

# CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

**Petition No. 28/TT/2021**

**Coram:**

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

**Date of Order: 10.05.2022**

**In the Matter of:**

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of **Asset-A:** 400/220 kV 1X500 MVA ICT-III at Satna along with associated ICT bays and 2 Number 220 kV line bays at Satna (Sub-station; **Asset-B:** 2 Number 500 MVA, 400/220 kV ICTs along with associated bays and 2 Number 220 kV line bays (for LILO of Parli - Harangul at Parli (Powergrid) Switching Station; **Asset-C:** 2 Number 220 kV line bays for Parli-Osmanabad 220 kV S/C line at Parli Sub-station; **Asset-D:** 2 Number 220 kV line bays at Mapusa (Colvale) (Powergrid Sub-station (for Mapusa (Colvale) (Powergrid) - Tuem 220 kV D/C line) and **Asset-E:** 2 Number 400 kV line bays for 400 kV D/C Indore (Powergrid)-Ujjain Transmission Line at 765/400 kV Indore (Powergrid) Sub-station under the "Western Region System Strengthening- XVI (WRSS XVI)" scheme in the Western Region.

**And in the matter of:**

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

.....**Petitioner**

**Versus**

1. Madhya Pradesh Power Management Company Limited,  
Shakti Bhawan, Rampur,  
Jabalpur-482008.



2. Madhya Pradesh Power Transmission Company Limited,  
Shakti Bhawan, Rampur,  
Jabalpur-482008.
3. Madhya Pradesh Audyogik Kendra,  
Vikas Nigam (Indore) Limited, 3/54, Press Complex,  
Agra-Bombay Road,  
Indore-452008.
4. Maharashtra State Electricity Distribution Company Limited,  
Hongkong Bank Building, 3rd Floor,  
M.G. Road, Fort,  
Mumbai-400001.
5. Maharashtra State Electricity Transmission Company Limited,  
Prakashganga, 6th Floor, Plot No. C-19, E-Block,  
Bandra Kurla Complex, Bandra (East),  
Mumbai-400051.
6. Gujarat Urja Vikas Nigam Limited,  
Sardar Patel Vidyut Bhawan,  
Race Course Road,  
Vadodara-390007.
7. Electricity Department,  
Government of Goa,  
Vidyut Bhawan, Near Mandvi Hotel, Panaji,  
Goa-403001.
8. Electricity Department,  
Administration of Daman & Diu,  
Daman-396210.
9. DNH Power Distribution Corporation Limited,  
Vidyut Bhawan, 66 kV Road,  
Near Secretariat Amla,  
Silvasa-396230.
10. Chhattisgarh State Power Transmission Company Limited,  
State Load Dispatch Building,  
Dangania,  
Raipur-492013.
11. Chhattisgarh State Power Distribution Company Limited,  
P.O. Sunder Nagar, Dangania,



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

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

### **ORDER**

The instant petition has been filed by Power Grid Corporation of India Limited, a deemed transmission licensee, for truing up of tariff from date of commercial operation (COD) to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following assets under the “Western Region System Strengthening- XVI (WRSS-XVI)” scheme in the Western Region (hereinafter referred to as the “transmission project”):

**Asset-A:** 400/220 kV 1X500 MVA ICT-III at Satna along with associated ICT bays and 2 Number 220 kV line bays at Satna Sub-station;

**Asset-B:** 2 Number 500 MVA, 400/220 kV ICTs along with associated bays and 2 Number 220 kV line bays (for LILO of Parli – Harangul at Parli (Powergrid) Switching Station;



**Asset-C:** 2 Number 220 kV line bays for Parli Osmanabad 220 kV S/C line at Parli Sub-station;

**Asset-D:** 2 Number 220 kV line bays at Mapusa (Colvale) (Powergrid Sub-station (for Mapusa (Colvale) (Powergrid) - Tuem 220 kV D/C line); and

**Asset-E:** 2 Number 400 kV line bays for 400 kV D/C Indore (Powergrid)-Ujjain Transmission Line at 765/400 kV Indore (Powergrid) Sub-station (hereinafter referred to as the “transmission assets”).

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

- 1) *“Allow the add cap 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 6 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 the Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice"*

## **Background**

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

a) The Investment Approval (IA) in respect of the transmission project was accorded by the Board of Directors of the Petitioner's Company *vide* Memorandum No. C/CP/PA 1617-07-of-IA006 dated 22.7.2016 in 300<sup>th</sup> meeting held on 20.7.2016 at an estimated cost of ₹15099 lakh including IDC of ₹906 lakh (based on April 2016 price level).

b) As per IA, the transmission project was scheduled to be put into commercial operation within 24 months from the date of IA i.e. 20.7.2016. Therefore, the scheduled date of commercial operation (SCOD) of the transmission project was 20.7.2018.

c) The scope of work covered under the transmission project is broadly as follows:

### **Sub-stations:**

#### **i. Parli (Powergrid) Switching Station**

- Installation of 2X500 MVA, 400/220 kV ICTs
- 400 kV ICT bays: 2 Number
- 220 kV ICT bays: 2 Number
- 220 kV line bays: 6 Number (for LILO of (i) both circuits of Parli-Harngul 220 kV line and (ii) Parli-Osmanabad 220 kV S/C line)

#### **ii. Mapusa (Colvale) (Powergrid) Sub-station**

- 220 kV line bays: 2 Number (for Mapusa (colvale) Powergrid)

#### **iii. Satna (Powergrid) Sub-station**

- Installation of 1X500 MVA, 400/220 kV (3<sup>rd</sup>) ICT
- 400 kV ICT bays: 1 Number



- 220 kV ICT bays: 1 Number
- 220 kV line bays: 2 Number

**iv. 765/400 kV Indore (Powergrid) Sub-station**

- 400 kV line bays: 2 Number (for Indore Powergrid)-Ujjain 400 kV D/C line.

d) All elements of the transmission project have been covered under instant petition. The details of transmission assets under the transmission project are as follows:

Asset nomenclature in previous order	COD	Previous Order	Asset nomenclature in instant petition
Asset	27.11.2017	Order dated 19.9.2018 in Petition No. 259/TT/2017	Asset-A
Asset-1A	12.8.2018*	Order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	Asset-B
Asset-1B	12.8.2018*		Asset-C
Asset-2	2.8.2018*		Asset-D
Asset-3	11.1.2019*		Asset-E

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

e) The dates of commercial operation (COD) and time over-run in respect of the transmission assets covered under the instant petition are as follows:

Assets	SCOD	COD	Time over-run
Asset-A	20.7.2018	27.11.2017	NIL
Asset-B*	20.7.2018	12.8.2018	24 days
Asset-C*	20.7.2018	12.8.2018	24 days
Asset-D*	20.7.2018	2.8.2018	14 days
Asset-E*	20.7.2018	11.1.2019	5 Months and 26 days (176 days)

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

f) MSETCL, Respondent No.5, has filed Review Petition No. 5/RP/2021 in Petition No. 266/TT/2018. The Commission vide order dated 31.7.2021 has held as follows:



*“14. During the hearing on 20.7.2021, learned counsel for MSETCL admitted that though MSETCL had received the notice in the matter in time, it was not able to present its case before the Commission during the proceedings in Petition No. 266/TT/2018. We are of the view that sufficient notice was given to MSETCL but it chose not to file any reply. Therefore, MSETCL’s contention that it was not represented before the Commission during the proceedings in Petition No.266/TT/2018 as it was not aware of the proceedings is rejected. We are of the view that there is no error in the impugned order dated 27.1.2020 in Petition No.266/TT/2020 and it was decided on the merit of facts brought to the notice of the Commission during the proceedings in Petition No.266/TT/2018.”*

g) The transmission tariff in respect of Asset-A from COD to 31.3.2019 was allowed *vide* order dated 19.9.2018 in Petition No. 259/TT/2017.

h) The transmission tariff in respect of Asset-B, Asset-C, Asset-D and Asset-E from COD to 31.3.2019 period was allowed *vide* order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018.

4. The Respondents are transmission utilities, 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 regarding filing of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the 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 12.3.2021 and has raised the issues of grossed up RoE based on effective tax rate for 2017-18 and 2018-19 period, O&M charges for 2 numbers of 220 kV line bays for LILO of Parli-Harangual at Parli (Powergrid) Switching Station, Additional Capital Expenditure



(ACE) for year 2018-19 and 2019-24 period and GST. The Petitioner, *vide* affidavit dated 13.8.2021, has filed rejoinder to the reply of MPPMCL.

6. It is observed that MPPMCL has been raising the issue of grossing up of RoE in other petitions as well despite clear findings of the Commission. The contentions of MPPMCL on the issue of RoE has been rejected by the Commission in order dated 21.9.2021 in Petition No. 326/TT/2020 vide order dated 21.9.2021. As MPPMCL has not challenged the findings, the same have attained finality. Accordingly, the objections regarding RoE raised by MPPMCL is not considered in this order. Other issues raised by MPPMCL and clarifications thereto given by the Petitioner have been dealt in the relevant paragraphs of this order.

7. This order is issued considering the submissions made by the Petitioner, MPPMCL's reply vide affidavit dated 12.3.2021 and the Petitioner's rejoinder vide affidavit dated 13.8.2021 to the reply filed by MPPMCL.

8. The hearing in this matter was held on 17.8.2021 through video conference and the order was reserved.

9. Having heard the representatives of the Petitioner and MPPMCL and having perused of the materials on record, we proceed to dispose of the petition.

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

10. The Petitioner has claimed the following trued up tariff in respect of the transmission assets for the period from COD to 31.3.2019:





(₹ in lakh)

Particulars	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
Depreciation	39.86	146.27
Interest on Loan	38.25	137.06
Return on Equity	44.61	164.05
O&M Expenses	70.60	213.01
Interest on Working Capital	6.27	20.56
<b>Total</b>	<b>199.59</b>	<b>680.95</b>

(₹ in lakh)

Particulars	Asset-B	
	2018-19 (pro-rata 232 days)	
Depreciation	202.35	
Interest on Loan	192.67	
Return on Equity	207.70	
O&M Expenses	209.65	
Interest on Working Capital	22.95	
<b>Total</b>	<b>835.32</b>	

(₹ in lakh)

Particulars	Asset-C	
	2018-19 (pro-rata 232 days)	
Depreciation	16.45	
Interest on Loan	16.56	
Return on Equity	19.37	
O&M Expenses	61.15	
Interest on Working Capital	4.13	
<b>Total</b>	<b>117.66</b>	

(₹ in lakh)

Particulars	Asset-D	
	2018-19 (pro-rata 242 days)	
Depreciation	14.32	
Interest on Loan	15.38	
Return on Equity	16.63	
O&M Expenses	63.78	
Interest on Working Capital	4.14	
<b>Total</b>	<b>114.25</b>	



(₹ in lakh)

Particulars	Asset-E	
	2018-19 (pro-rata 80 days)	
Depreciation		11.76
Interest on Loan		11.73
Return on Equity		12.68
O&M Expenses		30.12
Interest on Working Capital		2.25
<b>Total</b>		<b>68.54</b>

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

(₹ in lakh)

Particulars	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
O&M Expenses	17.18	17.75
Maintenance Spares	30.92	31.95
Receivables	97.13	113.49
Total	145.23	163.19
Rate of Interest (in %)	12.60	12.60
<b>Interest on Working Capital</b>	<b>6.27</b>	<b>20.56</b>

(₹ in lakh)

Particulars	Asset-B	
	2018-19 (pro-rata 232 days)	
O&M Expenses		27.49
Maintenance Spares		49.47
Receivables		219.03
Total		295.99
Rate of Interest (in %)		12.20
<b>Interest on Working Capital</b>		<b>22.95</b>

(₹ in lakh)

Particulars	Asset-C	
	2018-19 (pro-rata 232 days)	
O&M Expenses		8.02
Maintenance Spares		14.43
Receivables		30.85
Total		53.30
Rate of Interest (in %)		12.20
<b>Interest on Working Capital</b>		<b>4.13</b>



(₹ in lakh)

Particulars	Asset-D
	2018-19 (pro-rata 242 days)
O&M Expenses	8.02
Maintenance Spares	14.43
Receivables	28.72
Total	51.17
Rate of Interest (in %)	12.20
<b>Interest on Working Capital</b>	<b>4.14</b>

(₹ in lakh)

Particulars	Asset-E
	2018-19 (pro-rata 80 days)
O&M Expenses	11.45
Maintenance Spares	20.61
Receivables	52.12
Total	84.18
Rate of Interest (in %)	12.20
<b>Interest on Working Capital</b>	<b>2.25</b>

### **Capital Cost**

12. The capital cost of the transmission assets has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations.

13. The Commission *vide* order dated 19.9.2018 in Petition No. 259/TT/2017 had approved the transmission tariff in respect of Asset-A and *vide* order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018 had approved the transmission tariff in respect of Asset-B, Asset-C, Asset-D and Asset-E for 2014-19 period based on the admitted capital cost as on COD and projected ACE of the transmission assets which is as follows:



