

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 682/TT/2020

Coram:

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

Date of Order: 18.01.2022

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for **Asset I(A)**: Extension of 400/220 kV Sikar Sub-station with 1X500 MVA, 400/220/33 kV auto transformer along with associated bays, **Asset I(B)**: Extension of 400/220 kV Sikar Sub-station with 2 nos. 220 kV line bays, **Asset II(A)**: 400/220 kV, 500 MVA ICT along with associated bays at 400/220 kV Mainpuri Sub-station and **Asset II(B)**: 2 Numbers 220 kV line bays at 400/220 kV Mainpuri Sub-station under Augmentation of Transformation Capacity at Mainpuri and Sikar in Northern Region.

And in the matter of:

Power Grid Corporation of India Limited,
'SAUDAMINI', Plot No-2, Sector 29,
Gurgaon-122001 (Haryana)

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg,
Jaipur-302005 (Rajasthan).
2. Ajmer Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan).
3. Jaipur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan).



4. Jodhpur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan).
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004 (Himachal Pradesh).
6. Punjab State Electricity Board,
Thermal Shed Tia, Near 22 Phatak,
Patiala-147001 (Punjab).
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula-134109 (Haryana).
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001 (Uttar Pradesh).
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002.
11. BSES Yamuna Power Limited,
B-Block, 2nd Floor, Shakti Kiran Bldg.
(Near Karkardooma Courts), Karkardooma,
New Delhi-110092.
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi-110019.
13. Tata Power Delhi Distribution Limited,
NDPL House, Hudson Lines Kingsway Camp,
Delhi-110009.
14. Chandigarh Administration,
Sector-9,
Chandigarh.
15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun (Uttarakhand).



16. North Central Railway,
Allahabad (Uttar Pradesh).

17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.

.....Respondent(s)

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

For Respondents : None

ORDER

The Petitioner, Power Grid Corporation of India Limited, has filed the instant petition for truing-up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”); and determination of transmission 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 following transmission assets (hereinafter referred to as “the transmission assets”) under Augmentation of Transformation Capacity at Mainpuri and Sikar in Northern Region (hereinafter referred to as “the transmission project”):

Asset I(A): Extension of 400/220 kV Sikar Sub-station with 1X500 MVA, 400/220/33 kV auto transformer along with associated bays;

Asset-I(B): Extension of 400/220 kV Sikar Sub-station with 2 nos. 220 kV line bays;

Asset II(A): 400/220 kV, 500 MVA ICT along with associated bays at 400/220 kV Mainpuri Sub-station; and

Asset II(B): 2 Numbers 220 kV line bays at 400/220 kV Mainpuri Sub-station.

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



- “1) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 8 and 9 above.
- 2) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 8 and 9 above for respective block.
- 3) 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.
- 4) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- 5) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.
- 6) Allow the petitioner to file a separate petition before Hon’ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 9.10 above.
- 7) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 8) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

3. **Backdrop of the case**

- a) The Petitioner was entrusted with implementation of the transmission project and its scope was discussed and agreed in the 34th Standing Committee Meeting on Power System Planning of Northern Region held on 8.8.2014 and the same was approved in the 32nd Northern Regional Power Committee meeting held on 10.9.2014.



b) Investment Approval (I.A.) for the transmission project was accorded by the Board of Directors of the Petitioner company (in its 326th meeting held on 9.3.2016) vide Memorandum Ref. No. C/CP/Aug of Tfr Mainpuri & Sikar dated 11.3.2016 at an estimated cost of ₹7648.00 lakh including IDC of ₹450.00 lakh (based on October 2015 Price Level) with the broad scope of work as follows:

Sub-stations

i. 400/220 kV Mainpuri Sub-station (Extension)

400 kV

500 MVA 400/220 kV Transformer: 1
ICT bays: 1

220 kV

ICT Bays: 1
Line Bays: 1

ii. 400/220 kV Sikar Sub-station (Extension)

400 kV

500 MVA 400/220 kV Transformer: 1
ICT bays: 1

220 kV

ICT Bays: 1
Line Bays: 1

c) The Petitioner had filed Petition No. 249/TT/2017 for approval of transmission tariff of Asset-I and Asset-II (as per nomenclature in that petition) for the 2014-19 tariff period with their respective anticipated COD of 15.9.2017 and 1.9.2017. However, based on COD, the Petitioner vide affidavit dated 11.5.2018 had split Asset-I into Asset I(A), Asset I(B) and split Asset-II into Asset II(A) and Asset II(B). Asset I(B) and Asset II(B) consisted of 2 Numbers 220 kV line bays for the connectivity with the downstream system of RRVPNL and UPPTCL. The details of connecting line and the corresponding bays are as follows:

- i. 220 kV D/C line from Sikar (PG) - Sikar (RRVPN) Line or Nearby 220 kV lines (for 2 Numbers of 220 kV Bays of Asset-I) (ICT commissioning is required to mitigate critical load condition of Sikar Sub-station and 2



Numbers 220 kV line bays are anticipated to be commissioned along with ICT to avoid contractual obligation); and

- ii. 220 kV D/C Mainpuri (Bhogaon) - Neeb Karori (UPPTCL) lines (for 2 Numbers of 220 kV Bays of Asset-II) (Matching with 2 Numbers of 220 kV Bays at Manpuri Sub-station (PG).

d) As per I.A. dated 11.3.2016, the scheduled COD of the transmission assets was 10.3.2018 against which COD of Asset I(A), Asset I(B), Asset II(A) and Asset II(B), as approved by the Commission vide order dated 6.7.2018 in Petition No. 249/TT/2017 was 31.3.2018, 1.4.2018, 31.8.2017 and 5.4.2018 respectively. Further, vide that order, the time over-run of 21 days, 22 days and 26 days in respect of Asset I(A), Asset I(B) and Asset II(B) was condoned and the transmission tariff of Asset I(A), Asset I(B), Asset II(A) and Asset II(B) for the period from their respective COD to 31.3.2019 was also determined.

e) The scope of work with respect to the transmission project that is falling under the Petitioner's ambit is complete and is covered in the instant petition but the downstream scope of work under the ambit of RRVPNL is still incomplete and has not achieved COD. Accordingly, while determining the tariff for the 2019-24 period in the relevant portions of this order, due consideration has been given to the said incompleteness.

4. The Respondents are distribution licensees, power departments, power utilities and transmission licensees, which are procuring transmission services from the Petitioner, mainly beneficiaries of Northern Region.

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or objections have been received from the general public in response to the aforesaid notices published in the newspapers. None of the respondents have filed any reply in this matter.



6. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 20.1.2020 and the additional information filed by the Petitioner vide affidavit dated 18.8.2021.

7. The hearing in this matter was held on 31.8.2021 through video conference and the order was reserved. Having heard the representatives of the Petitioner and after perusal of the materials on record, we proceed to dispose of the petition.

