are as follows:

(₹ in lakh)

Combined Assets	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	5678.40	70.00	5678.40	70.00
Equity	2433.52	30.00	2433.52	30.00
Total	8111.92	100.00	8111.92	100.00

(₹ in lakh)

Asset-B3	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	304.33	70.00	304.33	70.00
Equity	130.42	30.00	130.42	30.00
Total	434.75	100.00	434.75	100.00

Return on Equity (RoE)

- 67. Regulations 30 and 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 run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

Provided that return on equity in respect of Additional Capitalization after 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.

(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."

68. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE for the 2019-24 tariff period, 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 and Asset-B3 under Regulation 30 of the 2019 Tariff Regulation is as under:

(₹ in lakh)

Combined Asset									
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24				
Opening Equity	2433.52	2433.52	2433.52	2433.52	2433.52				
Addition due to Additional									
Capitalization	0.00	0.00	0.00	0.00	0.00				
Closing Equity	2433.52	2433.52	2433.52	2433.52	2433.52				
Average Equity	2433.52	2433.52	2433.52	2433.52	2433.52				
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500				
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472				
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782				
Return on Equity (Pretax)	457.06	457.06	457.06	457.06	457.06				

Asset-B3									
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24				
Opening Equity	130.42	130.42	130.42	130.42	130.42				
Addition due to Additional									
Capitalization	0.00	0.00	0.00	0.00	0.00				
Closing Equity	130.42	130.42	130.42	130.42	130.42				
Average Equity	130.42	130.42	130.42	130.42	130.42				
Return on Equity (Base									
Rate) (%)	15.500	15.500	15.500	15.500	15.500				
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472				
Rate of Return on Equity									
(Pre-tax)	18.782	18.782	18.782	18.782	18.782				



Return on Equity (Pre- tax)	24.50	24.50	24.50	24.50	24.50
lax)					

Interest on Loan (IoL)

- 69. 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 decapitalization 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".
- 70. The weighted average rate of IoL has been considered on the basis of the rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. In view of the above, IoL has been allowed for the Combined Asset and



Asset-B3 in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL approved is as follows:

(₹ in lakh)

Combined Asset									
Particular	2019-20	2020-21	201-22	2022-23	2023-24				
Gross Normative Loan	5678.40	5678.40	5678.40	5678.40	5678.40				
Cumulative Repayments upto Previous Year	1914.81	2343.94	2773.07	3202.19	3631.32				
Net Loan-Opening	3763.58	3334.46	2905.33	2476.20	2047.08				
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00				
Repayment during the year	429.13	429.13	429.13	429.13	429.13				
Net Loan-Closing	3334.46	2905.33	2476.20	2047.08	1617.95				
Average Loan	3549.02	3119.89	2690.77	2261.64	1832.51				
Weighted Average Rate of Interest on Loan (%)	7.667	7.606	7.553	7.493	7.393				
Interest on Loan	272.10	237.31	203.24	169.46	135.47				

(₹ in lakh)

Asset-B3									
Particular	2019-20	2020-21	2021-22	2022-23	2023-24				
Gross Normative Loan	304.33	304.33	304.33	304.33	304.33				
Cumulative Repayments upto Previous Year	77.74	103.00	128.25	153.50	178.76				
Net Loan-Opening	226.58	201.33	176.08	150.82	125.57				
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00				
Repayment during the year	25.25	25.25	25.25	25.25	25.25				
Net Loan-Closing	201.33	176.08	150.82	125.57	100.32				
Average Loan	213.96	188.70	163.45	138.20	112.95				
Weighted Average Rate of Interest on Loan (%)	8.658	8.584	8.590	8.596	8.602				
Interest on Loan	18.52	16.20	14.04	11.88	9.72				

Depreciation

71. 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 thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

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



- (2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.
- (3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

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

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

- (4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 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."
- 72. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). The weighted average rate of depreciation (WAROD) has been worked out (refer Annexure-2) 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. The depreciation allowed for the Combined Asset and Asset-B3 are as follows:

Combined Asset									
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24				
Opening Gross Block	8111.92	8111.92	8111.92	8111.92	8111.92				
Addition during 2019-24 due to Projected Additional Capitalisation	0.00	0.00	0.00	0.00	0.00				
Closing Gross Block	8111.92	8111.92	8111.92	8111.92	8111.92				
Average Gross Block	8111.92	8111.92	8111.92	8111.92	8111.92				
Weighted Average Rate of Depreciation (WAROD) (%)	5.290	5.290	5.290	5.290	5.290				
Balance Useful life at the beginning of the year	21.00	20.00	19.00	18.00	17.00				
Elapsed life at the beginning of the year	4.00	5.00	6.00	7.00	8.00				
Aggregate Depreciable Value	7307.66	7307.66	7307.66	7307.66	7307.66				
Depreciation during the year	429.13	429.13	429.13	429.13	429.13				
Aggregate Cumulative Depreciation	2343.94	2773.07	3202.19	3631.32	4060.45				
Remaining Aggregated Depreciable Value Total	4963.72	4534.59	4105.46	3676.34	3247.21				



Asset-B3									
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24				
Opening Gross Block	434.75	434.75	434.75	434.75	434.75				
Addition during 2019-24 due to Projected Additional	0.00	0.00	0.00	0.00	0.00				
Capitalisation	404.75	404.75	404.75	404.75	404.75				
Closing Gross Block	434.75	434.75	434.75	434.75	434.75				
Average Gross Block	434.75	434.75	434.75	434.75	434.75				
Weighted Average Rate of Depreciation (WAROD) (%)	5.809	5.809	5.809	5.809	5.809				
Balance Useful life at the beginning of the year	21.00	20.00	19.00	18.00	17.00				
Elapsed life at the beginning of the year	4.00	5.00	6.00	7.00	8.00				
Aggregate Depreciable Value	393.44	393.44	393.44	393.44	393.44				
Depreciation during the year	25.25	25.25	25.25	25.25	25.25				
Aggregate Cumulative Depreciation	103.00	128.25	153.50	178.76	204.01				
Remaining Aggregated Depreciable Value Total	290.45	265.19	239.94	214.69	189.43				

Operation & Maintenance Expenses (O&M Expenses)

Regulations 35(3) and (4) of the 2019 Tariff Regulations provide as under: <i>Particulars</i>	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
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 below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh 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 below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)	-L				
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 (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

[&]quot;35 (3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:



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."



73. The O&M Expenses claimed by the Petitioner are as under:

(₹ in lakh)

Combined Asset								
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
Sub-station bays								
400 kV Mapusa ICT III Bay Nos.	1	1	1	1	1			
220 kV Mapusa ICT III Bay	1	1	1	1	1			
Nos.Nos.	-		•					
220 kV Mapusa line Bay Nos.	2	2	2	2	2			
400 kV Navsari: 500 MVA GIS	1	1	1	1	1			
400/ 220 kV ICT Bay Nos.	· · · · · · · · · · · · · · · · · · ·				·			
220 kV kV Navsari: 500 MVA GIS	1	1	1	1	1			
400/ 220 kV ICT Bay Nos	•	•	•	<u> </u>	'			
400 kV Line Bay for Indore-	2	2	2	2	2			
Pithampura Bay Nos.	2							
220 kV Line Bay for Pirana-	2	2	2	2	2			
Barajadi Bay Nos.								
Norm (₹ lakh/bay)								
400 kV (AIS)	32.15	33.28	34.45	35.66	36.91			
220 kV (AIS)	22.51	23.30	24.12	24.96	25.84			
400 kV (GIS)	22.51	23.30	24.12	24.96	25.84			
220 kV (GIS)	15.76	16.31	16.88	17.47	18.09			
Total Sub-station O&M	247.26	255.95	264.95	274.21	283.86			
Expenses	247.20	200.00	204.00	214.21	200.00			
Transformers								
Mapusa: 400/220 kV ICT	315	315	315	315	315			
400 kV Navsari: 500 MVA GIS	500	500	500	500	500			
400/ 220 kV ICT		000	000					
Norm (₹ lakh/MVA)								
400 kV	0.36	0.37	0.38	0.40	0.41			
Total Transformers O&M	291.77	302.37	312.96	324.37	334.97			
Expenses		002.01	0.2.00	02				
Communication System								
PLCC (₹ in lakh)	133.34	133.34	133.34	133.34	133.34			
Norms (%)	_				_			
Communication System	2	2	2	2	2			
Total Communication System	2.67	2.67	2.67	2.67	2.67			
Total O&M Expenses	541.70	560.98	580.58	601.25	621.49			

74. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 Tariff Regulations @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 Regulations and the 2019 Tariff Regulations and the norms for sub-

station have 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 original project 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 substation 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.