(₹ in lakh)

Assets	Apportioned approved cost as per FR	Admitted Capital Cost as on COD	ACE 2014-2019		Admitted Capital Cost as on 31.3.2019
			2017-18	2018-19	
Asset-A	4397.95	1908.62	850.47	531.55	3290.64
Asset-B	7246.73	5254.49	0.00	418.67	5673.16
Asset-C	989.31	470.40	0.00	82.86	553.26
Asset-D	887.07	326.61	0.00	181.38	507.99
Asset-E	1577.94	920.25	0.00	90.21	1010.46
<b>Total</b>	<b>15099.00</b>	<b>8880.37</b>	<b>850.47</b>	<b>1304.67</b>	<b>11035.50</b>

14. The Petitioner has claimed the following capital cost incurred up to COD and ACE up to 31.3.2019 in the instant true-up petition as per the Revised Auditor's Certificate dated 19.6.2020. The details of approved apportioned capital cost, capital cost as on COD and ACE up to 31.3.2019 claimed by the Petitioner in respect of the transmission assets are as follows:

(₹ in lakh)

Assets	Apportioned approved cost as per FR	Capital Cost claimed as on COD	ACE		Capital Cost as on 31.3.2019
			2017-18	2018-19	
Asset-A	4397.95	1949.33	584.90	502.64	3036.87
Asset-B	7246.73	5328.20	0.00	405.99	5734.19
Asset-C	989.31	474.92	0.00	82.67	557.59
Asset-D	887.07	335.94	0.00	178.76	514.70
Asset-E	1577.94	1064.10	0.00	88.84	1152.94
<b>Total</b>	<b>15099.00</b>	<b>9152.49</b>	<b>584.90</b>	<b>1258.90</b>	<b>10996.30</b>

### Cost over-run

15. The approved cost as per FR in respect of the transmission assets covered in the instant petition as mentioned in table above, the capital cost as on 31.3.2019 including ACE is within the approved capital cost as per FR. Therefore, there is no cost over-run.



### Time over-run

16. The transmission project was scheduled to be commissioned within 24 months from the date of IA i.e. 20.7.2016. Therefore, SCOD of the transmission project was 20.7.2018. The details of COD and time over-run are as follows:

Assets	SCOD	COD	Time over-run
Asset-A	20.7.2018	27.11.2017	NIL
Asset-B	20.7.2018	12.8.2018	24 days
Asset-C	20.7.2018	12.8.2018	24 days
Asset-D	20.7.2018	2.8.2018	14 days
Asset-E	20.7.2018	11.1.2019	5 months and 26 days (176 days)

17. The Commission *vide* order dated 27.1.2020 in Petition No. 266/TT/2018 has not condoned the time over-run in case of Asset-B, Asset-C, Asset-D and Asset-E, while in case of Asset-A there was no time over-run.

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

18. The Petitioner has claimed IDC in respect of the transmission assets and has submitted the statement showing IDC claim, discharge of IDC liability as on COD and thereafter as follows:

(₹ in lakh)

Assets	IDC as per Auditor's Certificate	IDC discharged up to COD	IDC discharged during			Total
			2017-18	2018-19	2019-20	
Asset-A	40.72	0.00	4.80	35.91	0.00	40.72
Asset-B	81.88	70.75	0.00	6.14	4.98	81.87
Asset-C	21.40	21.12	0.00	0.12	0.17	21.40
Asset-D	5.83	2.60	0.00	3.23	0.00	5.83
Asset-E	52.26	47.45	0.00	0.78	4.03	52.26



19. IDC is worked out based on the details given in the submissions. Further, the loan amount as on COD has been mentioned in Forms 6 and Form 9C. The allowable IDC is worked out based on the information available on record and relying on loan amount as per tariff Form 9C. However, for Asset-B the loan amount as per tariff Form 9C is higher when compared to the loan amount submitted in the IDC statement, therefore IDC has been computed based on the loan details mentioned in the IDC statement. IDC allowed in respect of the transmission assets has been worked out based on scrutiny of all the information on record and considering the disallowance pursuant to non-condonation of time overrun. IDC claimed and considered as on COD and summary of discharge of IDC liability up to COD and thereafter for the purpose of tariff determination is as follows:

(₹ in lakh)

Assets	IDC as per Auditor's Certificate (A)	IDC disallowed due to computational difference (B)	IDC disallowed due to time over-run not condoned (C)	IDC allowed in the instant order (D)=(A-B-C)
Asset-A	40.72	0.62	0.00	40.10
Asset-B	81.87	0.00	15.00	66.87
Asset-C	21.40	0.00	1.55	19.85
Asset-D	5.83	0.00	0.68	5.15
Asset-E	52.26	0.00	29.09	23.17

20. IDC considered as on COD and the statement of IDC discharge for the purpose of tariff determination is as follows:

(₹ in lakh)

Assets	IDC allowed in the instant order	IDC discharged up to COD	Undischarged IDC up to COD			
			2017-18	2018-19	2019-20	Total
Asset-A	40.10	0.00	4.80	35.30	0.00	40.10
Asset-B	66.87	50.75	16.11	0.00	0.00	16.11



Asset-C	19.87	0.33	0.00	19.52	0.00	19.52
Asset-D	5.15	1.30	0.00	3.85	0.00	3.85
Asset-E	23.17	2.15	0.00	19.98	1.04	21.02

21. The Petitioner has claimed IEDC in respect of the transmission assets as per the Auditor's Certificate. The Petitioner has submitted that the entire IEDC mentioned in the Auditor's Certificate is on cash basis and was paid up to COD and the same is as follows:

(₹ in lakh)

Assets	IEDC claimed as per Auditor's certificate	IEDC considered as on COD	IEDC discharged up to COD
Asset-A	52.65	52.65	52.65
Asset-B	166.22	166.22	166.22
Asset-C	11.22	11.22	11.22
Asset-D	15.68	15.41	15.41
Asset-E	184.04	148.45	148.45

22. Due to non-condonation of time over-run in case of Asset-B, Asset-C, Asset-D and Asset-E, there is disallowance of IEDC. IEDC considered as on COD for the purpose of tariff determination is as follows:

(₹ in lakh)

Assets	IEDC as per Auditor's Certificate (A)	IEDC disallowed due to time over-run not condoned (B)	IEDC allowed (C)=(A-B)
Asset-A	52.65	-	52.65
Asset-B	166.22	5.08	161.14
Asset-C	11.22	0.34	10.88
Asset-D	15.68	0.27	15.41
Asset-E	184.04	35.59	148.45



## Initial Spares

23. 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%”*

24. Initial Spares claimed by the Petitioner are as follows:

<b>Assets</b>	<b>Particulars</b>	<b>Plant &amp; Machinery Cost (A) (₹ in lakh)</b>	<b>Initial Spares Claimed (B) (₹ in lakh)</b>	<b>Ceiling Limit (in %) (C)</b>
Asset-A	Sub-station	3056.7	169.98	6.00
Asset-B	Sub-station	5837.66	324.59	6.00
Asset-C	Sub-station	472.76	23.35	6.00
Asset-D	Sub-station	466.29	27.82	6.00
Asset-E	Sub-station	1077.96	63.22	6.00

25. We have considered the submission made by the Petitioner. Initial Spares claimed by the Petitioner is within ceiling limit of 6% as per norms under Regulation 13(d) of the 2014 Tariff Regulations. Accordingly, Initial Spares allowed for the transmission assets as per respective percentage of plant and machinery cost as on cut-off date on individual basis. Initial Spares allowed in respect of the transmission assets are as follows:





(₹ in lakh)

Assets	Particulars	Estimated Completion Cost (A)	Initial Spares Claimed (B)	Ceiling Limit (in %) (C)	Initial Spares Worked out	Excess Initial Spares	Initial Spares allowed (₹ in lakh)
					(D)=[(A-B)*C/(100-C)]		
Asset-A	Sub-station	3056.7	169.98	6.00	184.26	-	169.98
Asset-B	Sub-station	5837.66	324.59	6.00	351.90	-	324.59
Asset-C	Sub-station	472.76	23.35	6.00	28.69	-	23.35
Asset-D	Sub-station	466.29	27.82	6.00	27.99	-	27.82
Asset-E	Sub-station	1077.96	63.22	6.00	64.77	-	63.22

26. The details of capital cost as on COD now approved after adjustment of IDC, IEDC and excess initial spares is as follows:

(₹ in lakh)

Assets	Capital Cost claimed as on COD as per Auditor's Certificates	Un-discharged IDC as on COD	IDC disallowed due to computational error and time over-run not condoned	IEDC disallowed due to time over-run not condoned	Capital Cost allowed as on COD
1	2	3	4	5	6=(2-3-4-5)
Asset-A	1949.33	40.10	0.62	0.00	1908.61
Asset-B	5328.20	16.11	15.00	5.08	5292.00
Asset-C	474.92	19.52	1.55	0.34	453.50
Asset-D	335.94	3.85	0.68	0.27	331.14
Asset-E	1064.10	21.02	29.09	35.59	978.40

### **Additional Capital Expenditure ("ACE")**

27. The Commission vide order dated 19.9.2018 in Petition No. 259/TT/2017 and order dated 27.1.2020 and Corrigendum order dated 4.2.2020 in Petition No. 266/TT/2018 had allowed ACE of ₹2155.14 lakh in respect of the transmission assets. The details are as follows:



(₹ in lakh)

<b>Particulars</b>	<b>2017-18</b>	<b>2018-19</b>	<b>Total</b>
Asset-A	850.47	531.55	<b>1382.02</b>
Asset-B	0.00	418.67	<b>418.67</b>
Asset-C	0.00	82.86	<b>82.86</b>
Asset-D	0.00	181.38	<b>181.38</b>
Asset-E	0.00	90.21	<b>90.21</b>
<b>Total</b>	<b>850.47</b>	<b>1304.67</b>	<b>2155.14</b>

28. The Petitioner has claimed following ACE based on Auditor's Certificates dated 19.6.2020:

(₹ in lakh)

<b>Assets</b>	<b>2017-18</b>	<b>2018-19</b>	<b>Total</b>
Asset-A	584.90	502.64	<b>1087.54</b>
Asset-B	-	405.99	<b>405.99</b>
Asset-C	-	82.67	<b>82.67</b>
Asset-D	-	178.76	<b>178.76</b>
Asset-E	-	88.84	<b>88.84</b>
<b>Total</b>	<b>584.90</b>	<b>1258.90</b>	<b>1843.80</b>

29. The Petitioner has submitted that ACE pertains to balance and retention payments and payment towards undischarged liabilities towards the works executed within cut-off date and work deferred for execution. The Petitioner has submitted that ACE claimed for 2017-18 and 2018-19 has been claimed under Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations.

30. We have considered the submissions of 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 liability for works executed prior to the cut-off date. The entitled un-discharged IDC liability as on COD has been allowed as ACE during the year of its discharge. ACE allowed for 2014-19 period in respect of the transmission assets covered in the instant petition is as follows:



(₹ in lakh)

Assets	Particulars	ACE		Total ACE
		2017-18	2018-19	
Asset-A	ACE	584.90	502.64	1127.64
	IDC Discharged	4.80	35.30	
	<b>Total</b>	<b>589.70</b>	<b>537.94</b>	
Asset-B	ACE		405.99	422.10
	IDC Discharged		16.11	
	<b>Total</b>		<b>422.10</b>	
Asset-C	ACE		82.67	102.19
	IDC Discharged		19.52	
	<b>Total</b>		<b>102.19</b>	
Asset-D	ACE		178.76	182.61
	IDC Discharged		3.85	
	<b>Total</b>		<b>182.61</b>	
Asset-E	ACE		88.84	108.82
	IDC Discharged		19.98	
	<b>Total</b>		<b>108.82</b>	

31. Accordingly, capital cost considered for 2014-19 period is as follows:

(₹ in lakh)

Assets	Apportioned Approved FR Cost	Capital Cost allowed as on COD	ACE		Capital Cost as on 31.3.2019
			2017-18	2018-19	
Asset-A	4397.95	1908.61	589.70	537.94	3036.25
Asset-B	7246.73	5292.00	0.00	422.10	5714.11
Asset-C	989.31	453.50	0.00	102.19	555.70
Asset-D	887.07	331.14	0.00	182.61	513.75
Asset-E	1577.94	978.4	0.00	108.82	1087.22

### Debt-Equity ratio

32. The Petitioner has claimed debt-equity ratio of 70:30 in respect of the transmission assets as provided in Regulation 19 of the 2014 Tariff Regulations. The details of debt-equity ratio considered in respect of the transmission assets as on COD and as on 31.3.2019 are as follows:



Asset-A	Capital Cost as on COD		ACE during 2014-19		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)
Debt	1336.03	70.00	789.35	70.00	2125.38	70.00
Equity	572.58	30.00	338.29	30.00	910.87	30.00
<b>Total</b>	<b>1908.61</b>	<b>100.00</b>	<b>1127.64</b>	<b>100.00</b>	<b>3036.25</b>	<b>100.00</b>

Asset-B	Capital Cost as on COD		ACE during 2014-19		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)
Debt	3704.40	70.00	295.47	70.00	3999.88	70.00
Equity	1587.60	30.00	126.63	30.00	1714.23	30.00
<b>Total</b>	<b>5292.00</b>	<b>100.00</b>	<b>422.10</b>	<b>100.00</b>	<b>5714.11</b>	<b>100.00</b>

Asset-C	Capital Cost as on COD		ACE during 2014-19		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)
Debt	317.45	70.00	71.54	70.00	388.99	70.00
Equity	136.05	30.00	30.66	30.00	166.71	30.00
<b>Total</b>	<b>453.50</b>	<b>100.00</b>	<b>102.19</b>	<b>100.00</b>	<b>555.70</b>	<b>100.00</b>

Asset-D	Capital Cost as on COD		ACE during 2014-19		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)
Debt	231.80	70.00	127.83	70.00	359.62	70.00
Equity	99.34	30.00	54.78	30.00	154.12	30.00
<b>Total</b>	<b>331.14</b>	<b>100.00</b>	<b>182.61</b>	<b>100.00</b>	<b>513.75</b>	<b>100.00</b>

Asset-E	Capital Cost as on COD		ACE during 2014-19		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)
Debt	684.88	70.00	76.17	70.00	761.05	70.00
Equity	293.52	30.00	32.65	30.00	326.17	30.00
<b>Total</b>	<b>978.40</b>	<b>100.00</b>	<b>108.82</b>	<b>100.00</b>	<b>1087.22</b>	<b>100.00</b>



## Depreciation

33. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed in respect of the transmission assets *vide* order dated 19.9.2018 in Petition No. 259/TT/2017 and order dated 27.1.2020 and Corrigendum order dated 4.2.2020 in Petition No. 266/TT/2018. The Petitioner has neither given any justification for claiming higher depreciation than that was allowed in previous orders nor made any specific prayer for allowing higher depreciation in this petition. Similar issue had come up in Petition No. 19/TT/2020 wherein the Commission *vide* order dated 9.5.2020 decided as follows:

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

34. In terms of the order dated 9.5.2020 in Petition No. 19/TT/2020, depreciation @ 5.28% has been considered for IT Equipment as part of the Sub-station up to 31.3.2019 while truing up the capital expenditure for 2014-19 period. During 2019-24 tariff period, 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.

35. The gross block during the tariff period 2014-19 has been depreciated at Weighted Average Rate of Depreciation (WAROD) (as placed in Annexure-I). WAROD has been worked out after taking into account the depreciation rates of the transmission assets as prescribed in the 2014 Tariff Regulations. Asset-wise trued up depreciation allowed in the instant petition is as follows:

Particulars	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
<b>Depreciation</b>		
Opening Gross Block	1908.61	2498.31
ACE	589.70	537.94
Closing Gross Block	2498.31	3036.25
Average Gross Block	2203.46	2767.28
Weighted Average Rate of Depreciation (in %)	5.28	5.29
Aggregate Depreciable Value	1983.11	2490.55
Balance useful life of the asset (Year)	24	24
Lapsed life (Year)	0	0
<b>Combined Depreciation during the year</b>	<b>39.86</b>	<b>146.25</b>
Cumulative depreciation at the end of the year	39.86	186.11
Aggregate Remaining Depreciable Value at the end of the year	1943.26	2304.44



(₹ in lakh)

Particulars	Asset-B
	2018-19 (pro-rata 232 days)
<b>Depreciation</b>	
Opening Gross Block	5292.00
ACE	422.10
Closing Gross Block	5714.11
Average Gross Block	5503.06
Weighted Average Rate of Depreciation (in %)	5.24%
Aggregate Depreciable Value	4952.75
Balance useful life of the asset (Year)	23
Lapsed life (Year)	0
<b>Combined Depreciation during the year</b>	<b>183.18</b>
Cumulative depreciation at the end of the year	183.18
Aggregate Remaining Depreciable Value at the end of the year	4769.57

(₹ in lakh)

Particulars	Asset-C
	2018-19 (pro-rata 232 days)
<b>Depreciation</b>	
Opening Gross Block	453.50
ACE	102.19
Closing Gross Block	555.70
Average Gross Block	504.60
Weighted Average Rate of Depreciation (in %)	5.03%
Aggregate Depreciable Value	454.14
Balance useful life of the asset (Year)	23
Lapsed life (Year)	0
<b>Combined Depreciation during the year</b>	<b>16.14</b>
Cumulative depreciation at the end of the year	16.14
Aggregate Remaining Depreciable Value at the end of the year	438.00

(₹ in lakh)

Particulars	Asset-D
	2018-19 (pro-rata 242 days)
<b>Depreciation</b>	
Opening Gross Block	331.14
ACE	182.61
Closing Gross Block	513.75
Average Gross Block	422.44
Weighted Average Rate of Depreciation (in %)	5.03%
Aggregate Depreciable Value	380.20
Balance useful life of the asset (Year)	24
Lapsed life (Year)	0

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<b>Combined Depreciation during the year</b>	<b>14.09</b>
Cumulative depreciation at the end of the year	14.09
Aggregate Remaining Depreciable Value at the end of the year	366.11

(₹ in lakh)

Particulars	Asset-E
	2018-19 (pro-rata 80 days)
<b>Depreciation</b>	
Opening Gross Block	978.40
ACE	108.82
Closing Gross Block	1087.22
Average Gross Block	1032.81
Weighted Average Rate of Depreciation (in %)	5.39%
Aggregate Depreciable Value	929.53
Balance useful life of the asset (Year)	24
Lapsed life (Year)	0
<b>Combined Depreciation during the year</b>	<b>12.21</b>
Cumulative depreciation at the end of the year	12.21
Aggregate Remaining Depreciable Value at the end of the year	917.33

36. The details of depreciation allowed in respect of the transmission assets vide order dated 19.9.2018 in Petition No. 259/TT/2017 and vide order dated 27.1.2020 and Corrigendum order dated 4.2.2020 in Petition No. 266/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Particulars	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
Approved vide order dated 19.9.2018 in Petition No. 259/TT/2017	42.22	159.77
Claimed by the Petitioner in the instant petition	39.86	146.27
Allowed after true-up in this order	39.86	146.25

(₹ in lakh)

Particulars	Asset-B
	2018-19 (pro-rata 232 days)
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	200.55
Claimed by the Petitioner in the instant petition	202.35

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Allowed after true-up in this order	183.18
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(₹ in lakh)

Particulars	Asset-C	
	2018-19 (pro-rata 232 days)	
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	16.37	
Claimed by the Petitioner in the instant petition	16.45	
Allowed after true-up in this order	16.14	

(₹ in lakh)

Particulars	Asset-D	
	2018-19 (pro-rata 242 days)	
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	14.11	
Claimed by the Petitioner in the instant petition	14.32	
Allowed after true-up in this order	14.09	

(₹ in lakh)

Particulars	Asset-E	
	2018-19 (pro-rata 80 days)	
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	11.41	
Claimed by the Petitioner in the instant petition	11.76	
Allowed after true-up in this order	12.21	

### **Interest on Loan (“IoL”)**

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

38. 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 transmission assets are as follows:

(₹ in lakh)

Particulars	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
<b>Interest on Loan</b>		
Gross Normative Loan	1336.03	1748.82



Cumulative Repayments upto Previous Year	0.00	39.86
Net Loan-Opening	1336.03	1708.96
Additions	412.79	376.56
Repayment during the year	39.86	146.25
Net Loan-Closing	1708.96	1939.27
Average Loan	1522.50	1824.12
Weighted Average Rate of Interest on Loan (in %)	7.3364	7.5128
<b>Interest on Loan</b>	<b>38.25</b>	<b>137.04</b>

(₹ in lakh)

Particulars	Asset-B	
	2018-19 (pro-rata 232 days)	
<b>Interest on Loan</b>		
Gross Normative Loan		3704.40
Cumulative Repayments upto Previous Year		0.00
Net Loan-Opening		3704.40
Additions		295.47
Repayment during the year		183.18
Net Loan-Closing		3816.70
Average Loan		3760.55
Weighted Average Rate of Interest on Loan (in %)		8.0664
<b>Interest on Loan</b>		<b>192.81</b>

(₹ in lakh)

Particulars	Asset-C	
	2018-19 (pro-rata 232 days)	
<b>Interest on Loan</b>		
Gross Normative Loan		317.45
Cumulative Repayments upto Previous Year		0.00
Net Loan-Opening		317.45
Additions		71.54
Repayment during the year		16.14
Net Loan-Closing		372.85
Average Loan		345.15
Weighted Average Rate of Interest on Loan (in %)		7.4083
<b>Interest on Loan</b>		<b>16.25</b>

(₹ in lakh)

Particulars	Asset-D	
	2018-19 (pro-rata 242 days)	
<b>Interest on Loan</b>		
Gross Normative Loan		231.80



Cumulative Repayments upto Previous Year	0.00
Net Loan-Opening	231.80
Additions	127.83
Repayment during the year	14.09
Net Loan-Closing	345.53
Average Loan	288.67
Weighted Average Rate of Interest on Loan (in %)	8.0248
<b>Interest on Loan</b>	<b>15.36</b>

(₹ in lakh)

Particulars	Asset-E
	2018-19 (pro-rata 80 days)
<b>Interest on Loan</b>	
Gross Normative Loan	684.88
Cumulative Repayments upto Previous Year	0.00
Net Loan-Opening	684.88
Additions	76.17
Repayment during the year	12.21
Net Loan-Closing	748.85
Average Loan	716.87
Weighted Average Rate of Interest on Loan (in %)	7.9011
<b>Interest on Loan</b>	<b>12.41</b>

39. The details of IoL allowed in respect of the transmission assets vide order dated 19.9.2018 in Petition No. 259/TT/2017 and vide order dated 27.1.2020 and Corrigendum order dated 4.2.2020 in Petition No. 266/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Particulars	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
Approved vide order dated 19.9.2018 in Petition No. 259/TT/2017	40.07	144.77
Claimed by the Petitioner in the instant petition	38.25	137.06
Allowed after true-up in this order	38.25	137.04



(₹ in lakh)

Particulars	Asset-B
	2018-19 (pro-rata 232 days)
Approved <i>vide</i> order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	190.94
Claimed by the Petitioner in the instant petition	192.67
Allowed after true-up in this order	192.81

(₹ in lakh)

Particulars	Asset-C
	2018-19 (pro-rata 232 days)
Approved <i>vide</i> order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	16.54
Claimed by the Petitioner in the instant petition	16.56
Allowed after true-up in this order	16.25

(₹ in lakh)

Particulars	Asset-D
	2018-19 (pro-rata 242 days)
Approved <i>vide</i> order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	15.17
Claimed by the Petitioner in the instant petition	15.38
Allowed after true-up in this order	15.36

(₹ in lakh)

Particulars	Asset-E
	2018-19 (pro-rata 232 days)
Approved <i>vide</i> order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	16.54
Claimed by the Petitioner in the instant petition	11.73
Allowed after true-up in this order	12.41

### **Return on Equity (“RoE”)**

40. The Petitioner has claimed RoE in respect of the transmission assets in terms of Regulation 24 and Regulation 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 2014-19 period:



Year	Claimed effective tax (in %)	Grossed up RoE (in %) [(Base Rate)/(1-t)]
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757

41. 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 as follows:

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

42. MAT rates as allowed *vide* order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of 2014-19 period in terms of the provisions of the 2014 Tariff Regulations and the same is as follows:

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

43. RoE is trued up on the basis of MAT rate applicable for the respective years and is allowed as follows:



(₹ in lakh)

Particulars	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
<b>Return on Equity</b>		
Opening Equity	572.58	749.49
Additions	176.91	161.38
Closing Equity	749.49	910.87
Average Equity	661.04	830.18
Return on Equity (Base Rate) (in %)	15.500	15.500
MAT Rate for respective year (in %)	21.342	21.549
Rate of Return on Equity (in %)	19.705	19.758
<b>Return on Equity</b>	<b>44.61</b>	<b>164.03</b>

(₹ in lakh)

Particulars	Asset B	
	2018-19 (pro-rata 232 days)	
<b>Return on Equity</b>		
Opening Equity		1587.60
Additions		126.63
Closing Equity		1714.23
Average Equity		1650.92
Return on Equity (Base Rate) (in %)		15.500
MAT Rate for respective year (in %)		21.549
Rate of Return on Equity (in %)		19.758
<b>Return on Equity</b>		<b>207.33</b>