Truing-up of Annual Fixed Charges for the 2014-19 Tariff Period

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

(₹ in lakh)

Asset I(A)		
Particulars	2017-18 (Pro-rata for 1 day)	2018-19
Depreciation	0.27	107.66
Interest on Loan	0.27	104.21
Return on Equity	0.30	119.36
Interest on Working Capital	0.03	13.12
O&M Expenses	0.31	116.81
Total	1.18	461.16

(₹ in lakh)

Asset I(B)	
Particulars	2018-19
Depreciation	24.75
Interest on Loan	21.02
Return on Equity	23.63
Interest on Working Capital	6.23
O&M Expenses	96.20
Total	171.83

(₹ in lakh)

Asset II(A)		
Particulars	2017-18 (Pro-rata for 213 days)	2018-19
Depreciation	60.42	110.89
Interest on Loan	58.05	100.51
Return on Equity	67.64	124.49
Interest on Working Capital	7.39	13.22
O&M Expenses	65.97	116.81
Total	259.47	465.92



(₹ in lakh)

Asset II(B)	
Particulars	2018-19 (Pro-rata for 361 days)
Depreciation	28.51
Interest on Loan	26.40
Return on Equity	31.06
Interest on Working Capital	6.53
O&M Expenses	95.15
Total	187.65

9. The details of the trued-up Interest on Working Capital (IWC) as claimed by the Petitioner in respect of the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

Asset I(A)		
Particulars	2017-18 (Pro-rata for 1 day)	2018-19
Maintenance Spares	9.42	9.73
O&M Expenses	16.96	17.52
Receivables	72.01	76.86
Total	98.39	104.11
Rate of Interest (in %)	12.60	12.60
Total	0.03	13.12

(₹ in lakh)

Asset I(B)	
Particulars	2018-19
Maintenance Spares	8.02
O&M Expenses	14.43
Receivables	28.64
Total	51.09
Rate of Interest (in %)	12.20
Total	6.23

(₹ in lakh)

Asset II(A)		
Particulars	2017-18 (Pro-rata for 213 days)	2018-19
Maintenance Spares	9.42	9.73
O&M Expenses	16.96	17.52
Receivables	74.11	77.65
Total	100.49	104.90
Rate of Interest (in %)	12.60	12.60
Total	7.39	13.22



(₹ in lakh)

Asset II(B)	
Particulars	2018-19 (Pro-rata for 361 days)
Maintenance Spares	8.02
O&M Expenses	14.43
Receivables	31.62
Total	54.07
Rate of Interest (in %)	12.20
Total	6.53

Capital Cost

10. The Petitioner has submitted the details of apportioned approved cost as per FR, cost as on COD, as on 31.3.2019 and Additional Capital Expenditure (ACE) during the 2014-19 period with respect to the transmission assets as admitted by the Commission vide order dated 6.7.2018 in Petition No. 249/TT/2017 as follows:

(₹ in lakh)

Asset	Apportioned approved cost as per FR	Admitted Cost (as on COD)	ACE		Admitted Cost (as on 31.3.2019)
			2017-18	2018-19	
Asset I(A)	3041.50	1870.98	0.00	342.99	2172.17
Asset I(B)	790.55	436.45	0.00	71.03	471.97
Asset II(A)	3021.78	1875.33	1.34	194.48	2071.15
Asset II(B)	794.46	510.74	0.00	78.88	589.62

11. The Petitioner has submitted Auditor's Certificates dated 11.12.2019 [with respect to Asset I(A) and Asset I(B)] and dated 19.12.2019 [with respect to Asset II(A) and Asset II(B)] wherein the details of claimed capital cost up to COD along with claimed ACE up to 31.3.2019 has been mentioned as follows:

(₹ in lakh)

Asset	Apportioned approved cost as per FR	Admitted Cost (as on COD)	ACE		Cost (as on 31.3.2019)
			2017-18	2018-19	
Asset I(A)	3041.50	1870.98	0.00	327.19	2198.17
Asset I(B)	790.55	385.19	0.00	36.44	421.63
Asset II(A)	3021.78	1890.86	169.39	94.18	2154.43
Asset II(B)	794.46	523.86	0.00	25.04	548.90



12. We have considered the submissions and claims of the Petitioner regarding capital cost and ACE and have given our findings on the same in the relevant portions of this order.

Cost Over-run

13. The Petitioner has submitted the details of the completion cost with respect to the transmission assets as on 31.3.2019 in this petition and has further submitted that the same is within the apportioned approved cost as per FR.

14. We have considered the submissions of the Petitioner and based on the Auditor's Certificates submitted, we observe that the completion cost as on 31.3.2019 with respect to the transmission assets is within the apportioned approved cost as per FR. Therefore, there is no cost over-run in this case.

Time Over-run

15. As per I.A. dated 11.3.2016, the scheduled COD of the transmission assets was 10.3.2018 against which COD of Asset I(A), Asset I(B), Asset II(A) and Asset II(B), as approved by the Commission vide order dated 6.7.2018 in Petition No. 249/TT/2017 was 31.3.2018, 1.4.2018, 31.8.2017 and 5.4.2018 respectively. Further, vide the same order, the time over-run of 21 days, 22 days and 26 days in the respective commissioning of Asset I(A), Asset I(B) and Asset II(B) was also condoned.

Interest During Construction (IDC)

16. The Petitioner has submitted that accrued IDC as on COD was not considered while calculating the tariff as the same was un-discharged up to COD. Further, the accrued IDC has been taken out of expenditure as on COD and added in ACE, when it has been discharged. The statement of cash IDC and Auditor's Certificates has



been submitted in this petition. The Petitioner has submitted the details of actual expenditure up to COD and ACE after considering cash IDC with respect to the transmission assets in this petition. Therefore, the Petitioner has requested to allow IDC on the basis of cash outflow.

17. We have considered the submissions and claims of the Petitioner and note that Auditor's Certificates have been submitted with respect to IDC claims. The computation of IDC along with year-wise details of IDC discharged has also been submitted.

18. In view of the foregoing, IDC has been worked out considering the information submitted by the Petitioner for individual assets separately on cash basis. Further, the loan details submitted in Form-9C for the 2014-19 tariff period and the IDC computation sheet have been considered for the purpose of IDC calculation on cash and accrued basis. Also, the un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.

19. We note that IDC allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017 involved loans from SBI and ICICI having floating rate of interest. In accordance with Regulation 8(1) of the 2014 Tariff Regulations, IDC has been recomputed based on the information filed by the Petitioner. Accordingly, amount of IDC considered after truing-up is as follows:

(₹ in lakh)					
Asset	IDC as per Auditor's Certificates	Entitled IDC up to Scheduled COD	IDC disallowed as on Scheduled COD due to computation difference	Un-discharged portion of entitled IDC (as on Scheduled COD)	IDC allowed on cash basis (as on Scheduled COD)
	A	B	C=(A-B)	D	E=(B-D)
Asset I(A)	57.82	57.12	0.70	41.14	15.98
Asset I(B)	21.93	21.78	0.15	9.17	12.61
Asset II(A)	34.02	33.95	0.07	15.47	18.49
Asset II(B)	19.26	19.07	0.19	12.92	6.15



Incidental Expenditure During Construction (IEDC)

20. The Petitioner has submitted that IEDC has been discharged up to COD and Auditor's Certificates have been submitted in this petition.

21. We have considered the submissions and claims of the Petitioner and observe that IEDC claim with respect to the transmission assets is supported by the Auditor's Certificates. The claimed IEDC is within the percentage of hard cost of 10.75% as indicated in FR abstract cost estimate. Accordingly, IEDC is allowed as claimed in this petition. The details of claimed and allowed IEDC with respect to the transmission assets are as follows:

Asset	(₹ in lakh)		
	IEDC claimed as per Auditor's Certificates 1	IEDC dis-allowed due to time over-run 2	IEDC allowed (as on COD) 3=(1-2)
Asset I(A)	38.40	0.00	38.40
Asset I(B)	6.97	0.00	6.97
Asset II(A)	22.28	0.00	22.28
Asset II(B)	25.07	0.00	25.07

Initial Spares

22. The Petitioner has submitted that the Commission vide order dated 6.7.2018 in Petition No. 249/TT/2017 had allowed Initial Spares with respect to the transmission assets as the same were within ceiling specified under the 2014 Tariff Regulations. However, the same is re-calculated based on completion cost as per the Auditor's Certificates and is within the limit. Further, the calculation of Initial Spares has been submitted in this petition.

