CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 313/TT/2020

Coram:

Shri I. S. Jha, Member Shri Arun Goyal, Member

Date of Order: 31 .01.2021

In the Matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of Asset-A1: 765 kV D/C Wardha Aurangabad Transmission Line 1 and associated bays along with 765 kV 3x80 MVAr Line, Asset-A2: 765/400 kV 1500 MVA ICT-1 with bays and equipment at Aurangabad Substation, Asset-A3: 400 kV 80 MVAR Switchable Line Reactor for Aurangabad-Boisar Transmission Line ckt 1 charged as Bus Reactor at Aurangabad Sub-station, Asset-A4: 400 kV 80 MVAR Switchable Line Reactor for Aurangabad-Boisar Transmission Line ckt 2 charged as Bus Reactor at Aurangabad Sub-station, Asset-A5: 400/220 kV 500 MVA ICT-3 with bays and equipment's at Boisar Sub-station, Asset-A6: 400 kV 80 MVAR Line Reactor for Aurangabad-Boisar Transmission Line ckt 1 charged as Bus Reactor at Boisar Sub-station, Asset-A7: 400 kV 80 MVAR Line Reactor for Aurangabad-Boisar Transmission Line ckt 2 charged as Bus Reactor at Boisar Substation, Asset-B1: 400 kV D/C Aurangabad Boisar Transmission Line (From Aurangabad to Loc 313/0 on D/C Towers and from Loc 332/0 to Boisar Sub-station on Multicircuit towers, Asset-B2: Part of 400 kV D/C Navsari-Boisar Transmission Line from Loc 332/0 to Boisar Sub-station on Multi circuit Tower. Asset-C1: 3x110 MVAR Switchable Line Reactor to be charged as Bus reactor 1 at 762/400 kV Wardha Sub-station, Asset-C2: 3x110 MVAR Switchable Line Reactor to be charged as Bus reactor 2 at 762/400 kV Wardha Sub-station, Asset-C3: 3x80 MVAR 765 kV Line reactor for 765 kV D/C Wardha Aurangabad Line 1 to be used as Bus Reactor at Aurangabad Sub-station, Asset-C4: 3x80 MVAR 765 kV Bus Reactor at Aurangabad Sub-station, Asset-C5: 765/400 kV 1500 MVA ICT-2 at Aurangabad Sub-station under "Transmission System Strengthening in Western region for IPPs in Chhattisgarh (IPP-D)".

And in the Matter of:

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

....Petitioner

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- Madhya Pradesh Power Management Company Ltd., Shakti Bhawan, Rampur, Jabalpur - 482008.
- Madhya Pradesh Power Transmission Company Ltd., Shakti Bhawan, Rampur, Jabalpur - 482008.
- 3. 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, 3rdFloor, M.G. Road, Fort, Mumbai- 400001.
- 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 - 390007.
- 7. Electricity Department,
 Government of Goa, Vidyut Bhawan,
 Panaji, Near Mandvi Hotel,
 Goa 403 001.
- 8. Electricity Department, Administration of Daman & Diu, Daman - 396210.
- DNH Power Distribution Corporation Ltd., Vidyut Bhawan, 66 kV Road, Near Secretariat, Amli, Silvassa - 396230.
- Chhattisgarh State Power Transmission Co. Ltd., Office of the Executive Director (C&P), State Load Despatch Building, Dangania, Raipur – 492013.
- 11. Chhattisgarh State Power Distribution Co. Ltd.,P.O. Sunder Nagar, Dangania,Raipur- 492 013........Respondents

For Petitioner : Shri S.S. Raju, PGCIL

Shri A.K. Verma, 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 tariff for the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of tariff for the 2019-24 period 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 (hereinafter collectively referred to as "the Combined Asset") under Transmission System Strengthening in Western region for IPPs in Chhattisgarh (IPP-D) (hereinafter referred to as "the transmission system"):

Asset-A1: 765 kV D/C Wardha Aurangabad Transmission Line 1 and associated bays along with 765 kV 3x80 MVAr Line,

Asset-A2: 765/400 kV 1500 MVA ICT-1 with bays and equipment at Aurangabad Sub-station,

Asset-A3: 400 kV 80 MVAr Switchable Line Reactor for Aurangabad-Boisar Transmission Line ckt 1 charged as Bus Reactor at Aurangabad Sub-station,

Asset-A4: 400 kV 80 MVAr Switchable Line Reactor for Aurangabad-Boisar Transmission Line ckt 2 charged as Bus Reactor at Aurangabad Sub-station,

Asset-A5: 400/220 kV 500 MVA ICT-3 with bays and equipment at Boisar Substation,

Asset-A6: 400 kV 80 MVAr Line Reactor for Aurangabad-Boisar Transmission Line ckt 1 charged as Bus Reactor at Boisar Sub-station,

Asset-A7: 400 kV 80 MVAr Line Reactor for Aurangabad-Boisar Transmission Line ckt 2 charged as Bus Reactor at Boisar Sub-station,

Asset-B1: 400 kV D/C Aurangabad Boisar Transmission Line (From Aurangabad to Loc 313/0 on D/C Towers and from Loc 332/0 to Boisar Substation on Multi circuit towers,

Asset-B2: Part of 400 kV D/C Navsari-Boisar Transmission Line from Loc 332/0 to Boisar Sub-station on Multi circuit Tower.

Asset-C1: 3x110 MVAr Switchable Line Reactor to be charged as Bus reactor 1 at 762/400 kV Wardha Sub-station,

Asset-C2: 3x110 MVAr Switchable Line Reactor to be charged as Bus reactor 2 at 762/400 kV Wardha Sub-station,

Asset-C3: 3x80 MVAr 765 kV Line reactor for 765 kV D/C Wardha Aurangabad Line 1 to be used as Bus Reactor at Aurangabad Sub-station,

Asset-C4: 3x80 MVAr 765 kV Bus Reactor at Aurangabad Sub-station,

Asset-C5: 765/400 kV 1500 MVA ICT-2 at Aurangabad Sub-station

- 2. The Petitioner has made the following prayers in this petition:
 - "1) Allow the add cap for 2014-19 and 2019-24 tariff block as claimed as per Para 6.9 above.
 - 2) Kindly allow Additional ROE of 0.5% for Assets A1, A2, A3 & A4 in true up of 2014-19 block as approved in order dated 26.08.16 in petition 24/RP/2016.
 - 3) 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 9.1 and 10.1 above.
 - 4) 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 9 above for respective block.
 - 5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
 - 6) 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.
 - 7) 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.

- 8) 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 9 above.
- 9) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 10) 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 the 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 system was accorded by the Board of Directors of the Petitioner vide Memorandum Ref. C/CP/Chhattisgarh IPP dated 22.11.2011 at an Estimated Cost of ₹212751 lakh including IDC of ₹13573 lakh based on 2nd Quarter, 2011 price level. The approval of Revised Cost Estimate (RCE) of the transmission system was accorded by the Board of Directors of the Petitioner vide Memorandum Ref. C/CP/RCE/WR-IIPs dated 9.3.2016 at an estimated cost of ₹261956 lakh including IDC of ₹22169 lakh. The Revised Cost Estimate-II for the subject transmission system was approved by the Board of Directors of the Petitioner vide Memorandum Ref: C/CP/RCE/RCE-II-WR-IPPs dated 21.2.2018 at an estimated cost of ₹273135 lakh including IDC of ₹26897 lakh based on April, 2017 price level.
 - (b) The transmission tariff of Assets-A1 to A7 from COD to 31.3.2019 was determined vide order dated 29.4.2016 in Petition No. 58/TT/2015 and order dated 9.10.2018 in Review Petition No. 24/RP/2016 in terms of provisions of the 2014 Tariff Regulations. The transmission tariff in respect of Assets-B1 and B2 from their respective COD to 31.3.2019 was determined vide order dated 9.10.2018 in Petition No. 192/TT/2017 and order dated 19.3.2019 in Review Petition No. 46/RP/2018 in terms of provisions of the 2014 Tariff Regulations. Assets-C1 to C5 have been executed during the 2009-14 period and the

transmission tariff in respect of these assets from their respective COD to 31.3.2014 was determined vide order dated 29.3.2016 in Petition No. 47/TT/2014 as per the 2009 Tariff Regulations which was trued-up and tariff for Combined Asset-C (Assets-C1 to C5) for 2014-19 tariff period was determined vide order dated 11.7.2018 in Petition No. 79/TT/2018. There is time over-run in case of Assets-A3 to A7, Assets-B1 and B2 which has been condoned by the Commission in its earlier orders.

(c) The scope of work covered under the transmission system in Western Region is as under:

i Transmission Line:

- i. Wardha-Aurangabad 765 kV D/C
- ii. Aurangabad- Boisar 400 kV D/C (Quad)

ii Sub-station:

- i. Establishment of 765/400 kV, 2x1500 MVA Aurangabad Sub-station
- ii. Augmentation of 400/220 kV transformation capacity by 1x500 MVA transformer at Boisar Sub-station
- iii. Extension of 765/400 kV Wardha Sub-station
- (d) As per IA dated 22.11.2011, the transmission system was scheduled to be put into commercial operation within 32 months of the IA i.e. by 21.7.2014. The details of commercial operation of the assets along with the time over-run are as under:

Asset	Description	SCOD	COD	Time Over-
Asset-A1	765 kV D/C Wardha Aurangabad Transmission Line 1 and associated bays alongwith 765 kV 3x80 MVAr Line Reactor at Aurangabad Sub-station	21.7.2014	8.7.2014	run No
Asset-A2	765/400 kV 1500 MVA ICT-1 with bays and equipment at Aurangabad Sub-station	21.7.2014	1.7.2014	No
Asset-A3	400 kV 80 MVAR Switchable Line Reactor for Aurangabad-Boisar Transmission Line ckt 1 charged as Bus Reactor at Aurangabad Sub-station	21.7.2014	2.10.2014	2 months and 12 days
Asset-A4	400 kV 80 MVAR Switchable Line Reactor for Aurangabad-Boisar Transmission Line ckt 2 charged as Bus Reactor at Aurangabad Sub-station	21.7.2014	1.10.2014	2 months and 11 days
Asset-A5	400/220 kV 500 MVA ICT-3 with bays and equipment at Boisar Sub-station	21.7.2014	2.1.2015	5 months and 12 days
Asset-A6	400 kV 80 MVAR Line Reactor for Aurangabad-Boisar Transmission Line ckt 1 charged as Bus Reactor at Boisar Substation	21.7.2014	11.1.2015	5 months and 21 days

Asset-A7	400 kV 80 MVAR Line Reactor for Aurangabad-Boisar Transmission Line ckt 2 charged as Bus Reactor at Boisar Substation	21.7.2014	7.1.2015	5 months and 17 days
Asset-B1	400 kV D/C Auragabad Boisar Transmission Line (From Aurangabad to Loc 313/0 on D/C Towers and from Loc 332/0 to Boisar Sub-station on Multi-circuit towers	21.7.2014	29.12.2017	41 months and 8 days
Asset-B2	Part of 400 kV D/C Navsari-Boisar Transmission Line from Loc 332/0 to Boisar Sub-station on Multi circuit Tower	21.7.2014	31.12.2016	29 months and 10 days
Asset-C1	3x110 MVAR Switchable Line Reactor to be charged as Bus reactor 1 at 762/400 kV Wardha Sub-station	21.7.2014	1.1.2014	No
Asset-C2	3x110 MVAR Switchable Line Reactor to be charged as Bus reactor 2 at 762/400 kV Wardha Sub-station	21.7.2014	1.1.2014	No
Asset-C3	3x80 MVAR 765 kV Line reactor for 765 kV D/C Wardha Aurangabad Line 1 to be used as Bus Reactor at Aurangabad Substation	21.7.2014	1.3.2014	No
Asset-C4	3x80 MVAR 765 kV Bus Reactor at Aurangabad Sub-station	21.7.2014	1.3.2014	No
Asset-C5	765/400 kV 1500MVA ICT-2 at Aurangabad Sub-station	21.7.2014	1.3.2014	No

- (e) The Commission vide order dated 29.4.2016 in Petition No. 58/TT/2015 directed as under:
 - "21. The petitioner is directed to submit the RLDC certificates for the assets III, IV & V during true-up, in support of the claim of commercial operation in accordance with Regulation 5(2) of the 2014 Tariff Regulations indicating completion of successful trial operation for the instant transmission asset."

As per the above direction, the Petitioner has submitted the RLDC charging certificate for Asset-A3, A4 and A6.

(f) The trued up transmission tariff claimed by the Petitioner in respect of the assets is as under:

Asset	Particular	2014-15	2015-16	2016-17	2017-18	2018-19
	Annual Fixed Charges approved vide order dated 29.4.2016	15745.05	22359.45	22037.81	21454.75	20860.97
Asset-A1	Claimed by the Petitioner based on true-up in the instant petition	15377.65	21623.03	21735.84	21305.99	20756.39
	Annual Fixed Charges approved vide order dated 29.4.2016	1001.88	1510.57	1551.34	1520.34	1489.42
Asset-A2	Claimed by the Petitioner based on true-up in the instant petition	988.12	1407.38	1442.30	1455.55	1430.97
Asset- A3	Annual Fixed Charges approved vide order dated 29.4.2016	115.20	246.84	251.69	252.92	254.36

		440.00	005.55	0.40.00	0.40 == 1	0=0.07
	Claimed by the Petitioner based on true-up in the instant petition	112.83	235.95	243.60	248.75	250.31
	Annual Fixed Charges approved vide order dated 29.4.2016	114.09	242.95	247.91	249.40	251.03
Asset-A4	Claimed by the Petitioner based on true-up in the instant petition	111.92	232.97	240.75	246.08	247.86
	Annual Fixed Charges approved vide order dated 29.4.2016	155.19	684.52	704.28	697.52	691.19
Asset-A5	Claimed by the Petitioner based on true-up in the instant petition	144.55	653.42	676.00	665.26	658.75
	Annual Fixed Charges approved vide order dated 29.4.2016	51.87	255.94	263.34	260.28	257.37
Asset-A6	Claimed by the Petitioner based on true-up in the instant petition	51.25	246.85	252.13	252.60	249.86
	Annual Fixed Charges approved vide order dated 29.4.2016	45.25	209.05	215.18	213.45	211.84
Asset-A7	Claimed by the Petitioner based on true-up in the instant petition	44.89	206.83	212.03	211.77	210.04
	Annual Fixed Charges approved vide order dated 9.10.2018	-	-	-	4038.27	16055.09
Asset-B1	AFC claimed by the Petitioner based on truing up in the instant petition	-	-	-	4136.36	16613.26
	Annual Fixed Charges approved vide order dated 9.10.2018	-	-	252.27	1058.48	1063.75
Asset-B2	Claimed by the Petitioner based on true-up in the instant petition	-	-	251.30	1054.24	1063.76
Combined	Annual Fixed Charges approved vide order dated 11.7.2018	3240.93	3472.23	3550.70	3611.64	3566.19
Asset-C	Claimed by the Petitioner based on true-up in the instant petition	3425.42	3655.50	3730.49	3765.72	3718.68

- 4. The Respondents are the distribution licensees and transmission licensees, which are procuring transmission services from the Petitioner, mainly beneficiaries of Western Region.
- 5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. M.P. Power Management Company Limited (MPPMCL), Respondent No. 1, has filed its reply vide affidavit dated 8.6.2020 and has raised issues like grossing up of RoE, effect of GST and excess Initial Spares claimed by the Petitioner. The Petitioner vide affidavit dated 20.7.2020 has filed a rejoinder to the reply filed by MPPMCL.
- 6. The hearing in this matter was held on 28.7.2020 through video conference and the order was reserved.
- 7. This order is issued considering the submissions made in the Petition dated 27.1.2020, Petitioner's affidavits dated 9.6.2020 and 18.8.2020, MPPMCL's reply affidavit dated 8.6.2020 and the Petitioner's rejoinder dated 20.7.2020 to the reply filed by MPPMCL.
- 8. Having heard the representatives of the Petitioner and having perused the material on record, we proceed to dispose of the petition.