(₹ in lakh)

Particulars	Asset-C	
	2018-19 (pro-rata 232 days)	
<b>Return on Equity</b>		
Opening Equity		136.05
Additions		30.66
Closing Equity		166.71
Average Equity		151.38
Return on Equity (Base Rate) (in %)		15.500
MAT Rate for respective year (in %)		21.549
Rate of Return on Equity (in %)		19.758
<b>Return on Equity</b>		<b>19.01</b>



(₹ in lakh)

Particulars	Asset-D	
	2018-19 (pro-rata 242 days)	
<b>Return on Equity</b>		
Opening Equity	99.34	
Additions	54.78	
Closing Equity	154.12	
Average Equity	126.73	
Return on Equity (Base Rate) (in %)	15.500	
MAT Rate for respective year (in %)	21.549	
Rate of Return on Equity (in %)	19.758	
<b>Return on Equity</b>	<b>16.60</b>	

(₹ in lakh)

Particulars	Asset-E	
	2018-19 (pro-rata 80 days)	
<b>Return on Equity</b>		
Opening Equity	293.52	
Additions	32.65	
Closing Equity	326.17	
Average Equity	309.84	
Return on Equity (Base Rate) (in %)	15.500	
MAT Rate for respective year (in %)	21.549	
Rate of Return on Equity (in %)	19.758	
<b>Return on Equity</b>	<b>13.42</b>	

44. The details of RoE allowed in respect of the transmission assets vide order dated 19.9.2018 in Petition No. 259/TT/2017 and vide order dated 27.1.2020 and Corrigendum order dated 4.2.2020 in Petition No. 266/TT/2018, claimed by the Petitioner in the instant Petition and trued up in the instant order are as follows:

(₹ in lakh)

Particulars	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
Approved vide order dated 19.9.2018 in Petition No. 259/TT/2017	47.02	177.95
Claimed by the Petitioner in the instant petition	44.61	164.05
Allowed after true-up in this order	44.61	164.03



(₹ in lakh)

Particulars	Asset-B
	2018-19 (pro-rata 232 days)
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	204.31
Claimed by the Petitioner in the instant petition	207.70
Allowed after true-up in this order	207.33

(₹ in lakh)

Particulars	Asset-C
	2018-19 (pro-rata 232 days)
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	19.14
Claimed by the Petitioner in the instant petition	19.37
Allowed after true-up in this order	19.01

(₹ in lakh)

Particulars	Asset-D
	2018-19 (pro-rata 242 days)
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	16.28
Claimed by the Petitioner in the instant petition	16.63
Allowed after true-up in this order	16.60

(₹ in lakh)

Particulars	Asset-E
	2018-19 (pro-rata 80 days)
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	12.45
Claimed by the Petitioner in the instant petition	12.68
Allowed after true-up in this order	13.42

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

45. O&M Expenses claimed by the Petitioner in respect of the transmission assets are as follows:





O&M Expenses	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
<b>Particulars</b>		
<b>Sub-station:</b>		
<b>400 kV bays:</b>		
Satna: ICT III 400 kV Bay		
<b>220 kV bays:</b>		
Satna: ICT III 220 kV Bay		
Satna: Chattarpur Bay		
Satna: Kotar Bay		
400 kV bays	1	1
220 kV bays	3	3
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>70.60</b>	<b>213.01</b>

O&M Expenses	Asset-B
<b>Sub-station:</b>	
<b>400 kV bays:</b>	
Parli: 400 kV Bays for ICT 1&2	
<b>220 kV bays:</b>	
Parli: 220 kV Line Bays for Parli-Osmanabad Transmission Line	
Parli: ICT Bays	
<b>Particulars</b>	<b>2018-19 (pro-rata 232 days)</b>
400 kV bays	2
220 kV bays	4
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>209.65</b>

O&M Expenses	Asset-C
<b>Sub-station:</b>	
<b>220 kV bays:</b>	
Parli: 220 kV Line Bays for LILO of Parli-Harangul Transmission Line	
<b>Particulars</b>	<b>2018-19 (pro-rata 232 days)</b>
220 kV bays	2
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>61.15</b>

O&M Expenses	Asset-D
<b>Sub-station:</b>	
<b>220 kV bays:</b>	
Mapusa: 220 kV bays for Mapusa- Tuem Transmission Line	
<b>Particulars</b>	<b>2018-19 (pro-rata 242 days)</b>
220 kV bays	2
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>63.78</b>



<b>O&amp;M Expenses</b>	<b>Asset-E</b>
<b>Sub-station:</b> <b>400 kV bays:</b> Indore: Ujjain 1 & 2 bay	
<b>Particulars</b>	<b>2018-19 (pro-rata 80 days)</b>
400 kV bays	2
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>30.12</b>

46. With respect to Asset-B, the Petitioner has submitted that due to inadvertent error, O&M charges for 2 number 220 kV line bays for LILO of Parli-Harangul at Parli switching station were not claimed in Petition No. 266/TT/2018, hence, the same has been claimed in the instant petition.

47. MPPMCL has requested the Commission to make prudence check before allowing the same. In response the Petitioner has reiterated its submission.

48. We have considered the submission of the Petitioner and MPPMCL. With respect to Asset-B, as per IA total 6 number of 220 kV line bays is associated with the LILO of (i) both circuits of Parli-Harngul 220 kV lines and (ii) Parli-Osmanabad 220 kV S/C line. Accordingly, the Petitioner's claim of additional O&M Expenses for 2 number of bays is considered in the instant true-up petition. O&M Expenses in respect of the transmission assets are allowed as per the norms specified in the 2014 Tariff Regulations and the same are as follows:



O&M Expenses	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
<b>Particulars</b>		
<b>Sub-station:</b>		
<b>400 kV bays:</b> Satna: ICT III 400 kV Bay		
<b>220 kV bays:</b> Satna: ICT III 220 kV Bay Satna: Chattarpur Bay Satna: Kotar Bay		
400 kV bays	1	1
220 kV bays	3	3
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>70.60</b>	<b>213.01</b>

O&M Expenses	Asset-B
<b>Sub-station:</b>	
<b>400 kV bays:</b> Parli: 400 kV Bays for ICT 1&2	
<b>220 kV bays:</b> Parli: 220 kV Line Bays for Parli-Osmanabad Transmission Line Parli: ICT Bays	
<b>Particulars</b>	<b>2018-19 (pro-rata 232 days)</b>
400 kV bays	2
220 kV bays	4
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>209.64</b>

O&M Expenses	Asset-C
<b>Sub-station:</b>	
<b>220 kV bays:</b> Parli:220 kV Line Bays for LILO of Parli-Harangul Transmission Line	
<b>Particulars</b>	<b>2018-19 (pro-rata 232 days)</b>
220 kV bays	2
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>61.15</b>

O&M Expenses	Asset-D
<b>Sub-station:</b>	
<b>220 kV bays:</b> Mapusa:220 kV bays for Mapusa- Tuem Transmission Line	
<b>Particulars</b>	<b>2018-19 (pro-rata 242 days)</b>
220 kV bays	2
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>63.78</b>



<b>O&amp;M Expenses</b>	<b>Asset-E</b>
<b>Sub-station:</b> <b>400 kV bays:</b> Indore: Ujjain 1 & 2 bay	
<b>Particulars</b>	<b>2018-19 (pro-rata 80 days)</b>
400 kV bays	2
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>30.12</b>

49. The details of O&M Expenses allowed in respect of the transmission assets vide order dated 19.9.2018 in Petition No. 259/TT/2017 and vide order dated 27.1.2020 and Corrigendum order dated 4.2.2020 in Petition No. 266/TT/2018, claimed by the Petitioner in the instant Petition and trued up in the instant order are as follows:

(₹ in lakh)

<b>Particulars</b>	<b>Asset-A</b>	
	<b>2017-18 (pro-rata 125 days)</b>	<b>2018-19</b>
Approved vide order dated 19.9.2018 in Petition No. 259/TT/2017	71.01	213.01
Claimed by the Petitioner in the instant petition	70.60	213.01
Allowed after true-up in this order	70.60	213.01

(₹ in lakh)

<b>Particulars</b>	<b>Asset-B</b>	
	<b>2018-19 (pro-rata 232 days)</b>	
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	148.48	
Claimed by the Petitioner in the instant petition	209.65	
Allowed after true-up in this order	209.64	

(₹ in lakh)

<b>Particulars</b>	<b>Asset-C</b>	
	<b>2018-19 (pro-rata 232 days)</b>	
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	61.14	
Claimed by the Petitioner in the instant petition	61.15	
Allowed after true-up in this order	61.15	



(₹ in lakh)

Particulars	Asset-D
	2018-19 (pro-rata 242 days)
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	63.78
Claimed by the Petitioner in the instant petition	63.78
Allowed after true-up in this order	63.78

(₹ in lakh)

Particulars	Asset-E
	2018-19 (pro-rata 80 days)
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	30.12
Claimed by the Petitioner in the instant petition	30.12
Allowed after true-up in this order	30.12

**Interest on Working Capital (“IWC”)**

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

(₹ in lakh)

Particulars	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
<b>Interest on Working Capital</b>		
Working Capital for O&M Expenses (O&M Expenses for one Month)	17.18	17.75
Working Capital for Maintenance Spares (15% of O&M Expenses)	30.92	31.95
Working Capital for Receivables (Equivalent to two months of annual fixed costs/annual transmission charges)	97.13	113.48
Total Working Capital	145.24	163.18
Rate of Interest (in %)	12.60	12.60
<b>Interest on Working Capital</b>	<b>6.27</b>	<b>20.56</b>

(₹ in lakh)

Particulars	Asset-B
	2018-19 (pro-rata 232 days)
<b>Interest on Working Capital</b>	
Working Capital for O&M Expenses (O&M Expenses for one Month)	27.49
Working Capital for Maintenance Spares	49.47

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(15% of O&M Expenses)	
Working Capital for Receivables (Equivalent to two months of annual fixed costs/annual transmission charges)	213.84
Total Working Capital	290.79
Rate of Interest (in %)	12.20
<b>Interest on Working Capital</b>	<b>22.55</b>

(₹ in lakh)

Particulars	Asset-C
	2018-19 (pro-rata 232 days)
<b>Interest on Working Capital</b>	
Working Capital for O&M Expenses (O&M Expenses for one Month)	8.02
Working Capital for Maintenance Spares (15% of O&M Expenses)	14.43
Working Capital for Receivables (Equivalent to two months of annual fixed costs/annual transmission charges)	30.59
Total Working Capital	53.04
Rate of Interest (in %)	12.20
<b>Interest on Working Capital</b>	<b>4.11</b>

(₹ in lakh)

Particulars	Asset-D
	2018-19 (pro-rata 242 days)
<b>Interest on Working Capital</b>	
Working Capital for O&M Expenses (O&M Expenses for one Month)	8.02
Working Capital for Maintenance Spares (15% of O&M Expenses)	14.43
Working Capital for Receivables (Equivalent to two months of annual fixed costs/annual transmission charges)	28.65
Total Working Capital	51.09
Rate of Interest (in %)	12.20
<b>Interest on Working Capital</b>	<b>4.13</b>

(₹ in lakh)

Particulars	Asset-E
	2018-19 (pro-rata 80 days)
<b>Interest on Working Capital</b>	
Working Capital for O&M Expenses (O&M Expenses for one Month)	11.45
Working Capital for Maintenance Spares	20.61



(15% of O&M Expenses)	
Working Capital for Receivables (Equivalent to two months of annual fixed costs/annual transmission charges)	53.57
Total Working Capital	85.63
Rate of Interest (in %)	12.20
<b>Interest on Working Capital</b>	<b>2.29</b>

51. The details of IWC allowed in respect of the transmission assets vide order dated 19.9.2018 in Petition No. 259/TT/2017 and vide order dated 27.1.2020 and Corrigendum order dated 4.2.2020 in Petition No. 266/TT/2018, claimed by the Petitioner in the instant Petition and trued up in the instant order are as follows:

(₹ in lakh)

Particulars	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
Approved vide order dated 19.9.2018 in Petition No. 259/TT/2017	6.53	21.66
Claimed by the Petitioner in the instant petition	6.27	20.56
Allowed after true-up in this order	6.27	20.56

(₹ in lakh)

Particulars	Asset-B
	2018-19 (pro-rata 232 days)
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	19.76
Claimed by the Petitioner in the instant petition	22.95
Allowed after true-up in this order	22.55

(₹ in lakh)

Particulars	Asset-C
	2018-19 (pro-rata 232 days)
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	4.13
Claimed by the Petitioner in the instant petition	4.13
Allowed after true-up in this order	4.11



(₹ in lakh)

Particulars	Asset-D
	2018-19 (pro-rata 242 days)
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	4.12
Claimed by the Petitioner in the instant petition	4.14
Allowed after true-up in this order	4.13

