# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No. 81/TT/2025

Coram:

Shri Jishnu Barua, Chairperson Shri Ramesh Babu V., Member Shri Harish Dudani, Member

Date of Order: 16.03.2025

#### In the matter of:

Approval under Section 62 read with Section 79(1)(d) of the Electricity Act, 2003 and Regulations 15(1)(a) and 23 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 for truing up of the transmission tariff for the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and the determination of transmission tariff of the 2024-29 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for the assets under Radial Interconnection between India (NER) and Bangladesh-Indian Portion" in the North-Eastern Region.

#### And in the matter of:

Power Grid Corporation of India Limited, "Saudamini", Plot No. 2, Sector-29,

Gurgaon-122001, Haryana.

...Petitioner

#### Vs.

- Assam Power Distribution Company Limited, 4<sup>th</sup> Floor, Bijulee Bhawan, Paltan Bazaar, Guwahati-781001. Assam.
- 2. **Meghalaya Energy Corporation Limited,** Short Round Road, "Lumjingshai", Shillong-793001, Meghalaya.
- 3. **Government of Arunachal Pradesh,** Itanagar, Arunachal Pradesh.
- 4. **Power and Electricity Department,**Government of Mizoram,
  Aizawl, Mizoram.
- 5. **Manipur State Power Distribution Corporation Limited,** Keishampat, Imphal.



- 6. **Department of Power,**Government of Nagaland,
  Kohima, Nagaland.
- 7. **Tripura State Electricity Corporation Limited,**Vidyut Bhawan, North Banamalipur,
  Agartala, Tripura (W)-799001, Tirupara.
- 8. Bangladesh Power Development Board, WAPDA Building, Motijheel Commercial Area, Dhaka-100, Bangladesh.

...Respondents

Parties present : Shri Mohd. Mohsin, PGCIL,

Shri A. Naresh Kumar, PGCIL, Shri Ranjeet Kumar Pandey, PGCIL,

Shri Ashish Alankar, PGCIL

#### <u>ORDER</u>

The instant Petition has been filed by Power Grid Corporation of India Limited for truing up of the transmission tariff for the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") and determination of transmission tariff for the 2024-29 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 (hereinafter referred to as "the 2024 Tariff Regulations") in respect of the following assets implemented under "Radial Interconnection between India (NER) and Bangladesh-Indian Portion" in North-Eastern Region (hereinafter referred to as "the transmission project"):

Asset-I: 400 kV D/C Surjyamaninagar (Tripura)—Indo Bangladesh Border Transmission Line (Operated at 132 kV), and

Asset-I(A): 2 nos. 132 kV line bays of 400 kV D/C Surjyamaninagar-Indo-Bangladesh border TL at Surjyamaninagar (operated at 132 kV)

The assets were combined during the 2019-24 period, and as such, they are hereinafter referred to as the 'Combined Asset.'

- 2. The Petitioner has made the following prayers in this Petition:
  - "a) Approve the trued-up Transmission Tariff for 2019-24 block and transmission tariff for 2024-29 block for the assets covered under this petition, as per para 12 and 13 above.



- b) 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, 2019 and Tariff Regulation 2024 as per para 12 and 13 above for respective block.
- c) 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 Regulations, 2019 and Tariff Regulation, 2024 as per para 12 and 13 above for respective block.
- d) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 94 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, and other expenditure (if any) in relation to the filing of petition.
- e) Allow the petitioner to bill and recover Licensee fee and RLDC fees & charges, separately from the respondents in terms of Regulation 94 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.
- f) 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 2024-29 period, if any, from the respondents.
- g) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 19 above.
- h) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall insurance expenses and consequential IOWC on that insurance expenses as mentioned at para 19 above.
- i) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall capital spares at the end of tariff block as per actual as mentioned at Para 19 above.
- j) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition as mentioned at para 20 above.
- k) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

#### **Background**

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



- (a) The Investment Approval (the IA) for the transmission project was accorded by the Board of Directors of the Petitioner's Company vide letter dated 5.2.2015 at an estimated cost of ₹7623 lakh, including an IDC of ₹236 lakh. The Revised Cost Estimate (RCE) was approved by the Board of Directors of the Petitioner's Company vide memorandum dated 16.06.2016 at the cost of ₹10038 lakh, including IDC of ₹224 lakh.
- (b) The scope of the transmission project as per IA is as under:

#### **Transmission lines:**

Asset-I:

400 kV D/C Surjyamaninagar (Tripura)-Indo-Bangladesh Border Transmission Line (operated at 132 kV).

