

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 70/TT/2020

Coram:

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

Date of Order : 24.07.2020

In the Matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and truing up of transmission tariff of the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2019 for Combined Asset consisting of **Asset-1:** Conversion of 50 MVAR, 420 kV fixed line reactors in each circuit of Itarsi-Indore (MPPTCL) 400 kV 2XS/C lines into Switchable Line Reactors at Indore (MPPTCL) Sub-station; **Asset-2:** Conversion of 50 MVAR, 420 kV fixed line reactors in 400 kV D/C Bina (PG) Shujalpur transmission line into Switchable Line Reactors at Shujalpur Sub-station; **Asset-3:** Conversion of 63 MVAR, 420 kV fixed line reactors in Bhadrawati-Dhariwal 400 kV S/C line into Bus Reactor at Bhadrawati Sub-station; **Asset-4:** 1 No. 500 MVA 400/220 kV ICT-3 along with associated bays at Khandwa Sub-station; **Asset-5:** 2 No. 220 kV bays at Khandwa Sub-station; **Asset-6:** 1 No. 500 MVA 400/220 kV ICT-4 along with associated bays at Boisar Sub-station; **Asset-7:** 1 No. 500 MVA 400/220 kV ICT-3 along with associated bays at Kala Sub-station; and **Asset-8:** 1 No. 500 MVA 400/220 kV ICT-3 along with associated bays at Dehgam Sub-station under the WRSS XVII in the Western Region.

And in the Matter of:

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

.....Petitioner



Order in Petition No. 70/TT/2020

Versus

1. Madhya Pradesh Power Management Company Ltd.,
Shakti Bhawan, Rampur,
Jabalpur-482008.
2. 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.
4. Maharashtra State Electricity Distribution Co. Ltd.,
Hongkong Bank Building, 3rd Floor,
M.G. Road, Fort, Mumbai-400001.
5. Maharashtra State Electricity Transmission Co. Ltd.,
Prakashganga, 6th Floor, Plot No. C-19, E-Block,
Bandra Kurla Complex, Bandra (East) Mumbai-400051.
6. Gujarat Urja Vikas Nigam Ltd.,
Sardar Patel Vidyut Bhawan,
Racecourse Road, Vadodara-390007.
7. Electricity Department,
Government of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa-403001.
8. Electricity Department,
Administration of Daman & Diu,
Daman-396210.
9. DNH Power Distribution Corporation Ltd.,
Vidyut Bhawan, 66 kV Road, Near Secretariat Amla,
Silvassa-396230.
10. Chhattisgarh State Power Transmission Co. Ltd.,
State Load Despatch Building,
Dangania, Raipur-492013.



11. Chhattisgarh State Power Distribution Co. Ltd.,
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh-492013.

...Respondent(s)

Parties present

For Petitioner: Shri Ved Prakash Rastogi, PGCIL
Shri A.K. Verma, PGCIL
Shri Vipin J. Joseph, PGCIL
Shri S.S. Raju, PGCIL
Shri Zafrul Hasan, PGCIL
Shri Amit K. Jain, PGCIL

For Respondent: None

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the Petitioner”), a deemed transmission licensee, for truing up of tariff from COD to 31.3.2019 under 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 period from 1.4.2019 to 31.3.2024 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of following assets:

Asset-1: Conversion of 50 MVAR, 420 kV fixed line reactors in each circuit of Itarsi-Indore (MPPTCL) 400 kV 2XS/C lines into Switchable Line Reactors at Indore (MPPTCL) Sub-station;



Asset-2: Conversion of 50 MVA, 420 kV fixed line reactors in 400 kV D/C Bina (PG) Shujalpur transmission line into Switchable Line Reactors at Shujalpur Sub-station;

Asset-3: Conversion of 63 MVA, 420 kV fixed line reactors in Bhadrawati-Dhariwal 400 kV S/C line into Bus Reactor at Bhadrawati Sub-station;

Asset-4: 1 No. 500 MVA 400/220 kV ICT-3 along with associated bays at Khandwa Sub-station;

Asset-5: 2 No. 220 kV bays at Khandwa Sub-station;

Asset-6: 1 No. 500 MVA 400/220 kV ICT4 along with associated bays at Boisar Sub-station;

Asset-7: 1 No. 500 MVA 400/220 kV ICT-3 along with associated bays at Kala Sub-station; and

Asset-8: 1 No. 500 MVA 400/220 kV ICT-3 along with associated bays at Dehgam Sub-station under the “East-West Transmission Corridor Strengthening Scheme in the Western Region” (hereinafter referred to as the “transmission project”).

2. The Petitioner has made the following prayers:

“1) Allow the addcap for 2014-19 and 2019-24 tariff block as claimed as per Para 6 and 8 above.



2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 7 and 8 above.

3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before Hon'ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 6 and 7 above for respective block.

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

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

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

7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 8.6 above.

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

9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the beneficiaries, if GST is levied at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

Background

3. The brief facts of the case are as under:

a) The Investment Approval for the said system was accorded by the Board of Directors of the Petitioner Company in its 337th meeting held on 9.2.2017 (communicated vide Memorandum No. C/CP/PA1617-03-0X-IA02 dated



21.3.2017) at an estimated capital cost of ₹20412 lakh including IDC of ₹1235 lakh based on October 2016 price level. The scope of work falling under the “East-West Transmission Corridor Strengthening Scheme” in the Western Region is as under:

Srl. No.	Assets	Asset nomenclature in order dated 5.7.2019 in Petition No. 247/TT/2018	Asset nomenclature in instant petition
1	Pune (GIS) 765 kV Sub-station: <ul style="list-style-type: none"> • 1x240 MVAR switchable line reactor along with 850-ohm NGR • 765 kV Switchable line reactor bay (GIS) - 01 no 	Not covered *	Not covered *
2	Itarsi Sub-station: <ul style="list-style-type: none"> • Conversion of 50 MVAR, 420 kV Fixed Line Reactor, in each circuit of Itarsi Indore (MPPTCL) 400 kV 2 x S/C lines, into switchable Line Reactors at Itarsi Sub-station. 	Asset-2	Asset-1
3	Indore (MPPTCL) Sub-station: <ul style="list-style-type: none"> • Conversion of 50 MVAR, 420 kV Fixed Line Reactor, in each circuit of Itarsi-Indore (MPPTCL) 400 kV 2xS/C lines, into switchable Line Reactors at Indore (MPPTCL) Sub-station 	Asset-3	Asset-2
4	Shujalpur Sub-station: <ul style="list-style-type: none"> • Conversion of 50 MVAR, 420 kV Fixed Line Reactor, in each circuit of Bina (PG) -Shujalpur 400 kV D/C line, into switchable Line Reactors at Shujalpur Sub-station. 	Asset-4	Asset-3
5	Bhadravati (PG): <ul style="list-style-type: none"> • Conversion of 63 MVAR 420 kV Fixed Line Reactor in Bhadravati-Dhariwal 400 kV S/C line into Bus Reactor at Bhadravati Sub-station. • 400 kV Bus Reactor Bay-1 no. 	Asset-5	Asset-4
6	Khandwa Sub-station: <ul style="list-style-type: none"> • Installation of 1 X 500 MVA, 400/220 kV (r) ICT • 400 kV ICT bay-01 no. • 220 kV ICT bay-01 no. 	Asset-6	Asset-5



Srl. No.	Assets	Asset nomenclature in order dated 5.7.2019 in Petition No. 247/TT/2018	Asset nomenclature in instant petition
	<ul style="list-style-type: none"> 220 kV line bays 		
7	Boisar Sub-station: <ul style="list-style-type: none"> Installation of 1 X 500 MVA, 400/220 kV (41") ICT 400 kV ICT bay-01 no. 220 kV ICT bay-01 no. 	Asset-7	Asset-6
8	Kala (GIS) Sub-station: <ul style="list-style-type: none"> Installation of 1 X 500 MVA, 400/220 kV (3rd) ICT 400 kV ICT bay — 01 no. 220 kV ICT bay-01 no. 	Asset-8	Asset-7
9	Dehgam Sub-station: <ul style="list-style-type: none"> Installation of 1 X 500 MVA, 400/220 kV (3rd) ICT 400 kV ICT bay — 01 no. 220 kV ICT bay — 01 no. 	Asset-9	Asset-8