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

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

(₹ in lakh)

Asset A1									
	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19				
Depreciation	4562.74	6552.88	6765.50	6838.81	6843.81				
Interest on Loan	4866.61	6508.55	6145.14	5547.87	4961.63				
Return on equity	5260.08	7591.81	7836.98	7924.05	7950.88				
Interest on Working Capital	356.45	501.28	504.30	495.14	483.30				
O & M Expenses	331.77	468.51	483.92	500.12	516.77				
Total	15377.65	21623.03	21735.84	21305.99	20756.39				

(₹ in lakh)

Asset-A2									
Particular	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19				
Depreciation	266.33	388.15	406.30	420.35	420.35				
Interest on Loan	274.38	374.15	361.93	337.40	306.59				
Return on equity	313.11	459.18	482.26	500.40	501.73				
Interest on Working Capital	25.66	36.38	37.32	37.78	37.39				
O & M Expenses	108.64	149.52	154.49	159.62	164.91				
Total	988.12	1407.38	1442.30	1455.55	1430.97				

(₹ in lakh)

Asset-A3								
Particular	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19			
Depreciation	14.21	30.34	32.07	33.15	33.15			
Interest on Loan	17.68	35.75	34.97	33.07	29.96			
Return on equity	16.72	36.03	38.28	39.72	39.82			
Interest on Working Capital	4.42	9.23	9.54	9.79	9.96			
O & M Expenses	59.80	124.60	128.74	133.02	137.42			
Total	112.83	235.95	243.60	248.75	250.31			

Asset-A4								
Particular	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19			
Depreciation	14.14	30.04	31.76	32.83	32.83			
Interest on Loan	16.59	33.48	32.86	31.15	28.25			
Return on equity	16.64	35.68	37.92	39.35	39.46			
Interest on Working Capital	4.41	9.17	9.47	9.73	9.90			
O & M Expenses	60.14	124.60	128.74	133.02	137.42			
Total	111.92	232.97	240.75	246.08	247.86			

Asset-A5									
Particular	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19				
Depreciation	28.87	139.29	148.53	148.53	148.53				
Interest on Loan	33.65	149.84	146.20	128.89	115.03				
Return on equity	31.77	150.38	160.22	160.22	160.65				
Interest on Working Capital	4.69	20.78	21.50	21.46	21.53				
O & M Expenses	45.57	193.13	199.55	206.16	213.01				
Total	144.55	653.42	676.00	665.26	658.75				

(₹ in lakh)

Asset-A6								
Particular	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19			
Depreciation	11.43	57.22	59.82	60.91	60.91			
Interest on Loan	12.41	57.84	55.54	51.48	46.35			
Return on equity	12.62	61.97	64.70	65.92	66.10			
Interest on Working Capital	1.57	7.52	7.70	7.78	7.79			
O & M Expenses	13.22	62.30	64.37	66.51	68.71			
Total	51.25	246.85	252.13	252.60	249.86			

(₹ in lakh)

Asset-A7									
Particular	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19				
Depreciation	9.09	43.74	45.95	46.56	46.56				
Interest on Loan	10.41	46.68	45.09	41.34	37.24				
Return on equity	10.06	47.49	49.82	50.50	50.64				
Interest on Working Capital	1.45	6.62	6.80	6.86	6.89				
O & M Expenses	13.88	62.30	64.37	66.51	68.71				
Total	44.89	206.83	212.03	211.77	210.04				

(₹ in lakh)

	Ass	et-B1	Asset-B2		
Particular	2017-18 (Pro- rata)	2018-19	2016-17	2017-18	2018-19
Depreciation	1266.81	5169.78	76.17	325.16	336.22
Interest on Loan	1259.46	4865.52	82.03	332.54	317.26
Return on equity	1418.87	5805.84	85.28	363.85	377.05
Interest on Working Capital	89.84	360.97	5.43	22.79	23.00
O & M Expenses	101.38	411.15	2.39	9.90	10.23
Total	4136.36	16613.26	251.30	1054.24	1063.76



Combined Asset-C										
Particular	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19					
Depreciation	803.97	884.75	926.04	959.09	964.42					
Interest on Loan	949.89	970.35	927.90	864.24	779.35					
Return on equity	922.73	1024.12	1075.51	1116.76	1125.75					
Interest on Working Capital	97.59	103.44	105.83	107.35	107.05					
O & M Expenses	651.24	672.84	695.21	718.28	742.11					
Total	3425.42	3655.50	3730.49	3765.72	3718.68					

10. The details of the trued up Interest on Working Capital (IWC) claimed by the Petitioner for the instant assets for the 2014-19 tariff period is as under:

(₹ in lakh)

	Asset-A1											
Particular	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19							
O & M expenses	37.80	39.04	40.33	41.68	43.06							
Maintenance Spares	68.03	70.28	72.59	75.02	77.52							
Receivables	3503.65	3603.84	3622.64	3551.00	3459.40							
Total	3609.48	3713.16	3735.56	3667.70	3579.98							
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50							
Interest on Working Capital	356.45	501.28	504.30	495.14	483.30							

(₹ in lakh)

Asset-A2										
Particular	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19					
O & M expenses	12.06	12.46	12.87	13.30	13.74					
Maintenance Spares	21.71	22.43	23.17	23.94	24.74					
Receivables	219.38	234.56	240.38	242.59	238.50					
Total	253.15	269.45	276.42	279.83	276.98					
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50					
Interest on Working Capital 25.66 36.38 37.32 37.78										

(₹ in lakh)

	Asset-A3												
Particular	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19								
O & M expenses	10.05	10.38	10.73	11.09	11.45								
Maintenance Spares	18.09	18.69	19.31	19.95	20.61								
Receivables	37.93	39.33	40.60	41.46	41.72								
Total	66.07	68.40	70.64	72.50	73.78								
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50								
Interest on Working Capital 4.42 9.23 9.54 9.79													



Asset-A4											
Particular	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19						
O & M expenses	10.05	10.38	10.73	11.09	11.45						
Maintenance Spares	18.09	18.69	19.31	19.95	20.61						
Receivables	37.41	38.83	40.13	41.01	41.31						
Total	65.55	67.90	70.17	72.05	73.37						
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50						
Interest on Working Capital	4.41	9.17	9.47	9.73	9.90						

	Asset-A5											
Particular	2014-15 (Pro-rata)	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	98.81	108.90	112.67	110.88	109.79							
Total	142.43	153.96	159.23	158.98	159.49							
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50							
Interest on Working Capital	4.69	20.78	21.50	21.46	21.53							

(₹ in lakh)

Asset-A6											
Particular	2014-15 (Pro-rata)	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	38.97	41.14	42.02	42.10	41.64						
Total	53.05	55.68	57.04	57.62	57.68						
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50						
Interest on Working Capital 1.57 7.52 7.70 7.78 7											

(₹ in lakh)

Asset-A7										
Particular 2014-15 (Pro-rata) 2015-16 2016-17 2017-18 201										
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	32.51	34.47	35.34	35.30	35.01					
Total	46.59	49.01	50.36	50.82	51.05					
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50					
Interest on Working Capital	1.45	6.62	6.80	6.86	6.89					

	Asse	et-B1	Asset-B2			
Particular	2018-10		2016-17 (Pro-rata)	2017-18	2018-19	
O & M expenses	33.16	34.26	0.80	0.83	0.85	
Maintenance Spares	59.68	61.67	1.44	1.49	1.53	
Receivables	2705.69	2768.88	168.00	175.71	177.29	



Total	2798.53	2864.81	170.24	178.03	179.67
Rate of Interest	12.60	12.60	12.80	12.80	12.80
Interest on Working Capital	89.84	360.97	5.43	22.79	23.00

Combined Asset-C										
Particular	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19					
O & M expenses	54.27	56.07	57.93	59.86	61.84					
Maintenance Spares	97.69	100.93	104.28	107.74	111.32					
Receivables	570.90	609.25	621.75	627.62	619.78					
Total	722.86	766.25	783.96	795.22	792.94					
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50					
Interest on Working Capital	97.59	103.44	105.83	107.35	107.05					

Capital Cost

- 11. The Commission vide order dated 29.4.2016 in Petition No. 58/TT/2015 approved the capital cost of ₹129627.50 lakh, ₹8652.14 lakh, ₹675.29 lakh, ₹666.83 lakh, ₹2909.58 lakh, ₹1163.19 lakh and ₹878.63 lakh for Assets-A1, A2, A3, A4, A5, A6 and A7 respectively as on 31.3.2019. The Commission, vide order dated 9.10.2018 in Petition No. 192/TT/2017, approved the capital cost of ₹96012.24 lakh and ₹6411.38 lakh respectively for Assets-B1 and B2 as on 31.3.2019. Further, the Commission vide order dated 11.7.2018 in Petition No. 79/TT/2018, approved capital cost of ₹14269.36 lakh as on 1.4.2014 and ₹19138.94 lakh as on 31.3.2019 for Combined Asset-C.
- 12. The details of apportioned approved capital cost as per the RCE, capital cost as on COD/31.3.2014 and Additional Capital Expenditure (ACE) incurred up to 31.3.2019 as claimed by the Petitioner are as under:

	Apportioned	Capital	Α	dditional C	apital Expe	nditure (ACE	Ξ)	Total
Asset	approved Capital Cost (RCE 2)	Cost up to	2014-15	2015-16	2016-17	2017-18	2018-19	Capital Cost as on 31.3.2019
Asset-A1	130224.94	114982.05	6674.58	5382.69	2775.12	78.76	110.49	130003.69
Asset-A2	8357.46	6289.96	1146.34	169.27	594.62	0.00	0.00	8200.19

Asset-A3	650.87	533.06	43.64	26.93	47.23	0.00	0.00	650.86
Asset-A4	964.19	527.64	43.28	26.93	47.02	0.00	0.00	644.87
Asset-A5	3044.91	2051.73	323.02	335.60	0.00	0.00	0.00	2710.35
Asset-A6	1115.16	933.75	88.13	51.82	41.46	0.00	0.00	1115.16
Asset-A7	854.29	710.49	64.02	56.66	23.12	0.00	0.00	854.29
Asset-B1	100997.34	94090.05	0.00	0.00	0.00	3987.64	1288.60	99366.29
Asset-B2	6600.12	5712.14	0.00	0.00	406.83	207.81	81.90	6408.68
Combined Asset-C	20325.68	14303.24	2767.07	484.25	1272.00	123.62	78.43	19028.61
Total	273134.95	240134.10	11150.08	6534.15	5207.40	4397.83	1559.42	268982.99

- 13. The Petitioner vide Auditor's Certificates dated 3.8.2019 has submitted the capital cost incurred upto COD in respect of Assets-A1 to A7, B1, B2 and capital cost as on 31.3.2014 in respect of Combined Asset-C and ACE upto 31.3.2019.
- 14. The Petitioner has submitted that the cost has been re-apportioned in case of few assets due to re-allocation of contingency and common package cost on the basis of RCE-2 and has prayed to consider the revised apportionment and allow the capital cost as claimed.
- 15. In this regard, MPPMCL has submitted that the apportioned approved cost (as per RCE-2) has been re-apportioned in few assets due to reallocation of contingency and common package cost considered in RCE-2 and hence, prudence check may be applied before allowing the prayer of the Petitioner.
- 16. We have considered the submissions of the Petitioner and MPPMCL. It is noted that the completion cost including ACE in respect of the instant assets is within the RCE-2 Approved Apportioned Capital Cost as mentioned above and we have considered the same.

Time Over-run

17. The Commission vide its order dated 29.4.2016 in Petition No. 58/TT/2015 (in respect of Assets-A3 to A7) and vide order dated 9.10.2018 in Petition No. 192/TT/2017 (in respect of Assets-B1 and B2) held that the time over-run was beyond the control of the Petitioner and the same was, accordingly, condoned.

Interest During Construction (IDC) and Incidental Expenditure During Construction (IEDC)

- 18. The Petitioner has claimed Interest During Construction (IDC) for the instant Assets and has submitted the Auditor's Certificates in support of the same. The Petitioner has submitted computation of IDC along with year-wise details of the IDC discharged.
- 19. 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. Further, Assets-C1 to C5 were executed during 2009-14 period and the IDC issues have been settled vide order dated 11.7.2018 in Petition No. 79/TT/2018.
- 20. Accordingly, based on the information furnished by the Petitioner, the IDC considered for Assets-A1 to A7, Asset-B1 and Asset-B2, is summarized as under:-

	IDC as per	IDC	Computa-	IDC dis- charged	IDC Un-	IDC	Dis-cha	arged dur	ing
Assets	Auditor's Certificate	Admissible	tional difference	as on COD	discharged as on COD	2014- 15	2015- 16	2017- 18	2018- 19

Α	В	C	D=B-C	E	F=C-E	G	Н	I	J
Asset- A1	6304.13	6185.77	118.36	4152.07	2033.7	1941.06	92.65	-	-
Asset- A2	545.49	431.79	113.7	332.73	99.06	96.17	2.89	-	-
Asset- A3	45.16	45.16	0	20.8	24.36	24.36	-	-	-
Asset- A4	44.58	44.58	0	30.67	13.91	13.91	-	-	-
Asset- A5	92.08	92.08	0	62.71	29.37	0.08	29.28	-	-
Asset- A6	62.57	62.57	0	41.42	21.15	1	21.15	-	-
Asset- A7	52.58	52.58	0	34.48	18.10	-	18.10	-	-
Asset- B1	17552.49	17552.49	0	15331.77	2220.72	-	-	676.26	1544.66
Asset- B2	314.59	309.77	4.82	185.37	124.4	-	-	124.40	-

21. The Petitioner has also claimed IEDC of ₹629.86 lakh, ₹5.50 lakh, ₹0.54 lakh, ₹0.52 lakh, ₹9.60 lakh, ₹4.23 lakh, ₹3.19 lakh, ₹2030.98 lakh and ₹93.26 lakh for Assets-A1, A2, A3, A4, A5, A6, A7, B1 and B2 respectively 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 the instant assets. The IEDC claimed is within the estimated expenditure of IEDC as indicated in the Abstract Cost Estimate, in respect of the instant assets. Hence, IEDC claimed has been allowed.

Initial Spares

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

Communication System: 3.5%"

23. The Petitioner has claimed the following Initial Spares for the transmission assets and prayed to revise the Initial Spares allowed earlier in light of the judgement of the Appellate Tribunal for Electricity (APTEL) dated 14.9.2019 in Appeal No.74 of 2017:

Assets	Particular	Plant & Machinery cost up to cut-off date (excluding IDC and IEDC) (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Ceiling (C) (in %)	Initial Spares worked out by the Petitioner (₹ in lakh)
Asset-A1	Transmission Line	115527.43	1428.87	1	1152.51
	Sub-station	3370.31	51.40	4	247.92
Asset-A2	Sub-station	6851.21	159.59	4	278.82
Asset-A3	Sub-station	512.92	17.10	6	31.65
Asset-A4	Sub-station	507.66	11.85	6	31.65
Asset-A5	Sub-station	2440.43	96.07	6	149.64
Asset-A6	Sub-station	968.79	25.25	6	60.23
Asset-A7	Sub-station	731.88	18.62	6	45.53
Asset-B1	Transmission Line	77374.13	565.62	1	776.62
	Sub-station	846.76	0	6	54.05
Asset-B2	Transmission Line	6000.83	60.04	1	60.00
Asset-C1*	Sub-station	2879.60	71.99	2.5	71.99
Asset-C2*	Sub-station	2785.10	65.89	2.5	69.72
Asset-C3*	Sub-station	3995.38	70.08	2.5	100.65
Asset-C4*	Sub-station	2738.86	0	2.5	70.23
Asset-C5*	Sub-station	6427.62	0	2.5	164.81

^{*}Assets C1 to C5 have been commissioned during 2009-14 period. Therefore, capital costs as on cutoff date as per the Auditor Certificates have been considered for calculation of Initial Spares.

- 24. MPPMCL has submitted that there is no provision in the 2014 Tariff Regulations, enabling the Petitioner to claim Initial Spares for the project as a whole, and hence, excess cost for Initial Spares in respect of Asset-A1 may be disallowed to save the beneficiaries from any undue financial burden.
- 25. In response, the Petitioner has submitted that it has claimed Initial Spares as per the 2014 Tariff Regulations. In the instant case, the identity of individual elements

will be lost after clubbing of all the elements as per the Commission's directions and therefore restricting spares on individual elements becomes infructuous. As the project is being considered as whole, it is prayed to allow the same as per APTEL judgement dated 14.9.2019 in Appeal No. 74 of 2017.

- 26. We have considered the submissions of the Petitioner and MPPMCL. APTEL vide its judgement dated 14.9.2019 in Appeal No. 74 of 2017 observed that the Commission for the purpose of prudence check may restrict the Initial Spares to the cost of the individual asset and later at the time of truing-up allow Initial Spares as per the ceiling on the overall project cost. The relevant portion of the said judgement is extracted here under:-
 - "18.13. The Central Commission to have a prudence check on the initial spares, being restricted based on the individual asset wise cost initially, but subsequently ought to have allowed as per the ceiling limits on the overall project cost basis during the true- up."
- 27. The Assets-A1 to A7, B1 and B2 were put into commercial operation in the 2014-19 period whereas Assets-C1 to C5 were put under commercial operation in 2009-14 tariff period. Accordingly, the norms specified for the Initial Spares in the 2014 Tariff Regulations and the 2009 Tariff Regulations are applicable for computation of the allowable Initial Spares asset-wise/ element-wise. As per APTEL's judgement, the Initial Spares are to be allowed as a percentage of the overall project cost. In the present case, though the instant assets were put into commercial operation during the 2014-19 tariff period, the overall project cost of the instant assets is arrived at only when all the instant assets are combined, which in the instant case is done by the Petitioner in the 2019-24 tariff period. Therefore, the Initial Spares are allowed on the basis of the overall project cost in the 2014-19 tariff period and the Initial Spares are allowed on the basis of the overall project cost in the 2019-

24 period when the instant assets are combined and the overall project cost is arrived at. Accordingly, the details of Initial Spares allowed for the 2014-19 tariff period are as under:

Assets	Particular	Plant & Machinery cost upto cut- off date (excluding IDC and IEDC) (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Norms as per the 2009/2014 Tariff Regulations (C) (in %)	Initial Spares as per the norms of the 2009/2014 Tariff Regulations (₹ in lakh)	Initial Spares allowed (₹ in lakh)
Asset-A1	Transmission Line	115527.43	1428.87	1	1152.51	1152.51
	Sub-station	3370.31	51.40	4	247.92	51.40
Asset-A2	Sub-station	6851.21	159.59	4	278.82	159.59
Asset-A3	Sub-station	512.92	17.10	6	31.65	17.10
Asset-A4	Sub-station	507.66	11.85	6	31.65	11.85
Asset-A5	Sub-station	2440.43	96.07	6	149.64	96.07
Asset-A6	Sub-station	968.79	25.25	6	60.23	25.25
Asset-A7	Sub-station	731.88	18.62	6	45.53	18.62
Asset-B1	Transmission Line	77374.13	354.00	1	776.62	354.00
Asset-B2	Transmission Line	6000.83	0.00	1	60.61	0.00
Asset-C1*	Sub-station	2879.60	71.99	2.5	71.99	71.99
Asset-C2*	Sub-station	2785.10	65.89	2.5	69.72	65.89
Asset-C3*	Sub-station	3995.38	70.08	2.5	100.65	70.08
Asset-C4*	Sub-station	2738.86	0.00	2.5	70.23	0.00
Asset-C5*	Sub-station	6427.62	0.00	2.5	164.81	0.00

^{*}Assets C1 to C5 have been commissioned during 2009-14 period. Therefore, capital costs as on cutoff date as per Auditor Certificates have been considered for calculation of Initial Spares.

Capital cost as on the COD

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

					(₹ in lakh)	
	Capital cost	Less: IDC as on COD due to		Excess	Capital Cost	
Assets	as on COD as per Auditor's Certificate	Computational Difference	Un- discharged IDC	Initial Spares	as on COD (on cash basis)	
Asset-A1	112392.56	118.36	2033.70	276.36	109964.14	
Asset-A2	6289.96	113.7	99.06	0	6077.20	
Asset-A3	533.06	0	24.36	0	508.70	

Asset-A4	527.64	0	13.91	0	513.73
Asset-A5	2051.73	0	29.37	0	2022.36
Asset-A6	933.75	0	21.15	0	912.60
Asset-A7	710.49	0	18.10	0	692.39
Asset-B1	94090.05	0	2220.92	0	91869.13
Asset-B2	5712.14	4.82	124.40	0	5582.92
Combined Asset-C	14,272.28	-	-	-	14272.28

Additional Capital Expenditure (ACE)

29. The Petitioner has claimed the following ACE for the assets covered in the instant petition:

(₹ in lakh)

Asset	Additional Capital Expenditure								
ASSEL	2014-15	2015-16	2016-17	2017-18	2018-19				
Asset-A1	6674.58	5382.69	2775.12	78.76	110.49				
Asset-A2	1146.34	169.27	594.62	0.00	0.00				
Asset-A3	43.64	26.93	47.23	0.00	0.00				
Asset-A4	43.28	26.93	47.02	0.00	0.00				
Asset-A5	323.02	335.60	0.00	0.00	0.00				
Asset-A6	88.13	51.82	41.46	0.00	0.00				
Asset-A7	64.02	56.66	23.12	0.00	0.00				
Asset-B1	0.00	0.00	0.00	3987.64	1288.60				
Asset-B2	0.00	0.00	406.83	207.81	81.90				
Combined Asset-C	2767.07	484.25	1272.00	123.62	78.43				
Total	11150.08	6534.15	5207.40	4397.83	1559.42				

30. The Petitioner has submitted that ACE incurred for the instant assets is on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date. ACE incurred after COD and up to the cut-off date has been claimed under Regulation 14(1)(i) (un-discharged liabilities) and ACE incurred after cut-off date in respect of Asset-A1, Asset-C1, Asset-C2 and Asset-C5 has been claimed under Regulation 14(2)(iv) of the 2014 Tariff Regulations.