23. We have considered the submissions and claim of the Petitioner and observe that the Petitioner's claim of Initial Spares with respect to the transmission assets is within the norms specified in Regulation 13(d) of the 2014 Tariff Regulations and is, accordingly, allowed as follows:



Asset	Plant & Machinery cost up to cut-off date (excluding IDC and IEDC as per Auditor's Certificates) (₹ in lakh) (A)	Initial Spares claimed (₹ in lakh) (B)	Ceiling Limit (in %) (C)	Allowable Initial Spares worked out	Excess Initial Spares (₹ in lakh)	Initial Spares allowed (₹ in lakh)
				$D = [(A-B) * C / (100-C)]$		
Asset I(A)	2339.95	111.60	6	142.24	0.00	111.60
Asset I(B)	464.73	20.92	6	28.33	0.00	20.92
Asset II(A)	2319.06	104.11	6	141.38	0.00	104.11
Asset II(B)	611.48	20.30	6	37.73	0.00	20.30

Capital Cost as on COD

24. Accordingly, the details of the capital cost approved as on COD after adjustment of IDC, IEDC and Initial Spares are as follows:

Asset	Capital Cost (as on 1.4.2014 or COD whichever is later as per Auditor's Certificates)	Less: IDC as on COD due to		Less: IEDC disallowed (as on COD)	Excess Initial Spares	Capital Cost considered (as on 1.4.2014 or COD whichever is later)
		Computation difference	Un-discharged			
Asset I(A)	1870.98	0.70	41.14	0.00	0.00	1829.14
Asset I(B)	385.19	0.15	9.17	0.00	0.00	375.87
Asset II(A)	1890.86	0.07	15.47	0.00	0.00	1875.33
Asset II(B)	523.86	0.19	12.92	0.00	0.00	510.75

Additional Capital Expenditure

25. The Petitioner vide Auditor's Certificates dated 11.12.2019 and 19.12.2019 has claimed the actual ACE in respect of the transmission assets during the 2014-19 tariff period as follows:

Asset	ACE (₹ in lakh)	
	ACE	
	2017-18	2018-19
Asset I(A)	0.00	327.19
Asset I(B)	0.00	36.44
Asset II(A)	169.39	94.18
Asset II(B)	0.00	25.04

26. The Petitioner has submitted that the admissibility of ACE incurred after COD and up to cut-off date is to be dealt in accordance with Regulation 14(1)(i) of the 2014 Tariff Regulations and the admissibility of ACE incurred after cut-off date is to be dealt in accordance with Regulation 14(3)(i) of the 2014 Tariff Regulations. Also, ACE with



respect to the transmission assets is within cut-off date and is accordingly claimed as per Regulation 14(1)(i) of the 2014 Tariff Regulations.

27. The Petitioner has submitted that ACE incurred in 2017-18 and 2018-19 is on account of Balance and Retention payments due to un-discharged liability for works executed within cut-off date/ work deferred for execution. Also, the details of ACE with respect to the transmission assets are given in Form-7 in this petition.

28. The Petitioner vide affidavit dated 18.8.2021 has submitted vendor-wise break-up of ACE claimed during the 2014-19 period with respect to the transmission assets.

29. We have considered the submissions of the Petitioner and note that ACE claimed includes the accrued IDC discharged during the 2014-19 tariff period. Also, the total estimated completion cost including ACE for the 2014-19 period is within the approved apportioned cost.

30. In view of the foregoing, ACE claimed by the Petitioner is allowed under Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations as it is towards Balance and Retention payments and for works deferred for execution. Further, the un-discharged IDC as on COD is allowed as ACE. The details of ACE allowed with respect to the transmission assets for the 2014-19 tariff period are as follows:

Asset I(A)	ACE
	2018-19
ACE to the extent of Balance and Retention Payments and works deferred for execution/ ACE to the extent of unexecuted works	327.19
Add: IDC Discharged	41.14
Total ACE allowed	368.33



(₹ in lakh)

Asset I(B)	ACE	
	2018-19	
ACE to the extent of Balance and Retention Payments and work deferred for execution/ ACE to the extent of unexecuted works	36.44	
Add: IDC Discharged	9.17	
Total ACE allowed	45.61	

(₹ in lakh)

Asset II(A)	ACE	
	2017-18	2018-19
ACE to the extent of Balance and Retention Payments and works deferred for execution	169.39	94.18
Add: IDC Discharged	1.33	14.14
Total ACE allowed	170.72	108.32

(₹ in lakh)

Asset II(B)	ACE	
	2018-19	
ACE to the extent of Balance and Retention Payments and works deferred for execution	25.04	
Add: IDC Discharged	12.92	
Total ACE allowed	37.96	

Capital Cost for the 2014-19 tariff period

31. In view of the above, the details of the allowed capital cost as on COD, as on 31.3.2019 and ACE during the 2014-19 tariff period in respect of the transmission assets are as follows:

(₹ in lakh)

Asset	Capital Cost (as on COD on cash basis)	ACE allowed		Capital Cost (as on 31.3.2019)
		2017-18	2018-19	
Asset I(A)	1829.14	0.00	368.33	2197.47
Asset I(B)	375.87	0.00	45.61	421.48
Asset II(A)	1875.33	170.72	108.32	2154.37
Asset II(B)	510.75	0.00	37.96	548.71

Debt-Equity Ratio

32. The Petitioner has claimed debt-equity ratio of 70:30 as on COD and for ACE post COD. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during the 2014-19 period as provided under Regulation 19 of the



2014 Tariff Regulations. The details of the debt-equity ratio as on COD and 31.3.2019 considered for the purpose of truing up of tariff for the 2014-19 tariff period is as follows:

Funding Asset I(A)	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	1280.39	70.00	1538.23	70.00
Equity	548.74	30.00	659.24	30.00
Total	1829.14	100.00	2197.47	100.00
Funding Asset I(B)	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	263.12	70.00	295.05	70.00
Equity	112.76	30.00	126.44	30.00
Total	375.87	100.00	421.48	100.00
Funding Asset II(A)	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	1312.73	70.00	1508.06	70.00
Equity	562.60	30.00	646.31	30.00
Total	1875.33	100.00	2154.37	100.00
Funding Asset II(B)	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	357.53	70.00	384.11	70.00
Equity	153.22	30.00	164.60	30.00
Total	510.75	100.00	548.71	100.00

Depreciation

33. Depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations after considering capital expenditure as on 1.4.2014 and approved ACE during the 2014-19 tariff period. The Gross Block during the 2014-19 tariff period with respect to the transmission assets has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD at Annexure-I has been worked out after taking into account the depreciation rates of assets as specified in the 2014 Tariff Regulations and the trued-up allowed for the transmission assets during the 2014-19 tariff period is as follows:



(₹ in lakh)

Asset I(A)		
Particulars	2017-18 (Pro-rata for 1 day)	2018-19
Opening Gross Block	1829.14	1829.14
Additional Capitalisation	0.00	368.33
Closing Gross Block	1829.14	2197.47
Average Gross Block	1829.14	2013.30
Weighted Average Rate of Depreciation (WAROD) (in %)	5.28	5.28
Balance useful life at the beginning of the year (Year)	25	25
Aggregated Depreciable Value	1646.22	1811.97
Remaining Aggregated Depreciable Value	1645.96	1705.40
Combined Depreciation during the year	0.26	106.30

(₹ in lakh)

Asset I(B)	
Particulars	2018-19 (Pro-rata for 1 day)
Opening Gross Block	375.87
Additional Capitalisation	45.61
Closing Gross Block	421.48
Average Gross Block	398.68
Weighted Average Rate of Depreciation (WAROD) (in %)	5.53
Balance useful life at the beginning of the year (Year)	21
Aggregated Depreciable Value	358.81
Remaining Aggregated Depreciable Value	336.76
Combined Depreciation during the year	22.05

(₹ in lakh)