*Subsequent to the Investment Approval, during 43rd Standing Committee Meeting held on 11.5.2018, it was agreed to drop the conversion of fixed line reactors of Indore-Itarsi 400 kV 2xS/C at Itarsi end due to space constraints.

b) The dates of commercial operation of the assets covered in the instant petition are as under:

Assets	SCOD	COD	Time over-run
Asset – 1	9.9.2019	3.10.2018	Nil
Asset – 2	9.9.2019	25.5.2018	Nil
Asset – 3	9.9.2019	19.7.2018	Nil
Asset – 4	9.9.2019	21.5.2018	Nil
Asset – 5	9.9.2019	5.11.2018	Nil
Asset – 6	9.9.2019	6.5.2018	Nil
Asset – 7	9.9.2019	24.11.2018	Nil
Asset – 8	9.9.2019	7.6.2018	Nil

c) The transmission tariff was allowed for the instant assets from COD to 31.3.2019 period vide order dated 5.7.2019 in Petition No. 247/TT/2018 and



transmission tariff based on truing up claimed by the Petitioner in the instant petition is as under:

(₹ in lakh)

Particulars	2018-19							
	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
Annual Fixed Charges approved vide order dated 5.7.2019 in Petition No. 247/TT/2018	86.41	143.18	75.11	345.27	60.55	357.98	173.59	371.17
AFC claimed based on instant truing up petition	85.16	143.35	73.13	336.64	60.57	377.66	195.30	369.66

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

5. The Petitioner has served the petition on the Respondents and notice of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No.1, has filed its reply vide affidavit dated 13.2.2020. MPPMCL has raised the issues of grossing up of RoE, Initial Spares and proposed ACE during the 2019-24 tariff period. Reply has also been filed by Maharashtra State Electricity



Distribution Company Ltd. (MSEDCL), Respondent No. 4, vide affidavit dated 19.3.2020, in which issues of grossing up of RoE, proposed ACE during the 2019-24 tariff period, calculation of IoL and the effect of GST and additional taxes have been raised. The Petitioner, vide affidavit dated 25.2.2020, has filed rejoinder to the reply of MPPMCL and vide affidavit dated 8.5.2020, has filed rejoinder to the reply of MSEDCL. The issues raised by MPPMCL and MSEDCL, and the clarifications given by the Petitioner are considered in the relevant portions of this order.

6. This order is issued considering the submissions made by the Petitioner dated 18.12.2019, 25.2.2020, and 16.3.2020; MPPMCL's reply vide affidavit dated 13.2.2020 and Petitioner's rejoinder vide affidavit dated 25.2.2020; and MSEDCL's reply vide affidavit dated 19.3.2020 and Petitioner's rejoinder vide affidavit dated 8.5.2020.

7. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.

Truing Up of Annual Fixed Charges of the 2014-19 Period

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

Particulars	(₹ in lakh)							
	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
Depreciation	4.36	8.56	6.38	71.38	6.21	83.26	47.66	85.54
Interest on Loan	4.48	5.40	7.62	74.60	6.42	85.52	51.63	85.86
Return on Equity	4.89	6.05	8.08	80.13	6.86	92.58	53.50	92.66
Interest on Working Capital	3.66	6.25	2.86	9.72	2.34	10.69	5.04	10.23



Particulars	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
O&M Expenses	67.77	117.09	48.19	100.81	38.74	105.61	37.47	95.37
Total	85.16	143.35	73.13	336.64	60.57	377.66	195.30	369.66

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

(₹ in lakh)								
Particulars	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
O&M Expenses	11.45	11.45	5.73	9.73	8.02	9.73	8.90	9.73
Maintenance Spares	20.61	20.61	10.31	17.52	14.43	17.52	16.02	17.52
Receivables	28.78	28.04	17.38	65.01	25.07	69.62	92.82	75.46
Total Working Capital	60.84	60.10	33.42	92.26	47.52	96.87	117.74	102.71
Rate of Interest (%)	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20
Interest on Working Capital	7.42	7.33	4.08	11.26	5.80	11.82	14.36	12.53
Pro-rata interest on Working Capital	3.66	6.25	2.86	9.72	2.34	10.69	5.04	10.23

Cost over-run

10. The details of FR apportioned approved capital cost, actual expenditure upto COD, and actual additional capital expenditure (ACE) in 2018-19 as claimed by the Petitioner are as below:

(₹ in lakh)				
Asset	FR Apportioned Approved Capital Cost	Actual Capital Cost as on COD	Actual ACE 2018-19	Total Capital Cost as on 31.3.2019
Asset-1	331.92	152.69	34.91	187.60
Asset-2	268.15*	98.62	43.63	142.25
Asset-3	390.41	123.60	141.87	265.47
Asset-4	2994.08	956.41	1223.07	2179.48
Asset-5	467.59	283.04	15.20	298.24
Asset-6	2726.85	1255.34	947.58	2202.92
Asset-7	4591.97	2092.18	976.28	3068.46
Asset-8	3057.63	1256.94	1323.04	2579.98



Asset	FR Apportioned Approved Capital Cost	Actual Capital Cost as on COD	Actual ACE 2018-19	Total Capital Cost as on 31.3.2019
Total	14828.60	6218.82	4705.58	10924.40

11. The total capital cost as on 31.3.2019, including the ACE, is within the FR apportioned approved capital cost. Therefore, there is no cost over-run.

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

12. The instant assets were scheduled to be put into commercial operation on 9.9.2019 and all the assets achieved commercial operation before the scheduled date. Thus, there was no time over-run in case of the instant assets. The Petitioner has claimed IDC for the instant assets and has submitted the statement showing IDC claimed and the IDC discharged as on COD and thereafter, as under:

(₹ in lakh)				
Asset	IDC as per Auditor certificate	IDC discharged upto COD	IDC discharged during 2018-19	IDC to be discharged during 2019-20
Asset-1	5.26	0	5.09	0.17
Asset-2	1.63	0.20	1.43	0
Asset-3	1.31	0.97	0.34	0
Asset-4	7.07	3.99	3.07	0
Asset-5	7.91	1.49	6.42	0
Asset-6	3.18	0	3.18	0
Asset-7	57.05	49.51	7.54	0
Asset-8	16.52	8.90	7.62	0
Total	99.93	65.06	34.69	0.17

13. The Petitioner has claimed IEDC as on COD, which is within the percentage of hard cost as indicated in the abstract cost estimate. Further, the Petitioner has



submitted that the entire IEDC claimed in Auditor's Certificate is on cash basis and is paid upto COD of the assets. Hence, the entire amount of IEDC has been allowed. The IEDC considered for the purpose of tariff calculation in respect of the instant assets is as under:

(₹ in lakh)

Asset	IEDC claimed as per certificate	IEDC considered as on COD	IEDC discharged Up to COD
Asset-1	7.59	7.59	7.59
Asset-2	3.19	3.19	3.19
Asset-3	23.43	23.43	23.43
Asset-4	36.75	36.75	36.75
Asset-5	8.92	8.92	8.92
Asset-6	25.56	25.56	25.56
Asset-7	28.01	28.01	28.01
Asset-8	51.89	51.89	51.89
Total	185.34	185.34	185.34

Initial Spares

14. 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 the following ceiling norms:

*“(d) Transmission System
Transmission line: 1.00%
Transmission sub-station (Green Field): 4.00%
Transmission sub-station (Brown Field): 6.00%
GIS Sub-station: 5.00%”*

15. The Initial Spares claimed by the Petitioner are as under:



Sub-station	P&M cost as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Initial Spares worked out and claimed by the Petitioner (₹ in lakh)	Ceiling limit
AIS	8495.78	482.09	511.51	6%
GIS	3680.21	217.08	182.27	5%
Total		699.17	693.78	

The Petitioner has submitted that the Initial Spares claimed for sub-station are within specified limit considering the project as a whole under the 2014 Tariff Regulations.