- 31. The Petitioner has also submitted that ACE upto 31.3.2019 has been considered in the Auditor's certificate as per actuals whereas the ACE claimed for the period from 1.4.2019 to 31.3.2020 is on estimated basis and may vary due to final claim/ reconciliation at the time of contract closing. The Petitioner has submitted contract-wise details along with LoA for balance and retention payments.
- 32. The cut-off date for Assets-A1 to Asset-A4 is 31.3.2017, for Assets-A5 to Asset-A7 is 31.3.2018, for Asset-B1 is 31.3.2020, for Asset-B2 is 31.3.2019 and for Combined Asset-C is 31.3.2017. It is observed that the total estimated completion cost including ACE from 2014-15 to 2018-19 period is within the approved apportioned capital cost.
- 33. ACE claimed by the Petitioner in respect of Assets-A2, A3, A4, A5, A6, B1, B2, C3 and C4 are within the cut-off date. Further, ACE claimed by the Petitioner in respect of Assets-A1, C1, C2 and C5 are beyond the cut-off date. The un-discharged IDC as on COD has been allowed as ACE in its respective year of discharge. ACE claimed for 2014-19 tariff period is allowed under Regulation 14(1)(i) and Regulation 14(2)(iv) of the 2014 Tariff Regulations. Accordingly, ACE allowed for the instant assets is as under:

Accet	Additional Capital Expenditure (ACE)							
Asset	2014-15	2015-16	2016-17	2017-18	2018-19			
Asset-A1	6674.58	5382.69	2775.12	78.76	110.49			
Asset-A2	1146.34	169.27	594.62	0.00	0.00			
Asset-A3	43.64	26.93	47.23	0.00	0.00			
Asset-A4	43.28	26.93	47.02	0.00	0.00			
Asset-A5	323.02	335.60	0.00	0.00	0.00			
Asset-A6	88.13	51.82	41.46	0.00	0.00			
Asset-A7	64.02	56.66	23.12	0.00	0.00			
Asset-B1	0.00	0.00	0.00	4663.90	2833.25			
Asset-B2	0.00	0.00	406.83	337.03	81.90			

Combined Asset-C	2800.96	484.25	1272.00	123.62	78.43
Total	11150.08	6534.15	5207.40	4397.83	1559.42

Capital Cost for the 2014-19 Tariff Period

34. Accordingly, the capital cost considered as on 31.3.2019 for the tariff period 2014-19 is as under:

(₹ in lakh)

Asset	Apportioned	Capital	Add	CE)	Capital cost			
	approved Cost (RCE 2)	cost as on COD	2014-15	2015-16	2016-17	2017-18	2018-19	as on 31.3.2019
Asset-A1	130224.94	109964.14	6674.58	5382.69	2775.12	78.76	110.49	124985.78
Asset-A2	8357.46	6077.20	1146.34	169.27	594.62	0.00	0.00	7987.43
Asset-A3	650.87	508.70	43.64	26.93	47.23	0.00	0.00	626.50
Asset-A4	964.19	513.73	43.28	26.93	47.02	0.00	0.00	630.96
Asset-A5	3044.91	2022.36	323.02	335.60	0.00	0.00	0.00	2680.98
Asset-A6	1115.16	912.60	88.13	51.82	41.46	0.00	0.00	1094.01
Asset-A7	854.29	692.39	64.02	56.66	23.12	0.00	0.00	836.19
Asset-B1	100997.34	91869.13	0.00	0.00	0.00	4663.9	2833.25	99366.28
Asset-B2	6600.12	5582.92	0.00	0.00	406.83	337.03	81.90	6408.68
Combined Asset-C	20325.68	14272.28	2800.96	484.25	1272.00	123.62	78.43	19031.54

Debt-Equity Ratio

35. The Petitioner has considered 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 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The same has been summarised as under:

	As or	n COD	As on 31.3.2019		
Asset-A1	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)	
Debt	76974.90	70.00	87490.14	70.00	
Equity	32989.24	30.00	37495.64	30.00	
Total	109964.14	100.00	124985.78	100.00	
	As or	n COD	As on 31.3.2019		
Asset-A2	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)	

Debt	4254.04	70.00	5591.21	70.00
Equity	1823.16	30.00	2396.23	30.00
Total	6077.20	100.00	7987.43	100.00
	As or	n COD	As on 31	.3.2019
Asset-A3	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	356.09	70.00	438.55	70.00
Equity	152.61	30.00	187.95	30.00
Total	508.70	100.00	626.50	100.00

	As on	COD	As on 31.	3.2019
Asset-A4	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	359.62	70.00	441.68	70.00
Equity	154.12	30.00	189.28	30.00
Total	513.73	100.00	630.96	100.00
	As on	COD	As on 31.3.2019	
Asset-A5	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	1415.65	70.00	1876.69	70.00
Equity	606.71	30.00	804.29	30.00
Total	2022.36	100.00	2680.98	100.00
	As on	COD	As on 31.	3.2019
Asset-A6	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	638.82	70.00	765.81	70.00
Equity	273.78	30.00	328.20	30.00
Total	912.60	100.00	1094.01	100.00
	As on	COD	As on 31.	3.2019
Asset-A7	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	484.67	70.00	585.33	70.00
Equity	207.72	30.00	250.86	30.00
Total	692.39	100.00	836.19	100.00
	As on COD		As on 31.	3.2019
Asset-B1	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	64308.51	70.00	69556.52	70.00
Equity	27506.62	30.00	29809.76	30.00
Total	91869.13	100.00	99366.28	100.00
	As on	COD	As on 31.	3.2019
Asset-B2	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	3908.05	70.00	4488.04	70.00
Equity	1674.87	30.00	1920.64	30.00
Total	5582.92	100.00	6408.68	100.00
	As on	COD	As on 31.	3.2019
Asset-C	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	9990.60	70.00	13322.09	70.00
Equity	4282.68	30.00	5709.45	30.00
Total	14272.28	100.00	19031.54	100.00

Interest on Loan (IoL)

- 36. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2019 for respective loans. The change in interest rate is due to floating rate of interest applicable for the project to be claimed/ adjusted over a period of 5 years directly from the beneficiaries. We have considered the submissions of the Petitioner. loL is allowed on the basis of the actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations. The loL has been worked out as under:
 - (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.
- 37. The details of IoL calculated for instant assets are as follows:

(₹ in lakh)

	Asset-	·A1			
Particular	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	76974.90	81647.11	85415.07	87357.66	87412.80
Cumulative Repayments upto Previous Year	0.00	4369.77	10658.85	17160.54	23735.55
Net Loan-Opening	76974.90	77277.34	74756.23	70197.12	63677.24
Additions due to Additional Capitalization	4672.21	3767.96	1942.59	55.13	77.34
Repayment during the year	4369.77	6289.07	6501.69	6575.01	6580.01
Net Loan-Closing	77277.34	74756.23	70197.12	63677.24	57174.58
Average Loan	77126.12	76016.78	72476.68	66937.18	60425.91
Weighted Average Rate of Interest on Loan (%)	8.26	8.22	8.15	7.97	7.90
Interest on Loan	4660.18	6246.59	5906.87	5335.85	4772.40

	Asset-A2				
Particular	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	4254.04	5056.48	5174.97	5591.21	5591.21
Cumulative Repayments upto Previous Year	0.00	256.91	632.51	1026.27	1434.07
Net Loan-Opening	4254.04	4799.57	4542.46	4564.93	4157.13



Additions due to Additional	802.44	118.49	416.23	0.00	0.00
Capitalization					
Repayment during the year	256.91	375.60	393.76	407.80	407.80
Net Loan-Closing	4799.57	4542.46	4564.93	4157.13	3749.33
Average Loan	4526.81	4671.02	4553.70	4361.03	3953.23
Weighted Average Rate of	7.83	7.79	7.74	7.56	7.57
Interest on Loan (%)					
Interest on Loan	265.91	363.77	352.63	329.71	299.31

	Asset-A3				
Particular	2014-15 (Pro-rata for 181 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	356.09	386.64	405.49	438.55	438.55
Cumulative Repayments up to Previous Year	0.00	13.40	42.11	72.54	104.05
Net Loan-Opening	356.09	373.24	363.38	366.01	334.50
Additions due to Additional Capitalization	30.55	18.85	33.06	0.00	0.00
Repayment during the year	13.40	28.71	30.43	31.51	31.51
Net Loan-Closing	373.24	363.38	366.01	334.50	302.99
Average Loan	364.66	368.31	364.70	350.26	318.75
Weighted Average Rate of Interest on Loan (%)	9.35	9.32	9.24	9.13	9.10
Interest on Loan	16.91	34.31	33.70	31.96	29.01

(₹ in lakh)

	Asset-A	\4			
Particular	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	359.62	389.92	408.77	441.68	441.68
Cumulative Repayments upto Previous Year	0.00	13.59	42.53	73.18	104.91
Net Loan-Opening	359.62	376.32	366.24	368.50	336.77
Additions due to Additional Capitalization	30.30	18.85	32.91	0.00	0.00
Repayment during the year	13.59	28.94	30.66	31.73	31.73
Net Loan-Closing	376.32	366.24	368.50	336.77	305.04
Average Loan	367.97	371.28	367.37	352.63	320.90
Weighted Average Rate of Interest on Loan (%)	8.82	8.81	8.77	8.68	8.66
Interest on Loan	16.17	32.72	32.20	30.59	27.79

	Asset-A	\ 5			
Particular	2014-15 (Pro-rata for 89 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1415.65	1641.77	1876.69	1876.69	1876.69

Cumulative Repayments upto	0.00	27.73	158.90	298.96	439.02
Previous Year					
Net Loan-Opening	1415.65	1614.03	1717.79	1577.73	1437.67
Additions due to Additional Capitalization	226.11	234.92	0.00	0.00	0.00
Repayment during the year	27.73	131.17	140.06	140.06	140.06
Net Loan-Closing	1614.03	1717.79	1577.73	1437.67	1297.61
Average Loan	1514.84	1665.91	1647.76	1507.70	1367.64
Weighted Average Rate of Interest on Loan (%)	8.99	8.91	8.83	8.56	8.47
Interest on Loan	33.21	148.47	145.58	129.01	115.87

	Asset-A	\ 6			
Particular	2014-15 (Pro-rata for 80 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	638.82	700.51	736.79	765.81	765.81
Cumulative Repayments upto Previous Year	0.00	10.91	64.37	120.30	177.32
Net Loan-Opening	638.82	689.60	672.41	645.51	588.48
Additions due to Additional Capitalization	61.69	36.27	29.02	0.00	0.00
Repayment during the year	10.91	53.47	55.93	57.02	57.02
Net Loan-Closing	689.60	672.41	645.51	588.48	531.46
Average Loan	664.21	681.01	658.96	617.00	559.97
Weighted Average Rate of Interest on Loan (%)	8.34	8.34	8.32	8.28	8.27
Interest on Loan	12.14	56.80	54.83	51.09	46.28

(₹ in lakh)

	Asset-A	7			
Particular	2014-15 (Pro-rata for 84 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	484.67	529.49	569.15	585.33	585.33
Cumulative Repayments upto Previous Year	0.00	8.65	49.43	92.31	135.80
Net Loan-Opening	484.67	520.84	519.73	493.03	449.54
Additions due to Additional Capitalization	44.81	39.66	16.18	0.00	0.00
Repayment during the year	8.65	40.77	42.88	43.49	43.49
Net Loan-Closing	520.84	519.73	493.03	449.54	406.05
Average Loan	502.76	520.28	506.38	471.28	427.79
Weighted Average Rate of Interest on Loan (%)	8.78	8.79	8.77	8.69	8.67
Interest on Loan	10.16	45.74	44.41	40.94	37.11

Asset-B



Particular	2017-18 (Pro-rata for 93 days)	2018-19
Gross Normative Loan	64308.51	67573.24
Cumulative Repayments upto Previous Year	0.00	1266.21
Net Loan-Opening	64308.51	66307.02
Additions due to Additional Capitalization	3264.73	1983.28
Repayment during the year	1266.21	5167.42
Net Loan-Closing	66307.02	63122.89
Average Loan	65307.77	64714.95
Weighted Average Rate of Interest on Loan (%)	7.57	7.52
Interest on Loan	1259.47	4865.68

Asset-B2							
Particular	2016-17 (Pro-rata for 91 days)	2017-18	2018-19				
Gross Normative Loan	3908.05	4192.83	4430.71				
Cumulative Repayments upto Previous Year	0.00	76.17	401.33				
Net Loan-Opening	3908.05	4116.66	4029.38				
Additions due to Additional Capitalization	284.78	237.88	57.33				
Repayment during the year	76.17	325.16	336.22				
Net Loan-Closing	4116.66	4029.38	3750.50				
Average Loan	4012.36	4073.02	3889.94				
Weighted Average Rate of Interest on Loan (%)	8.20	8.16	8.16				
Interest on Loan	82.03	332.54	317.27				

Combined Asset-C							
Particular	2014-15	2015-16	2016-17	2017-18	2018-19		
Gross Normative Loan	9990.60	11951.27	12290.25	13180.65	13267.19		
Cumulative Repayments upto Previous Year	92.48	891.25	1770.80	2691.63	3645.51		
Net Loan-Opening	9898.12	11060.02	10519.45	10489.02	9621.68		
Additions due to Additional Capitalization	1960.67	338.98	890.40	86.54	54.90		
Repayment during the year	798.77	879.55	920.83	953.88	959.21		
Net Loan-Closing	11060.02	10519.45	10489.02	9621.68	8717.37		
Average Loan	10479.07	10789.74	10504.24	10055.35	9169.52		
Weighted Average Rate of Interest on Loan (%)	9.07	9.00	8.84	8.61	8.52		
Interest on Loan	950.13	971.05	929.04	865.81	781.34		

38. IoL approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-A1 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	5034.22	6842.38	6350.71	5764.05	5166.47
Claimed by the Petitioner in the instant petition	4866.61	6508.55	6145.14	5547.87	4961.63
Approved after True-up in this order	4660.18	6246.59	5906.87	5335.85	4772.40

39. loL approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, loL claimed in the instant petition and trued-up loL allowed in respect of Asset-2 is shown in the table below:

(₹ in lakh)

					1
Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	274.14	401.75	390.19	354.60	318.91
Claimed by the Petitioner in the instant petition	274.38	374.15	361.93	337.40	306.59
Approved after True-up in this order	265.91	363.77	352.63	329.71	299.31

40. IoL approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-3 is shown in the table below:

Particulars	2014-15 (Pro-rata for 181 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	18.70	40.16	38.38	37.17	32.04
Claimed by the Petitioner in the	17.68	35.75	34.97	33.07	29.96

instant petition					
Approved after True-up in this	16.91	34.31	33.70	31.96	29.01
order					

41. IoL approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-A4 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	17.48	37.29	35.65	32.69	29.74
Claimed by the Petitioner in the instant petition	16.59	33.48	32.86	31.15	28.25
Approved after True-up in this order	16.17	32.72	32.20	30.59	27.79

42. IoL approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-A5 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 89 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	37.93	165.56	161.88	148.46	135.20
Claimed by the Petitioner in the instant petition	33.65	149.84	146.20	128.89	115.03
Approved after True-up in this order	33.21	148.47	145.58	129.01	115.87

43. IoL approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-A6 is shown in the table below:

					(* ,
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	(Pro-rata for				



	80 days)				
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	13.22	64.50	63.08	57.88	52.77
Claimed by the Petitioner in the instant petition	12.41	57.84	55.54	51.48	46.35
Approved after True-up in this order	12.14	56.80	54.83	51.09	46.28

44. IoL approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-A7 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 84 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	10.68	48.62	47.57	43.67	39.83
Claimed by the Petitioner in the instant petition	10.41	46.68	45.09	41.34	37.24
Approved after True-up in this order	10.16	45.74	44.41	40.94	37.11

45. IoL Approved vide order dated 9.10.2018 in Petition No. 192/TT/2017, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-B1 is shown in the table below:

(₹ in lakh)

Particulars	2017-18 (Pro-rata for 93 days)	2018-19
Approved vide order dated 9.10.2018 in Petition No. 192/TT/2017	1229.87	4696.00
Claimed by the Petitioner in the instant petition	1259.46	4865.52
Approved after True-up in this order	1259.47	4865.68

46. IoL Approved vide order dated 9.10.2018 in Petition No. 192/TT/2017, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-B2 is shown in the table below:



Particulars	2016-17 (Pro-rata for 91 days)	2017-18	2018-19
Approved vide order dated 9.10.2018 in Petition No. 192/TT/2017	82.83	336.52	319.95
Claimed by the Petitioner in the instant petition	82.03	332.54	317.26
Approved after True-up in this order	82.03	332.54	317.27

47. IoL approved vide order dated 11.7.2018 in Petition No. 79/TT/2018, IoL claimed in the instant petition and trued-up IoL allowed in respect of Combined Asset-C is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 11.7.2018 in Petition No.					
79/TT/2018	949.95	982.13	948.79	906.24	826.32
Claimed by the Petitioner in the instant petition	949.89	970.35	927.90	864.24	779.35
Approved after True-up in this order	950.13	971.05	929.04	865.81	781.34

Return on Equity (RoE)

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

Year	Claimed effective tax (in %)	Grossed up RoE (Base Rate/1-t) (in %)
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

49. MPPMCL has submitted that while the Petitioner has grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18, for 2018-19 the same has been grossed up on the basis of MAT rate, surcharge and cess. The Petitioner has also failed to place on record the assessment order for the period 2016-17 and 2017-