Asset II(A)		
Particulars	2017-18 (Pro-rata for 213 days)	2018-19
Opening Gross Block	1875.33	2046.05
Additional Capitalisation	170.72	108.32
Closing Gross Block	2046.05	2154.37
Average Gross Block	1960.69	2100.21
Weighted Average Rate of Depreciation (WAROD) (in %)	5.28	5.28
Balance useful life at the beginning of the year (Year)	25	25
Aggregated Depreciable Value	1764.62	1890.19
Remaining Aggregated Depreciable Value	1704.21	1718.88
Combined Depreciation during the year	60.41	110.89



(₹ in lakh)

Asset II(B)	
Particulars	2018-19 (Pro-rata for 361 days)
Opening Gross Block	510.75
Additional Capitalisation	37.96
Closing Gross Block	548.71
Average Gross Block	529.73
Weighted Average Rate of Depreciation (WAROD) (in %)	5.44
Balance useful life at the beginning of the year (Year)	23
Aggregated Depreciable Value	476.76
Remaining Aggregated Depreciable Value	448.24
Combined Depreciation during the year	28.52

34. Depreciation with respect to the transmission assets as allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)			
Asset	Particulars	2017-18	2018-19
Asset I(A)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.26	105.64
	Claimed by the Petitioner in the instant petition	0.27	107.66
	Approved in the instant order	0.26	106.30
Asset I(B)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.00	26.05
	Claimed by the Petitioner in the instant petition	0.00	24.75
	Approved in the instant order	0.00	22.05
Asset II(A)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	57.80	104.22
	Claimed by the Petitioner in the instant petition	60.42	110.89
	Approved in the instant order	60.41	110.89
Asset II(B)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.00	29.61
	Claimed by the Petitioner in the instant petition	0.00	28.51
	Approved in the instant order	0.00	28.52

Interest on Loan (IoL)

35. The Petitioner has submitted that while filing tariff petition for the 2014-19 period, the Petitioner had prayed for allowing the floating rate of IoL adjustments and as per the order dated 6.7.2018 in Petition No. 249/TT/2017, it was stated that Weighted Average Rate of Interest (WAROI) on loan had been considered on the



basis of rate prevailing as on 1.4.2014 and, accordingly, the floating rate of interest on actual, applicable from time to time, if any, during 2014-19 tariff will be considered at the time of true up.

36. We have considered the submissions of the Petitioner. IoL has been calculated based on actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of the trued-up IoL allowed for the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

Asset I(A)		
Particulars	2017-18 (Pro-rata for 1 day)	2018-19
Gross Normative Loan	1280.39	1280.39
Cumulative Repayments up to Previous Year	0.00	0.26
Net Loan-Opening	1280.39	1280.13
Addition due to Additional Capitalization	0.00	257.83
Repayment during the year	0.26	106.30
Net Loan-Closing	1280.13	1431.66
Average Loan	1280.26	1355.89
Weighted Average Rate of Interest on Loan (in %)	7.634	7.688
Interest on Loan	0.27	104.24

(₹ in lakh)

Asset I(B)	
Particulars	2018-19
Gross Normative Loan	263.12
Cumulative Repayments up to Previous Year	0.00
Net Loan-Opening	263.12
Addition due to Additional Capitalization	31.93
Repayment during the year	22.05
Net Loan-Closing	273.00
Average Loan	268.06
Weighted Average Rate of Interest on Loan (in %)	7.880
Interest on Loan	21.12



(₹ in lakh)

Asset II(A)		
Particulars	2017-18 (Pro-rata for 213 days)	2018-19
Gross Normative Loan	1312.73	1432.23
Cumulative Repayments up to Previous Year	0.00	60.41
Net Loan-Opening	1312.73	1371.82
Addition due to Additional Capitalization	119.50	75.82
Repayment during the year	60.41	110.89
Net Loan-Closing	1371.82	1336.75
Average Loan	1342.27	1354.29
Weighted Average Rate of Interest on Loan (in %)	7.410	7.421
Interest on Loan	58.05	100.51

(₹ in lakh)

Asset II(B)	
Particulars	2018-19 (Pro-rata for 361 days)
Gross Normative Loan	357.53
Cumulative Repayments up to Previous Year	0.00
Net Loan-Opening	357.53
Addition due to Additional Capitalization	26.58
Repayment during the year	28.52
Net Loan-Closing	355.59
Average Loan	356.56
Weighted Average Rate of Interest on Loan (in %)	7.483
Interest on Loan	26.39

37. IoL in respect of the transmission assets as allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Asset	Particulars	2017-18	2018-19
Asset I(A)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.26	103.35
	Claimed by the Petitioner in the instant petition	0.27	104.21
	Approved in the instant order	0.27	104.24
Asset I(B)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.00	24.06
	Claimed by the Petitioner in the instant petition	0.00	21.02
	Approved in the instant order	0.00	21.12
Asset II(A)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	55.80	94.70
	Claimed by the Petitioner in the instant petition	58.05	100.51
	Approved in the instant order	58.05	100.51
Asset II(B)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.00	27.35



	Claimed by the Petitioner in the instant petition	0.00	26.40
	Approved in the instant order	0.00	26.39

Return on Equity (RoE)

38. The Petitioner has claimed RoE for the transmission assets in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at Minimum Alternate Tax (MAT) rates and has claimed effective tax rates for the 2014-19 tariff period as follows:

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

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

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

40. RoE is trued-up on the basis of the MAT rates applicable in the respective years and is allowed in respect of the transmission assets for the 2014-19 tariff period as follows:



(₹ in lakh)

Asset I(A)		
Particulars	2017-18 (Pro-rata for 1 day)	2018-19
Opening Equity	548.74	548.74
Addition due to Additional Capitalization	0.00	110.50
Closing Equity	548.74	659.24
Average Equity	548.74	603.99
Return on Equity (Base Rate) (in %)	15.500	15.500
Tax Rate applicable (in %)	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.758
Return on Equity (Pre-tax)	0.30	119.34

(₹ in lakh)

Asset I(B)	
Particulars	2018-19
Opening Equity	112.76
Addition due to Additional Capitalization	13.68
Closing Equity	126.44
Average Equity	119.60
Return on Equity (Base Rate) (in %)	15.500
Tax Rate applicable (in %)	21.549
Rate of Return on Equity (Pre-tax)	19.758
Return on Equity (Pre-tax)	23.63

(₹ in lakh)

Asset II(A)		
Particulars	2017-18 (Pro-rata for 213 days)	2018-19
Opening Equity	562.60	613.81
Addition due to Additional Capitalization	51.22	32.50
Closing Equity	613.81	646.31
Average Equity	588.21	630.06
Return on Equity (Base Rate) (in %)	15.500	15.500
Tax Rate applicable (in %)	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.758
Return on Equity (Pre-tax)	67.64	124.49

(₹ in lakh)

Asset II(B)	
Particulars	2018-19 (Pro-rata for 361 days)
Opening Equity	153.22
Addition due to Additional Capitalization	11.38
Closing Equity	164.60
Average Equity	158.91
Return on Equity (Base Rate) (in %)	15.500
Tax Rate applicable (in %)	21.549
Rate of Return on Equity (Pre-tax)	19.758
Return on Equity (Pre-tax)	31.05



41. RoE in respect of the transmission assets as allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

		(₹ in lakh)	
Asset	Particulars	2017-18	2018-19
Asset I(A)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.29	117.70
	Claimed by the Petitioner in the instant petition	0.30	119.36
	Approved in the instant order	0.30	119.34
Asset I(B)	Allowed vide Order dated 6.7.2018 in Petition No. 249/TT/2017	0.00	27.77
	Claimed by the Petitioner in the instant petition	0.00	23.63
	Approved in the instant order	0.00	23.63
Asset II(A)	Allowed vide Order dated 6.7.2018 in Petition No. 249/TT/2017	64.40	116.12
	As claimed by the Petitioner	67.64	124.49
	Approved after Truing Up	67.64	124.49
Asset II(B)	Allowed vide Order dated 6.7.2018 in Petition No. 249/TT/2017	0.00	32.01
	Claimed by the Petitioner in the instant petition	0.00	31.06
	Approved in the instant order	0.00	31.05