(₹ in lakh)

Particulars	Asset-E
	2018-19 (pro-rata 80 days)
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	2.24
Claimed by the Petitioner in the instant petition	2.25
Allowed after true-up in this order	2.29

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

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

(₹ in lakh)

Particulars	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
<b>Annual Transmission Charges</b>		
Depreciation	39.86	146.25
Interest on Loan	38.25	137.04
Return on Equity	44.61	164.03
O&M Expenses	70.60	213.01
Interest on Working Capital	6.27	20.56
<b>Total</b>	<b>199.59</b>	<b>680.89</b>

(₹ in lakh)

Particulars	Asset-B
	2018-19 (pro-rata 232 days)
<b>Annual Transmission Charges</b>	
Depreciation	183.18
Interest on Loan	192.81
Return on Equity	207.33
O&M Expenses	209.64
Interest on Working Capital	22.55
<b>Total</b>	<b>815.51</b>

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(₹ in lakh)

Particulars	Asset-C
	2018-19 (pro-rata 232 days)
<b>Annual Transmission Charges</b>	
Depreciation	16.14
Interest on Loan	16.25
Return on Equity	19.01
O&M Expenses	61.15
Interest on Working Capital	4.11
<b>Total</b>	<b>116.66</b>

(₹ in lakh)

Particulars	Asset-D
	2018-19 (pro-rata 242 days)
<b>Annual Transmission Charges</b>	
Depreciation	14.09
Interest on Loan	15.36
Return on Equity	16.60
O&M Expenses	63.78
Interest on Working Capital	4.13
<b>Total</b>	<b>113.96</b>

(₹ in lakh)

Particulars	Asset-E
	2018-19 (pro-rata 80 days)
<b>Annual Transmission Charges</b>	
Depreciation	12.21
Interest on Loan	12.41
Return on Equity	13.42
O&M Expenses	30.12
Interest on Working Capital	2.29
<b>Total</b>	<b>70.45</b>

53. Accordingly, asset-wise AFC approved vide order dated 19.9.2018 in Petition No. 259/TT/2017 and vide order dated 27.1.2020 and Corrigendum order dated 4.2.2020 in Petition No. 266/TT/2018, claimed by the Petitioner in the instant petition and approved after truing up in the instant order are as follows:



(₹ in lakh)

Particulars	Asset-A	
	2017-18 (pro-rata 125 days)	2018-19
Approved vide order dated 19.9.2018 in Petition No. 259/TT/2017	206.85	717.16
Claimed by the Petitioner in the instant petition	199.59	680.95
Allowed after true-up in this order	199.59	680.89

(₹ in lakh)

Particulars	Asset-B	
	2018-19 (pro-rata 232 days)	
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	764.04	
Claimed by the Petitioner in the instant petition	835.32	
Allowed after true-up in this order	815.51	

(₹ in lakh)

Particulars	Asset-C	
	2018-19 (pro-rata 232 days)	
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	117.33	
Claimed by the Petitioner in the instant petition	117.66	
Allowed after true-up in this order	116.66	

(₹ in lakh)

Particulars	Asset-D	
	2018-19 (pro-rata 242 days)	
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	113.46	
Claimed by the Petitioner in the instant petition	114.25	
Allowed after true-up in this order	113.96	

(₹ in lakh)

Particulars	Asset-E	
	2018-19 (pro-rata 80 days)	
Approved vide order dated 27.1.2020 and Corrigendum dated 4.2.2020 in Petition No. 266/TT/2018	67.86	
Claimed by the Petitioner in the instant petition	68.54	
Allowed after true-up in this order	70.45	



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

54. As stated in paragraph no.3(d) above, the COD of Asset-B, Asset-C, Asset-D and Asset-E was approved under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations as the associated downstream assets were not put into commercial operation and held that the transmission charges from the COD of the transmission asset to the COD of the downstream asset would be borne by the entity responsible for the execution of the downstream assets vide order dated 27.1.2020 in Petition No.266/TT/2018. The downstream asset in case of Asset-B was put into commercial operation in the 2014-19 tariff period, in case of Asset-C it was put into commercial operation on 9.10.2019 and in case of Asset-D and Asset-E the downstream assets are yet to be put into commercial operation. As the transmission charges of Asset-C, Asset-D and Asset-E have to be borne by the entity responsible for implementation of downstream transmission assets till they are put into commercial operation, their transmission charges for the 2019-24 tariff period are required to be determined individually so that it will be recovered from the entity responsible for execution of the downstream assets. Therefore, the Petitioner has claimed the following transmission charges for Combined Asset A&B and separately for Asset-C, Asset-D and Asset-E for 2019-24 tariff period:

### **Combined Asset -A&B**

<b>Particulars</b>	<b>(₹ in lakh)</b>				
	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Depreciation	508.63	529.85	532.12	532.12	532.12
Interest on Loan	459.10	442.48	403.27	360.84	317.88
Return on Equity	515.30	540.40	543.40	543.40	543.40
O&M Expenses	791.02	819.44	848.19	878.70	908.11
Interest on Working Capital	56.77	58.56	59.30	59.99	60.53
<b>Total</b>	<b>2330.82</b>	<b>2390.73</b>	<b>2386.28</b>	<b>2375.05</b>	<b>2362.04</b>



**Asset-C**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	29.19	30.95	31.15	31.15	31.15
Interest on Loan	28.62	28.45	26.42	24.08	21.71
Return on Equity	33.23	35.46	35.78	35.78	35.78
O&M Expenses	45.02	46.60	48.24	49.92	51.68
Interest on Working Capital	3.33	3.46	3.51	3.55	3.58
<b>Total</b>	<b>139.39</b>	<b>144.92</b>	<b>145.10</b>	<b>144.48</b>	<b>143.90</b>

**Asset-D**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	26.89	29.91	31.56	31.56	31.56
Interest on Loan	28.72	30.05	29.54	26.96	24.37
Return on Equity	30.59	34.19	36.15	36.15	36.15
O&M Expenses	45.02	46.60	48.24	49.92	51.68
Interest on Working Capital	3.26	3.45	3.57	3.61	3.64
<b>Total</b>	<b>134.48</b>	<b>144.20</b>	<b>149.06</b>	<b>148.20</b>	<b>147.40</b>

**Asset-E**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	58.75	63.09	64.82	64.82	64.82
Interest on Loan	55.96	55.61	52.37	47.24	42.05
Return on Equity	60.18	64.73	66.57	66.57	66.57
O&M Expenses	64.30	66.56	68.90	71.32	73.82
Interest on Working Capital	5.43	5.67	5.78	5.80	5.82
<b>Total</b>	<b>244.62</b>	<b>255.66</b>	<b>258.44</b>	<b>255.75</b>	<b>253.08</b>

55. The Petitioner has claimed the following IWC in respect of the Combined Asset A&B, Asset-C, Asset-D and Asset-E for 2019-24 tariff period:

**Combined Asset -A&B**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses	65.92	68.29	70.68	73.23	75.68
WC for Maintenance Spares	118.65	122.92	127.23	131.81	136.22
WC for Receivables	286.58	294.75	294.20	292.81	290.41
Total Working Capital	471.15	485.96	492.11	497.85	502.31
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>56.77</b>	<b>58.56</b>	<b>59.30</b>	<b>59.99</b>	<b>60.53</b>



## Asset-C

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses	3.75	3.88	4.02	4.16	4.31
WC for Maintenance Spares	6.75	6.99	7.24	7.49	7.75
WC for Receivables	17.14	17.87	17.89	17.81	17.69
Total Working Capital	27.64	28.74	29.15	29.46	29.75
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>3.33</b>	<b>3.46</b>	<b>3.51</b>	<b>3.55</b>	<b>3.58</b>

## Asset-D

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses	3.75	3.88	4.02	4.16	4.31
WC for Maintenance Spares	6.75	6.99	7.24	7.49	7.75
WC for Receivables	16.53	17.78	18.38	18.27	18.12
Total Working Capital	27.03	28.65	29.64	29.92	30.18
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>3.26</b>	<b>3.45</b>	<b>3.57</b>	<b>3.61</b>	<b>3.64</b>

## Asset-E

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses	5.36	5.55	5.74	5.94	6.15
WC for Maintenance Spares	9.65	9.98	10.34	10.70	11.07
WC for Receivables	30.08	31.52	31.86	31.53	31.12
Total Working Capital	45.09	47.05	47.94	48.17	48.34
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>5.43</b>	<b>5.67</b>	<b>5.78</b>	<b>5.80</b>	<b>5.82</b>

### **Effective Date of Commercial Operation (“E-COD”)**

56. The Petitioner has claimed E-COD of the Combined Asset A&B as 14.5.2018. Based on the capital cost and actual COD of the individual asset, E-COD has been worked out as follows:



Assets	Capital Cost as on 31.3.2019	COD	Number of days from last COD	Weight of cost (in %)	Weighted days
	(₹ in lakh)				
Asset-A	3036.25	27/11/2017	258.00	34.70	89.52
Asset-B	5714.11	12/08/2018	0.00	65.30	0.00
<b>Total</b>	<b>8750.36</b>				<b>89.52</b>
<b>E-COD (latest COD – total weighted days)</b>					<b>14.5.2018</b>

### **Weighted Average Life (“WAL”)**

57. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of WAL. The Combined Asset may have multiple elements such as land, building, transmission line, Sub-station and PLCC and each element may have different span of life. Therefore, the concept of WAL has been used as the useful life of Combined Asset A and B.

58. WAL in respect of the Combined Asset A&B 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. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual asset has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset put into commercial operation during 2014-19 period has been worked out as 24 years as follows:



Particulars	Life (in years) (1)	Capital Cost as on 31.3.2019 (₹ in lakh) (2)	Weighted Cost (₹ in lakh) (3)= (1) x (2)	Weighted Average Life of Asset (in years) (4) = (3)/ (2)
Building Civil Works	25	177.03	4425.66	<b>24.29 years (rounded off to 24 years)</b>
Transmission Line	35	0.00	0.00	
Sub-station	25	8,214.90	205372.54	
PLCC	15	44.64	669.60	
IT Equipment (Including Software)	6.67	313.79	2092.98	
<b>Total</b>		<b>8750.36</b>	<b>212560.78</b>	

### **Capital Cost**

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

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

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

- (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
- (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
- (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
- (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;



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

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





only after its redeployment;

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

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

60. The Petitioner has claimed the following capital cost for the transmission assets:

(₹ in lakh)

Assets	Apportioned approved cost as per FR	Capital Cost as on 1.4.2019	ACE 2019-2024		Capital Cost as on 31.3.2024
			2019-20	2020-21	
Combined Asset A&B	11644.68	8771.06	784.83	106.29	9662.18
Asset-C	989.31	557.59	68.07	11.32	636.98
Asset-D	887.07	514.70	58.24	69.64	642.58
Asset-E	1577.94	1152.94	96.07	65.25	1314.26
<b>Total</b>	<b>15099.00</b>	<b>10996.29</b>	<b>1007.21</b>	<b>252.50</b>	<b>12256.00</b>

61. However, the capital cost as on 31.3.2019 worked out for the transmission assets 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. Capital cost considered for the transmission assets is as follows:

(₹ in lakh)

Assets	Apportioned approved cost as per FR	Capital Cost admitted as on 1.4.2019
Combined Asset A&B	11644.68	8750.36
Asset-C	989.31	555.70



Asset-D	887.07	513.75
Asset-E	1577.94	1087.22
<b>Total</b>	<b>15099.00</b>	<b>10907.03</b>

### **Additional Capital Expenditure (“ACE”)**

62. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provides as follows:

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

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

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

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

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

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

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

- (a) *Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- (b) *Change in law or compliance of any existing law;*
- (c) *Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (d) *Liability for works executed prior to the cut-off date;*



- (e) Force Majeure events;
- (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;
- (g) Raising of ash dyke as a part of ash disposal system.

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

- (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
- (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission.”

63. The Petitioner has projected ACE in respect of the transmission assets during 2019-24 tariff period as follows.

Assets	Apportioned approved cost as per FR	Capital Cost claimed as on 1.4.2019	ACE 2019-2024		Capital Cost claimed as on 31.3.2024
			2019-20	2020-21	
Combined Asset A&B	11644.68	8771.06	784.83	106.29	9662.18
Asset-C	989.31	557.59	68.07	11.32	636.98
Asset-D	887.07	514.70	58.24	69.64	642.58
Asset-E	1577.94	1152.94	96.07	65.25	1314.26
<b>Total</b>	<b>15099.00</b>	<b>10996.29</b>	<b>1007.21</b>	<b>252.50</b>	<b>12256.00</b>

64. The Petitioner has submitted that ACE incurred in respect of the transmission assets are on account of undischarged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date.