- 18. MPPMCL has further submitted that the Petitioner has not claimed grossed up RoE on the basis of actual taxes paid for the year 2018-19 and further submitted that when the Financial Year 2019-20 has nearly come to an end, the Petitioner has not been able to get its assessment order for 2016-17, 2017-18 and 2018-19. It has been further submitted by MPPMCL that the Petitioner has also failed to produce assessment orders for 2014-15 and 2015-16. Similarly, the audited accounts in respect of actual taxes paid for 2016-17 and 2017-18 has also not been furnished in the instant petition. Therefore, in the absence of these essential documents, the claim of the Petitioner cannot be scrutinized in a proper manner.
- 50. In response, the Petitioner has submitted that the Income Tax assessment of the Petitioner has been completed and Assessment Orders have been issued by the 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 and 2018-19. It was further submitted by the Petitioner that on the basis of the effective tax rate and Grossed up ROE trued-up accordingly for the 2014-19 tariff period has already been mentioned in the petition for prudence check. The Petitioner has further submitted that the assessment order for the 2014-15 and 2015-16 period has already been submitted in reply to Technical Validation for Petition No. 20/TT/2020. The Petitioner also enclosed a copy of the assessment order for 2016-17 along with the rejoinder.
- 51. We have considered the submissions of the Petitioner and MPPMCL. As regards the MPPMCL's contentions that the grossed up rate of RoE for the period 2016-17 and 2017-18 is not based on the MAT rates approved by the Income Tax Authorities, it is observed that the effective rate of tax considered for 2014-15, 2015-

16 and 2016-17 are based on Assessment orders issued by Income Tax Authorities and the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed for the purpose of grossing up the RoE rate of respective years. In view of the clarification given by the Petitioner, we are of the view that there is no merit in MPPMCL contention. The Commission, vide order dated 27.4.2020 in Petition No. 274/TT/2019 has already arrived at the effective tax rate for the Petitioner based on the notified MAT rates. 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 overrecovery 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

52. The same MAT rates as considered in order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing-

up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Accordingly, the grossed up RoE rate is as follows:

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	Base rate of RoE (in %)	Grossed up RoE [Base Rate/(1-t)](%)
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

- 53. Further, the Commission vide order dated 26.8.2016 in Review Petition No. 24/RP/2016 allowed additional RoE of 0.5% for Assets-A1 to A4. Accordingly, the same has been considered while true-up of tariff for the 2014-19 tariff period.
- 54. Accordingly, the RoE allowed for the instant assets is as follows:

(₹ in lakh)

Asset-A1							
Particular	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19		
Net Opening Equity	32989.24	34991.61	36606.34	37438.87	37462.50		
Increase in Equity due to addition during the year	2002.37	1614.73	832.53	23.63	33.15		
Closing Equity	34991.61	36606.34	37438.87	37462.50	37495.64		
Average Equity	33990.42	35798.97	37022.60	37450.68	37479.07		
Return on Equity (Base Rate) (%)	16.000	16.000	16.000	16.000	16.000		
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549		
Applicable RoE Rate (%)	20.243	20.341	20.341	20.341	20.395		
Return on Equity for the year	5033.27	7281.87	7530.77	7617.84	7643.86		

Asset-A2						
Particular	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19	
Net Opening Equity	1823.16	2167.06	2217.84	2396.23	2396.23	
Increase in Equity due to addition during the year	343.90	50.78	178.39	0.00	0.00	
Closing Equity	2167.06	2217.84	2396.23	2396.23	2396.23	
Average Equity	1995.11	2192.45	2307.03	2396.23	2396.23	

Return on Equity (Base Rate) (%)	16.000	16.000	16.000	16.000	16.000
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Applicable RoE Rate (%)	20.243	20.341	20.341	20.341	20.395
Return on Equity for the year	303.18	445.97	469.27	487.42	488.71

Asset-A3							
Particular	2014-15 (Pro-rata for 181 days)	2015-16	2016-17	2017-18	2018-19		
Net Opening Equity	152.61	165.70	173.78	187.95	187.95		
Increase in Equity due to addition during the year	13.09	8.08	14.17	0.00	0.00		
Closing Equity	165.70	173.78	187.95	187.95	187.95		
Average Equity	159.15	169.74	180.86	187.95	187.95		
Return on Equity (Base Rate) (%)	16.000	16.000	16.000	16.000	16.000		
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549		
Applicable RoE Rate (%)	20.243	20.341	20.341	20.341	20.395		
Return on Equity for the year	15.98	34.53	36.79	38.23	38.33		

(₹ in lakh)

Asset-A4						
Particular	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19	
Net Opening Equity	154.12	167.10	175.18	189.28	189.28	
Increase in Equity due to addition during the year	12.98	8.08	14.11	0.00	0.00	
Closing Equity	167.10	175.18	189.28	189.28	189.28	
Average Equity	160.61	171.14	182.23	189.28	189.28	
Return on Equity (Base Rate) (%)	16.000	16.000	16.000	16.000	16.000	
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549	
Applicable RoE Rate (%)	20.243	20.341	20.341	20.341	20.395	
Return on Equity for the year	16.21	34.81	37.07	38.50	38.60	

Asset-A5							
Particular	2014-15						
	(Pro-rata for 89 days)	2015-16	2016-17	2017-18	2018-19		
Net Opening Equity	606.71	703.61	804.29	804.29	804.29		
Increase in Equity due to addition during the year	96.91	100.68	0.00	0.00	0.00		
Closing Equity	703.61	804.29	804.29	804.29	804.29		
Average Equity	655.16	753.95	804.29	804.29	804.29		
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		
Applicable RoE Rate (%)	20.243	20.341	20.341	20.341	20.395		

Return on Equity for the year	31.33	148.57	158.49	158.49	158.91
restarri on Equity for the year	01100			.000	

Asset-A6									
Particular	2014-15 (Pro-rata for 80 days)	2015-16	2016-17	2017-18	2018-19				
Net Opening Equity	273.78	300.22	315.76	328.20	328.20				
Increase in Equity due to addition during the year	26.44	15.55	12.44	0.00	0.00				
Closing Equity	300.22	315.76	328.20	328.20	328.20				
Average Equity	287.00	307.99	321.98	328.20	328.20				
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				
Applicable RoE Rate (%)	20.243	20.341	20.341	20.341	20.395				
Return on Equity for the year	12.34	60.69	63.45	64.67	64.85				

(₹ in lakh)

Asset-A7									
Particular	2014-15								
	(Pro-rata for 84	2015-16	2016-17	2017-18	2018-19				
	days)								
Net Opening Equity	207.72	226.92	243.92	250.86	250.86				
Increase in Equity due to addition	19.21	17.00	6.94	0.00	0.00				
during the year									
Closing Equity	226.92	243.92	250.86	250.86	250.86				
Average Equity	217.32	235.42	247.39	250.86	250.86				
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				
Applicable RoE Rate (%)	20.243	20.341	20.341	20.341	20.395				
Return on Equity for the year	9.81	46.39	48.75	49.43	49.56				

	Asse	t-B1			
Particular	2017-18 (Pro-rata for 93 days)	2018-19	2016-17 (Pro-rata for 91 days)	2017-18	2018-19
Net Opening Equity	27560.62	28959.79	1674.87	1796.92	1896.07
Increase in Equity due to addition during the year	1399.17	849.97	122.05	99.15	24.57
Closing Equity	28959.79	29809.76	1796.92	1896.07	1920.64
Average Equity	28260.21	29384.78	1735.89	1846.49	1908.35
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	21.342	21.549	21.342	21.342	21.549
Applicable RoE Rate (%)	19.705	19.758	19.705	19.705	19.758
Return on Equity for the year	1418.87	5805.84	85.28	363.85	377.05

Combined Asset-C								
Particular	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19			
Net Opening Equity	4281.68	5121.97	5267.24	5648.84	5685.92			
Increase in Equity due to addition during the year	840.29	145.27	381.60	37.08	23.53			
Closing Equity	5121.97	5267.24	5648.84	5685.92	5709.45			
Average Equity	4701.82	5194.60	5458.04	5667.38	5697.68			
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			
Applicable RoE Rate (%)	20.243	20.341	20.341	20.341	20.395			
Return on Equity for the year	922.03	1023.60	1075.51	1116.76	1125.75			

55. RoE approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, RoE claimed in the instant petition and trued-up RoE allowed in respect of Asset-A1 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015 and order dated 26.8.2016 in Petition No. 24/RP/2016	5363.27	7785.15	7872.17	7872.17	7872.17
Claimed by the Petitioner in the instant petition	5260.08	7591.81	7836.98	7924.05	7950.88
Approved after true-up in this order	4660.18	6246.59	5906.87	5335.85	4772.40

56. RoE approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, RoE claimed in the instant petition and trued-up RE allowed in respect of Asset-A2 is shown in the table below:

Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015 and order dated 26.8.2016 in Petition No. 24/RP/2016	321.57	500.09	525.44	525.44	525.44
Claimed by the Petitioner in the instant petition	313.11	459.18	482.26	500.40	501.73

Approved after true-up in	303.18	445.97	469.27	487.42	488.71
this order					

57. RoE approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, RoE claimed in the instant petition and trued-up RoE allowed in respect of Asset-A3 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 181 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015 and order dated 26.8.2016 in Petition No. 24/RP/2016	17.57	39.76	41.01	41.01	41.01
Claimed by the Petitioner in the instant petition	16.72	36.03	38.28	39.72	39.82
Approved after true-up in this order	15.98	34.53	36.79	38.23	38.33

58. RoE approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, RoE claimed in the instant petition and trued-up RoE allowed in respect of Asset-A4 is shown in the table below:

(₹ in lakh)

					<u> </u>
Particulars	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015 and order dated 26.8.2016 in Petition No. 24/RP/2016	17.47	39.26	40.50	40.50	40.50
Claimed by the Petitioner in the instant petition	16.64	35.68	37.92	39.35	39.46
Approved after true-up in this order	16.21	34.81	37.07	38.50	38.60

59. RoE approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, RoE claimed in the instant petition and trued-up RoE allowed in respect of Asset-A5 is shown in the table below:

Particulars 2014-15 (Pro-rata for 89 days) 2015-16 2016-17 2017-18	2018-19

Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015	35.55	162.34	171.17	171.17	171.17
Claimed by the Petitioner in the instant petition	31.77	150.38	160.22	160.22	160.65
Approved after true-up in this order	31.33	148.57	158.49	158.49	158.91

60. RoE approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, RoE claimed in the instant petition and trued-up RoE allowed in respect of Asset-A6 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 80 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015	12.73	64.90	68.43	68.43	68.43
Claimed by the Petitioner in the instant petition	12.62	61.97	64.70	65.92	66.10
Approved after true-up in this order	12.34	60.69	63.45	64.67	64.85

61. RoE approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, RoE claimed in the instant petition and trued-up RoE allowed in respect of Asset-A7 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 84 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015	10.29	49.02	51.69	51.69	51.69
Claimed by the Petitioner in the instant petition	10.06	47.49	49.82	50.50	50.64
Approved after true-up in this order	9.81	46.39	48.75	49.43	49.56

62. RoE approved vide order dated 9.10.2018 in Petition No. 192/TT/2017, RoE claimed in the instant petition and trued-up RoE allowed in respect of Asset-B1 and Asset-B2 are shown in the table below:

	Asset-B1		Asset-B2		
Particulars	2017-18	2018-19	2016-17	2017-18	2018-19

	(Pro-rata for 93 days)		(Pro-rata for 91 days)		
Approved vide order 9.10.2018 in Petition No. 192/TT/2017	1379.50	5585.01	85.15	363.21	374.48
Claimed by the Petitioner in the instant petition	1418.87	5805.84	85.28	363.85	377.05
Approved after true-up in this order	1418.87	5805.84	85.28	363.85	377.05

63. RoE approved vide order dated 11.7.2018 in Petition No. 79/TT/2018, RoE claimed in the instant petition and trued-up RoE allowed in respect of Combined Asset-C is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 11.7.2018 in Petition No.					
79/TT/2018	921.86	1018.49	1070.15	1116.75	1125.94
Claimed by the Petitioner in the instant petition	922.73	1024.12	1075.51	1116.76	1125.75
Approved after true-up in this order	922.03	1023.60	1075.51	1116.76	1125.75

Depreciation

- 64. The Assets-A1 to A7, Asset-B1 and Asset-B2 were put into commercial operation during the 2014-19 period and the tariff from the date of commercial operation to 31.3.2019 was allowed vide order dated 29.4.2016 in Petition No. 58/TT/2015 and vide order dated 9.10.2018 in Petition No. 192/TT/2017. Assets-C1 to C5 were executed during the tariff period 2009-14 and the tariff from the date of commercial operation to 31.3.2014 was allowed vide order dated 29.3.2016 in Petition No. 47/TT/2014 and the tariff of the 2009-14 period was trued-up and tariff for the 2014-19 period was allowed vide order dated 11.7.2018 in Petition No. 79/TT/2018.
- 65. In Petition Nos. 58/TT/2015, 192/TT/2017 and 79/TT/2018, the Petitioner had submitted capital cost of IT equipment in Sub-station cost and, therefore, depreciation

for IT equipment was allowed @5.28% of the corresponding capital cost. The Petitioner now at the time of truing-up for the 2014-19 period has segregated the IT equipment cost from sub-station cost and has considered depreciation rate for IT equipment @15% and the salvage value as NIL as per the 2014 Tariff Regulations.

- 66. Similar issue had come up in Petition No. 19/TT/2020 wherein the Commission vide order dated 9.5.2020 held as under:
 - "31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012and 9.5.2013in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014- 19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations(the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the substation upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations."
- 67. In line with the above decision, the depreciation for IT Equipment is considered @5.28% for the sub-station while truing up the capital expenditure of the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered

separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations. The Gross Block during the tariff period 2014-19 has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is given in Annexure-1. WAROD has been worked out after taking into account the depreciation rate as prescribed in the 2014 Tariff Regulations and the trued-up depreciation allowed is as under:

(₹ in lakh)

Asset-A1									
Particular	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19				
Opening Gross Block	109964.14	116638.72	122021.41	124796.53	124875.29				
Additional Capitalisation	6674.58	5382.69	2775.12	78.76	110.49				
Closing Gross Block	116638.72	122021.41	124796.53	124875.29	124985.78				
Average Gross Block	113301.43	119330.07	123408.97	124835.91	124930.54				
Rate of Depreciation (%)	5.27	5.27	5.27	5.27	5.27				
Elapsed life at the beginning of the year	0	1	2	3	4				
Balance useful life	35	34	33	32	31				
Aggregate Depreciable Value	101971.29	107397.06	111068.07	112352.32	112437.48				
Depreciation during the year	4369.77	6289.07	6501.69	6575.01	6580.01				
Aggregate Cumulative depreciation	4369.77	10658.85	17160.54	23735.55	30315.56				
Remaining Aggregate Depreciable Value	97601.51	96738.21	93907.53	88616.77	82121.92				

Asset-A2									
Particular	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19				
Opening Gross Block	6077.20	7223.54	7392.81	7987.43	7987.43				
Additional Capitalisation	1146.34	169.27	594.62	0.00	0.00				
Closing Gross Block	7223.54	7392.81	7987.43	7987.43	7987.43				
Average Gross Block	6650.37	7308.18	7690.12	7987.43	7987.43				
Rate of Depreciation (%)	5.15	5.14	5.12	5.11	5.11				
Elapsed life at the beginning of the year	0.00	1.00	2.00	3.00	4.00				
Balance useful life	25.00	24.00	23.00	22.00	21.00				
Aggregate Depreciable Value	5985.34	6577.36	6921.11	7188.69	7188.69				

Depreciation during the year	256.91	375.60	393.76	407.80	407.80
Aggregate Cumulative Depreciation	256.91	632.51	1026.27	1434.07	1841.87
Remaining Aggregate Depreciable Value	5728.43	5944.85	5894.84	5754.62	5346.82

Asset-A3								
Particular	2014-15 (Pro-rata for 181 days)	2015-16	2016-17	2017-18	2018-19			
Opening Gross Block	508.70	552.34	579.27	626.50	626.50			
Additional Capitalisation	43.64	26.93	47.23	0.00	0.00			
Closing Gross Block	552.34	579.27	626.50	626.50	626.50			
Average Gross Block	530.52	565.80	602.88	626.50	626.50			
Rate of Depreciation (%)	5.09	5.07	5.05	5.03	5.03			
Elapsed life at the beginning of the year	0.00	1.00	2.00	3.00	4.00			
Balance useful life	25.00	24.00	23.00	22.00	21.00			
Aggregate Depreciable Value	477.47	509.22	542.59	563.85	563.85			
Depreciation during the year	13.40	28.71	30.43	31.51	31.51			
Aggregate Cumulative Depreciation	13.40	42.11	72.54	104.05	135.56			
Remaining Aggregate Depreciable Value	464.07	467.12	470.06	459.80	428.29			

(₹ in lakh)

Asset-A4									
Particular	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19				
Opening Gross Block	513.73	557.01	583.94	630.96	630.96				
Additional Capitalisation	43.28	26.93	47.02	0.00	0.00				
Closing Gross Block	557.01	583.94	630.96	630.96	630.96				
Average Gross Block	535.37	570.48	607.45	630.96	630.96				
Rate of Depreciation (%)	5.09	5.07	5.05	5.03	5.03				
Elapsed life (at the beginning of the year)	0.00	1.00	2.00	3.00	4.00				
Balance useful life	25.00	24.00	23.00	22.00	21.00				
Aggregate Depreciable Value	481.84	513.43	546.71	567.87	567.87				
Depreciation during the year	13.59	28.94	30.66	31.73	31.73				
Aggregate Cumulative Depreciation	13.59	42.53	73.18	104.91	136.64				
Remaining Aggregate Depreciable Value	468.24	470.90	473.53	462.96	431.23				

Asset-A5								
Particular	2014-15 (Pro-rata for 89 days)	2015-16	2016-17	2017-18	2018-19			
Opening Gross Block	2022.36	2345.38	2680.98	2680.98	2680.98			
Additional Capitalisation	323.02	335.60	0.00	0.00	0.00			



Closing Gross Block	2345.38	2680.98	2680.98	2680.98	2680.98
Average Gross Block	2183.87	2513.18	2680.98	2680.98	2680.98
Rate of Depreciation (%)	5.21	5.22	5.22	5.22	5.22
Elapsed life at the beginning of the	0.00	0.00	1.00	2.00	3.00
year					
Balance useful life	25.00	25.00	24.00	23.00	22.00
Aggregate Depreciable Value	1965.49	2261.86	2412.88	2412.88	2412.88
Depreciation during the year	27.73	131.17	140.06	140.06	140.06
Aggregate Cumulative Depreciation	27.73	158.90	298.96	439.02	579.08
Remaining Aggregate Depreciable	1937.75	2102.96	2113.92	1973.86	1833.80
Value					