16. MPPMCL has submitted that the Initial Spares claimed by the Petitioner are beyond the limit specified in the Regulations and, therefore, the excess amount claimed in respect of Initial Spares should not be allowed. MPPMCL has further submitted that the two types of Sub-stations i.e. AIS and GIS have different ceiling limits and thus cannot be subsidizing each other, as claimed by the Petitioner. In response, the Petitioner, vide affidavit dated 20.3.2020, has submitted that the scope of work under the subject project comprises of AIS/GIS (1/2 nos. each) at various locations and accordingly spares have been procured to cater to the said scattered bays. The Petitioner has further submitted that as a consequence, the ratio of cost of spares to plant and machinery cost of the asset is marginally high as compared to ratio for scope of work in a particular Sub-station.

17. We have considered the submissions of the Petitioner and MPPMCL. As per APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017, the Initial Spares are to be allowed as a percentage of the project cost as a whole as on the cut-off date.



Out of the nine assets covered in the instant transmission project, eight assets have achieved COD during 2014-19 period. Seven of these assets are in brownfield sub-stations and one asset is in GIS sub-station. As per the 2014 Tariff Regulations, the allowable limit for Initial Spares for the brownfield and GIS Sub-stations is 6% and 5% respectively. The ninth asset is a 240 MVAr switchable line reactor alongwith 850 ohm NGR and 765 kV switchable line reactor bay (GIS) at 765/400 kV Pune (GIS) Sub-station. As all the assets of the instant transmission project in the brownfield sub-stations have been put into commercial operation, the Initial Spares for the seven assets in the brownfield sub-station are allowed @6% of the total Plant & Machinery cost as on the cut-off date. In case of Asset-7, which is in a GIS sub-station, the Initial Spares are allowed @5% of the P&M cost as on the cut-off date. The Initial Spares allowed for the instant assets are as under:

Asset	Type	P&M cost as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Ceiling limit	Initial Spares allowable (₹ in lakh)	Excess Initial Spares (₹ in lakh)	Initial Spares allowed
		Sub-station					
		A					
Asset-1	Brownfield Sub-station	212.68	14.25	6%	12.67	-	14.25
Asset-2	Brownfield Sub-station	200.45	12.17	6%	12.02		12.17
Asset-3	Brownfield Sub-station	205.79	12.69	6%	12.33		12.69
Asset-4	Brownfield Sub-station	2457.67	146.48	6%	147.52		146.48



Asset	Type	P&M cost as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Ceiling limit	Initial Spares allowable (₹ in lakh)	Excess Initial Spares (₹ in lakh)	Initial Spares allowed
		Sub-station					
		A	B	C	$D=(A-B)*C/(100-C)$	E=B-D	
Asset-5	Brownfield Sub-station	348.30	-	6%	22.23		-
Asset-6	Brownfield Sub-station	2346.08	138.50	6%	140.91		138.50
Asset-8	Brownfield Sub-station	2724.81	158.00	6%	163.84		158.00
	Total Brownfield Sub-station	8495.78	482.09	6%	511.51	-	482.09
Asset-7	GIS Sub-station	3680.21	217.08	5%	182.27	34.81	182.27
	Total GIS Sub-station	3680.21	217.08	5%	182.27	34.81	182.27

18. The claim of Initial Spares has been considered as per Auditor's certificate and the discharge of Initial Spares has been considered as per the Petitioner's submission. The Statement of discharge of Initial Spares has been adjusted for excess claim of Initial Spares, wherever applicable, and the Initial Spares discharged are allowed as under:

(₹ in lakh)

Asset	Initial Spares allowed	Statement of Discharge of Initial Spares			
		Upto COD	During 2018-19	During 2019-20 (Projected)	Total
Asset-1	14.25	13.37	0.88	-	14.25
Asset-2	12.17	10.94	1.23	-	12.17
Asset-3	12.69	-	9.02	3.67	12.69



Asset	Initial Spares allowed	Statement of Discharge of Initial Spares			
		Upto COD	During 2018-19	During 2019-20 (Projected)	Total
Asset-4	146.48	23.53	122.95	-	146.48
Asset-5	-	-	-	-	-
Asset-6	138.50	14.23	124.27	-	138.50
Asset-7	182.27*	-	182.27	-	182.27
Asset-8	158.00	64.81	93.19	-	158.00
Total	664.36	126.88	533.81	3.67	664.36

* After adjusting excess Initial Spares of ₹34.81 lakh

Capital Cost as on COD

19. The capital cost of the instant assets has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations. The Commission vide order dated 5.7.2019 in Petition No. 247/TT/2018 had approved the transmission tariff for the instant assets for the 2018-19 period based on the admitted capital cost as on COD and projected ACE during 2018-19 for the transmission assets as under:

(₹ in lakh)

Asset	Capital Cost claimed as on COD (A)	Un-discharged IDC (B)	Un-discharged Initial Spares (C)	Excess Initial Spares disallowed (D)	Capital Cost allowed as on COD (E) = (A-B-C-D)
Asset-1	152.69	5.26	0.88	0.00	146.55
Asset-2	98.62	1.43	1.23	0.00	95.96
Asset-3	123.60	0.34	12.69	0.00	110.57
Asset-4	956.41	3.07	122.95	0.00	830.39
Asset-5	283.04	6.42	0.00	0.00	276.62
Asset-6	1255.34	3.18	124.27	0.00	1127.99
Asset-7	2092.18	7.54	159.97	125.92	1798.76
Asset-8	1256.94	7.62	93.19	0.00	1156.13



Asset	Capital Cost claimed as on COD (A)	Un-discharged IDC (B)	Un-discharged Initial Spares (C)	Excess Initial Spares disallowed (D)	Capital Cost allowed as on COD (E) = (A-B-C-D)
Total	6218.82	34.86	515.18	125.92	5542.97

(₹ in lakh)

Asset	Apportioned Approved Capital Cost	Admitted Capital Cost as on COD*	Admitted ACE for 2018-19	Total admitted Capital Cost as on 31.3.2019
Asset-1	331.92	146.55	74.20	220.75
Asset-2	268.15	95.96	91.36	187.32
Asset-3	390.41	110.57	210.15	320.72
Asset-4	2994.08	830.39	1632.10	2462.49
Asset-5	467.59	276.62	25.85	302.47
Asset-6	2726.85	1127.99	995.29	2123.28
Asset-7	4591.97	1798.76**	813.59	2612.35
Asset-8	3057.63	1156.13	1631.31	2787.44
Total	14828.60	5542.97	5473.85	11016.82

*After adjustment of Accrual IDC discharged after COD.

**After restriction of excess Initial Spares of ₹125.92 lakh.

20. The details of the capital cost as on COD now approved after adjustment of IDC, IEDC and Initial Spares are as under:

(₹ in lakh)

Asset	Capital Cost claimed as on COD (A)	Un-discharged IDC as on COD (B)	Un-discharged Initial Spares as on COD (C)	Excess Initial Spares disallowed (D)	Capital Cost allowed as on COD (E) = (A-B-C-D)
Asset-1	152.69	5.26	0.88	-	146.55
Asset-2	98.62	1.43	1.23	-	95.96



Asset	Capital Cost claimed as on COD (A)	Un-discharged IDC as on COD (B)	Un-discharged Initial Spares as on COD (C)	Excess Initial Spares disallowed (D)	Capital Cost allowed as on COD (E) = (A-B-C-D)
Asset-3	123.60	0.34	12.69	-	110.57
Asset-4	956.41	3.07	122.95	-	830.39
Asset-5	283.04	6.42	0	-	276.62
Asset-6	1255.34	3.18	124.27	-	1127.89
Asset-7	2092.18	7.54	182.27	34.81	1867.56
Asset-8	1256.94	7.62	93.19	-	1156.13
Total	6218.82	34.86	537.48	34.81	5611.67

Additional Capital Expenditure (ACE)

21. The Commission had allowed ACE of ₹5473.85 lakh for the instant transmission assets during 2018-19 towards balance and retention payments vide order dated 5.7.2019 in Petition No 247/TT/2018.