Operation & Maintenance Expenses (O&M Expenses)

42. O&M Expenses in respect of the various elements covered under the transmission assets as claimed by the Petitioner are within the norms specified under the 2014 Tariff Regulations and the allowable O&M expenses are as follows:

		(₹ in lakh)	
Asset I(A)			
Particulars		2017-18(Pro-rata for 1 day)	2018-19
Sub-station bays			
400 kV Sikar: ICT Bay		1	1
220 kV Sikar: ICT Bay		1	1
Norm (₹ lakh/bay)			
400 kV (AIS)		66.51	68.71
220 kV (AIS)		46.55	48.10
Total Sub-station O&M Expenses		113.06	116.81
Total O&M Expenses		0.31	116.81



(₹ in lakh)

Asset I(B)	
Particulars	2018-19
Sub-station bays	
220 kV Line Bay 1 and 2	2
Norm (₹ lakh/bay)	
220 kV (AIS)	48.10
Total Sub-station O&M Expenses	
Total O&M Expenses	96.20

(₹ in lakh)

Asset II(A)		
Particulars	2017-18 (Pro-rata for 213 days)	2018-19
Sub-station bays		
400 kV Mainpur: ICT Bay 1	1	1
220 kV Mainpur: ICT Bay 2		
Norm (₹ lakh/bay)		
400 kV (AIS)	66.51	68.71
220 kV (AIS)	46.55	48.10
Total Sub-station O&M Expenses	113.06	116.81
Total O&M Expenses	65.98	116.81

(₹ in lakh)

Asset II(B)	
Particulars	2018-19 (Pro-rata for 361 days)
Sub-station bays	
220 kV Mainpuri Line Bay 1 and 2	2
Norm (₹ lakh/bay)	
220 kV (AIS)	48.10
Total Sub-station O&M	96.20
Total O&M Expenses	95.15

43. O&M Expenses in respect of the transmission assets as allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Asset	Particulars	2017-18	2018-19
Asset I(A)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.31	116.81
	Claimed by the Petitioner in the instant petition	0.31	116.81
	Approved in the instant order	0.31	116.81
Asset I(B)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.00	96.20
	Claimed by the Petitioner in the instant petition	0.00	96.20
	Approved in the instant order	0.00	96.20
Asset II(A)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	54.33	96.20
	Claimed by the Petitioner in the instant petition	65.98	116.81



	Approved in the instant order	65.98	116.81
Asset II(B)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.00	95.13
	Claimed by the Petitioner in the instant petition	0.00	95.15
	Approved in the instant order	0.00	95.15

Interest on Working Capital

44. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and the details of the trued-up IWC approved in respect of the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

Asset I(A)		
Particulars	2017-18 (Pro-rata for 1 day)	2018-19
Working Capital for O&M Expenses (O&M expenses for One month)	9.42	9.73
Working Capital for Maintenance Spares (15% of O&M expenses)	16.96	17.52
Working Capital for Receivables (Equivalent to two months of annual fixed cost / annual transmission charges)	71.30	76.63
Total Working Capital	97.68	103.89
Rate of Interest (in %)	12.60	12.60
Interest of Working Capital	0.03	13.09

(₹ in lakh)

Asset I(B)	
Particulars	2018-19
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 cost / annual transmission charges)	28.20
Total Working Capital	50.64
Rate of Interest (in %)	12.20
Interest of Working Capital	6.18

(₹ in lakh)

Asset II(A)		
Particulars	2017-18 (Pro-rata for 213 days)	2018-19
Working Capital for O&M Expenses (O&M expenses for One month)	9.42	9.73
Working Capital for Maintenance Spares (15% of O&M expenses)	16.96	17.52
Working Capital for Receivables (Equivalent to two months of annual fixed cost / annual transmission charges)	74.10	77.65
Total Working Capital	100.48	104.91



Rate of Interest (in %)	12.60	12.60
Interest of Working Capital	7.39	13.22

(₹ in lakh)

Asset II(B)	
Particulars	2018-19 (Pro-rata for 361 days)
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 cost / annual transmission charges)	31.62
Total Working Capital	54.06
Rate of Interest (in %)	12.20
Interest of Working Capital	6.52

45. IWC in respect of the transmission assets as allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Asset	Particulars	2017-18	2018-19
Asset I(A)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.03	12.15
	Claimed by the Petitioner in the instant petition	0.03	13.12
	Approved in the instant order	0.03	13.09
Asset I(B)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.00	6.73
	Claimed by the Petitioner in the instant petition	0.00	6.23
	Approved in the instant order	0.00	6.18
Asset II(A)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	6.72	11.90
	Claimed by the Petitioner in the instant petition	7.39	13.22
	Approved in the instant order	7.39	13.22
Asset II(B)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.00	6.92
	Claimed by the Petitioner in the instant petition	0.00	6.53
	Approved in the instant order	0.00	6.52

Approved Annual Fixed Charges for the 2014-19 Tariff Period

46. The annual fixed charges in respect of the transmission assets after truing-up for the 2014-19 tariff period are as follows:



(₹ in lakh)

Asset-I (A)		
Particulars	2017-18 (Pro-rata for 1 day)	2018-19
Depreciation	0.26	106.30
Interest on Loan	0.27	104.24
Return on Equity	0.30	119.34
O&M Expenses	0.31	116.81
Interest on Working Capital	0.03	13.09
Total	1.17	459.78

(₹ in lakh)

Asset- I (B)	
Particulars	2018-19
Depreciation	22.05
Interest on Loan	21.12
Return on Equity	23.63
O&M Expenses	96.20
Interest on Working Capital	6.18
Total	169.18

(₹ in lakh)

Asset-II (A)		
Particulars	2017-18 (Pro-rata for 213 days)	2018-19
Depreciation	60.41	110.89
Interest on Loan	58.05	100.51
Return on Equity	67.64	124.49
O&M Expenses	65.98	116.81
Interest on Working Capital	7.39	13.22
Total	259.46	465.91

(₹ in lakh)

Asset- II (B)	
Particulars	2018-19 (Pro-rata for 361 days)
Depreciation	28.52
Interest on Loan	26.39
Return on Equity	31.05
O&M Expenses	95.15
Interest on Working Capital	6.52
Total	187.63

47. Accordingly, AFC allowed for Asset-I (A), Asset-I(B), Asset-II(A) and Asset-II(B) vide order dated 6.7.2018 in Petition No. 249/TT/2017, as claimed by the Petitioner in the instant petition and as trued-up in the instant order are as follows:

(₹ in lakh)

Asset	Particulars	2017-18	2018-19
Asset I(A)	Allowed vide order dated 6.7.2018 in Petition No.	1.09	435.04



	249/TT/2017		
	Claimed by the Petitioner in the instant petition	1.18	461.16
	Approved in the instant order	1.17	459.78
Asset I(B)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.00	180.81
	Claimed by the Petitioner in the instant petition	0.00	171.83
	Approved in the instant order	0.00	169.18
Asset II(A)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	239.05	423.14
	Claimed by the Petitioner in the instant petition	259.47	465.92
	Approved in the instant order	259.46	465.91
Asset II(B)	Allowed vide order dated 6.7.2018 in Petition No. 249/TT/2017	0.00	191.02
	Claimed by the Petitioner in the instant petition	0.00	187.65
	Approved in the instant order	0.00	187.63

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

48. The Petitioner has combined the transmission assets [combined Asset I(A), Asset I(B), Asset II(A) and Asset II(B)] into one single asset and has claimed combined tariff and has submitted tariff forms. During the course of hearing held on 31.8.2021, the Petitioner submitted that the downstream system of RRVPNL with respect to Asset-I(B) is yet to be commissioned. Accordingly, as per proviso (i) to Regulation 8(1) of the 2019 Tariff Regulations, tariff for Combined Asset [consisting of Asset I(A), Asset II(A) and Asset II(B)] and Asset-I(B) has been worked out separately for the 2019-24 tariff period in this order.