Asset-A6									
Particular	2014-15 (Pro-rata for 80 days)	2015-16	2016-17	2017-18	2018-19				
Opening Gross Block	912.60	1000.73	1052.55	1094.01	1094.01				
Additional Capitalisation	88.13	51.82	41.46	0.00	0.00				
Closing Gross Block	1000.73	1052.55	1094.01	1094.01	1094.01				
Average Gross Block	956.67	1026.64	1073.28	1094.01	1094.01				
Rate of Depreciation (%)	5.20	5.21	5.21	5.21	5.21				
Elapsed life (at the beginning of the year)	0.00	0.00	1.00	2.00	3.00				
Balance useful life	25.00	25.00	24.00	23.00	22.00				
Aggregate Depreciable Value	861.00	923.98	965.95	984.61	984.61				
Depreciation during the year	10.91	53.47	55.93	57.02	57.02				
Aggregate Cumulative depreciation	10.91	64.37	120.30	177.32	234.35				
Remaining Aggregate Depreciable Value	850.09	859.60	845.65	807.28	750.26				

Asset-A7									
Particular	2014-15								
	(Pro-rata for	2015-16	2016-17	2017-18	2018-19				
	84 days)								
Opening Gross Block	692.39	756.41	813.07	836.19	836.19				
Additional Capitalisation	64.02	56.66	23.12	0.00	0.00				
Closing Gross Block	756.41	813.07	836.19	836.19	836.19				
Average Gross Block	724.40	784.74	824.63	836.19	836.19				
Rate of Depreciation (%)	5.19	5.20	5.20	5.20	5.20				
Elapsed life at the beginning of the	0.00	0.00	1.00	2.00	3.00				
year									
Balance useful life	25.00	25.00	24.00	23.00	22.00				
Aggregate Depreciable Value	651.96	706.27	742.17	752.57	752.57				
Depreciation during the year	8.65	40.77	42.88	43.49	43.49				
Aggregate Cumulative Depreciation	8.65	49.43	92.31	135.80	179.29				
Remaining Aggregate Depreciable	643.31	656.84	649.86	616.78	573.28				
Value									

	Asset	-B1	Asset-B2			
Particular	2017-18 (Pro-rata for 93 days)	2018-19	2016-17 (Pro-rata for 91 days)	2017-18	2018-19	
Opening Gross Block	91869.13	96533.03	5582.92	5989.75	6326.78	
Additional Capitalisation	4663.90	2833.25	406.83	337.03	81.9	
Closing Gross Block	96533.03	99366.28	5989.75	6326.78	6408.68	
Average Gross Block	94201.08	97949.66	5786.34	6158.27	6367.73	
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28	
Elapsed life at the beginning of the year	0	0	0	0	1	
Balance useful life	35	35	35	35	34	
Aggregate Depreciable Value	84780.97	88154.69	5207.7	5542.44	5730.96	
Depreciation during the year	1266.21	5167.42	76.17	325.16	336.22	
Aggregate Cumulative Depreciation	1266.21	6433.63	76.17	401.33	737.54	
Remaining Aggregate Depreciable Value	83514.76	81721.06	5131.53	5141.11	4993.41	

Combined Asset-C								
Particular	2014-15	2015-16	2016-17	2017-18	2018-19			
Opening Gross Block	14272.28	17073.24	17557.49	18829.49	18953.11			
Additional Capitalisation	2800.96	484.25	1272.00	123.62	78.43			
Closing Gross Block	17073.24	17557.49	18829.49	18953.11	19031.54			
Average Gross Block	15672.76	17315.37	18193.49	18891.30	18992.33			
Weighted Average Rate of Depreciation (%)	5.10	5.08	5.06	5.05	5.05			
Elapsed life at the beginning of the year	0	1	2	3	4			
Balance useful life of the Asset	25	24	23	22	21			
Aggregate Depreciable Value	14105.48	15583.83	16374.14	17002.17	17093.09			
Depreciation during the year	798.77	879.55	920.83	953.88	959.21			
Aggregate Cumulative Depreciation	891.25	1770.80	2691.63	3645.51	4604.73			
Remaining Aggregate Depreciable Value	13214.23	13813.03	13682.51	13356.66	12488.37			

68. The depreciation approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, depreciation claimed in the instant petition and trued-up depreciation allowed in respect of Asset-A1 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015	4651.08	6745.57	6819.92	6819.92	6819.92
Claimed by the Petitioner in the instant petition	4562.74	6552.88	6765.50	6838.81	6843.81
Approved after true-up in this order	4369.77	6289.07	6501.69	6575.01	6580.01

69. The depreciation approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, depreciation claimed in the instant petition and trued-up depreciation allowed in respect of Asset-A2 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015	271.57	420.51	441.45	441.45	441.45
Claimed by the Petitioner in the instant petition	266.33	388.15	406.30	420.35	420.35
Approved after true-up in this order	256.91	375.60	393.76	407.80	407.80

70. The depreciation approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, depreciation claimed in the instant petition and trued-up depreciation allowed in respect of Asset-A3 is shown in the table below:

Particulars	2014-15 (Pro-rata for 181 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015	14.64	32.84	33.84	33.84	33.84
Claimed by the Petitioner in the instant petition	14.21	30.34	32.07	33.15	33.15
Approved after true-up in this order	13.40	28.71	30.43	31.51	31.51

71. The depreciation approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, depreciation claimed in the instant petition and trued-up depreciation allowed in respect of Asset-A4 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015	14.55	32.40	33.39	33.39	33.39
Claimed by the Petitioner in the instant petition	14.14	30.04	31.76	32.83	32.83
Approved after true-up in this order	13.59	28.94	30.66	31.73	31.73

72. The depreciation approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, depreciation claimed in the instant petition and trued-up depreciation allowed in respect of Asset-A5 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 89 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015	31.20	142.00	149.54	149.54	149.54
Claimed by the Petitioner in the instant petition	28.87	139.29	148.53	148.53	148.53
Approved after true-up in this order	27.73	131.17	140.06	140.06	140.06

73. The depreciation approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, depreciation claimed in the instant petition and trued-up depreciation allowed in respect of Asset-A6 is shown in the table below:

Particulars	2014-15 (Pro-rata for 80 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015	11.12	56.52	59.50	59.50	59.50
Claimed by the Petitioner in the instant petition	11.43	57.22	59.82	60.91	60.91

Approved after true-up in	10.91	53.47	55.93	57.02	57.02
this order					

74. The depreciation approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, depreciation claimed in the instant petition and trued-up depreciation allowed in respect of Asset-A7 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 84 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015	8.95	42.45	44.68	44.68	44.68
Claimed by the Petitioner in the instant petition	9.09	43.74	45.95	46.56	46.56
Approved after true-up in this order	8.65	40.77	42.88	43.49	43.49

75. The depreciation approved vide order dated 9.10.2018 in Petition No. 192/TT/2017, depreciation claimed in the instant petition and trued-up depreciation allowed in respect of Asset-B1 and Asset-B2 are shown in the table below:

(₹ in lakh)

	Asset-B1		Asset-B2		
Particulars	2017-18 (Pro-rata for 93 days)	2018-19	2016-17 (Pro-rata for 93 days)	2017-18	2018-19
Approved vide order dated 9.10.2018 in Petition No. 192/TT/2017	1237.01	5008.15	76.42	325.98	336.09
Claimed by the Petitioner in the instant petition	1266.81	5169.78	76.17	325.16	336.22
Approved after true-up in this order	1266.21	5167.42	76.17	325.16	336.22

76. The depreciation approved vide order dated 11.7.2018 in Petition No. 79/TT/2018, depreciation claimed in the instant petition and trued-up depreciation allowed in respect of Combined Asset-C is shown in the table below:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 11.7.2018 in Petition No.					
79/TT/2018	798.61	879.39	920.68	958.56	966.65
Claimed by the Petitioner in the instant petition	803.97	884.75	926.04	959.09	964.42
Approved after true-up in	798.77	879.55	920.83	953.88	959.21
this order					

Operation & Maintenance Expenses (O&M Expenses)

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

(₹ in lakh)

	Asset-A1						
Particulars	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19		
Sub-station Bays							
765 kV Bay (AIS) at Aurangabad	1	1	1	1	1		
Norm (₹ lakh/bay)	84.42	87.22	90.12	93.11	96.20		
Total Sub-station O&M	84.42	87.22	90.12	93.11	96.20		
Transmission Line							
765kV Aurangabad- Wardha D/C line (km)	347.577	347.577	347.577	347.577	347.577		
Norm (₹ lakh/km)	1.062	1.097	1.133	1.171	1.21		
Total transmission Line O&M	369.13	381.29	393.80	407.01	420.57		
Total O&M Expenses	331.77	468.51	483.92	500.12	516.77		

Asset-A2						
Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19	
Sub-station Bays						
765 kV Bay (AIS) at	1	1	1	1	1	
Aurangabad						
Norm (₹ lakh/bay)	84.42	87.22	90.12	93.11	96.20	
Total Sub-station O&M	84.42	87.22	90.12	93.11	96.20	
400 kV Bay (AIS) at	1	1	1	1	1	
Aurangabad						
Norm (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71	
Total Sub-station O&M	60.30	62.30	64.37	66.51	68.71	
Total O&M Expenses	108.64	149.52	154.49	159.62	164.91	

Asset-A3						
Particulars	2014-15 (Pro-rata for 181 days)	2015-16	2016-17	2017-18	2018-19	
Sub-station Bays						
400 kV Bay (AIS) at	2	2	2	2	2	
Aurangabad						
Norm (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71	
Total Sub-station O&M	120.60	124.60	128.74	133.02	137.42	
Total O&M Expenses	59.80	124.60	128.74	133.02	137.42	

(₹ in lakh)

Asset-A4						
Particulars	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19	
Sub-station Bays						
400 kV Bay (AIS) at	2	2	2	2	2	
Aurangabad						
Norm (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71	
Total Sub-station O&M	120.60	124.60	128.74	133.02	137.42	
Total O&M Expenses	60.14	124.60	128.74	133.02	137.42	

(₹ in lakh)

	Asset-A5						
Particulars	2014-15 (Pro-rata for 89 days)	2015-16	2016-17	2017-18	2018-19		
Sub-station Bays							
400 kV Bay (AIS) at Boisar Sub-station	1	1	1	1	1		
Norm (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71		
Total Sub-station O&M	60.30	62.30	64.37	66.51	68.71		
220 kV Bay (AIS) at Boisar Sub-station	3	3	3	3	3		
Norm (₹ lakh/bay)	42.21	43.61	45.06	46.55	48.10		
Total Sub-station O&M	126.63	130.83	135.18	139.65	144.30		
Total O&M Expenses	45.57	193.13	199.55	206.16	213.01		

Asset-A6							
Particulars	2014-15 2015-16 (Pro-rata for 80 days) 2016-17 2017-18 2						
Sub-station Bays							
400 kV Bay (AIS) at	1	1	1	1	1		
Boisar Sub-station							
Norm (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71		

Total Sub-station O&M	60.30	62.30	64.37	66.51	68.71
Total O&M Expenses	13.22	62.30	64.37	66.51	68.71

Asset-A7						
Particulars	2014-15 (Pro-rata for 84 days)	2015-16	2016-17	2017-18	2018-19	
Sub-station Bays						
400 kV Bay (AIS) at	1	1	1	1	1	
Boisar Sub-station						
Norm (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71	
Total Sub-station O&M	60.30	62.30	64.37	66.51	68.71	
Total O&M Expenses	13.88	62.30	64.37	66.51	68.71	

(₹ in lakh)

Asset-B1						
Particulars	2017-18 (Pro-rata for 93 days)	2018-19				
Transmission Line						
400 kV D/C Aurangabad- Boisar line (Quad)	339.790	339.790				
Norm (₹ lakh/km)	1.171	1.210				
Total Sub-station O&M	397.90	411.15				
Total O&M Expenses	101.38	411.15				

(₹ in lakh)

Asset-B2						
Particulars	2016-17 (Pro-rata for 91 days)	2017-18	2018-19			
Transmission Line						
Part of 400 kV D/C Navsari- Boisar line (double conductor)	12.69	12.69	12.69			
Norm (₹ lakh/km)	0.755	0.780	0.806			
Total Sub-station O&M	9.58	9.90	10.23			
Total O&M Expenses	2.39	9.90	10.23			

/· ····						
Combined Asset-C						
Particulars 2014-15 2015-16 2016-17 2017-18 2018						
Sub-station Bays						
765 kV Bay (AIS) at	7	7	7	7	7	
Aurangabad Sub-station						
and Wardha Sub-station						
Norm (₹ lakh/bay)	84.42	87.22	90.12	93.11	96.20	
Total Sub-station O&M	590.94	590.94	590.94	590.94	590.94	
400 kV Bay (AIS) at	1	1	1	1	1	

Aurangabad					
Norm (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
Total Sub-station O&M	60.30	62.30	64.37	66.51	68.71
Total O&M Expenses	651.24	672.84	695.21	718.28	742.11

78. The O&M Expenses approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, O&M Expenses claimed in the instant petition and trued-up O&M Expenses allowed in respect of Asset-A1 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	331.77	468.51	483.92	500.12	516.77
Claimed by the Petitioner in the instant petition	331.77	468.51	483.92	500.12	516.77
Approved after true-up in this order	331.77	468.51	483.92	500.12	516.77

79. The O&M Expenses approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, O&M Expenses claimed in the instant petition and trued-up O&M Expenses allowed in respect of Asset-A2 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	108.64	149.52	154.49	159.62	164.91
Claimed by the Petitioner in the instant petition	108.64	149.52	154.49	159.62	164.91
Approved after true-up in this order	108.64	149.52	154.49	159.62	164.91

80. The O&M Expenses approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, O&M Expenses claimed in the instant petition and trued-up O&M Expenses allowed in respect of Asset-A3 is shown in the table below:

Particulars	2014-15 (Pro-rata for	2015-16	2016-17	2017-18	2018-19
	267 days)				

Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015 and order dated 26.8.2016 in Petition No. 24/RP/2016	59.80	124.60	128.74	133.02	137.42
Claimed by the Petitioner in the instant petition	59.80	124.60	128.74	133.02	137.42
Approved after true-up in this order	59.80	124.60	128.74	133.02	137.42

81. The O&M Expenses approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, O&M Expenses claimed in the instant petition and trued-up O&M Expenses allowed in respect of Asset-A4 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	60.14	124.60	128.74	133.02	137.42
Claimed by the Petitioner in the instant petition	60.14	124.60	128.74	133.02	137.42
Approved after true-up in this order	60.14	124.60	128.74	133.02	137.42

82. The O&M Expenses approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, O&M Expenses claimed in the instant petition and trued-up O&M Expenses allowed in respect of Asset-A5 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 89 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015	45.57	193.13	199.55	206.16	213.01
Claimed by the Petitioner in the instant petition	45.57	193.13	199.55	206.16	213.01
Approved after true-up in this order	45.57	193.13	199.55	206.16	213.01

83. The O&M Expenses approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, O&M Expenses claimed in the instant petition and trued-up O&M Expenses allowed in respect of Asset-A6 is shown in the table below:

Particulars	2014-15 (Pro-rata for 80 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015	13.22	62.30	64.37	66.51	68.71
Claimed by the Petitioner in the instant petition	13.22	62.30	64.37	66.51	68.71
Approved after true-up in this order	13.22	62.30	64.37	66.51	68.71

84. The O&M Expenses approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, O&M Expenses claimed in the instant petition and trued-up O&M Expenses allowed in respect of Asset-A7 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 84 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 29.4.2016 in Petition No. 58/TT/2015	13.88	62.30	64.37	66.51	68.71
Claimed by the Petitioner in the instant petition	13.88	62.30	64.37	66.51	68.71
Approved after true-up in this order	13.88	62.30	64.37	66.51	68.71

85. The O&M Expenses approved vide order dated 9.10.2018 in Petition No. 192/TT/2017, O&M Expenses claimed in the instant petition and trued-up O&M Expenses allowed in respect of Asset-B1 is shown in the table below:

(₹ in lakh)

Particulars	2017-18 (Pro-rata for 93 days)	2018-19
Approved vide order dated 9.10.2018 in Petition No. 192/TT/2017	101.38	411.15
Claimed by the Petitioner in the instant petition	101.38	411.15
Approved after true-up in this order	101.38	411.15

86. The O&M Expenses approved vide order dated 9.10.2018 in Petition No. 192/TT/2017, O&M Expenses claimed in the instant petition and trued-up O&M Expenses allowed in respect of Asset-B2 is shown in the table below:

			(\ III Iakii)
Particulars	2016-17	2017-18	2018-19
	(Pro-rata for		

	91 days)		
Approved vide order dated 9.10.2018 in Petition No. 192/TT/2017	2.39	9.90	10.23
Claimed by the Petitioner in the instant petition	2.39	9.90	10.23
Approved after true-up in this order	2.39	9.90	10.23

87. The O&M Expenses approved vide order dated 11.7.2018 in Petition No. 79/TT/2018, O&M Expenses claimed in the instant petition and trued-up O&M Expenses allowed in respect of Combined Asset-C is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 11.7.2018 in Petition No. 79/TT/2018	651.24	672.84	695.21	718.28	742.11
Claimed by the Petitioner in the instant petition	651.24	672.84	695.21	718.28	742.11
Approved after true-up in this order	651.24	672.84	695.21	718.28	742.11

88. The O&M Expenses allowed for the instant assets for the 2014-19 tariff period are as under:

Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-A1	331.77	468.51	483.92	500.12	516.77
Asset-A2	108.64	149.52	154.49	159.62	164.91
Asset-A3	59.80	124.60	128.74	133.02	137.42
Asset-A4	60.14	124.60	128.74	133.02	137.42
Asset-A5	45.57	193.13	199.55	206.16	213.01
Asset-A6	13.22	62.30	64.37	66.51	68.71
Asset-A7	13.88	62.30	64.37	66.51	68.71
Asset-B1	-	1		101.38	411.15
Asset-B2	-	1	2.39	9.90	10.23
Combined	651.24	672.84	695.21	718.28	742.11
Asset-C					

Interest on Working Capital (IWC)

89. The Petitioner is entitled to claim 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 Regulation 28(3) of the 2014, Tariff Regulations.