22. The Petitioner has claimed following ACE based on actual expenditure:

(₹ in lakh)

Asset	Apportioned Approved Capital Cost	Capital Cost as on COD	ACE 2018-19	Total Capital Cost as on 31.3.2019
Asset-1	331.92	152.69	34.91	187.60
Asset-2	268.15	98.62	43.63	142.25
Asset-3	390.41	123.60	141.87	265.47
Asset-4	2994.08	956.41	1223.07	2179.48
Asset-5	467.59	283.04	15.20	298.24
Asset-6	2726.85	1255.34	947.58	2202.92
Asset-7	4591.97	2092.18	976.28	3068.46
Asset-8	3057.63	1256.94	1323.04	2579.98
Total	14828.60	6218.82	4705.58	10924.40



23. The Petitioner has submitted that the ACE pertains to balance and retention payments and payment towards unexecuted work. In the order dated 5.7.2019, the additional capital was admitted towards balance and retention payment. In response to the Commission's query in this matter, the Petitioner vide affidavit dated 25.2.2020 has submitted that many works in the sub-stations like roads, drains, township, etc. are completed after COD. At the same time, payments for all the works completed till COD were not made by COD. Thus, it is not possible to freeze liability of all works by COD. The Petitioner has further submitted that value of works beyond cut-off date and liability as on date of COD is known only after actual status of payments are reconciled. Thus, such estimates are revised while filing petition for true-up of tariff.

24. We have considered the submissions made by the Petitioner. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations as it is towards balance and retention payments and balance work deferred for execution. The entitled un-discharged IDC liability as well as amount of Initial Spares un-discharged as on COD have been allowed as ACE during the year of its discharge. ACE allowed from COD to 31.3.2019 in respect of the assets covered in the instant petition is as under:

(₹ in lakh)

Asset	ACE	Un-discharged IDC in 2018-19	Un-discharged Initial Spares in 2018-19	Total ACE
Asset-1	34.91	5.09	0.88	40.88
Asset-2	43.63	1.43	1.23	46.29



Asset	ACE	Un-discharged IDC in 2018-19	Un-discharged Initial Spares in 2018-19	Total ACE
Asset-3	141.87	0.34	9.02	151.23
Asset-4	1223.07	3.07	122.95	1349.09
Asset-5	15.20	6.42	-	21.62
Asset-6	947.58	3.18	124.27	1075.03
Asset-7	976.28	7.54	182.27	1166.09
Asset-8	1323.04	7.62	93.19	1423.85
Total	4705.58	34.69	533.81	5274.08

25. Accordingly, the capital cost considered for the 2014-19 period is as under:

(₹ in lakh)

Asset	Admitted Capital Cost as on COD	ACE	Total Capital Cost as on 31.3.2019
		2018-19	
Asset-1	146.55	40.88	187.43
Asset-2	95.96	46.29	142.25
Asset-3	110.57	151.23	261.80
Asset-4	830.39	1349.09	2179.48
Asset-5	276.62	21.62	298.24
Asset-6	1127.89	1075.03	2202.92
Asset-7	1867.56	1166.09	3033.65
Asset-8	1156.13	1423.85	2579.98
Total	5611.67	5274.08	10885.75

Debt-Equity ratio

26. The Petitioner has claimed Debt-Equity ratio of 70:30 as on the date of commercial operation. Debt-Equity ratio of 70:30 is considered as provided in Regulation 19 of the 2014 Tariff Regulations. The details of Debt-Equity ratio in respect of the instant assets as on the date of commercial operation and as on 31.3.2019 are as under:



(₹ in lakh)

Asset	Capital Cost as on COD			ACE			Capital Cost as on 31.3.2019		
	Debt	Equity	Total	Debt	Equity	Total	Debt	Equity	Total
	70%	30%	100%	70%	30%	100%	70%	30%	100%
Asset-1	102.59	43.97	146.55	28.62	12.26	40.88	131.20	56.23	187.43
Asset-2	67.17	28.79	95.96	32.40	13.89	46.29	99.58	42.68	142.25
Asset-3	77.40	33.17	110.57	105.86	45.37	151.23	183.26	78.54	261.80
Asset-4	581.27	249.12	830.39	944.36	404.73	1349.09	1525.64	653.84	2179.48
Asset-5	193.63	82.99	276.62	15.13	6.49	21.62	208.77	89.47	298.24
Asset-6	789.52	338.37	1127.89	752.52	322.51	1075.03	1542.04	660.88	2202.92
Asset-7	1307.29	560.27	1867.56	816.26	349.83	1166.09	2123.56	910.10	3033.65
Asset-8	809.29	346.84	1156.13	996.70	427.16	1423.85	1805.99	773.99	2579.98
Total	3928.17	1683.50	5611.67	3691.86	1582.22	5274.08	7620.03	3265.73	10885.75

Interest on Loan (IoL)

27. The Petitioner has claimed the weighted average rate of IoL, based on its actual loan portfolio and rate of interest.

28. IoL has been calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL allowed in respect of the instant assets is as under:

(₹ in lakh)

Particulars	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
Interest on Loan	2018-19							
Gross Normative Loan	102.59	67.17	77.40	581.27	193.63	789.52	1307.29	809.29
Cumulative Repayments upto Previous Year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Loan-Opening	102.59	67.17	77.40	581.27	193.63	789.52	1307.29	809.29
Additions	28.62	32.40	105.86	944.36	15.13	752.52	816.26	996.70
Repayment during the year	4.35	5.36	6.07	68.58	6.21	79.50	45.38	80.53
Net Loan-Closing	126.85	94.22	177.19	1457.06	202.56	1462.54	2078.18	1725.46



Particulars	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
Interest on Loan	2018-19							
Average Loan	114.72	80.69	127.29	1019.17	198.10	1126.03	1692.74	1267.37
Weighted Average Rate of Interest on Loan (%)	7.90	7.97	8.17	8.15	8.05	8.10	8.28	8.10
Interest on Loan (pro-rata basis)	4.47	5.48	7.30	71.67	6.42	82.47	49.16	83.86

29. Accordingly, IoL approved earlier, claimed by the Petitioner in the instant petition and trued up is shown in the table below:-

Particular / Asset	(₹ in lakh)							
	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
Approved vide order dated 5.7.2019 in Petition No. 247/TT/2018	4.86	6.38	8.23	75.96	6.35	78.03	44.00	85.84
Claimed by the Petitioner in the instant petition	4.48	5.40	7.62	74.60	6.42	85.52	51.63	85.86
Allowed after true-up in this order	4.47	5.48	7.30	71.67	6.42	82.47	49.16	83.86

Return on Equity (RoE)

30. The Petitioner is entitled to RoE for the instant assets in terms of Regulation 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 period:

Year	Claimed effective tax (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	21.018	19.624



Year	Claimed effective tax (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757

31. MPPMCL has submitted that the Petitioner has grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 and has not placed on record the assessment orders for 2016-17 and 2017-18. For 2018-19, it has grossed up RoE and has not claimed the effective tax rate based on actual taxes paid for 2018-19. In response, the Petitioner vide affidavit dated 25.2.2020 has submitted that effective rates of tax considered for 2014-15 and 2015-16 are based on Assessment Order issued by Income Tax authorities for the purpose of grossing up of RoE rate. The effective rate of tax considered for 2016-17 and 2017-18 are based on the Income-tax returns filed for the purpose of grossing up of ROE rate of the respective years. Further, for 2018-19, effective tax rate is calculated based on the applicable MAT rate (i.e. MAT 18.50% + Surcharge 12.00% + Cess 4%) for the purpose of grossing up of RoE rate. The Petitioner has also submitted a copy of the Assessment orders for 2014-15 to 2016-17.

