CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 86/TT/2023

Coram:

Shri Jishnu Barua, Chairperson Shri Arun Goyal, Member

Date of Order: 02.08.2024

In the Matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff for the 2014-19 period and determination of transmission tariff for the 2019-24 period in respect of the asset +/-200 MVAR STATCOM at 400/220 kV Nalagarh Sub-station under "Provision of STATCOM at Nalagarh and Lucknow in Northern Region".

And in the Matter of:

Power Grid Corporation of India Limited,

"Saudamini", Plot No-2, Sector-29, Gurgaon-122001(Haryana). Petitioner

Vs.

1. Ajmer Vidyut vitran Nigam Limited,

Corporate Office, Vidyut Bhawan, Panchsheel Nagar, Makarwali Road, Ajmer, Rajasthan-305004

2. Jaipur Vidyut Vitran Nigam Limited,

132 kV, GSS RVPNL Sub- Station Building, Caligiri Road, Malviya Nagar, Jaipur-302017, Rajasthan

3. Jodhpur Vidyut Vitran Nigam Limited,

New Power House, Industrial Area, Jodhpur-342003, Rajasthan

4. Himachal Pradesh State Electricity Board Limited,

Vidyut Bhawan, Kumar House Complex Building, Shimla-171004

5. Punjab State Power Corporation Limited,

The Mall, PSEB Head Office, Patiala-147001, Punjab

6. Haryana Power Purchase Centre,

Shakti Bhawan, Sector-6 Panchkula-134109, Haryana

7. Jammu Kashmir Power Corporation Limited,

220/66/33 kV GLADNI SS SLDC Building, Narwal, Jammu

8. Uttar Pradesh Power Corporation Limited,

Shakti Bhawan, 14, Ashok Marg, Lucknow-226001

9. BSES Yamuna Power Limited,

B-Block, Shakti Kiran, Bldg. (Near Karkadooma Court), Karkadooma 2nd Floor, New Delhi-110092

10. BSES Rajdhani Power Limited,

BSES Bhawan, Nehru Place, New Delhi

11. Tata Power Delhi Distribution Limited,

33 kV Sub-station Building, Hudson Lane, Kingsway Camp, North Delhi-110009

12. Chandigarh Administration,

Sector -9, Chandigarh

13. Uttarakhand Power Corporation Limited,

Urja Bhawan, Kanwali Road, Dehradun

14. North Central Railway,

Allahabad, Uttar Pradesh.

15. New Delhi Municipal Council,

Palika Kendra, Sansad Marg,

New Delhi-110002......Respondent(s)

Parties Present: Shri Vivek Kumar Singh, PGCIL

Shri Nitish Kumar, PGCIL

ORDER

The instant Petition has been filed by Power Grid Corporation of India Limited

for truing up of the transmission tariff for the 2014-19 tariff period under the Central

Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as the '2014 Tariff Regulations') and determination of the transmission tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as the '2019 Tariff Regulations') for the 2019-24 tariff period in respect of the asset +/-200 MVAR STATCOM at 400/220 kV Nalagarh Sub-station (hereinafter referred to as the 'transmission asset') under 'Provision of STATCOM at Nalagarh and Lucknow in Northern Region' (hereinafter referred to as the 'transmission project').

- 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 7.6 and 8.4 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 claim the overall security expenses and consequential IOWC on that security expenses separately.
 - 7) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
 - 8) Condone the delay in filing of the instant petition.
 - 9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the

beneficiaries.

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

Background

- 3. The brief facts of the case are as follows:
 - (a) The transmission project was discussed and agreed upon in the 32nd Standing Committee meeting of the Northern Region held on 31.8.2013. It was later discussed and agreed to for implementation in the 29th NRPC meeting held on 13.9.2013.
 - (b) The Investment Approval (IA) for the said transmission project was accorded by the Board of Directors of the Petitioner's Company in its 332nd meeting held on 19.8.2016 (notified vide Memorandum No. C/CP/STATCOM in NR, dated 29.8.2016) at an estimated cost of ₹43189 lakh, including IDC of ₹2623 lakh based on the April 2016 price level.
 - (c) The scope of instant transmission project is as follows:

Sub-station	Mechanically switched Compensation Reactor Capacitor x125 x125 MVAR MVAR		Dynamic Compensation (STATCOM)
			MVAR
Nalagarh	2	2	+/- 200
Lucknow	2	1	+/- 300

(d) The details of the transmission assets covered under the transmission project are as follows:

SI No.	Asset	COD	Petition	
1	+/-200 MVAR STATCOM at 400/220 kV Nalagarh Sub-station	31.3.2019	Instant Petition	
2	+/-300 MVAR STATCOM at 400 kV Lucknow Sub-station	25.12.2020	Covered under Petition No. 274/TT/2022	

- 4. The instant Petition covers submissions for truing up of the transmission tariff for the 2014-19 tariff block and determination of transmission tariff for the 2019-24 tariff period for the transmission asset +/-200 MVAR STATCOM at 400/220 kV Nalagarh Sub-station, which was declared under commercial operation on 31.3.2019 under "Provision of STATCOM at Nalagarh and Lucknow in Northern Region." The Commission, vide its order dated 25.1.2021 in Petition No. 85/TT/2019, approved the transmission tariff for the transmission assets from COD to 31.3.2019.
- 5. The Respondents are Distribution Licensees, Power Departments, Power Utilities, and Transmission Licensees, which are procuring transmission services from the Petitioner, mainly beneficiaries of the Northern Region.
- 6. The Petitioner has served a copy of the Petition on the Respondents, and notice regarding the filing of this Petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 ('the Act'). No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. None of the Respondents have filed any replies in the matter.
- 7. The Petitioner was directed to submit certain information pertaining to the Additional Capital Expenditure (ACE) and Liquidated Damages (LD) during the hearing held on 31.1.2024 and the same was furnished by the Petitioner vide affidavit dated 16.2.2024.
- 8. The matter was heard on 29.4.2024, and the order was reserved in the matter.
- 9. Having heard the Petitioner's representatives and perused the material on record, we proceed to dispose of the Petition. This order is issued considering the

submissions made by the Petitioner in the Petition vide affidavits dated 3.2.2023 and 16.2.2024.