75. The O&M Expenses allowed as per the norms specified in the 2019 Tariff Regulations for Combined Asset are as under:



Combined Asset								
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
Sub-station bays								
400 kV Mapusa ICT III Bay Nos.	1	1	1	1	1			
220 kV Mapusa ICT III Bay	1	1	1	1	1			
Nos.Nos.				•				
220 kV Mapusa line Bay Nos.	2	2	2	2	2			
400 kV Navsari: 500 MVA GIS 400/ 220 kV ICT Bay Nos.	1	1	1	1	1			
220 kV kV Navsari: 500 MVA GIS 400/ 220 kV ICT Bay Nos	1	1	1	1	1			
400 kV Line Bay for Indore- Pithampura Bay Nos.	2	2	2	2	2			
Norm (₹ lakh/bay)								
400 kV (AIS)	32.15	33.28	34.45	35.66	36.91			
220 kV (AIS)	22.51	23.30	24.12	24.96	25.84			
400 kV (GIS)	22.51	23.30	24.12	24.96	25.84			
220 kV (GIS)	15.76	16.31	16.88	17.47	18.09			
Total Sub-station O&M Expenses	202.24	209.35	216.71	224.29	232.18			
Transformers								
Mapusa: 400/220 kV ICT	315	315	315	315	315			
400 kV Navsari: 500 MVA GIS 400/ 220 kV ICT	500	500	500	500	500			
Norm (₹ lakh/MVA)								
400 kV	0.36	0.37	0.38	0.40	0.41			
Total Transformers O&M Expenses	291.77	302.37	312.96	324.37	334.97			
Total O&M Expenses	494.01	511.71	529.67	548.66	567.14			

76. The O&M Expenses allowed as per the norms specified in the 2019 Tariff Regulations for the Asset-B3 are as under:

(₹ in lakh)

Asset-B3									
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24				
Sub-station bays									
220 kV Line Bay for Pirana-	2	2	2	2	2				
Barajadi Bay Nos.			2	2	2				
Norm (₹ lakh/bay)									
220 kV (AIS)	22.51	23.30	24.12	24.96	25.84				
Total Sub-station O&M Expenses	45.02	46.60	48.24	49.92	51.68				
Total O&M Expenses	45.02	46.60	48.24	49.92	51.68				

Interest on Working Capital (IWC)

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



- "34. Interest on Working Capital: (1) The working capital shall cover:
- (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
 - (i) Receivables equivalent to 45 days of annual fixed cost;
 - (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
 - (iii) Operation and maintenance expenses, including security expenses for one month.
- (3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 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. Definition In these regulations, unless the context otherwise requires:-
- (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;"
- 78. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the bank rate as on 1.4.2019.
- 79. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC 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 the rate of interest 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 allowed thereon allowed for Combined Asset and Asset-B3 are as under:



1						
Combined Asset						
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
O & M Expenses	41.17	42.64	44.14	45.72	47.26	
Maintenance Spares	74.10	76.76	79.45	82.30	85.07	
Receivables	207.94	206.12	204.16	202.37	199.94	
Total	323.21	325.52	327.75	330.40	332.27	
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25	
Interest of working capital	38.95	36.62	36.87	37.17	37.38	

(₹ in lakh)

Asset-B3						
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
O & M Expenses	3.75	3.88	4.02	4.16	4.31	
Maintenance Spares	6.75	6.99	7.24	7.49	7.75	
Receivables	14.30	14.22	14.16	14.11	14.03	
Total	24.80	25.10	25.42	25.76	26.08	
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25	
Interest of working capital	2.99	2.82	2.86	2.90	2.93	

Annual Fixed Charges for the 2019-24 Tariff Period

80. The annual fixed charges for the Combined Asset and Asset-B3 for the 2019-24 tariff period are as summarised below:

(₹ in lakh)