90. IWC allowed for the instant assets is as under:

(₹ in lakh)

	Asset-A1							
Particular	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19			
O & M Expenses	37.80	39.04	40.33	41.68	43.06			
Maintenance Spares	68.03	70.28	72.59	75.02	77.52			
Receivables	3357.69	3461.35	3484.82	3417.66	3329.80			
Total Working Capital	3463.51	3570.67	3597.74	3534.36	3450.38			
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50			
Interest on working capital	342.03	482.04	485.69	477.14	465.80			

(₹ in lakh)

	Asset-A2							
Particular	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19			
O & M Expenses	12.06	12.46	12.87	13.30	13.74			
Maintenance Spares	21.71	22.43	23.17	23.94	24.74			
Receivables	213.06	228.40	234.45	236.93	232.89			
Total Working Capital	246.83	263.29	270.49	274.17	271.37			
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50			
Interest on working capital	25.01	35.54	36.52	37.01	36.64			

Asset-A3						
Particular	2014-15 (Pro-rata for 181 days)	2015-16	2016-17	2017-18	2018-19	
O & M Expenses	10.05	10.38	10.73	11.09	11.45	



Maintenance Spares	18.09	18.69	19.31	19.95	20.61
Receivables	37.12	38.55	39.85	40.74	41.02
Total Working Capital	65.26	67.62	69.89	71.77	73.09
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on working capital	4.37	9.13	9.43	9.69	9.87

	Asset-A4							
Particular	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19			
O & M Expenses	10.05	10.38	10.73	11.09	11.45			
Maintenance Spares	18.09	18.69	19.31	19.95	20.61			
Receivables	36.93	38.36	39.68	40.59	40.90			
Total Working Capital	65.07	67.44	69.72	71.62	72.96			
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50			
Interest on working capital	4.38	9.10	9.41	9.67	9.85			

(₹ in lakh)

Asset-A5							
Particular	2014-15 (Pro-rata for 89 days)	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	97.40	106.98	110.82	109.16	108.20		
Total Working Capital	141.02	152.04	157.38	157.26	157.90		
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50		
Interest on working capital	4.64	20.53	21.25	21.23	21.32		

(₹ in lakh)

Asset-A6								
Particular	2014-15 (Pro-rata for 80 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	38.13	40.11	41.02	41.16	40.75			
Total Working Capital	52.20	54.64	56.04	56.68	56.79			
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50			
Interest on working capital	1.54	7.38	7.57	7.65	7.67			

Asset-A7							
Particular	2014-15 (Pro-rata for 84 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	31.81	33.62	34.52	34.52	34.28		



Total Working Capital	45.88	48.15	49.54	50.04	50.31
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on working capital	1.43	6.50	6.69	6.76	6.79

	Asset-	-B1	A		
Particular	2017-18 (Pro-rata for 93 days)	2018-19	2016-17 (Pro-rata for 91 days)	2017-18	2018-19
O & M Expenses	33.16	34.26	0.8	0.82	0.85
Maintenance Spares	59.68	61.67	1.44	1.48	1.53
Receivables	2705.29	2768.50	168	175.71	177.29
Total Working Capital	2798.13	2864.44	170.23	178.02	179.68
Rate of Interest (%)	12.60	12.60	12.80	12.80	12.80
Interest on working capital	89.83	360.92	5.43	22.79	23.00

(₹ in lakh)

Combined Asset-C								
Particular	2014-15	2015-16	2016-17	2017-18	2018-19			
O & M Expenses	54.27	56.07	57.93	59.86	61.84			
Maintenance Spares	97.69	100.93	104.28	107.74	111.32			
Receivables	569.94	608.39	621.06	627.00	619.23			
Total Working Capital	721.89	765.39	783.27	794.60	792.39			
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50			
Interest on working capital	97.46	103.33	105.74	107.27	106.97			

91. IWC approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, IWC claimed in the instant petition and trued-up IWC allowed in respect of Asset-A1 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	364.71	517.85	511.09	498.49	485.65
Claimed by the Petitioner in the instant petition	356.45	501.28	504.30	495.14	483.30
Approved after true-up in this order	342.03	482.04	485.69	477.14	465.80

92. IWC approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, IWC claimed in the instant petition and trued-up IWC allowed in respect of Asset-A2 is shown in the table below:

Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	25.96	38.70	39.77	39.24	38.71
Claimed by the Petitioner in the instant petition	25.66	36.38	37.32	37.78	37.39
Approved after true-up in this order	25.01	35.54	36.52	37.01	36.64

93. IWC approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, IWC claimed in the instant petition and trued-up IWC allowed in respect of Asset-A3 is shown in the table below:

(₹ in lakh)

		,			·
Particulars	2014-15 (Pro-rata for 181 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	4.48	9.48	9.72	9.88	10.05
Claimed by the Petitioner in the instant petition	4.42	9.23	9.54	9.79	9.96
Approved after true-up in this order	4.37	9.13	9.43	9.69	9.87

94. IWC approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, IWC claimed in the instant petition and trued-up IWC allowed in respect of Asset-A4 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	4.46	9.39	9.63	9.80	9.98
Claimed by the Petitioner in the instant petition	4.41	9.17	9.47	9.73	9.90
Approved after true-up in this order	4.38	9.10	9.41	9.67	9.85

95. IWC approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, IWC claimed in the instant petition and trued-up IWC allowed in respect of Asset-A5 is shown in the table below:

Particulars	2014-15 (Pro-rata for 89 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	4.93	21.49	22.13	22.19	22.26
Claimed by the Petitioner in the instant petition	4.69	20.78	21.50	21.46	21.53
Approved after true-up in this order	4.64	20.53	21.25	21.23	21.32

96. IWC approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, IWC claimed in the instant petition and trued-up IWC allowed in respect of Asset-A6 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 80 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	1.58	7.72	7.95	7.95	7.96
Claimed by the Petitioner in the instant petition	1.57	7.52	7.70	7.78	7.79
Approved after true-up in this order	1.54	7.38	7.57	7.65	7.67

97. IWC approved vide order dated 29.4.2016 in Petition No. 58/TT/2015, IWC claimed in the instant petition and trued-up IWC allowed in respect of Asset-A7 is shown in the table below:

(₹ in lakh)

					(* 111 101111)
Particulars	2014-15 (Pro-rata for 84 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	1.46	6.67	6.87	6.90	6.93
Claimed by the Petitioner in the instant petition	1.45	6.62	6.80	6.86	6.89
Approved after true-up in this order	1.43	6.50	6.69	6.76	6.79

98. Accordingly, the IWC approved vide order dated 9.10.2018 in Petition No. 192/TT/2017, IWC claimed in the instant petition and trued-up IWC allowed in respect of Asset-B1 and Asset-B2 are shown in the table below:

	Asset-l	B1		Asset-B2	
Particulars	2014-15 (Pro-rata for 93 days)	2015-16	2016-17	2017-18 (Pro-rata for 91 days)	2018-19
Approved vide order dated 9.10.2018 in Petition No. 192/TT/2017	89.22	354.79	5.45	22.88	23.00
Claimed by the Petitioner in the instant petition	89.84	360.97	5.43	22.79	23.00
Approved after true-up in this order	89.83	360.92	5.43	22.79	23.00

99. IWC approved vide order dated 11.7.2018 in Petition No. 79/TT/2018, IWC claimed in the instant petition and trued-up IWC allowed in respect of Combined Asset-C is shown in the table below:

(₹ in lakh)

					,
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated					
11.7.2018 in Petition No.					
79/TT/2018	88.12	93.82	96.11	98.02	97.56
Claimed by the Petitioner in	97.59	103.44	105.83	107.35	107.05
the instant petition	97.59	103.44	105.65	107.33	107.03
Approved after true-up in	97.46	103.33	105.74	107.27	106.97
this order					

Annual Fixed Charges for the 2014-19 tariff period

100. Accordingly, the annual fixed charges after truing-up for the 2014-19 tariff period are as under:

(₹ in lakh)

					1				
Asset-A1									
Particulars	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19				
Depreciation	4369.77	6289.07	6501.69	6575.01	6580.01				
Interest on Loan	4660.18	6246.59	5906.87	5335.85	4772.40				
Return on Equity	5033.27	7281.87	7530.77	7617.84	7643.86				
Int. on Working Capital	342.03	482.04	485.69	477.14	465.80				
Op. and Maintenance	331.77	468.51	483.92	500.12	516.77				
Total	14737.03	20768.09	20908.95	20505.97	19978.83				

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Particulars	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19

Approved vide order dated	15745.05	22359.46	22037.81	21454.75	20860.98
29.4.2016 in Petition No.					
58/TT/2015 and order dated					
26.8.2016 in Petition No.					
24/RP/2016					
Claimed by the Petitioner in	15377.65	21623.03	21735.84	21305.99	20756.39
the instant petition					
Allowed after true-up in this	14737.03	20768.09	20908.95	20505.97	19978.83
order					

Asset-A2								
Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19			
Depreciation	256.91	375.60	393.76	407.80	407.80			
Interest on Loan	265.91	363.77	352.63	329.71	299.31			
Return on Equity	303.18	445.97	469.27	487.42	488.71			
Int. on Working Capital	25.01	35.54	36.52	37.01	36.64			
Op. and Maintenance	108.64	149.52	154.49	159.62	164.91			
Total	959.65	1370.40	1406.67	1421.56	1397.37			

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015 and order dated 26.8.2016 in Petition No. 24/RP/2016	1001.88	1510.57	1551.34	1520.35	1489.42
Claimed by the Petitioner in the instant petition	988.12	1407.38	1442.30	1455.55	1430.97
Allowed after true-up in this order	959.65	1370.40	1406.67	1421.56	1397.37

Asset-A3								
Particulars	2014-15 (Pro-rata for 181 days)	2015-16	2016-17	2017-18	2018-19			
Depreciation	13.40	28.71	30.43	31.51	31.51			
Interest on Loan	16.91	34.31	33.70	31.96	29.01			
Return on Equity	15.98	34.53	36.79	38.23	38.33			
Int. on Working Capital	4.37	9.13	9.43	9.69	9.87			
Op. and Maintenance	59.80	124.60	128.74	133.02	137.42			
Total	110.46	231.28	239.09	244.41	246.14			

Particulars	2014-15 (Pro-rata for 181 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015 and order dated 26.8.2016 in Petition No. 24/RP/2016	115.19	246.84	251.69	254.92	254.36
Claimed by the Petitioner in the instant petition	112.83	235.95	243.60	248.75	250.31
Allowed after true-up in this order	110.46	231.28	239.09	244.41	246.14

(₹ in lakh)

Asset-A4									
Particulars	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19				
Depreciation	13.59	28.94	30.66	31.73	31.73				
Interest on Loan	16.17	32.72	32.20	30.59	27.79				
Return on Equity	16.21	34.81	37.07	38.50	38.60				
Int. on Working Capital	4.38	9.10	9.41	9.67	9.85				
Op. and Maintenance	60.13	124.60	128.74	133.02	137.42				
Total	110.49	230.17	238.07	243.51	245.40				

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 182 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015 and order dated 26.8.2016 in Petition No. 24/RP/2016	114.09	242.94	247.91	249.40	251.03
Claimed by the Petitioner in the instant petition.	111.92	232.97	240.75	246.08	247.86
Allowed after true-up in this order	110.49	230.17	238.07	243.51	245.40

Asset-A5									
Particulars	2014-15 (Pro-rata for 89 days)	2015-16	2016-17	2017-18	2018-19				
Depreciation	27.73	131.17	140.06	140.06	140.06				
Interest on Loan	33.21	148.47	145.58	129.01	115.87				
Return on Equity	31.33	148.57	158.49	158.49	158.91				
Int. on Working Capital	4.64	20.53	21.25	21.23	21.32				
Op. and Maintenance	45.58	193.13	199.55	206.16	213.01				
Total	142.50	641.86	664.92	654.95	649.17				



Particulars	2014-15 (Pro-rata for 89 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	155.19	684.52	704.27	697.52	692.18
Claimed by the Petitioner in the instant petition	144.55	653.42	676.00	665.26	658.75
Allowed after true-up in this order	142.50	641.86	664.92	654.95	649.17

(₹ in lakh)

Asset-A6									
Particulars	2014-15 (Pro-rata for 80 days)	2015-16	2016-17	2017-18	2018-19				
Depreciation	10.91	53.47	55.93	57.02	57.02				
Interest on Loan	12.14	56.80	54.83	51.09	46.28				
Return on Equity	12.34	60.69	63.45	64.67	64.85				
Int. on Working Capital	1.54	7.38	7.57	7.65	7.67				
Op. and Maintenance	13.22	62.30	64.37	66.51	68.71				
Total	50.14	240.63	246.14	246.95	244.53				

(₹ in lakh)

					(×
Particulars	2014-15 (Pro-rata for 80 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	51.87	255.94	263.33	260.27	257.37
Claimed by the Petitioner in the instant petition	51.25	246.85	252.13	252.60	249.86
Allowed after true-up in this order	50.14	240.63	246.14	246.95	244.53

(₹ in lakh)

Asset-A7								
Particulars	2014-15 (Pro-rata for 84 days)	2015-16	2016-17	2017-18	2018-19			
Depreciation	8.65	40.77	42.88	43.49	43.49			
Interest on Loan	10.16	45.74	44.41	40.94	37.11			
Return on Equity	9.81	46.39	48.75	49.43	49.56			
Int. on Working Capital	1.43	6.50	6.69	6.76	6.79			
Op. and Maintenance	13.88	62.30	64.37	66.51	68.71			
Total	43.92	201.71	207.10	207.12	205.66			



	(Pro-rata for 84 days)				
Approved vide order dated 29.4.2016 in Petition No. 58/TT/2015	45.26	209.06	215.18	213.45	211.84
Claimed by the Petitioner in the instant petition	44.89	206.83	212.03	211.77	210.04
Allowed after true-up in this order	43.92	201.71	207.10	207.12	205.66

	Asset-	·B1	Asset-B2			
Particulars	2017-18 (Pro-rata for 93 days)	2018-19	2016-17 (Pro-rata for 91 days)	2017-18	2018-19	
Depreciation	1266.21	5167.42	76.17	325.16	336.22	
Interest on Loan	1259.47	4865.68	82.03	332.54	317.27	
Return on Equity	1418.87	5805.84	85.28	363.85	377.05	
Int. on Working Capital	89.83	360.92	5.43	22.79	23	
Op. and Maintenance	101.38	411.15	2.39	9.9	10.23	
Total	4135.76	16611.01	251.31	1054.23	1063.76	

(₹ in lakh)

	Asset-	B1	Asset-B2			
Particulars	2017-18 (Pro-rata for 93 days)	2018-19	2016-17 (Pro-rata for 91 days)	2017-18	2018-19	
Approved vide order dated 9.10.2018 in Petition No. 192/TT/2017	4038.28	16055.10	252.27	1058.49	1063.75	
Claimed by the Petitioner in the instant petition	4136.36	16613.26	251.30	1054.24	1063.76	
Allowed after true-up in this order	4135.76	16611.01	251.31	1054.23	1063.76	

(₹ in lakh)

Combined Asset-C								
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19			
Depreciation	798.77	879.55	920.83	953.88	959.21			
Interest on Loan	950.13	971.05	929.04	865.81	781.34			
Return on Equity	922.03	1023.60	1075.51	1116.76	1125.75			
Int. on Working Capital	97.46	103.33	105.74	107.27	106.97			
Op. and Maintenance	651.24	672.84	695.21	718.28	742.11			
Total	3419.62	3650.36	3726.33	3762.00	3715.39			

Particulars 2014-15 (Pro-rata) 2015-16 2016-17 2017-18 2018-19
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Approved vide order dated 11.7.2018 in Petition No. 79/TT/2018	3240.94	3472.23	3550.70	3611.63	3566.18
Claimed by the Petitioner in the instant petition	3425.42	3655.50	3730.49	3765.72	3718.68
Allowed after true-up in this order	3419.62	3650.36	3726.33	3762.00	3715.39

<u>DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD</u>

- 101. The Petitioner has combined the instant assets into one single asset and has also submitted the tariff forms. Accordingly, as per proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations, single tariff for the Combined Asset is approved out for the 2019-24 tariff period.
- 102. The Petitioner has claimed the following transmission charges for the 2019-24 tariff period for the Combined Asset:

(₹ in lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	14185.07	14231.67	14213.80	14193.05	14193.05
Interest on Loan	10495.38	9362.92	8217.52	7470.93	6771.22
Return on equity	15205.82	15255.76	15255.76	15255.76	15255.76
Interest on Working Capital	745.32	736.58	724.34	718.33	711.71
O & M Expenses	3338.65	3455.01	3576.57	3704.07	3832.69
Total	43970.24	43041.94	41987.99	41342.14	40764.43

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

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
O & M expenses	278.22	287.92	298.05	308.67	319.39
Maintenance Spares	500.80	518.25	536.49	555.61	574.90
Receivables	5406.18	5306.54	5176.60	5096.98	5012.02
Total	6185.20	6112.71	6011.14	5961.26	5906.31
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	745.32	736.58	724.34	718.33	711.71

Effective Date of Commercial Operation (E-COD)

104. The Petitioner has claimed E-COD of the combined asset as 1.11.2015. Based on the trued-up admitted capital cost and actual COD of all the Assets, the E-COD has been worked out as follows:

Computation of effective COD							
Asset	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	8.7.2014	124985.78	47.41	1270.00	602.06		
Asset-A2	1.7.2014	7987.43	3.03	1277.00	38.69		
Asset-A3	2.10.2014	626.50	0.24	1184.00	2.81		
Asset-A4	1.10.2014	630.96	0.24	1185.00	2.84		
Asset-A5	2.1.2015	2680.98	1.02	1092.00	11.10		
Asset- A6	11.1.2015	1094.01	0.41	1083.00	4.49	10.11.2015	
Asset-A7	7.1.2015	836.19	0.32	1087.00	3.45		
Asset-B1	29.12.2017	99366.28	37.69	0.00	0.00		
Asset-B2	31.12.2016	6408.68	2.43	363.00	8.82		
Combined	1.1.2014	19031.54	7.22	1458.00	105.25		
Asset C							
Total	29.12.2017	263648.36	100.00		779.51		

105. The E-COD is used to determine the lapsed life of the project as a whole which works out as 3 (three) 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)

- 106. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of Weighted Average Life.
- 107. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have a 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.

108. The 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 2009 Tariff Regulations or 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, the WAL of the Combined Asset has been worked out as 33 years as shown below:

Particular (1)	Combined Cost (₹ in lakh) (2)	Life in Years (3)	Weighted Cost (₹ in lakh) (4) = (2)x(3)	Weighted Avg. Life of Asset (in years) (5) = (4)/ (2)
Land	0.00	0	0.00	
Building	4471.64	25	111830.39	
Transmission line	224298.02	35	7869042.40	33.45
Sub-station	34392.66	25	859962.98	(Rounded off to 33
PLCC	238.08	15	3579.21	years)
Lease hold land	0.00	25	0.00	
IT Equipment and Software	247.97	7	1654.06	
Total	263648.36		8827262.35	

109. The WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed at paragraphs 55 and 56, the Effective COD of the assets is 10.11.2015 and the lapsed life of the project as a whole works out as three 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 30 years.