- 10. The Petitioner has submitted that there is a delay in filing the instant Petition and has requested to condone the same as it was beyond the control of the Petitioner. We have considered the Petitioner's prayer. The Petitioner filed Petition No. 331/MP/2019, under Regulation 76 'Power to Relax' and under Regulation 77 'Power to Remove Difficulty' of the 2019 Tariff Regulations to relax the provisions of Regulation 9(2) of the 2019 Tariff Regulations which required the Petitioner to file the tariff Petitions of the existing assets by 31.10.2019. The Commission, in its order dated 28.10.2019 in Petition No. 331/MP/2019, after examination of the submissions of the Petitioner, relaxed the provisions of Regulation 9(2) of the 2019 Tariff Regulations and permitted the Petitioner to file the tariff Petitions for truing up of the existing assets for the 2014-19 period and the determination of tariff for the 2019-24 period by 31.10.2019, where the final orders for the 2014-19 tariff period had already been issued.
- 11. As regards the existing assets, the Commission, at the time of passing the said order for the 2014-19 period, observed that a Petition for truing up of the 2014-19 tariff period and the determination of tariff for the 2019-24 period shall be filed by the Petitioner within three months from the date of issue of the final order for the 2014-19 period. Subsequently, NTPC and NHPC made representations seeking further extension of time. Taking into consideration the representations of NTPC and NHPC, the outbreak of the Covid-19 pandemic, and the subsequent declaration of the lockdown by the Central Government, the Commission, vide its order dated 6.4.2020 in Petition No. 7/SM/2020, extended the time for filing the tariff Petitions for the 2019-24 period along with truing up of tariff of the 2014-19 period up to 30.6.2020, The Commission, vide its order dated 6.7.2020 in IA Nos. 39/IA/2020 and 40/IA/2020 in

Petition No. 7/SM/2020 filed by NHPC Limited and Teesta Urja Limited, respectively further extended the time to file tariff Petitions for the 2019-24 period along with truing up Petitions for the 2014-19 period till 30.9.2020.

12. Accordingly, the Commission granted an extension of time up to 30.9.2020 in the cases where the tariff orders had already been issued and 90 days from the date of issue of the order where tariff orders were then to be issued. The tariff for the 2014-19 period was approved in the instant case on 25.1.2021 in Petition No. 85/TT/2019 for the transmission asset. Accordingly, as per the Commission's order dated 28.10.2019 in Petition No. 331/MP/2019, the Petitioner should have filed the truing up Petition by 25.4.2021 as the Commission allowed final tariff in Petition No. 85/TT/2019 vide order dated 25.1.2021. However, the Petitioner has filed the instant Petition vide Diary No. on 9.2.2023. Thus, there is a delay of 655 days in filing the instant Petition. Taking into consideration the Covid-19 Pandemic and the consequent lockdown, we relax Regulation 9(2) of the 2019 Tariff Regulations, and the subsequent orders issued by the Commission that required the Petitioner to file the tariff Petitions within a specific period under Regulation 76 'Power to Relax' and under Regulation 77 'Power to Remove Difficulty' of the 2019 Tariff Regulations and condone the delay of 655 days in filing of the instant Petition.

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

13. The details of the trued-up transmission charges claimed by the Petitioner in respect of the transmission asset for the 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2018-19
Depreciation	1.90
Interest on Loan	2.04
Return on equity	2.14
Interest on Working Capital	0.15
O&M Expenses	0.38
Total	6.60

14. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2018-19
O&M expenses	11.56
Maintenance Spares	20.81
Receivables	402.11
Total Working Capital	434.48
Rate of Interest (In %)	12.20
Interest on Working Capital	0.15

Capital Cost

15. The Commission, vide its order dated 25.1.2021 in Petition No. 85/TT/2019, allowed the following capital cost of the transmission asset as on COD as well as on 31.3.2019:

(₹ in lakh)

Asset	Apportioned Approved Cost as per FR	Expenditure up to COD	Additional Capital Expenditure (ACE) 2018-19	Total Capital Cost as on 31.3.2019
Asset-1	18973.60	12387.46	0.00	12387.46

16. The Petitioner, vide Auditor's Certificate, has submitted the capital cost incurred up to COD (i.e.31.3.2019) and ACE during the 2014-19 tariff period for the transmission asset. The details of the apportioned approved FR cost, capital cost as on COD, and ACE incurred up to 31.3.2019, as claimed by the Petitioner in the instant true-up Petition, are as follows:

(₹ in lakh)

Apportioned Approved Cost as	et as Expenditure Expenditure (AC		Total Capital Cost as on
per FR	up to COD	2018-19	31.3.2019
18973.60	13253.43	0.00	13253.43

17. It is observed that the total FR approved cost is ₹18973.60 lakh and the total capital cost as on 31.3.2019 is ₹13253.43 lakh. Thus, there is no cost over-run.

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

18. The Commission, in its order dated 25.1.2021 in Petition No. 85/TT/2019, did not condone the time over-run of 40 days in respect of the transmission asset. Accordingly, the Commission, in the said order dated 25.1.2021, allowed the IDC of ₹299.04 lakh and disallowed the IDC of ₹53.89 lakh due to time over-run not condoned for the transmission asset. The details of the IDC allowed and disallowed are as follows:

(₹ in lakh)

IDC as per Auditor's Certificate	IDC disallowed due to time over- run not condoned	IDC Allowed	IDC Discharged upto COD	IDC discharged during 2018-19	IDC discharged during 2019-20
352.93	53.89	299.04	274.01	-	25.03

19. The Petitioner has submitted the computation of IDC for the transmission asset along with the Auditor's Certificate dated 28.9.2022. The Petitioner has submitted the computation of IDC along with year-wise details of the IDC discharged, and the details of the same are as follows:

(₹ in lakh)

IDC as per Auditor's Certificate	IDC Discharged up to COD	IDC discharged during the 2019-20	IDC discharged during the 2020-21
352.93	298.47	54.46	-

20. We have considered the submissions of the Petitioner. As the time over-run of the transmission asset in the instant case was not condoned, the IDC claimed by the Petitioner for the period beyond the scheduled date of commercial operation (SCOD) has been disallowed. Therefore, the total amount of IDC allowed/disallowed in respect of the transmission asset is as follows:

(₹ in lakh)

IDC as per Auditor's Certificate	IDC disallowed due to time over-run not condoned	IDC Allowed	IDC Discharged up to COD	IDC discharged during the 2018-19	IDC discharged during the 2019-20
352.93	57.56	295.37	295.37	-	-

21. The Petitioner has claimed IEDC of ₹665.46 lakh for the transmission asset as per the Auditor's Certificate dated 28.9.2022. The Petitioner has further submitted that the entire amount of IEDC for the transmission asset has been discharged up to COD. As the entire time over-run in the case of the transmission asset has been disallowed, the IEDC for the transmission asset has been allowed in proportion to the date of the Investment Approval (IA) of the SCOD. Accordingly, the IEDC claimed as per the Auditor's Certificate, IEDC considered, and discharged up to COD is as follows:

(₹ in lakh)

IEDC claimed as per Auditor's certificate (A)	IEDC disallowed due to time over-run not condoned (B)	IEDC allowed (C)=(A-B)
665.46	27.90	637.56

Initial Spares

22. The Commission vide its order dated 25.1.2021 in Petition No. 85/TT/2019 has allowed the Initial Spares at 4% of the plant and machinery cost in respect of the transmission asset, and the same is as follows:

(₹ in lakh)

Element	Plant and Machinery cost up to the cut-off date (excluding IDC and IEDC, land cost and cost of civil works)	Initial Spares claimed	Norms as per the 2014 Tariff Regulations (In %)	Initial Spares allowed
Transmission System- Series Compensation Devices	15698.06	1071.23	4.00	609.45

- 23. It is observed that the Petitioner had filed a Review Petition No. 11/RP/2021 in Petition No. 85/TT/2019 with regard to the percentage of plant and machinery cost allowed as Initial Spares. The Commission, vide its order dated 15.5.2022 in the said Review Petition, allowed the Initial Spares at 6% of the plant and machinery cost and directed the Petitioner to approach the Commission for revision of tariff of the transmission assets at the time of truing-up of the tariff of the 2014-19 tariff. The relevant extracts of the said order are as follows:
 - "11. Accordingly, considering the fact that (i) STATCOM is a shunt connected compensation device and is significantly different from a series compensation device and (ii) the STATCOM at Nalagarh Sub-station is installed on 31.3.2019 and that Nalagarh Substation is existing sub-station, we are of the view that it would be correct to allow Initial Spares @ 6% of the plant and machinery cost up to cut-off date in terms of Regulation 13(d)(iii) of the 2014 Tariff Regulations. Thus, the order dated 25.1.2021 in Petition No. 85/TT/2019 is modified to this extent.
 - 12. In view of above discussions, we allow the review petition. Accordingly, the Review Petitioner may approach the Commission for revision of tariff of the transmission asset at the time of truing up of tariff of the 2014-19 tariff period."
- 24. Accordingly, the Initial Spares amounting to ₹936.79 lakhs are allowed at 6% of plant and machinery cost, excluding IDC, IEDC, and land expenses for the purpose of tariff for the 2014-19 tariff period as against the Petitioner's claim of ₹1071.04 lakh.
- 25. The Petitioner has further submitted the discharge details of the Initial Spares up to the COD and thereafter, which are as under:

(₹ in lakh)

Particulars	Initial Spares
Expenditure upto COD	312.05
Expenditure during 2019-20	748.47
Expenditure during 2020-21	10.52
Total	1071.04

26. We have considered the submissions of the Petitioner. The expenses incurred on Initial Spares up to the COD have been considered as a part of capital cost as on COD. The liabilities towards balance Initial Spares post COD shall be considered as

a part of ACE beyond the 2014-19 tariff periods. Accordingly, the Initial Spares allowed at 6% of the plant and machinery cost, excluding IDC, IEDC, and land expenses, in respect of the transmission asset for the purpose of tariff of the 2014-19 period are as follows:

Plant and Machinery Cost (A)	Initial Spares claimed (B)	Ceiling Limit (In %) (C)	Initial Spares worked out D = [(A- B)*C/(100-C)]	Excess [B-D] if B>D	Initial Spares allowed
15747.36	1071.04	6.00	936.79	134.25	936.79

Capital Cost as on COD

13253.43

27. The details of capital cost approved as on COD in respect of the transmission asset are as follows:

(₹ in lakh) IDC Capital cost **Excess** disallowed claimed as Initial due to Capital cost Less: on COD Spares **Undischarged** computational as on COD **IEDC** (As per disallowed IDC as on difference / (F) = (A-Bdisallowed Auditor's as on time over-run COD(C) C-D-E) (D) Certificate) COD not condoned (A) (E) (B)

27.90

Additional Capital Expenditure (ACE)

57.56

28. The Petitioner, in the instant true-up petition, has not claimed any ACE for the financial year 2018-19.

Capital Cost considered for truing-up of tariff for the 2014-19 period

29. The capital cost considered for truing-up of the 2014-19 tariff period in respect of the transmission asset is as follows:

(₹ in lakh)

Capital Cost as on COD	ACE during 2018-19	Capital Cost as on 31.3.2019
13167.97	0.00	13167.97

13167.97

Debt-Equity Ratio

30. The debt-equity ratio has been allowed in accordance with Regulation 19 of the 2014 Tariff Regulations. The details of the debt-equity ratio in respect of the transmission asset as on COD and 31.3.2019 are as follows:

Particulars	Capital cost as on COD (₹ in lakh)	(in %)	ACE during 2014-19 (₹ in lakh)	(in %)	Capital cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	9217.58	70.00	0.00	70.00	9217.58	70.00
Equity	3950.39	30.00	0.00	30.00	3950.39	30.00
Total	13167.97	100.00	0.00	100.00	13167.97	100.00

Depreciation

31. Depreciation has been allowed as per the methodology provided under Regulation 27 of the 2014 Tariff Regulations. The Gross Block during the 2014-19 tariff period has been depreciated at the Weighted Average Rate of Depreciation (WAROD). WAROD at Annexure-I has been worked out after considering the depreciation rates of the communication assets as specified in the 2014 Tariff Regulations. Accordingly, the trued-up depreciation allowed in respect of the transmission asset during the 2014-19 tariff period is as follows:

(₹ in lakh)

	Particulars	2018-19
	Fai liculai S	(pro-rata for 1 day)
Α	Opening Gross Block	13167.97
В	Addition during the year 2019-24 due to projected ACE	0.00
С	Closing Gross Block (A+B)	13167.97
D	Average Gross Block (A+C)/2	13167.97
Е	Average Gross Block (90% depreciable assets)	13167.97
F	Average Gross Block (100% depreciable assets)	0.00
G	Depreciable value (excluding IT equipment and software) (E*90%)	11851.18
Н	Depreciable value of IT equipment and software (F*100%)	0.00
I	Total Depreciable Value (G+H)	11851.18
J	Weighted average rate of Depreciation (WAROD) (in %)	5.28
K	Lapsed useful life at the beginning of the year (Year)	0.00
L	Balance useful life at the beginning of the year (Year)	25.00
М	Depreciation during the year (D*J)	1.90
N	Cumulative Depreciation at the end of the year	1.90
0	Remaining Aggregate Depreciable Value at the end of the year	11849.27

32. The details of depreciation approved vide order dated 25.1.2021 in Petition No. 85/TT/2019, depreciation claimed in the instant Petition, and trued-up depreciation allowed in the instant order in respect of the transmission asset are as follows:

	(₹ in lakh)
Particulars	2018-19 (pro-rata for 1 day)
Approved vide order dated 25.1.2021 in Petition No. 85/TT/2019	1.79
Claimed by the Petitioner in the instant Petition	1.90
Allowed after true-up in this order	1.90

Interest on Loan ("IoL")

33. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest. IoL has been calculated based on the actual interest rate submitted by the Petitioner in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed in respect of the transmission assets is as follows:

	(₹ in lakh)
Particulars	2018-19 (Pro-rata1 day)
Gross Normative Loan	9217.58
Cumulative Repayment up to previous Year	0.00
Net Loan-Opening	9217.58
Addition due to ACE	0.00
Repayment during the year	1.90
Net Loan-Closing	9215.68
Average Loan	9216.63
Weighted Average Rate of Interest on Loan (in %)	8.092
Interest on Loan	2.04

34. The details of loL approved vide order dated 25.1.2021 in Petition No. 85/TT/2019, loL claimed in the instant Petition and trued-up loL allowed in the instant order in respect of the transmission asset are as follows:

Particulars

Particulars

2018-19
(pro-rata for 1 day)

Approved vide order dated 25.1.2021 in Petition No. 85/TT/2019

Claimed by the Petitioner in the instant Petition

2.04

Allowed after true-up in this order

2.04

Return on Equity ("RoE")

35. The Petitioner has claimed RoE in respect of the transmission asset 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 the MAT rates and has claimed the following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax rate (in %)	Grossed up RoE (in %) [(Base Rate)/(1-t)]
2018-19	21.549	19.758

36. We have considered the submissions of the Petitioner. The Commission, in its order dated 27.4.2020 in Petition No. 274/TT/2019, has arrived at the effective tax rate based on the notified MAT rates, and the same is as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Effective tax (in %)
2018-19	21.549	21.549

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

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Base rate of RoE (in %)	Grossed up RoE (in %) [(Base Rate)/(1-t)]
2018-19	21.549	15.50	19.758

38. Accordingly, the RoE allowed in respect of the transmission asset is as follows:

(₹ in lakh)

		(t iii iaitii)
	Particulars	2018-19
		(Pro-rata1 day)
Α	Opening Equity	3950.39
В	Addition due to Net ACE	-
С	Closing Equity (A+B)	3950.39
D	Average Equity [(A+B)/2]	3950.39
Е	Return on Equity (Base Rate) (in %)	15.500
F	Tax Rate applicable (in %)	21.549
G	Applicable ROE Rate (in %)	19.758
Н	Return on Equity for the year(D*G)	2.14

39. The details of RoE trued-up vide order dated 25.1.2021 in Petition No. 85/TT/2019, RoE claimed in the instant Petition, and trued-up RoE allowed in the instant order in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2018-19
	(pro-rata for 1
	day)
Approved vide order dated 25.1.2021 in Petition	2.01
No. 85/TT/2019	2.01
Claimed by the Petitioner in the instant Petition	2.14
Allowed after true-up in this order	2.14

Operation & Maintenance Expenses (O&M Expenses)

40. Regulation 29(4) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system, and the same is as follows:

Element	2018-19
400 kV bays – (₹ lakh/bays)	68.71

41. The O&M Expenses approved under Regulation 29(4) of the 2014 Tariff Regulations are as follows:

(₹ in lakh)

Asset	Element	2018-19 (pro-rata for 1 day)
+/- 200 MVAR STATCOM at 400/220 kV Nalagarh Sub-station	2 nos. of 400 kV bays	0.38
Total O&M Expenses a	0.38	

42. The details of the O&M Expenses approved, vide order dated 25.1.2021 in Petition No. 85/TT/2019, O&M Expenses claimed in the instant Petition, and trued-up

O&M Expenses allowed in the instant order in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2018-19 (pro-rata for 1 day)
Approved vide order dated 25.1.2021 in	0.36
Petition No. 85/TT/2019 Claimed by the Petitioner in the instant	0.00
Petition	0.38
Allowed after true-up in this order	0.38

Interest on Working Capital (IWC)

43. IWC has been worked out as per the methodology provided under Regulation 28 of the 2014 Tariff Regulations. The trued-up IWC allowed for the transmission asset from its COD to 31.3.2019 is as follows:

(₹ in lakh)

	(t iii ididi)
Particulars	2018-19 (pro-rata for 1 day)
IWC for O&M Expenses (O&M Expenses for One Month)	11.45
IWC for Maintenance Spares (15% of O&M)	20.61
IWC for Receivables (Equivalent to two months of annual transmission charges)	401.38
Total Working Capital	433.44
Rate of Interest (in %)	12.20
Interest on Working Capital	0.14

44. The details of IWC trued-up vide order dated 25.1.2021 in Petition No. 85/TT/2019, IWC claimed in the instant Petition and trued-up IWC allowed in the instant order in respect of the transmission asset are as follows:

(₹ in lakh)

	(\ III Ianii)
Particulars	2018-19 (pro-rata for 1 day)
Approved vide order dated 25.1.2019 in Petition No. 85/TT/2019	0.14
Claimed by the Petitioner in the instant Petition	0.15
Allowed after true-up in this order	0.14

Approved Annual Fixed Charges for the 2014-19 Tariff Period

45. Accordingly, the trued up Annual Fixed Charges (AFC) in respect of the transmission asset for the 2014-19 tariff period are as follows:

	(₹ in lakh)
Particulars	2018-19 (pro-rata for 1 day)
Depreciation	1.90
Interest on Loan	2.04
Return on Equity	2.14
O&M Expenses	0.38
Interest on Working Capital	0.14
Total	6.60

46. The details of the AFC approved vide order dated 25.1.2021 in Petition No. 85/TT/2019, AFC claimed in the instant Petition and trued-up Annual Transmission Charges allowed in the instant order in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars Particulars	2018-19
Approved vide order dated 25.1.2019 in Petition No. 85/TT/2019	6.27
Claimed by the Petitioner in the instant Petition	6.60
Allowed after true-up in this order	6.60

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

47. The Petitioner has claimed the following transmission charges in respect of the transmission asset for the 2019- 24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	761.39	826.87	852.13	880.51	890.30
Interest on Loan	791.87	791.54	747.30	706.32	644.89
Return on equity	805.33	876.15	903.79	934.65	945.50
Interest on Working Capital	46.53	49.07	49.61	50.30	50.00
O M Expenses	253.72	262.63	271.83	281.39	291.25
Total	2658.84	2806.26	2824.66	2853.17	2821.94

48. The details of the IWC claimed by the Petitioner in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	21.14	21.89	22.65	23.45	24.27
Maintenance Spares	38.06	39.39	40.77	42.21	43.69
Receivables	326.91	345.98	348.24	351.76	346.96
Total	386.11	407.26	411.66	417.42	414.92
Rate of Interest (In %)	12.05	12.05	12.05	12.05	12.05
Interest	46.53	49.07	49.61	50.30	50.00