32. MSEDCL has submitted that the Petitioner has mentioned the effective tax rate only for 2014-15 and 2015-16. However, the actual tax paid on income from other business activities of the Petitioner are required to be excluded for the computation of the effective tax rate which has not been done by the Petitioner. Thus, in accordance



with the above Regulation, income from other business stream during the tariff block 2014-19 shall not be considered in calculation of effective tax rate. MSEDCL has further submitted that the Petitioner has submitted grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 and the Petitioner had not submitted the assessment order for 2014-15, 2015-16, 2016-17 and 2017-18. For 2018-19, the claimed grossed up RoE is not on the basis of actual taxes paid for the year.

33. In response to MSEDCL's reply, the Petitioner vide affidavit dated 8.5.2020 has clarified that it has submitted effective tax rates for all the years of the 2014-19 period. Further, the Petitioner has submitted that from 2014-15 to 2018-19, the Petitioner was liable to pay tax under the provisions of Section 115JB of the Income tax Act, 1961, i.e., the entire income of the company was liable to be taxed at Minimum Alternate Tax ('MAT') rate. Therefore, income from all streams of business is taxable at a uniform tax rate. The Petitioner has submitted that while computing the adjusted book profits liable to be taxed as income under the MAT provisions, no specific deduction/ exemption/ relief was claimed/ allowed for any specific stream of income. Hence, inclusion/ exclusion of non-transmission income does not impact the computation of effective tax rate used for the purpose of grossing up of ROE. The Petitioner has further submitted that the Income Tax assessment of the Petitioner had been completed and Assessment Orders had been issued by the Income Tax Department for the years 2014-15, 2015-16 and 2016-17 and that the Income Tax returns have been filed with the Income Tax Department for the years 2017-18 and 2016-17. Basis



of year wise effective tax rate and grossed up RoE for the 2014-19 period had already been submitted as a part of the instant petition. Further, assessment order of 2014-15 and 2015-16 had already been submitted in TV (Technical Validation) reply for Petition No. 20/TT/2020 and a copy of the assessment order for the financial year 2016-17 has been submitted along with the rejoinder.

34. We have considered the submissions of the Petitioner and the Respondents, MPPMCL and MSEDCL. The Commission, vide order dated 27.4.2020 in Petition No. 274/TT/2019, had arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given in the table below. The same MAT rates are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 period in terms of the provisions of the 2014 Tariff Regulations.

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

35. The RoE is trued up on the basis of the MAT rate applicable for the respective years and is allowed as under:

(₹ in lakh)								
Asset	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
Return on Equity	2018-19							
Opening Equity	43.97	28.79	33.17	249.11	82.99	338.37	560.27	346.84
Additions	12.26	13.89	45.37	404.73	6.49	322.51	349.83	427.16
Closing Equity	56.23	42.68	78.54	653.84	89.47	660.88	910.10	773.99
Average Equity	50.10	35.73	55.86	451.48	86.23	499.62	735.18	560.42



Asset	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (%)	21.549	21.549	21.549	21.549	21.549	21.549	21.549	21.549
Rate of Return on Equity (%)	19.758	19.758	19.758	19.758	19.758	19.758	19.758	19.758
Return on Equity (pro-rata basis)	4.88	6.02	7.74	76.98	6.86	89.25	50.94	90.40

36. Accordingly, details of RoE approved vide earlier order, claimed by the Petitioner in the instant petition and true up RoE for the year 2018-19 are as follows:-

(₹ in lakh)

Particular / Asset	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
Approved vide order dated 5.7.2019 in Petition No. 247/TT/2018	5.33	7.11	8.90	83.59	6.86	86.47	46.13	94.71
Claimed by the Petitioner in the instant petition	4.89	6.05	8.08	80.13	6.86	92.58	53.50	92.66
Allowed after true-up in this order	4.88	6.02	7.74	76.98	6.86	89.25	50.94	90.40

Depreciation

37. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed for the instant assets in the order dated 5.7.2019 in Petition No. 247/TT/2018. The Petitioner has neither given any justification for claiming higher depreciation than that was allowed earlier in order dated 5.7.2019 nor made any specific prayer for allowing higher depreciation in this petition.

38. The instant assets were put into commercial operation during the 2014-19 period and the tariff for the 2014-19 period was allowed vide order dated 5.7.2019 in Petition No. 247/TT/2018. The Petitioner did not apportion part of capital expenditure towards



“IT Equipment” in the above said petition even though there was a clear provision in the 2014 Tariff Regulations providing depreciation @ 15% for IT Equipment. Having failed to make a claim as per the 2014 Tariff Regulations, the Petitioner has now, at the time of truing up of the tariff claimed 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 also in few other petitions. It is further 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%. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the ACE, 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 COD onwards. Accordingly, the depreciation @5.28% has been considered for IT Equipment as part of the sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations. The Gross Block during the tariff period 2014-19 has been depreciated at



weighted average of depreciation (WAROD). The weighted average of depreciation (WAROD) has been worked out (as placed in Annexure-I) after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2018-19 is as under:

(₹ in lakh)								
Particulars	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
Depreciation	2018-19							
Opening Gross Block	146.55	95.96	110.57	830.38	276.62	1127.89	1867.56	1156.13
Additional Capitalisation	40.88	46.29	151.23	1349.10	21.62	1075.03	1166.09	1423.85
Closing Gross Block	187.43	142.25	261.80	2179.48	298.24	2202.92	3033.65	2579.98
Average Gross Block	166.99	119.11	186.19	1504.93	287.43	1665.41	2450.61	1868.06
Weighted average rate of Depreciation (WAROD) (%)	5.28	5.28	4.65	5.28	5.37	5.28	5.28	5.28
Balance useful life of the asset	25	25	25	25	24	25	25	25
Aggregated Depreciable Value	150.29	107.19	167.57	1354.44	258.69	1498.86	2205.54	1681.25
Combined Depreciation during the year (pro-rata basis)	4.35	5.36	6.07	68.58	6.21	79.50	45.38	80.53
Remaining Aggregate Depreciable Value	145.94	101.84	161.49	1285.86	252.48	1419.36	2160.17	1600.72

39. The details of the depreciation approved vide earlier order, claimed by the Petitioner and trued up in the instant order for the year 2018-19 is shown in the table below:-

(₹ in lakh)



Particular / Asset	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
Approved vide order dated 5.7.2019 in Petition No. 247/TT/2018	4.78	6.38	6.89	75.02	6.27	77.60	41.41	85.00
Claimed by the Petitioner in the instant petition	4.36	8.56	6.38	71.38	6.21	83.26	47.66	85.54
Allowed after true-up in this order	4.35	5.36	6.07	68.58	6.21	79.50	45.38	80.53

Operation & Maintenance Expenses (O&M Expenses)

40. The O&M Expenses claimed by the Petitioner for the instant assets are as under:

Element	Norms for 2018-19	Number of bays							
		Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
220 kV Sub-station	₹48.10 lakh/ bay				1	2	1		1
400 kV Sub-station	₹68.71 lakh/ bay	2	2	1	1		1		1
220 kV GIS Sub-station	₹48.10 lakh/ bay							1	
400 kV GIS Sub-station	₹58.73 lakh/ bay							1	
Claimed by the Petitioner in the instant petition (₹ in lakh)		67.77	117.09	48.19	100.81	38.74	105.61	37.47	95.37

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

Element	Norms for 2018-19	Number of bays							
		Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
220 kV Sub-station	₹48.10 lakh/ bay				1	2	1		1
400 kV Sub-station	₹68.71 lakh/ bay	2	2	1	1		1		1
220 kV GIS Sub-station	₹48.10 lakh/ bay							1	