Capital Cost

110. Regulations 19 of the 2019, Tariff Regulation provides as under:

- "19. **Capital Cost:** (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.
- (2) The Capital Cost of a new project shall include the following:
 - (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
 - (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
 - (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
 - (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
 - (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
 - (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
 - (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
 - (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
 - (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway:
 - (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
 - (I) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
 - (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
 - (n) Expenditure on account of change in law and force majeure events; and
 - (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries
- (3) The Capital cost of an existing project shall include the following:
 - (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued-up by excluding liability, if any, as on 1.4.2019;
 - (b) Additional Capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
 - (c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;

- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (4) The capital cost in case of existing or new hydro generating station shall also include:
 - (a) cost of approved rehabilitation and resettlement (R&R) plan of the project inconformity with National R&R Policy and R&R package as approved; and
 - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area
- (5) The following shall be excluded from the capital cost of the existing and new projects:
 - (a) The assets forming part of the project, but not in use, as declared in the tariff petition:
 - (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."
- 111. The Petitioner has claimed the capital cost of the individual assets which has been added to arrive at the capital cost claimed during the 2019-24 period for Combined Asset as per the following details:-

Assets	RCE Apportioned Approved Capital Cost	Capital Cost claimed as on 31.3.2019	Additional Capital Expenditure Claimed 2019-20	Estimated completion cost
Asset-A1	130224.90	130003.69	141.62	130145.31
Asset-A2	8357.46	8200.19	0.00	8200.19
Asset-A3	650.865	650.86	0.00	650.86
Asset-A4	964.19	644.87	0.00	644.87
Asset-A5	3044.91	2710.35	0.00	2710.35
Asset-A6	1115.16	1115.16	0.00	1115.16
Asset-A7	854.29	854.29	0.00	854.29
Asset-B1	100997.30	99366.29	1631.07	100997.36
Asset-B2	6600.12	6408.68	0.00	6408.68
Combined Asset-C	20325.68	19028.61	0.00	19028.61
Total	273134.95	268982.99	1772.69	270755.68

- 112. The estimated completion cost including ACE is ₹270755.68 lakh against the RCE approved capital cost (as per RCE) of ₹273134.95 lakh. The individual cost of each asset is also within the respective RCE approved apportioned cost. Therefore, there is no cost over-run as per RCE.
- 113. 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) admitted by the Commission as on 31.3.2019 for the instant Assets are clubbed together and the combined capital cost has been considered as capital cost for the Combined Asset as on 1.4.2019, as per the following details:-

1	₹	in	lakh)
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Particulars	Asset-A1	Asset- A2	Asset- A3	Asset- A4	Asset- A5	Asset- A6	Asset- A7	Asset-B1	Asset- B2	Combine d Asset-C	Combined Cost (a)
Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building	910.17	718.66	80.84	81.75	86.35	38.20	34.00	275.27	0.00	2246.39	4471.64
Transmissi on Line	119939.50	0.00	0.00	0.00	0.00	0.00	0.00	97949.84	6408.68	0.00	224298.02
Sub- Station	3984.77	7252.41	541.76	545.23	2506.13	1027.12	780.34	1023.27	0.00	16731.64	34392.66
PLCC	126.94	0.56	0.00	0.00	17.12	0.00	0.00	93.46	0.00	0.00	238.08
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

IT	24.40	15.81	3.90	3.98	71.39	28.69	21.85	24.43	0.00	53.51	247.97
Equipment											
and											
software											
Total	124985.78	7987.43	626.50	630.96	2680.98	1094.01	836.19	99366.28	6408.68	19031.54	263648.36
Total	124985.78	7987.43	626.50	630.96	2680.98	1094.01	836.19	99366.28	6408.68	19031.54	263648.3

Initial Spares

114. As stated above, Initial Spares are allowed for the 2014-19 period on the basis of the cost of the individual assets. The assets covered in the transmission project are combined and the overall project cost is arrived at in the 2019-24 tariff period and therefore Initial Spares are allowed during the 2019-24 tariff period on the basis of the overall project cost as per the APTEL's judgement dated 14.9.2019 in Appeal No.74 of 2017. Accordingly, Initial Spares allowed for the Combined Asset for the 2019-24 tariff period are as under:

Asset	Plant & Machinery cost upto cut-off	Initial Spares claimed	Norms as per the 2014 Tariff	Initial spares allowable as per APTEL	Initial Spares allowed in	Additional Initial Spares
	date (excluding IDC and IEDC) (₹ in lakh)	(₹ in lakh)	Regulations (%)	judgement (₹ in lakh)	2014-19 (₹ in lakh)	allowed in 2019-24 (₹ in lakh)
Transmissio	on Line					
Asset A1	115527.43	1428.87			1152.51	
Asset B1	77374.13	354.00			354.00	
Asset B2	6000.83	0.00	1		0.00	
Total	198902.39	1782.87		1991.11	1506.51	276.36
Sub-station						
Asset-A1	3370.31	51.40			51.40	
Asset-A2	6851.21	159.59			159.59	
Asset-A3	512.92	17.10			17.10	
Asset-A4	507.66	11.85			11.85	
Asset-A5	2440.43	96.07			96.07	
Asset-A6	968.79	25.25			25.25	
Asset-A7	731.88	18.62			18.62	
Asset B1	846.76	0.00			0	
Asset-C1	2572.08	71.99			71.99	
Asset-C2	2473.95	65.89			65.89	
Asset-C3	3266.36	70.08			70.08	
Asset-C4	2156.40	0.00			0	
Asset-C5	5672.18	0.00			0	
Total	32370.93	587.84	6	2028.71	587.84	0

- 115. Accordingly, Initial Spares of ₹276.36 lakh against sub-station are being allowed as part of the combined capital cost as on 1.4.2019 in line with APTEL's judgement dated 14.9.2019 in Appeal 74 of 2017.
- 116. Capital cost as on 1.4.2019 is worked out as under:

(₹ in lakh)

Combined Capital Cost as on 31.3.2019		Additional Spares allowed as per APTEL judgment dated 14.9.2019	Combined Capital Cost as on 1.4.2019		
	263648.36	276.36	263924.72		

117. The trued-up capital cost of ₹263924.72 lakh for Combined Asset is considered as admitted capital cost as on 1.4.2019 for working out tariff for the 2019-24 tariff period.

Additional Capital Expenditure (ACE)

- 118. Regulation 24 and Regulation 25 of the 2019, Tariff Regulations provide as under:
 - "24. Additional Capitalization within the original scope and upto the cut-off date
 - (1) The Additional Capital Expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
 - (a) Undischarged liabilities recognized to be payable at a future date;
 - (b) Works deferred for execution;
 - (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;
 - (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
 - (e) Change in law or compliance of any existing law; and
 - (f) Force Majeure events:

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

(2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work

along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.

25. Additional Capitalisation within the original scope and after the cut-off date:

- (1) The ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:
 - (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
 - (b) Change in law or compliance of any existing law;
 - (c) Deferred works relating to ash pond or ash handling system in the original scope of work;
 - (d) Liability for works executed prior to the cut-off date;
 - (e) Force Majeure events;
 - (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and
 - (g) Raising of ash dyke as a part of ash disposal system.
- (2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:
- (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
- (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission."
- 119. The Petitioner has claimed projected ACE for 2019-24 period in respect of Asset- A1 and Asset- B1 only and has submitted Auditor's certificates in support of the same. The Petitioner has submitted that ACE claimed for the period 1.4.2019 to 31.3.2021 is on estimated basis and may vary due to final claim/ reconciliation at the time of contract closing. The details of projected ACE in respect of the Combined Asset are shown as follows:

(₹ in lakh)

Assets	Projected ACE 2019-24
	2019-20
Asset-A1	141.62
Asset-B1	1419.45
Total	1561.07

120. It is observed that the entire ACE claimed in the 2019-24 period falls beyond the cut-off date in the instant petition. The Petitioner is directed to submit the actual details of ACE for 2019-24 at the time of truing-up. The ACE allowed is summarized below which is subject to true-up:

(₹ in lakh)

Particulars	Regulation	Combined Asset 2019-20
ACE to the extent of un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date	Regulation 25(1)(d)	1561.07

Capital cost of the 2019-24 tariff period

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

(₹ in lakh)

Capital Cost allowed as on 1.4.2019	ACE allowed for the year 2019-20	Total Estimated Completion Cost up to 31.3.2024
263924.72	1561.07	265485.79

Debt-Equity Ratio

122. Regulation 18 of the 2019 Tariff Regulations provides as under:

"18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

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

Explanation-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall

be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

- (2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.
- (3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

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

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

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

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

123. The details of the debt-equity ratio considered for the purpose of tariff for 2019-

24 tariff period is as under:

Combined Asset	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	184749.51	70.00	185842.26	70.00
Equity	79175.21	30.00	79643.53	30.00
Total	263924.72	100.00	265485.79	100.00

Return on Equity (RoE)

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



- **"30. Return on Equity**: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.
- (2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

Provided that return on equity in respect of Additional Capitalization after cutoff date beyond the original scope excluding Additional Capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system; Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

ii.in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

- iii. in case of a thermal generating station, with effect from 1.4.2020:
- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

- "31. **Tax on Return on Equity**:(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.
 - (2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

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

Where "t" is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the

estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

Illustration-

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

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

- (ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:
- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
- (b) Estimated Advance Tax for the year on above is Rs 240 crore;
- (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;
- (d) Rate of return on equity = 15.50/(1-0.24) = 20.395%.
- (3) The generating company or the transmission licensee, as the case may be, shall true-up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing-up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."
- 125. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, MAT rate applicable during the year 2019-20 has been considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019, Tariff Regulations. The RoE allowed for the Combined Asset as per Regulation 30 of the 2019, Tariff Regulations is as under:

(₹ in lakh)

Combined Asset								
Particular	2019-20	2020-21	2021-22	2022-23	2023-24			
Net Opening Equity	79175.21	79643.53	79643.53	79643.53	79643.53			
Increase in Equity due to addition during the year	468.32	0.00	0.00	0.00	0.00			

MAT Rate for respective year (%) Applicable ROE Rate (%)	17.472 18.782	17.472 18.782	17.472 18.782	17.472 18.782	17.472 18.782
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Average Equity	79409.37	79643.53	79643.53	79643.53	79643.53
Closing Equity	79643.53	79643.53	79643.53	79643.53	79643.53

Interest on Loan (IoL)

- 126. 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".
- 127. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate

due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the Combined Asset is as under:

(₹ in lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	184749.51	185842.26	185842.26	185842.26	185842.26
Cumulative Repayments upto Previous Year	45198.25	59114.34	73071.43	87028.52	100985.61
Net Loan-Opening	139551.26	126727.92	112770.83	98813.74	84856.65
Additions	1092.75	0.00	0.00	0.00	0.00
Repayment during the year	13916.08	13957.09	13957.09	13957.09	13957.09
Net Loan-Closing	126727.92	112770.83	98813.74	84856.65	70899.56
Average Loan	133139.59	119749.38	105792.29	91835.19	77878.10
Weighted Average Rate of Interest on Loan (%)	7.762	7.698	7.651	8.016	8.571
Interest on Loan	10334.74	9218.82	8094.56	7361.90	6674.85

Depreciation

- 128. Regulations 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 de-capitalized asset during its useful services."
- 129. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). WAROD has been worked out (refer to 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 and accumulated depreciation up to 31.3.2019. The depreciation allowed for the Combined Asset is as under:

(₹ in lakh)

Combined Assets							
Particular	2019-20	2020-21	2021-22	2022-23	2023-24		
Opening Capital Cost	263924.72	265485.79	265485.79	265485.79	265485.79		
Additional Capital	1561.07	0.00	0.00	0.00	0.00		
Expenditure during the year							
Closing Capital Cost	265485.79	265485.79	265485.79	265485.79	265485.79		
Average Capital Cost	264705.26	265485.79	265485.79	265485.79	265485.79		
Rate of Depreciation (%)	5.26	5.26	5.26	5.26	5.26		
Elapsed life at the beginning of the year	3	4	5	6	7		
Balance useful life at the beginning of the year	30	29	28	27	26		
Aggregate Depreciable Value	238259.53	238962.01	238962.01	238962.01	238962.01		
Depreciation during the year	13916.08	13957.09	13957.09	13957.09	13957.09		
Cumulative Aggregate Depreciation	59114.34	73071.43	87028.52	100985.61	114942.70		
Remaining Aggregate Depreciable Value at the end of the year	179145.19	165890.58	151933.49	137976.40	124019.31		

Operation & Maintenance Expenses (O&M Expenses)

130. Regulations 35(3) (a) and (4) of the 2019, Tariff Regulations provide as under:

"35. Operation and Maintenance Expenses:

. .

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
Norms for sub-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 M	VA)							
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)								
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 0.809 Single Circuit (Twin & Triple Conductor) 0.503 0.521 0.539 0.558 0.809 Single Circuit (Single Conductor) 0.252 0.260 0.270 0.279 0.270 Double Circuit (Bundled conductor with four or more sub-Double Circuit (Twin & Triple Conductor) 0.881 0.912 0.944 0.977 1.609 Double Circuit (Single Conductor) 0.377 0.391 0.404 0.419 0.404 Multi Circuit (Bundled Conductor with four or more sub-conductor) 2.319 2.401 2.485 2.572 2.600 Multi Circuit (Twin & Triple 1.544 1.598 1.654 1.713 1.713 1.713
Single Circuit (Twin & 0.503 0.521 0.539 0.558 0.5
Triple Conductor) 0.303 0.321 0.339 0.339 0.339 0.339 0.339 0.339 0.339 0.339 0.339 0.339 0.339 0.339 0.339 0.339 0.339 0.339 0.339 0.339 0.339 0.321 0.279
Single Circuit (Single Conductor) 0.252 0.260 0.270 0.279 0.279 0.270 0.279 0.270 0.279 0.270 0.279 0.270 0.279 0.270 0.279 0.270 0.279 0.270 0.270 0.279 0.270
Double Circuit (Bundled conductor with four or more sub-Double Circuit (Twin & Triple Conductor) Double Circuit (Single Conductor) Double Circuit (Single Conductor) Multi Circuit (Bundled Conductor with four or more sub-conductor) Multi Circuit (Twin & Triple 2.319 2.401 2.485 2.572
Conductor with four or more sub- 1.322 1.306 1.410 1.400 1.500 1.410 1.400 1.500 1.410 1.400 1.500 1.500 1.410 1.400 1.500 1.500 1.500 1.410 1.500 1
Conductor with four or more sub- Double Circuit (Twin & Triple Conductor) Double Circuit (Single Conductor) 0.377 0.391 0.404 0.419
Conductor
Double Circuit (Single Conductor) 0.377 0.391 0.404 0.419 0.404
Multi Circuit (Bundled Conductor with four or more sub-conductor) 2.319 2.401 2.485 2.572 2.601
four or more sub-conductor) 2.319 2.401 2.485 2.572 2.601 Adulti Circuit (Tuin & Triple)
Tour or more sub-conductor)
Multi Circuit (Twin & Triple 1 508 1 654 1 713 1
Conductor) 1.344 1.395 1.334 1.775 1.775
Norms for HVDC stations
HVDC Back-to-Back stations (Rs
Lakh per 500 MW) (Except 834 864 894 925 9
Gazuwaka BTB)
Gazuwaka HVDC Back-to-Back
Gazuwaka HVDC Back-to-Back
500 kV Rihand-Dadri HVDC
bipole scheme (Rs Lakh) (1500 2,252 2,331 2,413 2,498 2,5
MW)
±500 kV Talcher- Kolar HVDC
bipole scheme (Rs Lakh) (2000 2,468 2,555 2,645 2,738 2,8
±500 kV Bhiwadi-Balia HVDC
bipole scheme (Rs Lakh) (2500 1,696 1,756 1,817 1,881 1,9
MW)
±800 kV, Bishwanath-Agra HVDC
bipole scheme (Rs Lakh) (3000 2,563 2,653 2,746 2,842 2,9
MW)

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 iustification.

- (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."
- 131. The O&M Expenses claimed by the Petitioner for the Combined Asset for the 2019-24 period are as under:

O - - - I - ! - - - - I - A - - - - 1

(₹ in lakh)

Particulars	2019-20	ed Asset 2020-21	2021-22	2022-23	2023-24					
	Sub-stat	ion Bays								
400 kV Bays (AIS) - Nos.	9	9	9	9	9					
765 kV Bays (AIS) – Nos.	9	9	9	9	9					
220 kV Bays (AIS) - Nos.	3	3	3	3	3					
Norm (₹ lakh/bay)										
400 kV Bay (AIS)	32.150	33.280	34.450	35.660	36.910					
765 kV Bay (AIS)	31.507	32.620	33.761	34.951	36.176					
220 kV Bay (AIS)	22.51	23.300	24.120	24.960	25.840					
Total Sub-station Bays	761.97	788.82	816.48	845.19	874.83					
	Transf	ormers								
765 kV – Capacity (MVA)	3000	3000	3000	3000	3000					
400 kV – Capacity (MVA)	500	500	500	500	500					
Norm (₹ lakh/ MVA)										
765 kV	0.490	0.510	0.530	0.550	0.560					
400 kV	0.360	0.370	0.380	0.400	0.410					
Total Transformers	1652.00	1709.50	1770.00	1834.00	1897.50					

	AC & HV	DC Lines			
400 kV D/C Twin conductor-	12.69	12.69	12.69	12.69	12.69
length (km)					
765 kv D/C quad conductor (km)	687.367	687.367	687.367	687.367	687.367
Norm (₹ lakh/ km)					
D/C Twin Conductor	0.881	0.912	0.944	0.977	1.011
D/C Quad Conductor	1.322	1.368	1.416	1.466	1.517
Total Transmission Line	919.88	951.89	985.29	1020.08	1055.57
	Communica	tion System]		
PLCC – Capital Cost (₹ lakh)	240.21	240.21	240.21	240.21	240.21
Norm (%)					
PLCC	2	2	2	2	2
Total Communication System	4.80	4.80	4.80	4.80	4.80
Total O&M Expenses	3338.65	3455.02	3576.58	3704.07	3832.70

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

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

"105. In our view, granting of O&M Expenses for PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations under the communication system head would tantamount to granting O&M Expenses twice for PLCC



equipment as PLCC equipment has already been considered as part of the substation. Therefore, the Petitioner's prayer for grant of O&M Expenses for the PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations is rejected.