Capital Cost

- 49. Regulation 19 of the 2019 Tariff Regulations provides as follows:
 - "19 Capital Cost (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.
 - (2) The Capital Cost of a new project shall include the following:
 - (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
 - (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
 - (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
 - (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
 - (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
 - (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
 - (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
 - (h) Adjustment of revenue earned by the transmission licensee by using the asset before the date of commercial operation:
 - (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
 - (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing:
 - (I) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
 - (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
 - (n) Expenditure on account of change in law and force majeure events; and
 - (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT)

scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

- (3) The Capital cost of an existing project shall include the following:
- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
- (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (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 up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (4) The capital cost in case of existing or new hydro generating station shall also include:
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
- (a) The asset forming part of the project, but not in use, as declared in the tariff petition;
- (b) De-capitalised Asset after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

- (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. "

50. The Petitioner has claimed a capital cost of ₹13171.00 lakhs for the transmission asset as on 31.3.2019. In the instant order, we have allowed the capital cost of ₹13167.97 lakh for the transmission asset as on 31.3.2019. Accordingly, the capital cost of ₹13167.97 lakhs for the transmission asset has been considered as on 1.4.2019 for the determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

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

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

- (2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution."
- 25. Additional Capitalisation within the original scope and after the cut-off date:
- (1) The ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cutoff date may be admitted by the Commission, subject to prudence check:
 - (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
 - (b) Change in law or compliance of any existing law;
 - (c) Deferred works relating to ash pond or ash handling system in the original scope of work;
 - (d) Liability for works executed prior to the cut-off date;

- (e) Force Majeure events;
- (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and
- (g) Raising of ash dyke as a part of ash disposal system
- (2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:
 - (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
 - (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
 - (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
 - (d) The replacement of such asset or equipment has otherwise been allowed by the Commission."
- 52. The Petitioner has claimed that the ACE incurred/ projected to be incurred is mainly on account of the balance and retention payments. Hence, the same is claimed under Regulations 24(1)(a), 24(1)(b) and 25(1)(d) of the 2019 Tariff Regulations. ACE claimed by the Petitioner in respect of the transmission asset is as follows:

(₹ in lakh)

			Estimated			
Apportioned cost as per FR	Expenditure upto COD	2019-20	2020-21	2021-22	2022-23	completion cost as on 31.3.2024
18973.60	13171.10	2243.01	270.83	710.12	385.13	16780.19

53. The Petitioner has further submitted the head-wise/contractor-wise break-up of the ACE claimed for the 2019-24 tariff Period in respect of the transmission asset, and the same is as follows:

(₹ in lakh)

Head wise/ Party wise	Particulars	Discharge			
Faity wise		2019-20	2020-21	2021-22	2022-23
M/s. Sai Construction & Co.	Civil & Building work	0.00	0.00	18.39	38.83
M/s. Techno Electric and Montnets Rongxin	Substation work	1213.76	0.00	691.27	346.30
M/s. Techno Electric and ontnets Rongxin	IT Works	0.00	0.00	0.46	0.00
Head wise/	Particulars	Unexecuted work			
Party wise	Particulars	2019-20	2020-21	2021-22	2022-23

M/s. Sai Construction & Co.	Civil & Building work	41.11	50.35	0.00	0.00
M/s. Techno Electric and Montnets Rongxin	Substation work	1111.30	231.00	0.00	0.00
M/s. Techno Electric and ontnets Rongxin	IT Works	0.00	0.00	0.00	0.00

54. We have considered the submissions of the Petitioner. The projected ACE is allowed under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations on account of the balance and retention payments and under Regulation 25(1)(d) of the 2019 Tariff Regulations towards undischarged liability for works executed before the cut-off date in respect of the transmission asset is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23
ACE as per Auditor's Certificate	2366.17	281.35	628.36	385.13
Less: Excess Initial Spares	123.73	10.52	-	-
ACE allowed in the instant	2242.44	270.83	628.36	385.13

- 55. The Petitioner has further submitted that the Commission vide its order dated 25.1.2021 in Petition No. 85/TT/2019 disallowed the IDC and IEDC of ₹81.76 lakh on account of the time over-run not condoned and reduced it from the capital cost as on COD. Subsequently, ₹101.97 lakh was recovered as Liquidated Damages (LD) from the contractor in FYs 2021-22. The Petitioner has submitted that LD recovered to the extent of disallowed IDC, and IEDC is to be added back as ACE during the FY 2021-22.
- 56. We have considered the submissions of the Petitioner. The Appellate Tribunal for Electricity (APTEL), in its judgment dated 27.4.2011 in Appeal No. 72/2010, has laid down the following principles for dealing with the issue of time over-run in the execution of projects:
 - "7.4. The delay in execution of a generating project could occur due to following reasons:

i) due to factors entirely attributable to the generating company, e.g., imprudence in selecting the contractors/suppliers and in executing contractual agreements including terms and conditions of the contracts, delay in award of contracts, delay in

providing inputs like making land available to the contractors, delay in payments to contractors/suppliers as per the terms of contract, mismanagement of finances, slackness in project management like improper co-ordination between the various contractors, etc.

ii) due to factors beyond the control of the generating company e.g. delay caused due to force majeure like natural calamity or any other reasons which clearly establish, beyond any doubt, that there has been no imprudence on the part of the generating company in executing the project.

iii) situation not covered by (i) & (ii) above

In our opinion in the first case the entire cost due to time over run has to be borne by the generating company. However, the Liquidated Damages (LDs) and insurance proceeds on account of delay, if any, received by the generating company could be retained by the generating company. In the second case the generating company could be given benefit of the additional cost incurred due to time over-run. However, the consumers should get full benefit of the LDs recovered from the contractors/suppliers of the generating company and the insurance proceeds, if any, to reduce the capital cost. In the third case the additional cost due to time overrun including the LDs and insurance proceeds could be shared between the generating company and the consumer. It would also be prudent to consider the delay with respect to some benchmarks rather than depending on the provisions of the contract between the generating company and its contractors/suppliers. If the time schedule is taken as per the terms of the contract, this may result in imprudent time schedule not in accordance with good industry practices."

57. As per the above judgment of the APTEL, when the time over-run is attributable to the project developer (in the instant case of the Petitioner) or its contractors, the cost of the time over-run, i.e., IDC and IEDC is required to be borne by the project developer and LD, if any, recovered can be retained by the Petitioner. In the instant case, since the time over-run for the transmission asset was not condoned, the IDC and IEDC for the period of time over-run that was not condoned was not capitalized, and the LD recovered was allowed to be retained by the Petitioner. Accordingly, the capital cost of the said asset is allowed in accordance with the observations of the APTEL in the said judgment dated 27.4.2011 in Appeal No. 72/2010. IDC and IEDC disallowed in respect of the transmission asset have been deducted from the capital cost as on the date of its commercial operation, and the ACE incurred by the Petitioner after the COD is added to the capital cost. Therefore, the Petitioner is allowed to retain the LD to the extent of IDC and IEDC disallowed and allowed to adjust ACE on this account.