Element	Norms for 2018-19	Number of bays							
		Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
400 kV GIS Sub-station	₹58.73 lakh/ bay							1	

42. We have considered the submission of the Petitioner. The O&M Expenses are allowed for the instant assets as per the norms specified in the 2014 Tariff Regulations and are as under:

Element	Norms for 2018-19	Number of bays							
		Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
220 kV Sub-station	₹48.10 lakh/ bay				1	2	1		1
400 kV Sub-station	₹68.71 lakh/ bay	2	2	1	1		1		1
220 kV GIS Sub-station	₹48.10 lakh/ bay							1	
400 kV GIS Sub-station	₹58.73 lakh/ bay							1	
Claimed by the Petitioner in the instant petition (₹ in lakh)		67.77	117.09	48.19	100.81	38.74	105.61	37.46	95.37

43. The details of the O&M Expenses approved vide earlier order, claimed by the Petitioner and as trued up in the instant order is shown in the table below:-

Particulars/ Assets	(₹ in lakh)							
	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
Approved vide order dated 5.7.2019 in Petition No. 247/TT/2018	67.76	117.08	48.19	100.80	38.74	105.60	37.45	95.36
Claimed by the Petitioner in the instant petition	67.77	117.09	48.19	100.81	38.74	105.61	37.47	95.37
Allowed after true-up in this order	67.77	117.09	48.19	100.81	38.74	105.61	37.46	95.37



Interest on Working Capital (IWC)

44. The IWC for the year 2018-19 has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and allowed as under:

Particulars	(₹ in lakh)							
	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
O&M Expenses	11.45	11.45	5.73	9.73	8.02	9.73	8.90	9.73
Maintenance Spares	20.61	20.61	10.31	17.52	14.43	17.52	16.02	17.52
Receivables	28.77	27.41	17.14	63.26	25.07	67.71	89.26	73.53
Total Working Capital	60.83	59.47	33.18	90.52	47.51	94.97	114.19	100.79
Rate of Interest (%)	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20
Interest on Working Capital (pro-rata basis)	3.66	6.18	2.84	9.53	2.33	10.47	4.89	10.04

45. The details of IWC approved vide earlier order, IWC claimed by the Petitioner and as trued up in the instant order for the year 2018-19 is shown in the table below:-

Particulars/ Assets	(₹ in lakh)							
	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
Approved vide order dated 5.7.2019 in Petition No. 247/TT/2018	3.69	6.24	2.90	9.89	2.33	10.29	4.60	10.26
Claimed by the Petitioner in the instant petition	3.66	6.25	2.86	9.72	2.34	10.69	5.04	10.23
Allowed after true-up in this order	3.66	6.18	2.84	9.53	2.33	10.47	4.89	10.04

Approved Annual Fixed Charges for the 2014-19 Period

46. The trued up annual fixed charges for the instant transmission assets for the year 2018-19 are summarised below:

Particulars/ Assets	(₹ in lakh)							
	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8



Particulars/ Assets	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
Depreciation	4.35	5.36	6.07	68.58	6.21	79.50	45.38	80.53
Interest on Loan	4.47	5.48	7.30	71.67	6.42	82.47	49.16	83.86
Return on Equity	4.88	6.02	7.74	76.98	6.86	89.25	50.94	90.40
Interest on Working Capital	3.66	6.18	2.84	9.53	2.33	10.47	4.89	10.04
O&M Expenses	67.77	117.09	48.19	100.81	38.74	105.61	37.46	95.37
Total	85.13	140.12	72.14	327.57	60.57	367.30	187.82	360.20

Determination of Annual Fixed Charges for the 2019-24 Tariff Period

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	638.44	688.96	689.15	689.15	689.15
Interest on Loan	638.21	641.93	585.20	528.20	471.17
Return on Equity	672.00	729.03	729.30	729.30	729.30
Interest on Working Capital	78.31	81.88	82.81	83.84	84.68
O&M Expenses	1124.58	1164.91	1205.76	1249.07	1290.97
Total	3151.54	3306.71	3292.22	3279.56	3265.27

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	93.72	97.08	100.48	104.09	107.58
Maintenance Spares	168.69	174.74	180.86	187.36	193.65
Receivables	387.48	407.68	405.89	404.33	401.47
Total Working Capital	649.89	679.50	687.23	695.78	702.70
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	78.31	81.88	82.81	83.84	84.68



Effective Date of Commercial Operation (E-COD)

49. The Petitioner has stated that E-COD of the Combined Asset is 22.7.2018. However, based on the capital cost and actual COD of the 8 individual assets, the E-COD has been worked out as 21.7.2018 and is shown below:

Assets	Capital Cost as on 31.3.2019 (₹ in lakh)	COD	No. of days from COD of Asset from COD of Project	Weight of cost	Weighted days
Asset-1	187.43	3.10.2018	52	1.71%	0.90
Asset-2	142.25	25.5.2018	183	1.31%	2.39
Asset-3	261.80	19.7.2018	128	2.41%	3.08
Asset-4	2179.48	21.5.2018	187	20.02%	37.44
Asset-5	298.24	5.11.2018	19	2.74%	0.52
Asset-6	2202.92	6.5.2018	202	20.24%	40.88
Asset-7	3033.65	24.11.2018	0	27.87%	0
Asset-8	2579.98	7.6.2018	170	23.70%	40.29
Total	10885.75			100.00%	125.49
Effective COD - 21.7.2018					

Weighted Average Life (WAL) of the instant assets

50. The WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as specified in the 2019 Tariff Regulations. Accordingly, the WAL of the instant assets put into commercial operation during the 2014-19 period has been worked out as 25 years as shown below:

Particulars	Life (in years) (1)	Capital Cost as on 31.3.2019 (₹ in lakh) (2)	Weighted Cost (₹ in lakh) (3) = (1) x (2)	Weighted Avg. Life of Asset (in years) (4) = (3) / (2)
Land – Freehold	0	0.00	0.00	
Land – Leasehold	0	0.00	0.00	



Particulars	Life (in years) (1)	Capital Cost as on 31.3.2019 (₹ in lakh) (2)	Weighted Cost (₹ in lakh) (3)= (1) x (2)	Weighted Avg. Life of Asset (in years) (4) = (3)/ (2)
Building Civil Works & Colony	25	76.37	1909.25	
Transmission Line	35	0.00	0.00	
Sub Station	25	10653.61	266340.25	
PLCC	15	23.60	354.00	
IT Equipment (Incl. Software)	6	132.17	793.02	
Total		10885.75	269396.52	24.74 years (rounded off to 25 years)

Capital Cost as on 1.4.2019

51. Regulation 19 of the 2019 Tariff Regulations provide 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;*
 - (l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
 - (m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
 - (n) *Expenditure on account of change in law and force majeure events; and*
 - (o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (3) *The Capital cost of an existing project shall include the following:*
- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
 - (b) *Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
 - (c) *Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;*
 - (d) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
 - (e) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
 - (f) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (4) *The capital cost in case of existing or new hydro generating station shall also include:*
- (a) *cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
 - (b) *cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti*



Yojana (DDUGJY) project in the affected area.