					12 111 101111		
Combined Asset							
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24		
Depreciation	429.13	429.13	429.13	429.13	429.13		
Interest on Loan	272.10	237.31	203.24	169.46	135.47		
Return on Equity	457.06	457.06	457.06	457.06	457.06		
Interest on Working Capital	38.95	36.62	36.87	37.17	37.38		
Operation and Maintenance	494.01	511.71	529.67	548.66	567.14		
Total	1691.25	1671.83	1655.96	1641.48	1626.18		

Asset-B3						
Particulars	2019-20	2020-21	201-22	2022-23	2023-24	
Depreciation	25.25	25.25	25.25	25.25	25.25	
Interest on Loan	18.52	16.20	14.04	11.88	9.72	
Return on Equity	24.50	24.50	24.50	24.50	24.50	
Interest on Working Capital	2.99	2.82	2.86	2.90	2.93	
Operation and Maintenance	45.02	46.60	48.24	49.92	51.68	
Total	116.28	115.37	114.89	114.45	114.08	

Filing Fee and Publication Expenses

81. 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 and RLDC Fees and Charges

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

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 Respondents 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 raised issue with respect to CGST. MPPMCL has submitted that with respect to the effect of CGST, the demand of the Petitioner is premature and need not to be considered at this juncture.
- 85. In response the Petitioner has submitted that under CGST Act, 2017 implemented w.e.f. 1.7.2017, the Govt. of India has exempted the charges of transmission of electricity vide Notification No. 12/2017- Central Tax rate dated 28.6.2017 at serial no

25 under the heading 9969 "Transmission or distribution of electricity by an electric transmission or distribution utility" by giving applicable GST rate NIL. Hence the transmission charges as indicated at para 4 and 5 of the instant petition is exclusive of GST. Further if GST is levied at any rate and at any point of time in future on charge of Transmission of Electricity, the same shall be borne and additional 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.

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

Security Expenses

87. 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 yearly basis.

88. 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.

Capital Spares

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

Sharing of Transmission Charges

- 90. The Commission vide order dated 23.5.2016 in Petition No. 109/TT/2014 held as under:
 - "51. The transmission charges for the instant assets shall be borne by the discoms whose downstream system was not ready, till the commissioning of the downstream system. After the commissioning of downstream system, the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of the 2014 Tariff Regulations"
- 91. The petitioner has submitted that the downstream system of Asset-B3 under the scope of GETCO was not ready and hence the Commission approved its COD under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. The tariff for Asset-B3 is billed bilaterally on GETCO and the rest of the assets are under the PoC mechanism. In view of the above, the transmission charges for Asset-B3 shall be borne by GETCO till the COD of the downstream system under its scope. After the COD of the

downstream system, 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, 2020, as provided in Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

- 92. The billing, collection and disbursement of the transmission charges approved in this order for Assets-A1, B1, B2(a) and B2(b) shall be governed by the provisions of 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 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.
- 93. To summarise, the trued-up Annual Fixed Charges allowed for the transmission assets for the 2014-19 tariff period are as under:

					(₹ in lakl
Asset- A1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	454.84	493.99	512.01	510.95	513.35

	Asset- B1				
Particulars	2014-15				
	(Pro-rata for	2015-16	2016-17	2017-18	2018-19
	265 days)				
AFC	578.99	855.57	872.67	859.62	851.55

		Asset- B2(a)				
Particulars	2014-15 (Pro- rata for 235 days)	2015-16	2016-17	2017-18	2018-19	
AFC	74.48	140.44	154.44	167.57	173.59	

(₹ in lakh)

		Asset- B2(b)				
Particulars	2014-15 (Pro-rata for 207 days)	2015-16	2016-17	2017-18	2018-19	
AFC	65.76	140.78	154.50	167.37	173.41	

(₹ in lakh)

	Asset- B3				
Particulars	2014-15 (Pro-rata for 11 days)	2015-16	2016-17	2017-18	2018-19
AFC	4.04	140.82	154.92	166.75	171.69

The Annual Fixed Charges allowed for the transmission assets for the 2019-24 tariff period in the instant order are as under:

(₹ in lakh)

Combined Asset - Asset A1, B1, B2(a) and B2(b)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	1691.25	1671.83	1655.96	1641.48	1626.18