- 58. In the instant order, an amount of ₹85.46 lakhs has been disallowed towards IDC and IEDC on account of time over-run not condoned, and the same has been adjusted in the ACE of the FY 2021-22 as the additional capital cost provided in the Auditor's Certificate for the FY 2021-22 appears to be after the adjustment of LD of ₹101.97 lakhs as per the Petitioner's submission. However, this LD adjustment is subject to truing-up. The Petitioner is directed to furnish the details of ACE on a gross basis and ACE after the adjustment of LD, duly certified by the Auditor, at the time of truing-up of the tariff for the 2019-24 period.
- 59. The capital cost allowed as on 31.3.2024 after the inclusion of ACE in respect of the transmission asset is as follows:

(₹ in lakh)

Capital Cost		App	roved Net	ACE		Capital Cost	
as on 1.4.2019	2019-20	2020-21	2020-21 2021-22 2022-23 2023-24		2021-22 2022-23 2023-24 as on 31.		as on 31.3.2024
13167.97	2242.44	270.83	713.82*	385.13	-	16780.19	

^{*}Inclusive of LD adjustment of ₹85.46 lakh

Debt-Equity Ratio

- 60. 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.
- 61. The debt-equity ratio for the 2019-24 tariff period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The details of the debt-equity ratio considered for the purpose of tariff for the 2019-24 period in respect of the transmission asset are as follows:

Particulars	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	9217.58	70.00	2528.55	70.00	11746.13	70.00
Equity	3950.39	30.00	1083.66	30.00	5034.06	30.00
Total	13167.97	100.00	3612.21	100.00	16780.19	100.00

Depreciation

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

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

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

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

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

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

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

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

- (4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the asset 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 asset.
- (6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2019 from the gross depreciable value of the asset.
- (7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.
- (8) In case of de-capitalization of asset in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.
- (9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.
- (10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of
 - a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or
 - b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or
 - c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life."
- 63. We have considered the submissions of the Petitioner. The depreciation has been worked out considering the admitted capital expenditure as on COD and thereafter. The Weighted Average Rate of Depreciation (WAROD) at Annexure-I has been worked out for the transmission asset as per the rates of depreciation prescribed in the 2019 Tariff Regulations. The depreciation allowed for the transmission asset is

as follows:

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Opening Gross Block	13167.97	15410.41	15681.24	16395.06	16780.19
В	Addition during the year 2019-24 due to projected ACE	2242.44	270.83	713.82	385.13	0.00
С	Closing Gross Block (A+B)	15410.41	15681.24	16395.06	16780.19	16780.19
D	Average Gross Block (A+C)/2	14289.19	15545.82	16038.15	16587.62	16780.19
Е	Average Gross Block (90% depreciable assets)	14215.73	15472.36	15964.69	16514.16	16706.73
F	Average Gross Block (100% depreciable assets)	73.46	73.46	73.46	73.46	73.46
G	Depreciable value (excluding IT equipment and software) (E*90%)	12794.16	13925.13	14368.22	14862.75	15036.05
Н	Depreciable value of IT equipment and software (F*100%)	73.46	73.46	73.46	73.46	73.46
I	Total Depreciable Value (G+H)	12867.62	13998.59	14441.68	14936.21	15109.51
J	Weighted average rate of Depreciation (WAROD) (in %)	5.327	5.318	5.312	5.308	5.305
K	Lapsed useful life at the beginning of the year (Year)	0.00	1.00	2.00	3.00	4.00
L	Balance useful life at the beginning of the year (Year)	25.00	24.00	23.00	22.00	21.00
M	Depreciation during the year (D*J)	761.21	826.67	851.98	880.41	890.20
N	Cumulative Depreciation at the end of the year	763.12	1589.79	2441.77	3322.18	4212.38
0	Remaining Aggregate Depreciable Value at the end of the year	12104.50	12408.80	11999.91	11614.03	10897.13

Interest on Loan ("IoL")

- 64. 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 asset, 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 up to 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.

(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".
- 65. The Weighted Average Rate of Interest on Loan (WAROI) has been considered on the basis of the rate prevailing as on COD. The Petitioner has prayed

that the change in interest rate due to the floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, will be considered at the time of truing-up. Therefore, the loL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations for the transmission asset, and the same is as follows:

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Gross Normative Loan	9217.58	10787.29	10976.87	11476.54	11746.13
В	Cumulative Repayments upto Previous Year	1.90	763.12	1589.79	2441.77	3322.18
С	Net Loan-Opening (A-B)	9215.68	10024.17	9387.08	9034.77	8423.95
D	Additions due to ACE	1569.71	189.58	499.67	269.59	0.00
Е	Repayment during the year	761.21	826.67	851.98	880.41	890.20
F	Net Loan-Closing (C+D-E)	10024.17	9387.08	9034.77	8423.95	7533.75
G	Average Loan (C+F)/2	9619.92	9705.62	9210.92	8729.36	7978.85
Н	Weighted Average Rate of Interest on Loan (in %)	8.230	8.154	8.112	8.092	8.083
I	Interest on Loan	791.68	791.35	747.23	706.37	644.95

Return on Equity (RoE)

- 66. Regulations 30 and 31 of the 2019 Tariff Regulations specify as follows:
 - **"30. Return on Equity**: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.
 - (2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage:

Provided that return on equity in respect of Additional Capitalization after cut- off date beyond the original scope excluding Additional Capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system 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 equityshall 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 toachieve 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 follows:

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-

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."
- 67. The Petitioner has submitted that the MAT rate is applicable to it. We have considered the submissions of the Petitioner. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued-up in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed in respect of the transmission asset under Regulation 30 of the 2019 Tariff Regulations is as follows:

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Opening Equity	3950.39	4623.12	4704.37	4918.52	5034.06
В	Addition due to net ACE	672.73	81.25	214.15	115.54	-
С	Closing Equity (A+B)	4623.12	4704.37	4918.52	5034.06	5034.06
D	Average Equity [(A+B)/2]	4286.76	4663.75	4811.44	4976.29	5034.06
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pretax)	18.782	18.782	18.782	18.782	18.782
Н	Return on Equity (Pre-tax)	805.14	875.94	903.69	934.65	945.50

Operation & Maintenance Expenses ("O&M Expenses")

68. The Petitioner has claimed O&M Expenses @1.5% of the project cost and

escalated @3.51% in line with the provisions of Regulation 35(3)(a)(v) of the 2019 Tariff Regulations. The O&M Expenses claimed by the Petitioner for the transmission asset for the 2019-24 period are as follows:

(₹ in lakh)

Asset	2019-20	2020-21	2021-22	2022-23	2023-24
Original Project Cost	16914.43	16914.43	16914.43	16914.43	16914.43
Norms (in %)	1.50	1.55	1.61	1.66	1.72
Normative O&M Expenses	253.72	262.62	271.84	281.38	291.26