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

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

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

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

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

52. The Petitioner has claimed a capital cost of ₹10918.84 lakh as on 31.3.2019 for the Combined Asset as per the Auditor's Certificates dated 18.8.2019 and 9.11.2019. However, the capital cost of ₹10885.75 lakh as on 31.3.2019 worked out for the Combined Asset has been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

53. Regulation 24 of the 2019 Tariff Regulations provides as under:

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



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

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

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

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

54. The Petitioner has claimed ₹2024.21 lakh (₹2014.81 lakh for 2019-20 and ₹9.40 lakh for 2020-21) as ACE for the instant assets during the 2019-24 period. The Petitioner has claimed the following capital cost as on 31.3.2024:

Assets	Apportioned Approved Capital Cost	Total Capital Cost as on 31.3.2019	Estimated ACE		Total Capital Cost as on 31.3.2024
			2019-20	2020-21	
Asset-1	331.92	187.60	58.14		245.74
Asset-2	268.15	142.25	170.44		312.69
Asset-3	390.41	265.47	84.60	9.40	359.47
Asset-4	2994.08	2179.48	322.01		2501.49
Asset-5	467.59	298.24	66.89		365.13
Asset-6	2726.85	2202.92	223.92		2426.84
Asset-7	4591.97	3063.07	796.96		3860.03
Asset-8	3057.63	2579.98	291.85		2871.83
Total	14828.60	10919.01	2014.81	9.40	12943.22



55. MPPMCL has submitted that the proposed ACE is not supported by proper documents and details. In response, the Petitioner vide affidavit dated 20.3.2020 has submitted that the estimated ACE is to be incurred for balance and retention payment and works deferred for execution for building and civil works, sub-station, PLCC and IT equipment under Regulation 24(1)(a) and (b) of the 2019 Tariff Regulations.

56. MSEDCL has submitted that ACE proposed by the Petitioner of ₹2024.21 lakh during 2019-20 and 2020-21 is without proper details and justification. In response, the Petitioner vide affidavit dated 8.5.2020 has submitted that an estimated ACE for ₹2014.81 lakh and ₹9.4 lakh has been claimed during 2019-20 and 2020-21 under Regulation 24(1)(a) and (b) of the 2019 Tariff Regulations. Further, the element-wise breakup of the capital cost of the asset (Form-5) has been submitted along with the instant petition.

57. We have considered the submission made by the Petitioner and the Respondents, MPPMCL and MSEDCL. ACE claimed by the Petitioner has been allowed under Regulation 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations, as it is towards undischarged liabilities recognised to be payable at a future date and balance work deferred for execution. The entitled un-discharged IDC liability as well as amount of Initial Spares un-discharged as on COD have been allowed as ACE during the year of its discharge based on the discharge statements submitted by the Petitioner. The



projected ACE allowed during 2019-24 in respect of the instant Combined Asset is summarized hereunder:

(₹ in lakh)

Assets	ACE	Un-discharged IDC as on COD to be discharged	Un-discharged Initial Spares as on COD to be discharged	Total ACE 2019-20	ACE 2020-21	Total ACE 2019-24
	A	B	C	D=A+B+C	E	F=D+E
Asset-1	58.14	0.17	-	58.31		58.31
Asset-2	170.44	-	-	170.44		170.44
Asset-3	84.6	-	3.67	88.27	9.40	97.67
Asset-4	322.01	-	-	322.01		322.01
Asset-5	66.89	-	-	66.89		66.89
Asset-6	223.92	-	-	223.92		223.92
Asset-7	796.96	-	-	796.96		796.96
Asset-8	291.85	-	-	291.85		291.85
Total	2014.81	0.17	3.67	2018.65	9.40	2028.05

Accordingly, the capital cost as on 31.3.2024 for the Combined Asset is considered as under:

(₹ in lakh)

Admitted Capital Cost as on 1.4.2019	Admitted ACE		Total Capital Cost as on 31.3.2024
	2019-20	2020-21	
10885.75	2018.65	9.40	12913.80

Debt-Equity ratio

58. 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.”



59. The debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period for the Combined Asset is as under:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	ACE 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	7620.03	70.00	1419.64	70.00	9039.66	70.00
Equity	3265.73	30.00	608.42	30.00	3874.14	30.00
Total	10885.75	100.00	2028.05	100.00	12913.80	100.00

Return on Equity (RoE)

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

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

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope 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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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:

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

(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.”

61. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. Accordingly, the MAT rate applicable for 2019-20 has been considered for the purpose of RoE, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the Combined Asset is as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	3265.73	3871.32	3874.14	3874.14	3874.14
Additions	605.60	2.82	0.00	0.00	0.00
Closing Equity	3871.32	3874.14	3874.14	3874.14	3874.14
Average Equity	3568.52	3872.73	3874.14	3874.14	3874.14
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	670.22	727.36	727.62	727.62	727.62

Interest on Loan (IoL)

62. Regulation 32 of the 2019 Tariff Regulations provides as under:

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



calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

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

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

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

63. MSEDCL has submitted that while calculating the interest on loan, weighted average rate of interest (WAROI) should be considered but the Petitioner has considered the rate of interest on loan on annual basis for the period under consideration. MSEDCL has submitted that it has major effect on the tariff and requested to check the same while determining IoL. In response, the Petitioner has submitted that for computing IoL in Form 9E, the weighted average rate of interest on



loan as computed in Form 9C has been used. The Petitioner has submitted that the weighted average interest on loan is computed, in Form 9C, considering the sum total of interest on all the loans deployed during the particular year divided by the sum total of average loans deployed during that year. Therefore, MSEDCL's submission that interest has been computed considering the rate of loan on annual basis is incorrect and baseless and requested to allow the cost and tariff as claimed.

64. We have considered the submission of the Petitioner and MSEDCL. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period may 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:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	7620.03	9033.08	9039.66	9039.66	9039.66
Cumulative Repayments upto Previous Year	295.97	932.77	1620.18	2307.77	2995.37
Net Loan-Opening	7324.05	8100.31	7419.48	6731.89	6044.29
Additions	1413.06	6.58	0.00	0.00	0.00
Repayment during the year	636.80	687.41	687.60	687.60	687.60
Net Loan-Closing	8100.31	7419.48	6731.89	6044.29	5356.70
Average Loan	7712.18	7759.90	7075.69	6388.09	5700.49
Weighted Average Rate of Interest on Loan (%)	8.2714	8.2714	8.2714	8.2715	8.2710
Interest on Loan	637.91	641.86	585.26	528.39	471.49



Depreciation

65. Regulation 33 of the 2019 Tariff Regulations provides as under:-

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

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

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

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

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

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

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

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



(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-I** to these regulations for the assets of the generating station and transmission system:

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

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

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

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

66. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). The weighted average rate of depreciation (WAROD) has been worked out (as placed in Annexure-II) 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)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
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Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	10885.75	12904.40	12913.80	12913.80	12913.80
Addition during the year 2019-24 due to projected Additional Capitalisation	2018.65	9.40	0.00	0.00	0.00
Closing Gross Block	12904.40	12913.80	12913.80	12913.80	12913.80
Average Gross Block	11895.08	12909.10	12913.80	12913.80	12913.80
Weighted average rate of Depreciation (WAROD) (%)	5.35	5.32	5.32	5.32	5.32
Balance useful life at the beginning of the year	25	24	23	22	21
Aggregated Depreciable Value	10718.98	11631.80	11636.03	11636.03	11636.03
Combined Depreciation during the year	636.80	687.41	687.60	687.60	687.60
Aggregate Cumulative Depreciation	932.77	1620.18	2307.77	2995.37	3682.96
Remaining Aggregated Depreciable Value	9786.21	10011.62	9328.26	8640.66	7953.07

Operation & Maintenance Expenses (O&M Expenses)

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

	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses					
400 kV					
No. of bays	8	8	8	8	8
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
220 kV					
No. of bays	5	5	5	5	5
Norms (₹ lakh/Bay)	22.51	23.3	24.12	24.96	25.84
400 kV GIS					
No. of bays	1	1	1	1	1
Norms (₹ lakh/Bay)	22.505	23.296	24.115	24.962	25.837
220 kV GIS					
No. of bays	1	1	1	1	1
Norms (₹ lakh/Bay)	15.757	16.31	16.884	17.472	18.088



	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses					
Transformer(s)					
400 kV					
Capacity MVA	2000	2000	2000	2000	2000
Norms (₹ lakh/MVA)	0.358	0.371	0.384	0.398	0.411
PLCC					
Original Capital Cost	23.6	23.6	23.6	23.6	23.6
Norms (₹ lakh)	2% on Original Capital Cost				
Total O&M expense (₹ in lakh)	1124.58	1164.91	1205.76	1249.07	1290.97

68. Regulation 35(3)(a) of the 2019 Tariff Regulations provides 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
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
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
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
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
<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-	1.322	1.368	1.416	1.466	1.517



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Double Circuit (Twin & Triple Conductor)</i>	0.881	0.912	0.944	0.977	1.011
<i>Double Circuit (Single Conductor)</i>	0.377	0.391	0.404	0.419	0.433
<i>Multi Circuit (Bundled Conductor with four or more sub-conductor)</i>	2.319	2.401	2.485	2.572	2.662
<i>Multi Circuit (Twin & Triple Conductor)</i>	1.544	1.598	1.654	1.713	1.773
<i>Norms for HVDC stations</i>					
<i>HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)</i>	834	864	894	925	958
<i>Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)</i>	1,666	1,725	1,785	1,848	1,913
<i>500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)</i>	2,252	2,331	2,413	2,498	2,586
<i>±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)</i>	2,468	2,555	2,645	2,738	2,834
<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)</i>	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

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



scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);

- iv. the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

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

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.