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

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

133. The O&M Expenses allowed out for the assets covered in the instant petition and the same is as under:

(₹ in lakh)

	Combine	ed Asset									
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24						
	Sub-stat	ion Bays									
400 kV Bays (AIS) - Nos.	9	9	9	9	9						
765 kV Bays (AIS) – Nos.	9	9	9	9	9						
220 kV Bays (AIS) - Nos.	3	3	3	3	3						
Norm (₹ lakh/bay)											
400 kV Bay (AIS)	32.150	33.280	34.450	35.660	36.910						
765 kV Bay (AIS)	31.507	32.620	33.761	34.951	36.176						
220 kV Bay (AIS)	22.51	23.300	24.120	24.960	25.840						
Total Sub-station Bays	761.97	788.82	816.48	845.19	874.83						
	Transf	ormers									
765 kV – Capacity (MVA)	3000	3000	3000	3000	3000						
400 kV – Capacity (MVA)	500	500	500	500	500						
Norm (₹ lakh/ MVA)											
765 kV	0.490	0.510	0.530	0.550	0.560						
400 kV	0.360	0.370	0.380	0.400	0.410						
Total Transformers	1652.00	1709.50	1770.00	1834.00	1897.50						
AC & HVDC Lines											
400 kV D/C Twin conductor-	12.69	12.69	12.69	12.69	12.69						
length (km)											
765 kV D/C quad conductor (km)	687.367	687.367	687.367	687.367	687.367						

Norm (₹ lakh/ km)					
D/C Twin Conductor	0.881	0.912	0.944	0.977	1.011
D/C Quad Conductor	1.322	1.368	1.416	1.466	1.517
Total Transmission Line	919.88	951.89	985.29	1020.08	1055.57
Total O&M Expenses	3333.85	3450.21	3571.77	3699.27	3827.90

Interest on Working Capital (IWC)

- 134. Regulations 34 and Regulation 3(7) of the 2019 Tariff Regulations provides as under:
 - "34. Interest on Working Capital: (1) The working capital shall cover:

(a) For Coal-based/lignite-fired thermal generating stations:

- (i) Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;
- (ii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;
- (iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;
- (iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;
- (v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and
- (vi) Operation and maintenance expenses, including water charges and security expenses, for one month.

(b) For Open-cycle Gas Turbine/Combined Cycle thermal generating stations:

- (i) Fuel cost for 30 days corresponding to the normative annual plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;
- (ii) Liquid fuel stock for 15 days corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;
- (iii) Maintenance spares @ 30% of operation and maintenance expenses including water charges and security expenses;
- (iv) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel; and
- (v) Operation and maintenance expenses, including water charges and security expenses, for one month.
- (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.
- (2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:

Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.

(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;"
- 135. The Petitioner has submitted that it has computed the IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. The 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 and 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus

350 basis points) for 2020-24. The components of the working capital and interest allowed thereon are as under:

(₹ in lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	277.82	287.52	297.65	308.27	318.99
Maintenance Spares	500.08	517.53	535.77	554.89	574.18
Receivables	5315.61	5210.32	5085.36	5010.12	4927.04
Total Working Capital	6093.51	6015.37	5918.78	5873.28	5820.22
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on working capital	734.27	676.73	665.86	660.74	654.77

Annual Fixed Charges for the 2019-24 tariff period

136. The annual fixed charges allowed for the Combined Asset for the 2019-24 tariff period are as under:

(₹ in lakh)

	Comb	ined Asset			
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	13916.08	13957.09	13957.09	13957.09	13957.09
Interest on Loan	10334.74	9218.82	8094.56	7361.90	6674.85
Return on Equity	14914.67	14958.65	14958.65	14958.65	14958.65
Int. on Working Capital	734.27	676.73	665.86	660.74	654.77
Op. and Maintenance	3333.85	3450.21	3571.77	3699.27	3827.90
Total	43233.61	42261.50	41247.94	40637.65	40073.26

Filing Fee and Publication Expenses

137. 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

138. 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

139. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if at any time GST on transmission is withdrawn from the negative list in future.

140. MPPMCL has submitted that the demand of the Petitioner is premature and need not be considered at this juncture. In response, Petitioner has submitted that currently transmission of electricity by an electric transmission utility is exempt from GST. Hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondents to the Petitioner and the same shall be charged and billed separately.

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

Security Expenses

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

143. 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 noticed 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

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

Sharing of Transmission Charges

145. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43

of the 2014 Tariff Regulations for the 2014-19 period and Regulation 57 of the 2019 Tariff Regulations for the 2019- 24 period.

146. To summarise, the trued-up Annual Fixed Charges allowed for the instant assets for the 2014-19 tariff period are as under:

(₹ in lakh)

Asset	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19		
Asset-A1	14737.03	20768.09	20908.95	20505.97	19978.83		
Asset-A2	959.65	1370.40	1406.67	1421.56	1397.37		
Asset-A3	110.46	231.28	239.09	244.41	246.14		
Asset-A4	110.49	230.17	238.07	243.51	245.40		
Asset-A5	142.50	641.86	664.92	654.95	649.17		
Asset-A6	50.14	240.63	246.14	246.95	244.53		
Asset-A7	43.92	201.71	207.10	207.12	205.66		
Asset-B1	-	-	-	4135.76	16611.01		
Asset-B2	-	-	251.31	1054.23	1063.76		
Combined Asset-C	3419.62	3650.36	3726.33	3762.00	3715.39		

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

(₹ in lakh)

Combined Assets	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	43233.61	42261.50	41247.94	40637.65	40073.26

147. This order disposes of Petition No. 313/TT/2020.

Sd/ (Arun Goyal) Member Sd/ (I. S. Jha) Member

Annexure-I

	2014-19	Admitted Capital Cost	Itted Capital Capital						Rate of	Ann	nual Depreciation as per Regulations (₹ in lakh)				
Asset	Capital Expenditure as on COD	as on COD (₹ in lakh)	2014-15	2015-16	2016-17	2017-18	2018-19	Cost as on 31.3.2019 (₹ in lakh)	Depre ciatio n	2014-15	2015-16	2016-17	2017-18	2018-19	
	Building	388.59	229.15	79.07	213.36	0.00	0.00	910.17	3.34%	12.29	21.95	26.84	30.40	30.40	
	Transmission Line	108374.28	5743.00	3305.87	2327.10	78.76	110.49	119939.50		4296.71	6112.67	6262.38	6324.89	6329.89	
Asset 1	Sub Station	1075.92	693.38	1989.73	225.74	0.00	0.00	3984.77	5.28%	54.95	145.95	204.44	210.40	210.40	
ASSEL I	PLCC	100.95	9,05	8.02	8.92	0.00	0.00	126.94	6.33%	4.88	7.22	7.75	8.04	8.04	
	IT Equipment and software	24.40	0.00	0.00	0.00	0.00	0.00	24.40	5.28%	0.94	1.29	1.29	1.29	1.29	
	TOTAL	109964.14	6674.58	5382.69	2775.12	78.76	110.49	124985.78		4369.77	6289.07	6501.69	6575.01	6580.01	
						Average	Gross Blo	ck (₹ in lakh)		113301.4 3	119330.0 7	123408.9 7	124835.9 1	124930.5 4	
						Weighted (WAROD)		Rate of Depred	5.27	5.27	5.27	5.27	5.27		



Accet	2014-19	Admitted Capital	Additional Capital Admitted Expenditure Capital (₹ in lakh) Cost as			Rate of	Annual	l Depreciation as per Regulations (₹ in lakh)				
Asset	Capital Expenditure as on COD	Cost as on COD (₹ in lakh)	2014-15	2015-16	2016- 17	on 31.3.2019 (₹ in lakh)	Depreciation	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19
	Building	406.64	105.25	35.58	171.19	718.66	3.34%	11.52	17.69	21.14	24.00	24.00
	Transmission Line	0.00	0.00	0.00	0.00	0.00	5.28%					
Asset-	Sub Station	5654.35	1041.04	133.65	423.37	7252.41	5.28%	244.75	357.04	371.75	382.93	382.93
A2	PLCC	0.41	0.05	0.04	0.06	0.56	6.33%	0.02	0.03	0.03	0.04	0.04
	IT Equipment and software	15.81	0.00	0.00	0.00	15.81	5.28%	0.63	0.83	0.83	0.83	0.83
	TOTAL	6077.20	1146.34	169.27	594.62	7987.43		256.91	375.60	393.76	407.80	407.80
			Average (Average Gross Block (₹ in lakh)								
			Weighted	Average F	late of De	epreciation (WAROD) (%)	5.15	5.14	5.12	5.11	5.11

	2014-19	Admitted	•			Admitted Capital		Annual Depreciation as per Regulations (₹ in lakh)					
Asset	Capital Expenditure as on COD	Capital Cost as on COD (₹ in lakh)	2014-15	2015-16	2016- 17	Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	
	Building	45.38	11.45	6,74	17.27	80.84	3.34%	0.85	2.01	2.41	2.70	2.70	
	Transmission Line						5.28%						
Asset-	Sub Station	459.42	32.19	20.19	29.96	541.76	5.28%	12.45	26.49	27.81	28.60	28.60	
A3	PLCC						6.33%						
	IT Equipment and software	3.90				3.90	5.28%	0.10	0.21	0.21	0.21	0.21	
	TOTAL	508.70	43.64	26.93	47.23	626.50		13.40	28.71	30.43	31.51	31.51	
				Average (
				_	Weighted Average Rate of Depreciation (WAROD) (%)				5.07	5.05	5.03	5.03	

	2014-19	Admitted Capital Cost	Additional Capital Expenditure (₹ in lakh)					Admitted Capital			Annual Depreciation as per Regulations (₹ in lakh)					
Asset	Capital Expenditure as on COD	as on COD (₹ in lakh)	2014-15	2015-16	2016-17	2017-18	2018-19	Cost as on 31.3.2019 (₹ in lakh)	Depre ciatio n	2014-15	2015-16	2016-17	2017-18	2018-19		
	Building	46.29	11.45	6.74	17.27			81.75	3.34%	0.87	2.04	2.44	2.73	2.73		
	Transmission Line								5.28%							
Asset-	Sub Station	463.46	31.83	20.19	29.75			545.23	5.28%	12.62	26.68	28.00	28.79	28.79		
A4	PLCC								6.33%							
	IT Equipment and software	3.98						3.98	5.28%	0.10	0.21	0.21	0.21	0.21		
	TOTAL	513.73	43.28	26.93	47.02			630.96		13.59	28.94	30.66	31.73	31.73		
					•	Average	Gross Blo	ck (₹ in lakh)								
Weighted Average Rate of I (WAROD) (%)							Rate of Depred	ciation	5.09	5.07	5.05	5.03	5.03			

	2014-19	Admitted Capital Cost	Additional Capital Expenditure (₹ in lakh)					Admitted Capital			Annual Depreciation as per Regulations (₹ in lakh)					
Asset	Capital Expenditure as on COD	as on COD (₹ in lakh)	2014-15	2015-16	2016-17	2017-18	2018-19	Cost as on 31.3.2019 (₹ in lakh)	Depre ciatio n	2014-15	2015-16	2016-17	2017-18	2018-19		
	Building	86.35						86.35	3.34%	0.70	2.88	2.88	2.88	2.88		
	Transmission Line								5.28%							
Asset-	Sub Station	1925.60	258.68	321.85				2506.13	5.28%	26.46	123.83	132.32	132.32	132.32		
A5	PLCC	10.42		6.70				17.12	6.33%	0.16	0.87	1.08	1.08	1.08		
	IT Equipment and software		64.34	7.05				71.39	5.28%	0.41	3.58	3.77	3.77	3.77		
	TOTAL	2022.36	323.02	335.60				2680.98		27.73	131.17	140.06	140.06	140.06		
						Average	Gross Blo	ck (₹ in lakh)								
						Weighted Average Rate of Depreciation (WAROD) (%)				5.21	5.22	5.22	5.22	5.22		

	2014-19	Admitted Capital Cost	Additional Capital Expenditure (₹ in lakh)					Admitted Capital	Rate of	Annual Depreciation as per Regulations (₹ in lakh)					
Asset	Capital Expenditure as on COD	as on COD (₹ in lakh)	2014-15	2015-16	2016-17	2017-18	2018-19	Cost as on 31.3.2019 (₹ in lakh)	Depre ciatio n	2014-15	2015-16	2016-17	2017-18	2018-19	
	Building	38.20	0.00	0.00	0.00	0.00	0.00	38.20	3.34%	0.28	1.28	1.28	1.28	1.28	
	Transmission Line		0.00	0.00	0.00	0.00	0.00		5.28%						
Asset-	Sub Station	874.40	62.27	48.99	41.46	0.00	0.00	1027.12	5.28%	10.48	50.75	53.14	54.23	54.23	
A6	PLCC					0.00	0.00		6.33%						
	IT Equipment and software		25.86	2.83		0.00	0.00	28.69	5.28%	0.15	1.44	1.51	1.51	1.51	
	TOTAL	912.60	88.13	51.82	41.46	0.00	0.00	1094.01		10.91	53.47	55.93	57.02	57.02	
	Average 0														
Weighted Average Ra (WAROD) (%)								Rate of Depred	ciation	5.20	5.21	5.21	5.21	5.21	

Accet	2014-19	Admitted Capital Cost	Additional Capital Expenditure (₹ in lakh)					Admitted Capital	Rate of	Ann	Annual Depreciation as per Regulations (₹ in lakh)				
Asset	Capital Expenditure as on COD	as on COD (₹ in lakh)	2014-15	2015-16	2016-17	2017-18	2018-19	Cost as on 31.3.2019 (₹ in lakh)	Depre ciatio n	2014-15	2015-16	2016-17	2017-18	2018-19	
	Building	34.00	0.00	0.00	0.00	0.00	0.00	34.00	3.34%	0.26	1.14	1.14	1.14	1.14	
	Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00		5.28%						
Asset-	Sub Station	658.39	44.33	54.50	23.12	0.00	0.00	780.34	5.28%	8.27	38.54	40.59	41.20	41.20	
A7	PLCC	0.00	0.00	0.00	0.00	0.00	0.00		6.33%						
	IT Equipment and software		19.69	2.16		0.00	0.00	21.85	5.28%	0.12	1.10	1.15	1.15	1.15	
	TOTAL	692.39	64.02	56.66	23.12	0.00	0.00	836.19		8.65	40.77	42.88	43.49	43.49	
						Average Gross Block (₹ in lakh)									
Weighted Average Rate of Depreciation (WAROD) (%)								ciation	5.19	5.20	5.20	5.20	5.20		

Asset	2014-19	Admitted Capital Cost as	•	al Capital diture lakh)	Admitted Capital Cost as on	Rate of	Annual De as per Reg in la	ulations (₹
	Capital Expenditure as on COD	on COD (₹ in lakh)	2017-18	2018-19	31.3.2019 (₹ in lakh)	Depreciation	2017-18	2018-19
	Building	268.77	1.98	4.52	275.27	3.34%	2.30	9.12
	Transmission Line	90488.87	4650.92	2810.05	97949.84	5.28%	1248.65	5097.57
Accet D1	Sub Station	996.37	10.15	16.75	1023.27	5.28%	13.47	53.59
Asset-B1	PLCC	91.26	0.67	1.53	93.46	6.33%	1.48	5.87
	IT Equipment and software	23.85	0.18	0.40	24.43	5.28%	0.32	1.28
	TOTAL	91869.13	4663.90	2833.25	993666.28		1266.21	5167.42
			Average G	ross Block (₹	94201.08	97949.66		
		of Depreciation (WAROD) (%)	5.28	5.28			

	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additiona	ll Capital Ex∣ (₹ in lakh)	penditure	Admitted Capital Cost	Rate of		Depreciation as per lations (₹ in lakh)	
Asset	Capital Expenditure as on COD		2016-17	2017-18	2018-19	as on 31.3.2019 (₹ in lakh)	Depreciation	2016-17	2017-18	2018-19
Asset-B2	Transmission Line	5582.92	406.83	337.03	81.90	6408.68	5.28%	76.17	325.16	336.22
	TOTAL	5582.92	406.83	337.03	81.90	6408.68		76.17	325.16	336.22
				Average G	ross Block	(₹ in lakh)		5786.34	6158.27	6367.73
				Weighted A	Average Rate	of Depreciation	5.28	5.28	5.28	

	2014-19	Admitted Capital Cost	Additional Capital Expenditure (₹ in lakh)					Admitted Rate Capital of		Annual Depreciation as per Regulations (₹ in lakh)					
Asset	Capital Expenditure as on COD	as on COD (₹ in lakh)	2014-15	2015-16	2016-17	2017-18	2018-19	Cost as on 31.3.2019 (₹ in lakh)	Depre ciatio n	2014-15	2015-16	2016-17	2017-18	2018-19	
	Building	1241.00	481.93	132.01	391.45			2246.39	3.34%	49.50	59.75	68.49	75.03	75.03	
Combi ned	Sub Station	12977.90	2318.90	352.24	880.55	123.62	78.43	16731.64	5.28%	746.45	816.97	849.52	876.03	881.36	
Asset C	IT Equipment and software	53.38	0.13					53.51	5.28%	2.82	2.83	2.83	2.83	2.83	
	TOTAL	5582.92	2800.96	484.25	1272.00	123.62	78.43	6408.68		798.77	879.55	920.83	953.88	959.21	
	Average Gross Blo							ck (₹ in lakh)		15672.76	17315.37	18193.49	18891.30	18992.33	
						Weighted (WAROD)	_	Rate of Depred	ciation	5.10	5.08	5.06	5.05	5.05	

Annexure-II

Petition No. 313/TT/2020

Period: 2019-24

Asset	Particular	Admitted Capital Cost as on	Additional Capital Expenditure (₹ in lakh)	Admitted Capital Cost as on	Rate of Depreciation		Annual Depre	ciation as pei (₹ in lakh)	Regulations	
		1.4.2019 (₹ in lakh)	2019-20	31.3.2024 (₹ in lakh)		2014-15	2015-16	2016-17	2017-18	2018-19
	Building	4471.64	21.18	4492.82	3.34%	149.71	150.06	150.06	150.06	150.06
	Transmission Line	224574.38	1507.40	226081.78	5.28%	11897.32	11937.12	11937.12	11937.12	11937.12
Combined	Sub Station	34392.66	32.49	34425.15	5.28%	1816.79	1817.65	1817.65	1817.65	1817.65
Asset	PLCC	238.08	0.00	238.08	6.33%	15.07	15.07	15.07	15.07	15.07
ASSEL	IT Equipment and software	247.97	0.00	247.97	15%	37.20	37.20	37.20	37.20	37.20
	TOTAL	263924.72	1561.07	265485.79		13916.08	13957.09	13957.09	13957.09	13957.09
			Average Gross	Block (₹ in lak	າ)	264705.26	265485.79	265485.79	265485.79	265485.79
			Weighted Average Rate of Depreciation (WAROD) (%)			5.26	5.26	5.26	5.26	5.26