- 69. The Regulation 35(3)(a)(v) of the 2019 Tariff Regulations specify as follows:
 - "(v) 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."
- 70. We have considered the submissions of the Petitioner. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as follows:

"35 (3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the combined 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 Trans	formers (₹ La	kh per MV	4)						
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 lin	es (₹ Lakh pe	er km)			1				
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 subconductors)	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
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to- Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath- Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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."
- 71. As per clause (vi) of the second proviso to Regulation 35(3)(a) of the 2019 Tariff Regulations, O&M Expenses of Static Synchronous Compensator, and Static Var Compensator shall be worked out at @ 1.5% of the "original project cost" as on COD. "Original Project Cost" has been defined in Regulation 3(46) of the 2019 Tariff Regulations as follows:
 - "3(46) 'Original Project Cost' means the capital expenditure incurred by the generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cut-off date, and as admitted by the Commission:"
- The "Original Project Cost" has been defined in Regulation 3(46) of the 2019 Tariff Regulations as the capital expenditure/cost within the original scope of the transmission project up to the cut-off date. However, clause (vi) of the second proviso to Regulation 35(3)(a) of the 2019 Tariff Regulations refers to the "original project cost" of the STATCOM as on COD for the purpose of determining the O&M Expenses. To address the said difference in the definition of "original project cost" in Regulation 3(46)

of the 2019 Tariff Regulations and in clause (vi) of the second proviso to Regulation 35(3)(a) of the 2019 Tariff Regulations, the Commission vide order dated 18.10.2021 in Petition No. 658/TT/2020, while allowing O&M Expenses for the STATCOM relaxed clause (vi) of the second proviso to Regulation 35(3)(a) of the 2019 Tariff Regulations by exercising the power conferred under Regulation 76 of the 2019 Tariff Regulations and allowed O&M Expenses for the STATCOM @1.5% of the plant and machinery cost (excluding IDC, IEDC, land cost, and cost of civil works) of the STATCOM as on the cut-off date. The relevant portion of the order dated 18.10.2021 in Petition No. 658/TT/2020 is extracted as follows:

- "77. The clause (vi) of the second proviso to Regulation 35(3)(a) of the 2019 Tariff Regulations provides for O&M Expenses @ 1.5% of the "original project cost" of the STATCOM as on COD. "Original Project Cost" has been defined in Regulation 3(46) of the 2019 Tariff Regulations as under:
- "3(46) 'Original Project Cost' means the capital expenditure incurred by the generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cut-off date, and as admitted by the Commission;"
- 78. While "Original Project Cost" as defined in Regulation 3(46) of the 2019 Tariff Regulations covers capital expenditure/ cost within the original scope of the project up to the cut-off date, clause (vi) of the second proviso to Regulation 35(3)(a) of the 2019 Tariff Regulations refers to the "original project cost" of the STATCOM as on COD for the purpose of determining O&M Expenses.
- 79. We also observe that "original project cost" includes components of IDC, IEDC, land cost and cost of civil works. However, as per Regulation 3(45) of the 2019 Tariff Regulations extracted hereunder, the O&M Expenses are allowed for operation and maintenance of the project or part thereof and includes the expenditure towards manpower, maintenance, repairs and maintenance etc. but it excludes IDC, IEDC, land cost and cost of civil works:
- "(45) 'Operation and Maintenance Expenses' or 'O&M expenses' means the expenditure incurred for operation and maintenance of the project, or part thereof, and includes the expenditure on manpower, maintenance, repairs and maintenance spares, consumables, insurance and overheads and fuel other than used for generation of electricity;"
- 80. Therefore, we are of the view that determination of O&M expenses on the basis of Project cost (including IDC, IEDC Land cost and Cost of civil work) will not be consistent with the provisions of the 2019 Tariff Regulations as extracted above.
- 81. Regulation 76 of the 2019 Tariff Regulations provides for relaxation of any of the provisions of the 2019 Tariff Regulations by recording the reasons for the same. The

said Regulation provides as follows.

- "76. Power to Relax: The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person."
- 82. To address above issues arising out of the difference in the way in which "original project cost" has been considered in clause (vi) of the second proviso to Regulation 35(3)(a) and Regulation 3(46) of the 2019 Tariff Regulations, we relax clause (vi) of the second proviso to Regulation 35(3)(a) of the 2019 Tariff Regulations under Regulation 76 of the 2019 Tariff Regulations and allow O&M Expenses for the transmission assets @1.5% of the Plant and Machinery cost (excluding IDC, IEDC, Land cost and cost of Civil works) of the STATCOM as on the cut-off date. The same has been escalated at the rate of 3.51% to work out the O&M Expenses for the 2019-24 tariff period."
- 73. In line with the Commission's order dated 18.10.2021 in Petition No.658/TT/2020, the O&M Expenses are allowed @1.5% of the plant and machinery cost (excluding IDC, IEDC, land cost, and cost of civil works) as on the cut-off date of the transmission asset. The same has been escalated at the rate of 3.51% to work out the O&M Expenses for the 2019- 24 tariff period, and it is as follows:

(₹ in lakh)

Asset	2019-20	2020-21	2021-22	2022-23	2023-24
STATCOM in Northern Region					
Original Project Cost	15698.56	15698.56	15698.56	15698.56	15698.56
Norms (in %)	1.50				
Normative O&M Expenses (considering escalation of 3.51% per year over normative expenses for 2019-20)	235.48	243.74	252.30	261.15	270.32

Interest on Working Capital ("IWC")

- 74. 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.

- (1) 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.
- (2) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."
- "3. Definitions. In these regulations, unless the context otherwise requires:-
- **'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;"
- 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 interest on working capital as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rol on working capital considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for the financial year 2019-20, 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for the financial year 2020-21, 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for the financial year 2021-22, 10.50% (SBI 1 year MCLR applicable as on 1.4.2022 of 7.00% plus 350 basis points) for the financial year 2022-23 and 12.00% (SBI 1 year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points) for the financial year 2023-24.
- 76. The components of the working capital and interest allowed thereon for the transmission asset for the 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M					
Expenses	19.62	20.31	21.02	21.76	22.53
(O&M Expenses for one month)					

Working Capital for Maintenance Spares (15% of O&M)	35.32	36.56	37.84	39.17	40.55
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	324.50	343.07	344.91	348.36	344.24
Total Working Capital	379.44	399.95	403.78	409.29	407.32
Rate of Interest (in %)	12.05	11.25	10.50	10.50	12.00
Interest of Working Capital	45.72	44.99	42.40	42.98	48.88

Annual Fixed Charges for the 2019-24 Tariff Period

77. The transmission charges allowed in respect of the transmission asset for the 2019-24 period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	761.21	826.67	851.98	880.41	890.20
Interest on Loan	791.68	791.35	747.23	706.37	644.95
Return on Equity	805.14	875.94	903.69	934.65	945.50
O & M Expenses	235.48	243.74	252.30	261.15	270.32
Int. on Working Capital	45.72	44.99	42.40	42.98	48.88
Total	2639.23	2782.69	2797.60	2825.56	2799.85

Filing Fee and Publication Expenses

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

Licensee Fee and RLDC Fees and Charges

80. The Petitioner has sought reimbursement of the licensee fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner has also sought reimbursement of RLDC fees and charges in accordance with Regulation 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner shall be entitled to the licence fee and RLDC fees and charges in terms of the 2019 Tariff

Regulations for the 2019-24 tariff period.