65. MPPMCL has submitted that the Petitioner has claimed ACE for 2019-2024 period and has not submitted any document providing proper details and justification. Hence, the tariff for 2019-24 period may be allowed only after admitting the cost as on 31.3.2019 after prudence check. In response, the Petitioner has submitted that the



tariff claimed for 2019-24 tariff period is in line with 2019 Tariff Regulations and the cost and tariff may be allowed as claimed.

66. We have considered the submission made by the Petitioner and MPPMCL. ACE claimed by the Petitioner has been allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations, as it is towards liabilities for works executed prior to the cut-off date subject to true-up based on the actual ACE for 2019-24 period. Accordingly, the capital cost as on 31.3.2024 in respect of the Combined Asset- A&B, Asset-C, Asset-D and Asset-E is considered as follows:

(₹ in lakh)

Assets	Apportioned approved cost as per FR	Capital Cost admitted as on 1.4.2019	ACE admitted during 2019-2024		Capital Cost approved as on 31.3.2024
			2019-20	2020-21	
Combined Asset A&B	11644.68	8750.36	784.83	106.29	9641.48
Asset-C	989.31	555.70	68.07	11.32	635.11
Asset-D	887.07	513.75	58.24	69.64	641.63
Asset-E	1577.94	1087.22	97.11	65.25	1249.58
<b>Total</b>	<b>15099.00</b>	<b>10907.03</b>	<b>1008.25</b>	<b>252.50</b>	<b>12167.80</b>

67. The capital cost as on 31.3.2024 is within the FR apportioned approved cost of ₹15099.00 lakh. Hence, there is no cost over-run.

### **Debt-Equity ratio**

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

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

*Provided that:*

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:*



- ii. *the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*
- iii. *any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.*

**Explanation-***The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.*

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

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

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

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

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

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

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



69. Debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period in respect of the Combined Asset- A&B, Asset-C, Asset-D and Asset-E are as follows:

Assets	Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	ACE 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Combined Asset- A&B	Debt	6125.25	70.00	623.78	70.00	6749.03	70.00
	Equity	2625.11	30.00	267.34	30.00	2892.44	30.00
	<b>Total</b>	<b>8750.36</b>	<b>100.00</b>	<b>891.12</b>	<b>100.00</b>	<b>9641.48</b>	<b>100.00</b>
Asset-C	Debt	388.99	70.00	55.57	70.00	444.56	70.00
	Equity	166.71	30.00	23.82	30.00	190.53	30.00
	<b>Total</b>	<b>555.70</b>	<b>100.00</b>	<b>79.39</b>	<b>100.00</b>	<b>635.09</b>	<b>100.00</b>
Asset-D	Debt	359.62	70.00	89.52	70.00	449.14	70.00
	Equity	154.12	30.00	38.36	30.00	192.49	30.00
	<b>Total</b>	<b>513.75</b>	<b>100.00</b>	<b>127.88</b>	<b>100.00</b>	<b>641.63</b>	<b>100.00</b>
Asset-E	Debt	761.05	70.00	113.65	70.00	874.70	70.00
	Equity	326.17	30.00	48.71	30.00	374.87	30.00
	<b>Total</b>	<b>1087.22</b>	<b>100.00</b>	<b>162.36</b>	<b>100.00</b>	<b>1249.58</b>	<b>100.00</b>

### Depreciation

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

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

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

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



first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

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

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

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

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

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

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

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

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

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

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

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

(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same,



depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.

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

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

71. The IT equipment has been considered as part of the Gross Block and depreciated using WAROD. 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 as nil, i.e. IT asset has been considered as 100 per cent depreciable. Depreciation has been worked out also considering ACE as on 31.3.2024 and accumulated depreciation up to 31.3.2019. Depreciation allowed in respect of the transmission assets are as follows:

### Combined Asset-A&B

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	8750.36	9535.19	9641.48	9641.48	9641.48
Addition during the year 2019-24 due to projected ACE	784.83	106.29	0.00	0.00	0.00
Closing Gross Block	9535.19	9641.48	9641.48	9641.48	9641.48
Average Gross Block	9142.77	9588.33	9641.48	9641.48	9641.48
Weighted average rate of	5.56	5.52	5.52	5.52	5.52





Depreciation (WAROD) (in %)					
Balance useful life at the beginning of the year (Year)	24.00	23.00	22.00	21.00	20.00
Lapsed life (Year)	0.00	1.00	2.00	3.00	4.00
Aggregated Depreciable Value	8260.03	8661.20	8709.03	8709.03	8709.03
<b>Combined Depreciation during the year</b>	<b>508.50</b>	<b>529.71</b>	<b>531.99</b>	<b>531.99</b>	<b>531.99</b>
Aggregate Cumulative Depreciation at the end of the year	877.78	1407.49	1939.48	2471.47	3003.45
Remaining Aggregated Depreciable Value at the end of the year	7383.85	7253.70	6769.55	6237.56	5705.57

### Asset-C

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	555.70	623.77	635.09	635.09	635.09
Addition during the year 2019-24 due to projected ACE	68.07	11.32	0.00	0.00	0.00
Closing Gross Block	623.77	635.09	635.09	635.09	635.09
Average Gross Block	589.73	629.43	635.09	635.09	635.09
Weighted average rate of Depreciation (WAROD) (in %)	4.95%	4.92%	4.90%	4.90%	4.90%
Balance useful life at the beginning of the year (Year)	25.00	24.00	23.00	22.00	21.00
Lapsed life (Year)	0.00	1.00	2.00	3.00	4.00
Aggregated Depreciable Value	530.76	566.48	571.58	571.58	571.58
<b>Combined Depreciation during the year</b>	<b>29.20</b>	<b>30.95</b>	<b>31.14</b>	<b>31.14</b>	<b>31.14</b>
Aggregate Cumulative Depreciation at the end of the year	45.34	76.28	107.43	138.57	169.71
Remaining Aggregated Depreciable Value at the end of the year	485.42	490.20	464.15	433.01	401.87



**Asset-D**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	513.75	571.99	641.63	641.63	641.63
Addition during the year 2019-24 due to projected ACE	58.24	69.64	0.00	0.00	0.00
Closing Gross Block	571.99	641.63	641.63	641.63	641.63
Average Gross Block	542.87	606.81	641.63	641.63	641.63
Weighted average rate of Depreciation (WAROD) (in %)	4.95%	4.93%	4.92%	4.92%	4.92%
Balance useful life at the beginning of the year (Year)	24.00	23.00	22.00	21.00	20.00
Lapsed life (Year)	0.00	1.00	2.00	3.00	4.00
Aggregated Depreciable Value	488.92	546.47	577.81	577.81	577.81
<b>Combined Depreciation during the year</b>	<b>26.88</b>	<b>29.90</b>	<b>31.56</b>	<b>31.56</b>	<b>31.56</b>
Aggregate Cumulative Depreciation at the end of the year	40.97	70.87	102.43	133.99	165.55
Remaining Aggregated Depreciable Value at the end of the year	447.95	475.59	475.37	443.81	412.25

**Asset-E**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	1087.22	1184.33	1249.58	1249.58	1249.58
Addition during the year 2019-24 due to projected ACE	97.11	65.25	0.00	0.00	0.00
Closing Gross Block	1184.33	1249.58	1249.58	1249.58	1249.58
Average Gross Block	1135.77	1216.95	1249.58	1249.58	1249.58
Weighted average rate of Depreciation (WAROD) (in %)	5.50%	5.49%	5.49%	5.49%	5.49%
Balance useful life at the beginning of the year (Year)	24.00	23.00	22.00	21.00	20.00
Lapsed life (Year)	0.00	1.00	2.00	3.00	4.00
Aggregated Depreciable Value	1023.47	1096.54	1125.90	1125.90	1125.90
<b>Combined Depreciation during the year</b>	<b>62.46</b>	<b>66.84</b>	<b>68.56</b>	<b>68.56</b>	<b>68.56</b>
Aggregate Cumulative Depreciation at the end of the	73.87	140.70	209.27	277.83	346.39



year					
Remaining Aggregated Depreciable Value at the end of the year	949.61	955.83	916.63	848.07	779.51

### **Interest on Loan (“IoL”)**

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

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

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

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

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

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

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

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

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

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



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

73. We have considered the submission of the Petitioner. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period 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 in respect of the Combined Asset A&B, Asset-C, Asset-D and Asset- E are as follows:

#### Combined Asset- A&B

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	6125.25	6674.63	6749.03	6749.03	6749.03
Cumulative Repayments up to Previous Year	369.29	877.78	1407.49	1939.48	2471.47
Net Loan-Opening	5755.96	5796.85	5341.54	4809.55	4277.57
Additions	549.38	74.40	0.00	0.00	0.00
Repayment during the year	508.50	529.71	531.99	531.99	531.99
Net Loan-Closing	5796.85	5341.54	4809.55	4277.57	3745.58
Average Loan	5776.41	5569.19	5075.55	4543.56	4011.57
Weighted Average Rate of Interest on Loan (in %)	7.97	7.97	7.97	7.97	7.96
<b>Interest on Loan</b>	<b>460.50</b>	<b>443.89</b>	<b>404.69</b>	<b>362.27</b>	<b>319.32</b>

#### Asset-C

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	388.99	436.64	444.56	444.56	444.56
Cumulative Repayments up to	16.14	45.34	76.28	107.43	138.57



Previous Year					
Net Loan-Opening	372.85	391.30	368.28	337.14	305.99
Additions	47.65	7.92	0.00	0.00	0.00
Repayment during the year	29.20	30.95	31.14	31.14	31.14
Net Loan-Closing	391.30	368.28	337.14	305.99	274.85
Average Loan	382.07	379.79	352.71	321.56	290.42
Weighted Average Rate of Interest on Loan (in %)	7.50	7.50	7.50	7.50	7.49
<b>Interest on Loan</b>	<b>28.65</b>	<b>28.48</b>	<b>26.45</b>	<b>24.10</b>	<b>21.74</b>

#### Asset-D

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	359.62	400.39	449.14	449.14	449.14
Cumulative Repayments up to Previous Year	14.09	40.97	70.87	102.43	133.99
Net Loan-Opening	345.53	359.42	378.26	346.70	315.15
Additions	40.77	48.75	0.00	0.00	0.00
Repayment during the year	26.88	29.90	31.56	31.56	31.56
Net Loan-Closing	359.42	378.26	346.70	315.15	283.59
Average Loan	352.48	368.84	362.48	330.93	299.37
Weighted Average Rate of Interest on Loan (in %)	8.15	8.15	8.15	8.15	8.14
<b>Interest on Loan</b>	<b>28.74</b>	<b>30.07</b>	<b>29.55</b>	<b>26.98</b>	<b>24.38</b>

#### Asset-E

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	761.05	829.03	874.70	874.70	874.70
Cumulative Repayments up to Previous Year	11.40	73.87	140.70	209.27	277.83
Net Loan-Opening	749.65	755.16	734.00	665.44	596.88
Additions	67.97	45.68	0.00	0.00	0.00
Repayment during the year	62.46	66.84	68.56	68.56	68.56



Net Loan-Closing	755.16	734.00	665.44	596.88	528.32
Average Loan	752.41	744.58	699.72	631.16	562.60
Weighted Average Rate of Interest on Loan (in %)	7.92%	7.92%	7.92%	7.92%	7.91%
<b>Interest on Loan</b>	<b>59.60</b>	<b>58.98</b>	<b>55.45</b>	<b>50.01</b>	<b>44.52</b>

### **Return on Equity (“RoE”)**

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

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

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

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

*Provided further that:*

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



- failure to achieve the ramp rate of 1% per minute;
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

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

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

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

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.”

75. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. Accordingly, 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 in respect of the Combined Asset- A&B, Asset-C, Asset-D and Asset-E are as follows:

**Combined Asset- A&B**

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	2625.11	2860.56	2892.44	2892.44	2892.44
Additions	235.45	31.89	0.00	0.00	0.00
Closing Equity	2860.56	2892.44	2892.44	2892.44	2892.44
Average Equity	2742.83	2876.50	2892.44	2892.44	2892.44
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity</b>	<b>515.15</b>	<b>540.25</b>	<b>543.24</b>	<b>543.24</b>	<b>543.24</b>





**Asset-C**

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	166.71	187.13	190.53	190.53	190.53
Additions	20.42	3.40	0.00	0.00	0.00
Closing Equity	187.13	190.53	190.53	190.53	190.53
Average Equity	176.92	188.83	190.53	190.53	190.53
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity</b>	<b>33.23</b>	<b>35.46</b>	<b>35.78</b>	<b>35.78</b>	<b>35.78</b>

**Asset-D**

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	154.12	171.60	192.49	192.49	192.49
Additions	17.47	20.89	0.00	0.00	0.00
Closing Equity	171.60	192.49	192.49	192.49	192.49
Average Equity	162.86	182.04	192.49	192.49	192.49
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity</b>	<b>30.59</b>	<b>34.19</b>	<b>36.15</b>	<b>36.15</b>	<b>36.15</b>

**Asset-E**

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	326.17	355.30	374.87	374.87	374.87
Additions	29.13	19.58	0.00	0.00	0.00
Closing Equity	355.30	374.87	374.87	374.87	374.87
Average Equity	340.73	365.09	374.87	374.87	374.87
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity</b>	<b>63.99</b>	<b>68.57</b>	<b>70.41</b>	<b>70.41</b>	<b>70.41</b>



**Operation & Maintenance Expenses (“O&M Expenses”)**

76. O&M Expenses claimed by the Petitioner in respect of the transmission assets for 2019-24 period are as follows:

<b>O&amp;M Expenses</b>	<b>Combined Asset-A&amp;B</b>				
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>Sub-station:</b>					
<b><u>400 kV bays:</u></b>					
Satna: ICT III 400 kV Bay					
Parli: 400 kV Bays for ICT 1&2					
<b><u>220 kV bays:</u></b>					
Satna: ICT III 220 kV Bay					
Satna: Chattarpur Bay					
Satna: Kotar Bay					
Parli: 220 kV Line Bays for Parli-Osmanabad Transmission Line					
Parli: ICT Bays					
400 kV bays	3	3	3	3	3
220 kV bays	7	7	7	7	7
Santa: 500 MVA 400/220 kV ICT III	1	1	1	1	1
Parli: 400/220 kV ICT 1 500 MVA	1	1	1	1	1
Parli: 400/220 kV ICT 2 500 MVA	1	1	1	1	1
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>791.02</b>	<b>819.44</b>	<b>848.19</b>	<b>878.70</b>	<b>908.11</b>

<b>O&amp;M Expenses</b>	<b>Asset-C</b>				
<b>Sub-station:</b>					
<b><u>220 kV bays:</u></b>					
Parli: 220 kV Line Bays for LILO of Parli-Harangul Transmission Line					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
220 kV bays	2	2	2	2	2
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>45.02</b>	<b>46.60</b>	<b>48.24</b>	<b>49.92</b>	<b>51.68</b>

<b>O&amp;M Expenses</b>	<b>Asset-D</b>				
<b>Sub-station:</b>					
<b><u>220 kV bays:</u></b>					
Mapusa: 220 kV bays for Mapusa-Tuem Transmission Line					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
220 kV bays	2	2	2	2	2
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>45.02</b>	<b>46.60</b>	<b>48.24</b>	<b>49.92</b>	<b>51.68</b>



O&M Expenses	Asset-E				
<b>Sub-station:</b>					
<b>400 kV bays:</b>					
Indore: Ujjain 1 & 2 bay					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
400 kV bays	2	2	2	2	2
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>64.30</b>	<b>66.56</b>	<b>68.90</b>	<b>71.32</b>	<b>73.82</b>

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

**“35. Operation and Maintenance Expenses:**

...

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

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
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					



<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<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.”

78. O&M Expenses have been worked out as per the norms specified in the 2019

Tariff Regulations and are as follows

O&M Expenses	Combined Asset-A&B				
	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Particulars</b>					
<b>Sub-station:</b>					
<b>400 kV bays:</b>					
Satna: ICT III 400 kV Bay					
Parli: 400 kV Bays for ICT 1&2					
<b>220 kV bays:</b>					
Satna: ICT III 220 kV Bay					
Satna: Chattarpur Bay					
Satna: Kotar Bay					
Parli: 220 kV Line Bays for Parli-Osmanabad Transmission Line					
Parli: ICT Bays					
400 kV bays	3	3	3	3	3
220 kV bays	7	7	7	7	7
Santa: 500 MVA 400/220 kV ICT III	1	1	1	1	1
Parli: 400/220 kV ICT 1 500 MVA	1	1	1	1	1
Parli: 400/220 kV ICT 2 500 MVA	1	1	1	1	1
<b>Total O&amp;M Expense (₹ in lakh)</b>	<b>791.02</b>	<b>819.44</b>	<b>848.19</b>	<b>878.70</b>	<b>908.11</b>



O&M Expenses	Asset-C				
<b>Sub-station:</b>					
<b><u>220 kV bays:</u></b>					
Parli: 220 kV Line Bays for LILO of Parli-Harangul Transmission Line					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
220 kV bays	2	2	2	2	2
<b>Total O&amp;M Expense (₹ in lakh)</b>	<b>45.02</b>	<b>46.60</b>	<b>48.24</b>	<b>49.92</b>	<b>51.68</b>

O&M Expenses	Asset-D				
<b>Sub-station:</b>					
<b><u>220 kV bays:</u></b>					
Mapusa: 220 kV bays for Mapusa-Tuem Transmission Line					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
220 kV bays	2	2	2	2	2
<b>Total O&amp;M Expense (₹ in lakh)</b>	<b>45.02</b>	<b>46.60</b>	<b>48.24</b>	<b>49.92</b>	<b>51.68</b>

O&M Expenses	Asset-E				
<b>Sub-station:</b>					
<b><u>400 kV bays:</u></b>					
Indore: Ujjain 1 & 2 bay					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
400 kV bays	2	2	2	2	2
<b>Total O&amp;M Expense (₹ in lakh)</b>	<b>64.30</b>	<b>66.56</b>	<b>68.90</b>	<b>71.32</b>	<b>73.82</b>

### **Interest on Working Capital (“IWC”)**

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

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

.....

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

- (i) Receivables equivalent to 45 days of annual fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
- (iii) Operation and maintenance expenses, including security expenses for one month.”

**“(3) Rate of interest on working capital shall be on normative basis and shall be**



considered as the bank rate as on 1.4.2019 or as on 1<sup>st</sup> April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

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

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

“3. **Definitions.** - 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;”

80. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-2021 and from 2021-22 onwards as 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon are as follows:

### Combined Asset- A&B

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	65.92	68.29	70.68	73.23	75.68
Working Capital for Maintenance Spares (15% of O&M Expenses)	118.65	122.92	127.23	131.81	136.22
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost/annual transmission)	286.72	294.40	293.39	291.99	289.59



charges)					
Total Working Capital	471.29	485.60	491.30	497.02	501.48
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
<b>Interest on Working Capital</b>	<b>56.79</b>	<b>54.63</b>	<b>51.59</b>	<b>52.19</b>	<b>52.66</b>

#### Asset-C

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	3.75	3.88	4.02	4.16	4.31
Working Capital for Maintenance Spares (15% of O&M Expenses)	6.75	6.99	7.24	7.49	7.75
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost/annual transmission charges)	17.14	17.84	17.84	17.76	17.64
Total Working Capital	27.65	28.72	29.09	29.41	29.70
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
<b>Interest on Working Capital</b>	<b>3.33</b>	<b>3.23</b>	<b>3.05</b>	<b>3.09</b>	<b>3.12</b>

#### Asset-D

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	3.75	3.88	4.02	4.16	4.31
Working Capital for Maintenance Spares (15% of O&M Expenses)	6.75	6.99	7.24	7.49	7.75
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost/annual transmission charges)	16.53	17.75	18.32	18.21	18.07
Total Working Capital	27.04	28.63	29.58	29.86	30.12
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
<b>Interest on Working Capital</b>	<b>3.26</b>	<b>3.22</b>	<b>3.11</b>	<b>3.14</b>	<b>3.16</b>

#### Asset-E

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	5.36	5.55	5.74	5.94	6.15





Working Capital for Maintenance Spares (15% of O&M Expenses)	9.65	9.98	10.34	10.70	11.07
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost/annual transmission charges)	31.47	32.84	33.10	32.73	32.28
Total Working Capital	46.47	48.37	49.18	49.37	49.50
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
<b>Interest on Working Capital</b>	<b>5.60</b>	<b>5.44</b>	<b>5.16</b>	<b>5.18</b>	<b>5.20</b>

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

81. The transmission charges allowed in respect of the Combined Asset- A&B, Asset-C, Asset-D and Asset-E for 2019-24 tariff period are as follows:

#### **Combined Asset- A&B**

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	508.50	529.71	531.99	531.99	531.99
Interest on Loan	460.50	443.89	404.69	362.27	319.32
Return on Equity	515.15	540.25	543.24	543.24	543.24
O&M Expenses	791.02	819.44	848.19	878.70	908.11
Interest on Working Capital	56.79	54.63	51.59	52.19	52.66
<b>Total</b>	<b>2331.95</b>	<b>2387.93</b>	<b>2379.70</b>	<b>2368.39</b>	<b>2355.32</b>

#### **Asset-C**

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	29.20	30.95	31.14	31.14	31.14
Interest on Loan	28.65	28.48	26.45	24.10	21.74
Return on Equity	33.23	35.46	35.78	35.78	35.78
O&M Expenses	45.02	46.60	48.24	49.92	51.68
Interest on Working Capital	3.33	3.23	3.05	3.09	3.12
<b>Total</b>	<b>139.43</b>	<b>144.72</b>	<b>144.67</b>	<b>144.04</b>	<b>143.46</b>

#### **Asset-D**

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	26.88	29.90	31.56	31.56	31.56
Interest on Loan	28.74	30.07	29.55	26.98	24.38
Return on Equity	30.59	34.19	36.15	36.15	36.15



O&M Expenses	45.02	46.60	48.24	49.92	51.68
Interest on Working Capital	3.26	3.22	3.11	3.14	3.16
<b>Total</b>	<b>134.48</b>	<b>143.99</b>	<b>148.61</b>	<b>147.74</b>	<b>146.94</b>

## Asset-E

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	62.46	66.84	68.56	68.56	68.56
Interest on Loan	59.60	58.98	55.45	50.01	44.52
Return on Equity	63.99	68.57	70.41	70.41	70.41
O&M Expenses	64.30	66.56	68.90	71.32	73.82
Interest on Working Capital	5.60	5.44	5.16	5.18	5.20
<b>Total</b>	<b>255.96</b>	<b>266.39</b>	<b>268.48</b>	<b>265.48</b>	<b>262.51</b>

### Filing Fee and Publication Expenses

82. 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

83. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 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 2019-24 tariff period.

### Goods and Services Tax

84. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and



additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

85. MPPMCL has submitted that the demand of the Petitioner for GST need not to be considered at this point. In response, the Petitioner has reiterated its submission.

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

### **Security Expenses**

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

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



## Capital Spares

89. 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

90. In case of Asset-A, the transmission charges for inter-State transmission systems to be shared in accordance with the Tariff Regulations for the respective tariff periods.

91. COD of Asset-B, Asset-C, Asset-D and Asset-E is approved as 12.8.2018, 12.8.2018, 2.8.2018 and 11.1.2019 respectively under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations due to non-readiness of the downstream transmission system.

92. The status of associated downstream transmission system and the liability of payment of transmission charges is as follows:

Asset as per current status	COD approved under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations	Entity implementing associated Transmission System	COD of associated Transmission asset	Liability of transmission charges
Asset-B	12.8.2018	MSETCL	18.1.2019	<b>From 12.8.2018 to 17.1.2019:</b> transmission charges of Asset-B shall be borne by MSETCL and from 18.1.2019, the transmission charges of Asset-B shall be included in the common pool.
Asset-C	12.8.2018	MSETCL	9.10.2019	<b>From 12.8.2018 to 8.10.2019:</b> transmission charges of Asset-C shall be borne by MSETCL and from 9.10.2019, the transmission charges of Asset-



				C shall be included in the common pool.
Asset-D	2.8.2018	GED	Yet to achieve COD	The downstream transmission system has not been put into commercial operation yet. Therefore, the transmission charges of Asset-D from 2.8.2018 to till COD of downstream transmission system shall be borne by GED.
Asset-E	11.1.2019	MPPTCL	Yet to achieve COD	The downstream transmission system has not been put into commercial operation yet. Therefore, the transmission charges of Asset-E, from 11.1.2019 to till COD of downstream transmission system, shall be borne by MPPTCL.

93. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. With effect from 1.11.2020, the 2010 Sharing Regulations has been repealed and sharing of transmission charges is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.