#### Substation:

- Asset-I (A):
  - 2 Nos 132 kV Line Bays of 400 kV D/C Surjyamaninagar-Indo-Bangladesh border Transmission Line at Surjyamaninagar (operated at 132 kV).
- 4. The transmission tariff of the transmission assets was approved by the Commission from their respective COD to 31.3.2019, vide order dated 8.12.2016 in Petition No. 18/TT/2016. The Commission, vide order dated 29.11.2021 in Petition No. 667/TT/2020, trued-up the tariff for the 2014-19 tariff period and determined the tariff for the 2019-24 tariff period.
- 5. The Respondents include Distribution Licensees, Power Departments and Transmission Licensees that receive transmission services from the Petitioner, primarily benefiting the North-Eastern Region.
- 6. The Petitioner has served a copy of the Petition on the Respondents, and notice regarding the filing of this Petition has 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 notices published in the



newspapers by the Petitioner. None of the Respondents have filed any reply in the matter.

- 7. The hearing in the matter was held on 29.1.2025, and the order was reserved.
- 8. This order is issued considering the submissions made by the Petitioner in its Petition vide affidavit dated 30.7.2024. None of the Respondents have filed any reply in the matter.
- 9. Having heard the Petitioner's representative and perused the material on record, we proceed to dispose of the Petition in the succeeding paragraphs.

## TRUING-UP OF ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD

10. The details of the trued-up transmission charges claimed by the Petitioner in respect of the Combined Asset for the 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	484.91	484.91	484.91	484.91	484.91
Interest on Loan	389.27	343.40	303.72	267.68	230.96
Return on Equity	512.66	512.66	512.66	512.66	512.66
Interest on Working Capital	22.92	20.85	18.99	18.58	20.76
O&M Expenses	47.31	48.97	50.70	52.46	54.31
Total	1457.07	1410.79	1370.98	1336.29	1303.60

11. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner in respect of the Combined Asset for 2019-24 are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	3.94	4.08	4.23	4.37	4.53
Maintenance Spares	7.10	7.35	7.61	7.87	8.15
Receivables	179.15	173.93	169.02	164.75	160.28
Total Working Capital	190.19	185.36	180.86	176.99	172.96
Rate of Interest (in %)	12.05	11.25	10.50	10.50	12.00
Interest on Working Capital	22.92	20.85	18.99	18.58	20.76

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

12. The Petitioner has claimed E-COD of the Combined Asset as 22.3.2016. Based on the trued-up admitted capital cost and actual COD of the transmission assets, the E-COD has been worked out as follows:



	Computation of E-COD							
Particulars	Actual COD	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Weightage of the cost (in %)	Number of days from the last COD	Weighted Days			
Asset – I	18.3.2016	7834.63	86.11	27.00	23.25			
Asset – I(A)	14.4.2016	1263.74	13.89	0.00	0.00			
Total		9098.37	100.00		23.25			
E-COD (Latest COD – Total weighted Days) 22.3.2016								

13. E-COD is used to determine the lapsed life of the project as a whole, which works out as three (3) years as on 1.4.2019 (i.e., the number of completed years as on 1.4.2019 from E-COD).