(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”

69. We have considered the submission of the Petitioner. The O&M expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and are as under:

	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses					



	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses					
400 kV					
No. of bays	8	8	8	8	8
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
220 kV					
No. of bays	5	5	5	5	5
Norms (₹ lakh/Bay)	22.51	23.3	24.12	24.96	25.84
400 kV GIS					
No. of bays	1	1	1	1	1
Norms (₹ lakh/Bay)	22.505	23.296	24.115	24.962	25.837
220 kV GIS					
No. of bays	1	1	1	1	1
Norms (₹ lakh/Bay)	15.757	16.31	16.884	17.472	18.088
Transformer(s)					
400 kV					
Capacity MVA	2000	2000	2000	2000	2000
Norms (₹ lakh/MVA)	0.358	0.371	0.384	0.398	0.411
PLCC					
Original Capital Cost	23.6	23.6	23.6	23.6	23.6
Norms (₹ lakh)	2% on Original Capital Cost				
Total O&M expense (₹ in lakh)	1124.48	1164.82	1205.67	1248.99	1290.88

Interest on Working Capital (IWC)

70. Regulation 34 and Regulation 3(7) of the 2019 Tariff Regulations provide 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. Definitions. - 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;”

71. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points). The components of the working capital and interest thereon allowed for the Combined Asset are as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	93.71	97.07	100.47	104.08	107.57
Maintenance Spares	168.67	174.72	180.85	187.35	193.63
Receivables	387.01	407.25	405.48	403.94	401.09
Total Working Capital	649.39	679.04	686.81	695.37	702.30
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	78.25	81.82	82.76	83.79	84.63



Annual Fixed Charges of the 2019-24 Tariff Period

72. The transmission charges allowed for the instant Combined Asset for the 2019-24 tariff period are as below:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	636.80	687.41	687.60	687.60	687.60
Interest on Loan	637.91	641.86	585.26	528.39	471.49
Return on Equity	670.22	727.36	727.62	727.62	727.62
Interest on Working Capital	78.25	81.82	82.76	83.79	84.63
O & M Expenses	1124.48	1164.82	1205.67	1248.99	1290.88
Total	3147.66	3303.26	3288.91	3276.38	3262.21

Filing Fee and the Publication Expenses

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

Licence Fee & RLDC Fees and Charges

74. 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

75. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on Charges of Transmission of Electricity, the same shall be borne and additionally paid by the respondent(s) to the Petitioner and the same shall be charged & billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

76. MPPMCL has submitted that the Petitioner's prayer is premature and need not be considered at this juncture. In response, the Petitioner has submitted that currently transmission of electricity by an electric transmission utility is exempted from GST hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately.

77. MSEDCL has submitted that the Petitioner has prayed to bill and recover GST on transmission charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, Petitioner has prayed that any taxes including GST and duties including cess etc. imposed by any statutory/ Government/ Municipal authorities shall be allowed to be recovered from the beneficiaries. MSEDCL submitted that the demand of the Petitioner at this stage is pre-mature. In response, the Petitioner has submitted that currently transmission of electricity by an electric



transmission utility is exempted from GST hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately.

78. We have considered the submission of the Petitioner, MSEDCL 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

79. 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 a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.



80. 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. The Commission observes 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

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

Sharing of Transmission Charges

82. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 period.

83. To summarise, the trued-up Annual Fixed Charges allowed for the instant assets for the year 2018-19 in the 2014-19 tariff period are as under:



(₹ in lakh)								
Assets	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Asset-6	Asset-7	Asset-8
AFC	85.13	140.12	72.14	327.57	60.57	367.30	187.82	360.20

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

(₹ in lakh)					
Combined Asset	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	3147.66	3303.26	3288.91	3276.38	3262.21

84. This order disposes of Petition No. 70/TT/2020.

sd/-
(Arun Goyal)
Member

sd/-
(I.S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson



Asset	2014-19 Capital Expenditure as on COD / 1.4.2014	Combined Admitted Capital Cost as on COD / 1.4.2014 (₹ in lakh)	Additional Capitalization (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations		Average Gross Block (₹ in lakh)	Weighted Average Rate of Depreciation
			2018-19				2018-19 (₹ in lakh)			
Asset-1	Sub-station	146.55	40.88		187.43	5.28%	8.82		166.99	5.28%
	Total	146.55	40.88		187.43		8.82		166.99	5.28%
Asset-2	Sub-station	95.96	46.29		142.25	5.28%	6.29		119.11	5.28%
	Total	95.96	46.29		142.25		6.29		119.11	5.28%
Asset-3	Building, Civil Works and Colony	44.20	32.17		76.37	3.34%	2.01		186.19	4.65%
	Sub-station	66.37	119.06		185.43	5.28%	6.65			
	Total	110.57	151.23		261.80		8.66		186.19	4.65%
Asset-4	Sub-station	830.38	1349.1		2179.48	5.28%	79.46		1504.93	5.28%
	Total	830.38	1349.10		2179.48		79.46		1504.93	5.28%
Asset-5	Sub-station	253.56	21.08		274.64	5.28%	13.94		287.43	5.37%
	PLCC	23.06	0.54		23.6	6.33%	1.48			
	Total	276.62	21.62		298.24		15.42		287.43	5.37%
Asset-6	Sub-station	1124.65	1078.27		2202.92	5.28%	87.85		1663.79	5.28%
	Total	1124.65	1078.27		2202.92		87.85		1663.79	5.28%
Asset-7	Sub-station	1867.56	1166.09		3033.65	5.28%	129.39		2450.61	5.28%
	Total	1867.56	1166.09		3033.65		129.39		2450.61	5.28%
Asset-8	Sub-station	1156.13	1423.85		2579.98	5.28%	98.63		1868.06	5.28%
	Total	1156.13	1423.85		2579.98		98.63		1868.06	5.28%



Annexure-II

2019-24 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected Additional Capitalization (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23	2023-24
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	-	-
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	-	-	-	-	-
Building Civil Works & Colony	76.37	318.55	5.96	0.00	0.00	0.00	400.88	3.34%	7.87	13.29	13.39	13.39	13.39
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	-	-	-	-	-
Sub Station	10653.61	1691.73	3.44	0.00	0.00	0.00	12348.78	5.28%	607.17	651.92	652.02	652.02	652.02
PLCC	23.60	4.43	0.00	0.00	0.00	0.00	28.03	6.33%	1.63	1.77	1.77	1.77	1.77
IT Equipment (Incl. Software)	132.17	3.94	0.00	0.00	0.00	0.00	136.11	15.00%	20.12	20.42	20.42	20.42	20.42
Total	10885.75	2018.65	9.40	0.00	0.00	0.00	12913.80	Total	636.80	687.41	687.60	687.60	687.60
							Average Gross Block (₹ in lakh)		11895.08	12909.10	12913.80	12913.80	12913.80
							Weighted Average Rate of Depreciation		5.35%	5.32%	5.32%	5.32%	5.32%