49. The details of the transmission charges for combined Asset I(A), Asset I(B), Asset II(A) and Asset II(B) for the 2019-24 tariff period as claimed by the Petitioner in this petition are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	300.86	318.21	321.74	321.74	321.74
Interest on Loan	260.69	254.07	232.93	208.31	183.78
Return on Equity	314.35	332.32	335.87	335.87	335.87
Interest on Working Capital	22.05	22.83	22.93	22.89	22.81
O&M Expenses	203.63	210.63	217.89	225.35	233.13
Total	1101.58	1138.06	1131.36	1114.16	1097.33



50. The details of IWC in respect for combined Asset I(A), Asset I(B), Asset II(A) and Asset II(B) for the 2019-24 tariff period as claimed by the Petitioner in this petition are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	16.97	17.55	18.16	18.78	19.43
Maintenance Spares	30.54	31.59	32.68	33.80	34.97
Receivables	135.44	140.31	139.48	137.36	134.92
Total Working Capital	182.95	189.45	190.32	189.94	189.32
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	22.05	22.83	22.93	22.89	22.81

Effective Date of Commercial Operation (E-COD)

51. The Petitioner has claimed E-COD of the combined Asset I(A), Asset I(B), Asset II(A) and Asset II(B) as 2.6.2018. However, based on the trued-up capital cost and COD of Asset I(A), Asset II(A) and Asset II(B), E-COD of the Combined Asset has been worked out as follows:

Asset	COD	Admitted Capital Cost (as on 31.3.2019) (₹ in lakh)	Weightage of cost (in %)	Number of days from last COD	Weighted days	E-COD (Latest COD - Total Weighted days)
Asset I(A)	31.3.2018	2197.47	44.84	5	2.24	28.12.2017
Asset II(A)	31.8.2017	2154.37	43.96	217	95.40	
Asset II(B)	5.4.2018	548.71	11.20	0	0.00	

52. E-COD is used to determine the lapsed life of the transmission project as a whole, which works out as 1 (one) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (WAL)

53. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of WAL.

54. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have different span



of life. Therefore, the concept of WAL has been used as the useful life of the transmission project as a whole.

55. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as specified in the 2019 Tariff Regulations. Accordingly, WAL of Combined Asset has been worked out as 25 years as follows:

Particulars	Capital Cost (as on 31.3.2019) (₹ in lakh) (1)	Life (in years) (2)	Weighted Cost (₹ in lakh) (3)=(1)x(2)	WAL (in years) (4)=(3)/(1)
Sub-station Equipment	4802.60	25	120064.90	24.78 years (rounded off to 25 years)
PLCC	84.29	15	1264.35	
IT Equipment and Software	13.66	6.67	91.05	
Total	4900.54		121420.30	

56. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for the 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed, E-COD of Combined Asset is 28.12.2017 and the lapsed life of the transmission project as a whole works out as 1 (one) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 24 years.

Capital Cost

57. Regulations 19(3) and 19(5) of the 2019 Tariff Regulations provide as follows:

“19. Capital Cost

...

(3) *The Capital cost of an existing project shall include the following:*

- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
- (b) *Additional Capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
- (c) *Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;*



- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”

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

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

Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be 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.”

58. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, sub-station and PLCC) as admitted by the Commission as on 31.3.2019 in this order for Asset I(A), Asset II(A) and Asset II(B) is clubbed together as follows:

(₹ in lakh)				
Element	Asset I(A)	Asset II(A)	Asset II(B)	Capital Cost for Combined Asset (as on 31.3.2019)
Sub-station Equipment	2183.81	2154.37	464.42	4802.60
PLCC	0.00	0.00	84.29	84.29
IT Equipment and Software	13.66	0.00	0.00	13.66
Total	2197.47	2154.37	548.71	4900.54



59. Similarly, capital cost for Asset I(B) as admitted by the Commission as on 31.3.2019 is as follows:

Element	Capital Cost for Asset I(B) (as on 31.3.2019)
Sub-station Equipment	297.48
PLCC	95.96
IT Equipment and Software	28.04
Total	421.48

60. The trued-up capital cost of ₹4900.54 lakh for Combined Asset [(Asset I (A), Asset II(A) and Asset II(B))] and ₹421.48 lakh for Asset I(B) has been considered as admitted capital cost as on 1.4.2019 for working out tariff for the 2019-24 tariff period.

Additional Capital Expenditure

61. Regulation 24 of the 2019 Tariff Regulations provides as follows:

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

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

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

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

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

62. The details of apportioned approved cost as per FR, capital expenditure as on 31.3.2019, ACE during the 2019-24 period and capital cost as on 31.3.2024 with



respect to combined Asset I(A), Asset I(B), Asset II(A) and Asset II(B), as submitted by the Petitioner are as follows:

(₹ in lakh)

Apportioned approved cost as per FR	Capital Expenditure (as on 31.3.2019)	ACE 2019-24		Capital Cost (as on 31.3.2024)
		2019-20	2020-21	
7648.29	5323.14	511.85	126.00	5960.99

63. The Petitioner has submitted that ACE incurred in 2019-20 and 2020-21 is on account of balance and retention payments due to un-discharged liability for works executed within cut-off date/ work deferred for execution. The admissibility of ACE incurred after COD and up to cut-off date is to be dealt in accordance with Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations. Further, ACE is within cut-off date and its details are given in Form-7 in this petition.

64. The Petitioner vide affidavit dated 18.8.2021 has submitted the vendor-wise break up of ACE claimed during the 2019-24 period.

65. We have considered the submissions and claims of the Petitioner. ACE claimed is towards balance and retention payments and unexecuted works and the same is allowed under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations, subject to true-up. Therefore, ACE with respect to Asset I(A), Asset I(B), Asset II(A) and Asset II(B) is allowed as follows:

(₹ in lakh)

Asset	Particulars	ACE	
		2019-20	2020-21
Asset- I(A)	ACE to extent of Balance and Retention Payments due to undischarged liabilities for works executed with in cut-off date/ work deferred for execution	142.00	96.00
Asset- I (B)		42.00	30.00
Asset- I(A)		220.94	0.00
Asset- I (B)		106.91	0.00

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



(₹ in lakh)

Asset	Capital Cost allowed (as on 1.4.2019)	ACE allowed during		Estimated Completion Cost allowed (as on 31.3.2024)
		2019-20	2020-21	
Combined Asset	4900.54	469.85	96.00	5466.39
Asset I(B)	421.48	42.00	30.00	493.48

Debt-Equity Ratio

67. 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.”

68. The debt-equity ratio considered for the purpose of computation of tariff for the 2019-24 tariff period is as follows:

(₹ in lakh)

Combined Asset				
Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	3430.39	70.00	3826.49	70.00
Equity	1470.15	30.00	1639.90	30.00
Total	4900.54	100.00	5466.39	100.00

(₹ in lakh)

Asset I(B)				
Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	295.05	70.00	345.45	70.00
Equity	126.44	30.00	148.04	30.00
Total	421.48	100.00	493.48	100.00

Depreciation

69. Regulations 33(1), 33(2) and 33(5) of the 2019 Tariff Regulations provide 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.”