(₹ in lakh)

Asset-B3					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	116.28	115.37	114.89	114.45	114.08

94. This order disposes of Petition No. 327/TT/2020.

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

Petition No.:	327-TT-2020
Period	2014-19 True-up

Asset-A1

2014-19	Admitted Capital	Α		al Capi f in lak	italizatio :h)	n	Admitted		Annual Depreciation (₹ in lakh)					
Capital Expenditure as on 1.4.2014	Cost as on 31.3.2014 or COD whichever is later (₹ in lakh)		2015- 16	2016- 17	2017-18	2018-19	31.3.2019 (≇ in	Rate of Depreciation (%)	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	
Building	229.46	61.27	77.10	0.00	0.00	0.00	367.83	3.34	8.69	11.00	12.29	12.29	12.29	
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00	
Sub-station	1296.46	186.87	120.40	0.00	0.00	0.00	1603.72	5.28	73.39	81.50	84.68	84.68	84.68	
PLCC	8.84	1.20	0.60	0.00	0.00	0.00	10.64	6.33	0.60	0.65	0.67	0.67	0.67	
TOTAL	1534.75	249.34	198.10	0.00	0.00	0.00	1982.19		82.67	93.15	97.64	97.64	97.64	
	Average Gross Block (₹ in lak										1982.19	1982.19	1982.19	
	Weighted Average Rate of Depreciation									4.95	4.93	4.93	4.93	



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Period	2014-19 True-up

Annexure – 1

Asset-B1

2014-19	Admitted Capital	Α	dditional. (₹ i	Capita n lakh)		l	Admitted		Annual Depreciation (₹ in lakh)						
Capital Expenditure as on 1.4.2014	Cost as on 31.3.2014 or COD whichever is later (₹ in lakh)		2015-16	2016- 17	2017- 18	2018- 19	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreci ation (%)	2014-15	2015-16	2016-17	2017-18	2018-19		
Sub-station	3981.52	465.46	322.38	0.00	24.78	18.92	4813.06	5.28	222.51	243.31	251.82	252.48	253.63		
IT Equipment and Software	12.63	0.26	2.73	0.00	0.00	0.00	15.62	5.28	0.67	0.75	0.82	0.82	0.82		
TOTAL	3994.15	465.72	325.11	0.00	24.78	18.92	4828.68		223.19	244.06	252.65	253.30	254.45		
	Average Gross Block (₹ in lak									4622.42	4784.98	4797.37	4819.22		
			V	Veight	ed Aver	age Rate	e of Deprec	iation %)	5.28	5.28	5.28	5.28	5.28		

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Asset-B2a

2014-19	Admitted Capital			al Capitali ₹ in lakh)	ization		Admitted		Annual Depreciation (₹ in lakh)				
Capital Expenditure as on 1.4.2014	Cost as on 31.3.2014 or COD whichever is later (₹ in lakh)	2014-15	2015-16	2016-17	2017-18	2018-19	31.3.2019	Rate of Depreciation (%)		2015-16	2016-17	2017-18	2018-19
Sub-station	163.56	191.38	22.21	119.79	45.51	28.55	571.00	5.28	13.68	19.33	23.08	27.44	29.40
PLCC	7.70	24.29	19.27	0.00	0.96	0.00	52.22	6.33	1.26	2.63	3.24	3.28	3.31
IT Equipment and Software	0.00	18.18	6.11	0.00	2.60	0.00	26.89	5.28	0.48	1.12	1.28	1.35	1.42
TOTAL	171.26	233.85	47.59	119.79	49.07	28.55	650.11		15.42	23.08	27.60	32.07	34.12
						Average	Gross Blo	ock (₹ in lakh)	288.18	428.90	512.59	597.02	635.83
	Weighted Average Rate of Depreciation (%) 5.35 5.38 5.39 5.37 5.37											5.37	