94. To summarise:

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

(₹ in lakh)

AFC	2017-18	2018-19
Asset-A	199.59 (pro-rata 125 days)	680.89
Asset-B	0.00	815.51 (pro-rata 232 days)
Asset-C	0.00	116.66 (pro-rata 232 days)
Asset-D	0.00	113.96 (pro-rata 242 days)
Asset-E	0.00	70.45 (pro-rata 80 days)

- b. AFC allowed in respect of the Combined Asset A&B, Asset-C, Asset-D and Asset-E for 2019-24 tariff period in this order are as follows:

(₹ in lakh)

AFC	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset -A&B	2331.95	2387.93	2379.70	2368.39	2355.32
Asset-C	139.43	144.72	144.67	144.04	143.46
Asset-D	134.48	143.99	148.61	147.74	146.94
Asset-E	255.96	266.39	268.48	265.48	262.51

95. The Annexure(s) to this order form part of the order.

96. This order disposes of Petition No. 28/TT/2021 in terms of the above discussion and findings.

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

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

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

**sd/-**  
**(P. K. Pujari)**  
**Chairperson**



## Annexure-I Asset-A

2014-19	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	Allowed ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation	Depreciation as per Regulations (₹ in lakh)	
		2017-18	2018-19			2017-18	2018-19
Land - Freehold	0.00	0.00	0.00	0.00	-	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	0.00	3.34	0.00	0.00
Building Civil Works & Colony	0.00	0.00	0.00	0.00	3.34	0.00	0.00
Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00	0.00
Sub Station	1904.87	589.69	518.81	3013.37	5.28	116.14	145.41
PLCC	3.74	0.01	19.13	22.88	6.33	0.24	0.84
IT Equipment (Including Software)	0.00	0.00	0.00	0.00	5.28	0.00	0.00
<b>Total</b>	<b>1908.61</b>	<b>589.70</b>	<b>537.94</b>	<b>3036.25</b>		<b>116.38</b>	<b>146.25</b>
				<b>Average Gross Block (₹ in lakh)</b>		<b>2203.46</b>	<b>2767.48</b>
				<b>Weighted Average Rate of Depreciation</b>		<b>5.28%</b>	<b>5.29%</b>



## Annexure-I Asset-B

2014-19		Allowed ACE (₹ in lakh)			Depreciation as per Regulations (₹ in lakh)
Capital Cost	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	2018-19	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation	2018-19
Land - Freehold	0.00	0.00	0.00	-	0.00
Land - Leasehold	0.00	0.00	0.00	3.34	0.00
Building Civil Works & Colony	90.56	86.47	177.03	3.34	4.47
Transmission Line	0.00	0.00	0.00	5.28	0.00
Sub Station	4885.60	315.93	5201.53	5.28	266.30
PLCC	20.68	1.08	21.76	6.33	1.34
IT Equipment (Including Software)	295.16	18.63	313.79	5.28	16.08
<b>Total</b>	<b>5292.00</b>	<b>422.10</b>	<b>5714.11</b>		<b>288.19</b>
			<b>Average Gross Block (₹ in lakh)</b>		<b>5503.05</b>
			<b>Weighted Average Rate of Depreciation</b>		<b>5.24%</b>





## Annexure-I Asset- C

2014-19		Allowed ACE (₹ in lakh)			Depreciation as per Regulations (₹ in lakh)
Capital Cost	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	2018-19	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation	2018-19
Land - Freehold	0.00	0.00	0.00	-	0.00
Land - Leasehold	0.00	0.00	0.00	3.34	0.00
Building Civil Works & Colony	52.46	47.20	99.66	3.34	2.54
Transmission Line	0.00	0.00	0.00	5.28	0.00
Sub Station	380.24	53.52	433.76	5.28	21.49
PLCC	20.80	1.48	22.27	6.33	1.36
IT Equipment (Including Software)	0.00	0.00	0.00	5.28	0.00
<b>Total</b>	<b>453.50</b>	<b>102.19</b>	<b>555.70</b>		<b>25.39</b>
<b>Average Gross Block (₹ in lakh)</b>					<b>504.60</b>
<b>Weighted Average Rate of Depreciation</b>					<b>5.03%</b>



## Annexure-I Asset-D

2014-19		Allowed ACE (₹ in lakh)			Depreciation as per Regulations (₹ in lakh)
Capital Cost	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	2018-19	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation	2018-19
Land - Freehold	0.00	0.00	0.00	-	0.00
Land - Leasehold	0.00	0.00	0.00	3.34	0.00
Building Civil Works & Colony	24.71	95.71	120.42	3.34	2.42
Transmission Line	0.00	0.00	0.00	5.28	0.00
Sub Station	274.23	79.25	353.48	5.28	16.57
PLCC	29.13	7.31	36.44	6.33	2.08
IT Equipment (Including Software)	3.07	0.35	3.41	5.28	0.17
<b>Total</b>	<b>331.14</b>	<b>182.61</b>	<b>513.75</b>		<b>21.24</b>
<b>Average Gross Block (₹ in lakh)</b>					<b>422.45</b>
<b>Weighted Average Rate of Depreciation</b>					<b>5.03%</b>



## Annexure I Asset-E

2014-19		Allowed ACE (₹ in lakh)			Depreciation as per Regulations (₹ in lakh)
Capital Cost	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	2018-19	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation	2018-19
Land - Freehold	0.00	0.00	0.00	-	0.00
Land - Leasehold	0.00	0.00	0.00	3.34	0.00
Building Civil Works & Colony	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	5.28	0.00
Sub Station	859.95	103.52	963.47	5.28	48.14
PLCC	108.76	2.22	110.98	6.33	6.96
IT Equipment (Including Software)	9.69	3.08	12.77	5.28	0.59
<b>Total</b>	<b>978.40</b>	<b>108.82</b>	<b>1087.22</b>		<b>55.69</b>
<b>Average Gross Block (₹ in lakh)</b>					<b>1032.81</b>
<b>Weighted Average Rate of Depreciation</b>					<b>5.39%</b>



**Annexure-II Combined Asset A&B**

2019-24 Capital Cost	Admitted Opening Capital Cost as on 01.04.2019 (₹ in lakh)	Additional Capitalization (₹ in lakh)			Admitted Capital Cost as on 31.3.2024	Depreciation as per Regulation						
		2019-20	2020-21	Total Claimed		Rate of Depreciation	2019-20	2020-21	2021-22	2022-23	2023-24	
Land - Freehold	-	-	-	-	-	-	-	-	-	-	-	-
Land - Leasehold	-	-	-	-	-	3.34	-	-	-	-	-	-
Building Civil Works & Colony	177.03	199.29	55.11	254.40	431.43	3.34	9.24	13.49	14.41	14.41	14.41	14.41
Transmission Line	-	-	-	-	-	5.28	-	-	-	-	-	-
Sub Station	8,214.90	582.31	50.62	632.93	8,847.83	5.28	449.12	465.83	467.17	467.17	467.17	467.17
PLCC	44.64	0.03	0.56	0.59	45.23	6.33	2.83	2.85	2.86	2.86	2.86	2.86
IT Equipment (Including Software)	313.79	3.20	-	3.20	316.99	15.00	47.31	47.55	47.55	47.55	47.55	47.55
<b>Total</b>	<b>8,750.36</b>	<b>784.83</b>	<b>106.29</b>	<b>891.12</b>	<b>9,641.48</b>	<b>Total</b>	<b>508.50</b>	<b>529.71</b>	<b>531.99</b>	<b>531.99</b>	<b>531.99</b>	<b>531.99</b>
<b>Average Gross Block (₹ in lakh)</b>							<b>9,142.77</b>	<b>9,588.33</b>	<b>9,641.48</b>	<b>9,641.48</b>	<b>9,641.48</b>	<b>9,641.48</b>
<b>Weighted Average Rate of Depreciation</b>							<b>5.56%</b>	<b>5.52%</b>	<b>5.52%</b>	<b>5.52%</b>	<b>5.52%</b>	<b>5.52%</b>



**Annexure-II Asset C**

2019-24 Capital Cost	Admitted Opening Capital Cost as on 01.04.2019 (₹ in lakh)	Additional Capitalization (₹ in lakh)			Admitted Capital Cost as on 31.3.2024	Depreciation as per Regulation					
		2019-20	2020-21	Total Claimed		Rate of Depreciation	2019-20	2020-21	2021-22	2022-23	2023-24
Land - Freehold	-	-	-	-	-	-	-	-	-	-	-
Land - Leasehold	-	-	-	-	-	3.34	-	-	-	-	-
Building Civil Works & Colony	99.66	24.84	10.98	35.82	135.48	3.34	3.74	4.34	4.53	4.53	4.53
Transmission Line	-	-	-	-	-	5.28	-	-	-	-	-
Sub Station	433.76	43.23	0.09	43.32	477.08	5.28	24.04	25.19	25.19	25.19	25.19
PLCC	22.27	-	0.25	0.25	22.52	6.33	1.41	1.42	1.43	1.43	1.43
IT Equipment (Including Software)	-	-	-	-	-	15.00	-	-	-	-	-
<b>Total</b>	<b>555.70</b>	<b>68.07</b>	<b>11.32</b>	<b>79.39</b>	<b>635.09</b>	<b>Total</b>	<b>29.20</b>	<b>30.95</b>	<b>31.14</b>	<b>31.14</b>	<b>31.14</b>
<b>Average Gross Block (₹ in lakh)</b>							<b>589.73</b>	<b>629.43</b>	<b>635.09</b>	<b>635.09</b>	<b>635.09</b>
<b>Weighted Average Rate of Depreciation</b>							<b>4.95%</b>	<b>4.92%</b>	<b>4.90%</b>	<b>4.90%</b>	<b>4.90%</b>



**Annexure-II Asset D**

2019-24 Capital Cost	Admitted Opening Capital Cost as on 1.4.2019 (₹ in lakh)	Additional Capitalization (₹ in lakh)			Admitted Capital Cost as on 31.3.2019	Depreciation as per Regulation						
		2019-20	2020-21	Total Claimed		Rate of Depreciation	2019-20	2020-21	2021-22	2022-23	2023-24	
Land - Freehold	-	-	-	-	-	-	-	-	-	-	-	-
Land - Leasehold	-	-	-	-	-	3.34	-	-	-	-	-	-
Building Civil Works & Colony	120.42	16.95	18.97	35.92	156.34	3.34	4.31	4.90	5.22	5.22	5.22	5.22
Transmission Line	-	-	-	-	-	5.28	-	-	-	-	-	-
Sub Station	353.48	41.29	50.63	91.92	445.40	5.28	19.75	22.18	23.52	23.52	23.52	23.52
PLCC	36.44	-	0.04	0.04	36.48	6.33	2.31	2.31	2.31	2.31	2.31	2.31
IT Equipment (Including Software)	3.41	-	-	-	3.41	15.00	0.51	0.51	0.51	0.51	0.51	0.51
<b>Total</b>	<b>513.75</b>	<b>58.24</b>	<b>69.64</b>	<b>127.88</b>	<b>641.63</b>	<b>Total</b>	<b>26.88</b>	<b>29.90</b>	<b>31.56</b>	<b>31.56</b>	<b>31.56</b>	<b>31.56</b>
<b>Average Gross Block (₹ in lakh)</b>							<b>542.87</b>	<b>606.81</b>	<b>641.63</b>	<b>641.63</b>	<b>641.63</b>	<b>641.63</b>
<b>Weighted Average Rate of Depreciation</b>							<b>4.95%</b>	<b>4.93%</b>	<b>4.92%</b>	<b>4.92%</b>	<b>4.92%</b>	<b>4.92%</b>



## Annexure-II Asset E

2019-24 Capital Cost	Admitted Opening Capital Cost as on 1.4.2019 (₹ in lakh)	Additional Capitalization (₹ in lakh)			Admitted Capital Cost as on 31.3.2019	Depreciation as per Regulation						
		2019-20	2020-21	Total Claimed		Rate of Depreciation	2019-20	2020-21	2021-22	2022-23	2023-24	
Land - Freehold	-	-	-	-	-	-	-	-	-	-	-	-
Land - Leasehold	-	-	-	-	-	3.34	-	-	-	-	-	-
Building Civil Works & Colony	-	-	-	-	-	3.34	-	-	-	-	-	-
Transmission Line	-	-	-	-	-	5.28	-	-	-	-	-	-
Sub Station	963.47	80.40	65.25	145.65	1,109.12	5.28	52.99	56.84	58.56	58.56	58.56	58.56
PLCC	110.98	16.70	-	16.70	127.68	6.33	7.55	8.08	8.08	8.08	8.08	8.08
IT Equipment (Including Software)	12.77	0.01	-	0.01	12.78	15.00	1.92	1.92	1.92	1.92	1.92	1.92
<b>Total</b>	<b>1,087.22</b>	<b>97.11</b>	<b>65.25</b>	<b>162.36</b>	<b>1,249.58</b>	<b>Total</b>	<b>62.46</b>	<b>66.84</b>	<b>68.56</b>	<b>68.56</b>	<b>68.56</b>	<b>68.56</b>
<b>Average Gross Block (₹ in lakh)</b>							<b>1,135.77</b>	<b>1,216.95</b>	<b>1,249.58</b>	<b>1,249.58</b>	<b>1,249.58</b>	<b>1,249.58</b>
<b>Weighted Average Rate of Depreciation</b>							<b>5.50%</b>	<b>5.49%</b>	<b>5.49%</b>	<b>5.49%</b>	<b>5.49%</b>	<b>5.49%</b>