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

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

70. Depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. WAROD at Annexure-II has been worked out after considering the depreciation rates of IT and non-IT assets as specified in the 2019 Tariff Regulations. The depreciation allowed for Combined Asset and Asset I(B) for the 2019-24 tariff period is as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	4900.54	5370.39	5466.39	5466.39	5466.39
Addition during 2019-24 due to Projected Additional Capitalisation	469.85	96.00	0.00	0.00	0.00
Closing Gross Block	5370.39	5466.39	5466.39	5466.39	5466.39
Average Gross Block	5135.47	5418.39	5466.39	5466.39	5466.39
Weighted Average Rate of Depreciation (WAROD) (in %)	5.33	5.33	5.33	5.33	5.33
Balance Useful life at the beginning of the year (Year)	24.00	23.00	22.00	21.00	20.00
Aggregated Depreciable Value	4623.39	4878.22	4921.52	4921.52	4921.52
Combined Depreciation during the year	273.58	288.84	291.47	291.47	291.47
Remaining Aggregate Depreciable Value at the end of the year	4043.42	4009.41	3761.24	3469.77	3178.30

(₹ in lakh)

Asset I(B)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	421.48	463.48	493.48	493.48	493.48
Addition during 2019-24 due to Projected Additional Capitalisation	42.00	30.00	0.00	0.00	0.00
Closing Gross Block	463.48	493.48	493.48	493.48	493.48
Average Gross Block	442.48	478.48	493.48	493.48	493.48
Weighted Average Rate of Depreciation (WAROD) (in %)	6.14	6.12	6.12	6.12	6.12
Balance Useful life at the beginning of the year (Year)	21.00	20.00	19.00	18.00	17.00
Aggregated Depreciable Value	401.09	433.64	447.24	447.24	447.24
Combined Depreciation during the year	27.18	29.28	30.19	30.19	30.19



Remaining Aggregated Depreciable Value at the end of the year	351.87	355.14	338.55	308.37	278.18
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Interest on Loan

71. 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.”*

72. WAROI on loan has been considered on the basis of the rates prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rates of interest applicable, if any, during the 2019-24 tariff period may be adjusted. Accordingly, the floating rate of interest, if any, will be considered at the time of true-



up. Therefore, IoL for Combined Asset and Asset I(B) for the 2019-24 tariff period has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	3430.39	3759.29	3826.49	3826.49	3826.49
Cumulative Repayments up to Previous Year	306.39	579.97	868.81	1160.28	1451.75
Net Loan-Opening	3124.00	3179.32	2957.68	2666.21	2374.74
Addition due to Additional Capitalization	328.90	67.20	0.00	0.00	0.00
Repayment during the year	273.58	288.84	291.47	291.47	291.47
Net Loan-Closing	3179.32	2957.68	2666.21	2374.74	2083.27
Average Loan	3151.66	3068.50	2811.95	2520.48	2229.00
Weighted Average Rate of Interest on Loan (in %)	7.592	7.591	7.587	7.583	7.581
Interest on Loan	239.28	232.92	213.35	191.14	168.98

(₹ in lakh)

Asset I(B)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	295.05	324.45	345.45	345.45	345.45
Cumulative Repayments up to Previous Year	22.05	49.22	78.50	108.68	138.87
Net Loan-Opening	273.00	275.22	266.95	236.76	206.58
Addition due to Additional Capitalization	29.40	21.00	0.00	0.00	0.00
Repayment during the year	27.18	29.28	30.19	30.19	30.19
Net Loan-Closing	275.22	266.95	236.76	206.58	176.39
Average Loan	274.11	271.09	251.86	221.67	191.49
Weighted Average Rate of Interest on Loan (in %)	7.905	7.905	7.901	7.896	7.895
Interest on Loan	21.67	21.43	19.90	17.50	15.12

Return on Equity

73. Regulations 30 and 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 cutoff date beyond the original scope, excluding additional capitalization on 7 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:

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

Where “t” is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the



corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

Illustration-

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

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

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;

(d) Rate of return on equity = $15.50/(1-0.24) = 20.395\%$.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."

74. The Petitioner has submitted that it is liable to pay Income Tax at MAT rate specified under the Taxation laws (Amendment) Ordinance 2019. Further, RoE has been calculated @18.782% after grossing up RoE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given in Regulation 31(2) of the 2019 Tariff Regulations for 2019-24 tariff period. As per Regulation 31(3) of the 2019 Tariff Regulations, the grossed-up rate of RoE at the end of every financial year shall be trued-up 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 IT authorities pertaining to 2019-24 tariff period on actual gross income. However, if any penalty arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the Petitioner. Any under-recovery or over-recovery of grossed-up rate on RoE after truing up shall be recovered or refunded to the long term customers on yearly basis. The Petitioner has further



submitted that any adjustment due to additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable/ adjustable during 2019-24 tariff period on yearly basis on receipt of Income Tax assessment order.

75. We have considered the submissions of the Petitioner. MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which will be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for Combined Asset and Asset I(B) for the 2019-24 tariff period is as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	1470.15	1611.10	1639.90	1639.90	1639.90
Addition due to Additional Capitalization	140.95	28.80	0.00	0.00	0.00
Closing Equity	1611.10	1639.90	1639.90	1639.90	1639.90
Average Equity	1540.63	1625.50	1639.90	1639.90	1639.90
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	289.36	305.30	308.01	308.01	308.01

(₹ in lakh)

Asset I(B)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	126.44	139.04	148.04	148.04	148.04
Addition due to Additional Capitalization	12.60	9.00	0.00	0.00	0.00
Closing Equity	139.04	148.04	148.04	148.04	148.04
Average Equity	132.74	143.54	148.04	148.04	148.04
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	24.93	26.96	27.80	27.80	27.80

Operation & Maintenance Expenses

76. Regulations 35(3)(a) and 35(4) of the 2019 Tariff Regulations provide 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
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947



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

“35(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.”*



77. O&M Expenses in respect of the various elements covered under Combined Asset and Asset I(B) as claimed by the Petitioner for the 2019-24 tariff period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station					
400 kV Sikar: ICT Bay	1	1	1	1	1
220 kV Sikar: ICT Bay	1	1	1	1	1
220 kV Sikar: Line Bay 1 and 2	2	2	2	2	2
400 kV Mainpuri: ICT Bay1	1	1	1	1	1
220 kV Mainpuri: ICT Bay 2	1	1	1	1	1
220 kV Mainpuri: Line Bay 1 and 2	2	2	2	2	2
Norms (₹ lakh/Bay)					
400 kV AIS	32.15	33.28	34.45	35.66	36.91
220 kV AIS	22.51	23.30	24.12	24.96	25.84
O&M Expenses	199.36	206.36	213.62	221.08	228.86
Communication System (PLCC)					
Project Cost (₹ in lakh)	213.48	213.48	213.48	213.48	213.48
Norm (in %)	2	2	2	2	2
O&M Expenses PLCC	4.27	4.27	4.27	4.27	4.27
Total O&M Expenses (₹ in lakh)	203.63	210.63	217.89	225.35	233.13

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



79. The O&M Expenses allowed for various elements covered under Combined Asset and Asset I(B) for the 2019-24 tariff period are as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station					
400 kV Sikar: ICT Bay	1	1	1	1	1
220 kV Sikar: ICT Bay	1	1	1	1	1
220 kV Sikar: Line Bay 1 and 2	2	2	2	2	2
400 kV Mainpuri: ICT Bay1	1	1	1	1	1
220 kV Mainpuri: ICT Bay 2	1	1	1	1	1
Norms (₹ lakh/Bay)					
400 kV AIS	32.15	33.28	34.45	35.66	36.91
220 kV AIS	22.51	23.30	24.12	24.96	25.84
O&M Expenses Sub-station	154.34	159.76	165.38	171.16	177.18
Total O&M Expenses (₹ in lakh)	154.34	159.76	165.38	171.16	177.18

(₹ in lakh)

Asset I(B)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station					
220 kV Mainpuri: Line Bay 1 and 2	2	2	2	2	2
Norms (₹ lakh/Bay)					
220 kV AIS	22.51	23.30	24.12	24.96	25.84
O&M Expenses Sub-station	45.02	46.60	48.24	49.92	51.68
Total O&M Expenses (₹ in lakh)	45.02	46.60	48.24	49.92	51.68

Interest on Working Capital

80. Regulations 34(1)(c), 34(3), 34(4) and 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 1st April of the year during the



tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

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

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

“3. Definitions ...