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Period	2014-19 True-up

Asset-B2b

2014-19	Admitted Capital	Α		al Capital ₹ in lakh)	ization		Admitted	Admitted		Annual Depreciation (₹ in lakh)					
Capital Expenditure as on 1.4.2014	Cost as on 31.3.2014 or COD whichever is later (₹ in lakh)	2014-15	2015- 16	2016-17		2018- 19	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)		2015-16	2016-17	2017-18	2018-19		
Sub-station	164.57	191.16	22.21	119.79	45.51	28.55	571.79	5.28	13.74	19.37	23.12	27.48	29.44		
PLCC	7.75	24.29	19.27	0.00	0.96	0.00	52.27	6.33	1.25	2.64	3.25	3.28	3.31		
IT Equipment and Software	0.00	18.18	6.11	0.00	2.60	0.00	26.89	5.28	0.48	1.12	1.28	1.35	1.42		
TOTAL	172.31	233.63	47.59	119.79	49.07	28.55	650.94		15.48	23.13	27.65	32.11	34.16		
					A	verage	Gross Blo	ock (₹ in lakh)	289.13	429.74	513.43	597.86	636.67		
				Weig	hted Ave	erage R	ate of Dep	reciation (%)	5.35	5.38	5.39	5.37	5.37		



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Period	2014-19 True-up

Asset-B3

2014-19	Admitted Capital			al Capit ₹ in lakh	alization)		Admitted				al Depreci (₹ in lakh)		
Capital Expenditure as on 1.4.2014	Cost as on 31.3.2014 or COD whichever is later (₹ in lakh)	2014-15	2015- 16	2016- 17	2017-18	2018- 19	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station	236.07	0.00	34.86	90.06	21.94	11.96	394.89	5.28	12.61	13.38	16.68	19.64	20.53
PLCC	11.40	0.00	0.36	0.00	6.42	0.00	18.18	6.33	0.66	0.73	0.74	0.95	1.15
IT Equipment and Software	0.00	0.00	14.74	4.83	2.11	0.00	21.68	5.28	0.00	0.39	0.91	1.09	1.14
TOTAL	247.47	0.00	49.96	94.89	30.47	11.96	434.75		13.27	14.51	18.33	21.68	22.83
					A	verage	Gross Blo	ock (₹ in lakh)	247.47	272.45	344.88	407.56	428.77
	Weighted Average Rate of Depreciation (5.32	5.32	5.32	5.32

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Period	2019-24 Tariff

	2019-24	Admitted Capital Cost as	Additional Capitalization (₹ in lakh)	Admitted Capital Cost Rate of		Annual Depreciation (₹ in lakh)							
Combined	Capital Expenditure as on 1.4.2019	on 31.3.2019 (₹ in lakh)	2019-24	as on 31.3.2024 (₹ in lakh)	Depreciati on (%)	2019-20	2020-21	2021-22	2022-23	2023-24			
Asset	Building	367.83	0.00	367.83	3.34	12.29	12.29	12.29	12.29	12.29			
	Sub-station	7559.57	0.00	7559.57	5.28	399.15	399.15	399.15	399.15	399.15			
	PLCC	115.13	0.00	115.13	6.33	7.29	7.29	7.29	7.29	7.29			
	IT Equipment and Software	69.40	0.00	69.40	15.00	10.41	10.41	10.41	10.41	10.41			
	TOTAL	8111.92	0.00	8111.92		429.13	429.13	429.13	429.13	429.13			
				Average Gro (₹ in la		8111.91	8111.91	8111.91	8111.91	8111.91			
				Weighted Ave		5.29	5.29	5.29	5.29	5.29			

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Period	2019-24 Tariff

Annexure – 2 a

Asset-B3	2019-24	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Additional Capitalization (₹ in lakh)	Capital Cost	Rate of Depreciati on (%)	Annual Depreciation (₹ in lakh)				
	Capital Expenditure as on 1.4.2019		2019-24			2019-20	2020-21	2021-22	2022-23	2023-24
	Sub-station	394.89	0.00	394.89	5.28	20.85	20.85	20.85	20.85	20.85
	PLCC	18.18	0.00	18.18	6.33	1.15	1.15	1.15	1.15	1.15
	IT Equipment and Software	21.68	0.00	21.68	15.00	3.25	3.25	3.25	3.25	3.25
	TOTAL	434.75	0.00	434.75		25.25	25.25	25.25	25.25	25.25
				Average Gross Block (₹ in lakh)		434.75	434.75	434.75	434.75	434.75
				Weighted Average Rate of Depreciation (%)		5.81	5.81	5.81	5.81	5.81