Goods and Services Tax

- 81. The Petitioner has submitted that if GST is levied at any rate and at any point of time in the future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, paid by the Petitioner on account of the demand from Government/Statutory authorities, may be allowed to be recovered from the beneficiaries.
- 82. We have considered the Petitioner's submissions. Since GST is not levied on transmission service at present, we are of the view that Petitioner's prayer is premature.

Security Expenses

- 83. The Petitioner has submitted that security expenses in respect of the transmission asset are not claimed in the instant Petition, and it would file a separate Petition for claiming the overall security expenses and the consequential IWC.
- 84. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses on a projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in the financial year 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved the security expenses from 1.4.2019 to 31.3.2024. Therefore, the 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.
- 85. The Petitioner has submitted that security expenses in respect of the transmission

asset are not claimed in the instant Petition, and it would file a separate Petition for claiming the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during the financial year 2018-19 for claiming estimated security expenses for the financial year 2019-20 which shall be subject to true-up at the end of the year based on the actuals. The Petitioner has submitted that similar Petition for security expenses for the financial years 2020-21, 2021-22, 2022-23, and FY 2023- 24 shall be filed on a yearly basis on the basis of the actual expenses of the previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

86. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses on a projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in FY 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, 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

87. The Petitioner has sought reimbursement of the capital spares at the end of the 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

88. The Petitioner has submitted that the transmission charges for the financial years 2014-19 will be recovered on a monthly basis in accordance with Regulation 42 of the 2014 Tariff Regulation and shall be shared by the Respondents in accordance with Regulation 43

of the 2014 Tariff Regulations and shall be shared by the beneficiaries and long term transmission customers in terms of the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 dated 15.6.2010 and amendment to these Regulations issued vide order dated 30.11.2012 or as amended from to time.

- 89. The Petitioner has submitted that the transmission charges for the financial year 2019-24 will be recovered on a monthly basis in accordance with Regulation 57 of the 2019 Tariff Regulations. These charges shall be recovered on a monthly basis, and the billing collection and disbursement of Transmission Charges shall be governed by provisions of the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2020 (hereinafter referred to as "the 2020 Sharing Regulations").
- 90. We have considered the submissions of the Petitioner. With effect from 1.7.2011, the sharing of transmission charges for the inter-State transmission systems was governed by the 2010 Sharing Regulations, and with effect from 1.11.2020 (after the repeal of the 2010 Sharing Regulations), the sharing of the transmission charges is governed by the 2020 Sharing Regulations. The transmission charges approved in this order for the 2014-19 tariff period shall be recovered in accordance with the applicable Sharing Regulations in accordance with Regulation 43 of the 2014 Tariff Regulations, and the transmission charges approved in this order for the 2019-24 tariff period shall be recovered in accordance with the applicable Sharing Regulations in accordance with Regulation 57(2) of the 2019 Tariff Regulations.

91. To summarize:

a. The trued-up Annual Fixed Charges (AFC) allowed in respect of the transmission asset for the financial year 2018-19 are as follows:

	(₹ in lakh)
Particulars	2018-19 (pro-rata for 1 day)
Annual Fixed Charges	6.60

b. The Annual Fixed Charges allowed in respect of the transmission asset for the 2019-24 tariff period in this order are as follows:

 (₹ in lakh)

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

 Annual Fixed Charges
 2639.23
 2782.69
 2797.60
 2825.56
 2799.85

- 92. Annexure-I, given hereinafter, forms part of the order.
- 93. This order disposes of Petition No. 86/TT/2023 in terms of the above discussions and findings.

sd/-(Arun Goyal) Member sd/-(Jishnu Barua) Chairperson

Annexure-I

						As	set-1							
2014-19	Capital Expenditure as on 31.3.2014 (₹ in lakh)	Additional Capitalization (₹ in lakh)					Admitted Capital Cost as	Rate of Depreciation	Annual Depreciation as per Regulations (₹ in lakh)					
		2014-15	2015-16	2016-17	2017-18	2018-19	on 31.3.2019 (₹ in lakh)	(%)	2014-15	2015-16	2016-17	2017-18	2018-19	
Building	-	-	-		-	-	-	3.34	-	-	-	-	-	
Transmission Line	-	-	-		-	-	-	5.28	-	-	-	-	-	
Sub Station	13094.51	-	-	-	-	-	13094.51	5.28	-	-	-	-	691.39	
PLCC	-	-	-	-	-	-	-	6.33	-	-	-	-	-	
IT Equipment	73.46					-	73.46	5.28					3.88	
Total	13167.97	-	-	-	-	-	13167.97		-	-	-	-	695.27	
						Average Gross Block (₹ in lakh)		0.00	0.00	0.00	0.00	13167.97		
							Weighted Ave Deprecia	rage Rate of tion (%)	0.00	0.00	0.00	0.00	5.28	



Order in Petition No. 86/TT/2023 Page 45 of 46

		_				Ass	et-1							
Particular	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE					Admitted	Rate of	Annual Depreciation					
		2019-20	2020- 21	2021- 22	2022- 23	2023- 24	Capital Cost as on 31.3.2024	Depreciati on (%)	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24	
Building	-	41.11	50.35	20.89	38.83	-	151.18	3.34	0.69	2.21	3.40	4.40	5.05	
Transmission Line	-	-	-	-	-	-	-	5.28	-	-	-	-	-	
Substation	13094.51	2201.33	220.4 8	692.93	346.30	-	16555.54	5.28	749.51	813.44	837.55	864.99	874.13	
PLCC	-	-	-	-	-	-	•	6.33	-	-	-	•	-	
IT Equipment	73.46	-	-	-	-	-	73.46	15.00	11.02	11.02	11.02	11.02	11.02	
Total	13167.97	2242.44	270.8 3	713.82	385.13	-	16780.19		761.21	826.67	851.98	880.41	890.20	
					Average Gross Block (₹ in lakh)		14289. 19	15545. 82	16038. 15	16587. 62	16780. 19			
							Weighted Average Rate of Depreciation (%)			5.32	5.31	5.31	5.31	

Order in Petition No. 86/TT/2023 Page 46 of 46