(7) ‘Bank Rate’ means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;”

81. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of 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 2020-21 and from 2021-22 onwards has been considered as 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). Therefore, IWC with respect to Combined Asset and Asset I(B) is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations and the components of the working capital and interest allowed thereon is as follows:

(₹ in lakh)					
Particulars	Combined Asset				
	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for One month)	13.22	13.67	14.14	14.62	15.12
Working Capital for Maintenance Spares (15% of O&M expenses)	23.79	24.60	25.45	26.31	27.22
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	120.47	124.45	123.23	121.20	118.87
Total Working Capital	157.48	162.72	162.82	162.13	161.21
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	18.98	18.31	17.10	17.02	16.93



(₹ in lakh)

Asset I(B)					
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)	14.98	15.69	15.90	15.82	15.70
Total Working Capital	25.49	26.56	27.16	27.47	27.76
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	3.07	2.99	2.85	2.88	2.91

Annual Fixed Charges for the 2019-24 Tariff Period

82. The transmission charges for Combined Asset and Asset I(B) for the 2019-24 tariff period are as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	273.58	288.84	291.47	291.47	291.47
Interest on Loan	239.28	232.92	213.35	191.14	168.98
Return on Equity	289.36	305.30	308.01	308.01	308.01
O&M Expenses	158.61	164.03	169.65	175.43	181.45
Interest on Working Capital	18.98	18.31	17.10	17.02	16.93
Total	979.82	1009.40	999.57	983.07	966.83

(₹ in lakh)

Asset I(B)					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	27.18	29.28	30.19	30.19	30.19
Interest on Loan	21.67	21.43	19.90	17.50	15.12
Return on Equity	24.93	26.96	27.80	27.80	27.80
O&M Expenses	45.02	46.60	48.24	49.92	51.68
Interest on Working Capital	3.07	2.99	2.85	2.88	2.91
Total	121.87	127.25	128.98	128.30	127.70

Filing Fee and Publication Expenses

83. 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

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

Goods and Service Tax

85. 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 will 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.

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

Security Expenses

87. The Petitioner has submitted that security expenses in respect of transmission project 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 above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved security expenses from 1.4.2019 to 31.3.2024. Therefore, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. Accordingly, 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 period. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

Sharing of Transmission Charges

90. The transmission charges allowed for Asset I(B) from 1.4.2018 up to COD of the downstream system under the scope of RRVPNL shall be borne by RRVPNL and shall not be included in the POC charges till the said downstream system achieves COD.

91. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the 2010 Sharing Regulations and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order for Asset I(A), Asset II(A) and Asset II(B) from their COD and for Asset I(B) [after COD of the downstream system under the scope of RRVPNL achieves COD] shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of the 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.



92. To summarise:

- a) The trued-up AFC approved for the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

Asset I(A)	
2017-18 (Pro-rata for 1 day)	2018-19
1.17	459.78

(₹ in lakh)

Asset I(B)	
2018-19	
169.18	

(₹ in lakh)

Asset II(A)	
2017-18 (Pro-rata for 213 days)	2018-19
259.46	465.91

(₹ in lakh)

Asset II(B)	
2018-19 (Pro-rata for 361 days)	
187.63	

- b) AFC allowed for Combined Asset and Asset-I(B) for the 2019-24 tariff period in this order are as follows:

(₹ in lakh)

Combined Asset				
2019-20	2020-21	2021-22	2022-23	2023-24
979.82	1009.40	999.57	983.07	966.83

(₹ in lakh)

Asset I(B)				
2019-20	2020-21	2021-22	2022-23	2023-24
121.87	127.25	128.98	128.30	127.70

93. Annexure-I and Annexure-II given hereinafter shall form part of the order.

94. This order disposes of Petition No. 682/TT/2020 in terms of the above discussions and findings.

sd/
(P. K. Singh)
Member

sd/
(Arun Goyal)
Member

sd/
(P. K. Pujari)
Chairperson



2014-19
Asset I(A)

Annexure-I
(₹ in lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE		Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2014 Tariff Regulations	
		2017-18	2018-19			2017-18	2018-19
Sub-station	1815.48	0.00	368.33	2183.81	5.28	95.86	105.58
IT Equipment and Software	13.66	0.00	0.00	13.66	5.28	0.72	0.72
Total	1829.14	0.00	368.33	2197.47		96.58	106.30
Weighted Average Rate of Depreciation (in %)						5.28	5.28
Average Gross Block (₹ in lakh)						1829.14	2013.30

Asset I(B)

(₹ in lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	2018-19	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (in%)	Annual Depreciation as per the 2014 Tariff Regulations
					2018-19
Sub-station	254.86	42.62	297.48	5.28	14.58
PLCC	93.65	2.31	95.96	6.33	6.00
IT Equipment and Software	27.36	0.68	28.04	5.28	1.46
Total	375.87	45.61	421.48		22.05
Weighted Average Rate of Depreciation (in %)					5.53
Average Gross Block (₹ in lakh)					398.68



Asset II(A)

(₹ in lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE		Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2014 Tariff Regulations	
		2017-18	2018-19			2017-18	2018-19
Sub-station	1875.33	170.72	108.32	2154.37	5.28	103.52	110.89
Total	1875.33	170.72	108.32	2154.37		103.52	110.89
Weighted Average Rate of Depreciation (in %)						5.28	5.28
Average Gross Block (₹ in lakh)						1960.69	2100.21

Asset II(B)

(₹ in lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE		Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2014 Tariff Regulations
		2017-18	2018-19			2018-19
Sub-station	430.99	0.00	33.43	464.42	5.28	23.64
PLCC	79.76	0.00	4.53	84.29	6.33	5.19
Total	510.75	0.00	37.96	548.71		28.83
Weighted Average Rate of Depreciation (in %)						5.44
Average Gross Block (₹ in lakh)						529.73



2019-24

Annexure-II**Combined Asset**

(₹ in lakh)

Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24		Admitted Capital Cost as on 1.4.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2019 tariff Regulations				
		2019-20	2020-21			2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station	4802.60	444.65	94.00	5341.25	5.28	265.32	279.54	282.02	282.02	282.02
PLCC	84.29	23.20	0.00	107.49	6.33	6.07	6.80	6.80	6.80	6.80
IT Equipment and Software	13.66	2.00	2.00	17.66	15.00	2.20	2.50	2.65	2.65	2.65
Total	4900.54	469.85	96.00	5466.39		273.58	288.84	291.47	291.47	291.47
Weighted Average Rate of Depreciation (in %)						5.33	5.33	5.33	5.33	5.33
Average Gross Block (₹ in lakh)						5135.47	5418.39	5466.39	5466.39	5466.39

Asset I(B)

(₹ in lakh)

Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24		Admitted Capital Cost as on 1.4.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2019 Tariff Regulations				
		2019-20	2020-21			2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station	297.48	35.00	24.00	356.48	5.28	16.63	18.19	18.82	18.82	18.82
PLCC	95.96	6.00	4.00	105.96	6.33	6.26	6.58	6.71	6.71	6.71
IT Equipment and Software	28.04	1.00	2.00	31.04	15.00	4.28	4.51	4.66	4.66	4.66
Total	421.48	42.00	30.00	493.48		27.18	29.28	30.19	30.19	30.19
Weighted Average Rate of Depreciation (%)						6.14	6.12	6.12	6.12	6.12
Average Gross Block (₹ in lakh)						442.48	478.48	493.48	493.48	493.48