# Weighted Average Life ("WAL")

- 14. Regulation 33 of the 2019 Tariff Regulations has been considered for determining WAL. The Combined Asset may have multiple elements, such as land, building, transmission line, sub-station, and PLCC, and each element may have a different span of life. Therefore, the concept of WAL has been used to determine the useful life of the transmission project as a whole.
- 15. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The element-wise life defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life defined in the 2019 Tariff Regulations has been considered for the determination of WAL. Accordingly, the WAL of the Combined Asset has been worked out as 33 years, and the same is as follows:

	Admitted Capital Cost as on 31.3.2019							
Particulars	Combined Asset Cost (₹ in lakh) (1)	Life in Years (2)	Weighted Cost (3) = (1) x (2)	Weighted Average Life of Asset (in years) (4) = (3)/ (1)				
Building	0.00	25	0.00					
Transmission Line	7834.63	35	274212.05					
Sub-Station Equipment	834.09	25	20852.25					
PLCC	429.65	15	6444.75					
IT Equipment and Software	0.00	7	0.00					
Total	9098.37		301509.05	33.14 (Rounded-off to 33 years)				

16. WAL as on 1.4.2019, as determined above, is applicable prospectively (i.e., for the 2019-24 tariff period). No retrospective adjustment of depreciation in the previous tariff period is required to be done. As discussed, the E-COD of the Combined Asset is 22.3.2016, and the lapsed life of the transmission project as a whole works out as three (3) years as on 1.4.2019 (i.e., the number of completed years as of 1.4.2019 from the Effective COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 30 years.

#### Capital Cost for the 2019-24 Tariff Period

- 17. The Commission, vide order dated 29.11.2021 in Petition No. 667/TT/2020, trued up the tariff for the 2014-19 period and allowed the tariff for the 2019-24 period. The capital cost of ₹9098.37 lakh was approved by the Commission for the Combined Asset as on 31.3.2019 in Petition No. 667/TT/2020, and the same has been considered as opening capital cost as on 1.4.2019 for the purpose of truing up of transmission tariff for the 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations in the instant Petition.
- 18. We have considered the submissions of the Petitioner. The capital cost allowed for the Combined Asset is as follows:



 Capital Cost as on 1.4.2019
 ACE during the 2019-24 tariff period
 Capital Cost as on 31.3.2024 on 31.3.2024

 9098.37
 No add cap
 9098.37

# **Debt-Equity Ratio**

19. The details of the debt-equity ratio considered and allowed under Regulation 18 of the 2019 Tariff Regulations for computation of tariff of the Combined Asset during the 2019-24 tariff period are as follows:

Funding	Capital Cost as on 1.4.2019		Capital Cost as on 31.3.2024	
	(₹ in lakh)	(in %)	(₹ in lakh)	(in %)
Debt	6368.86	70.00	6368.86	70.00
Equity	2729.51	30.00	2729.51	30.00
Total	9098.37	100.00	9098.37	100.00

# **Depreciation**

- 20. The depreciation has been worked out considering the admitted capital expenditure as on 1.4.2019 and thereafter up to 31.3.2024. The Weighted Average Rate of Depreciation (WAROD) has been worked out for the Combined Asset as per the rates of depreciation specified in Regulation 33 of the 2019 Tariff Regulations.
- 21. The depreciation allowed for the Combined Asset for the 2019-2024 tariff period is as follows:

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Opening Capital Cost	9098.37	9098.37	9098.37	9098.37	9098.37
В	Addition during the year 2019-24 due to ACE	0.00	0.00	0.00	0.00	0.00
С	Closing Capital Cost (A+B)	9098.37	9098.37	9098.37	9098.37	9098.37
D	Average Capital Cost (A+C)/2	9098.37	9098.37	9098.37	9098.37	9098.37
Е	Average Capital Cost (90% depreciable assets)	9098.37	9098.37	9098.37	9098.37	9098.37
F	Average Capital Cost (100% depreciable assets)	0.00	0.00	0.00	0.00	0.00
G	Depreciable value (excluding IT equipment and software) (E*90%)	8188.53	8188.53	8188.53	8188.53	8188.53



Н	Depreciable value of IT equipment and software (F*100%)	0.00	0.00	0.00	0.00	0.00
I	Total Depreciable Value (G+H)	8188.53	8188.53	8188.53	8188.53	8188.53
J	Weighted average rate of Depreciation (WAROD) (in %)	5.3296	5.3296	5.3296	5.3296	5.3296
K	Lapsed useful life at the beginning of the year (Year)	3	4	5	6	7
L	Balance useful life at the beginning of the year (Year)	30	29	28	27	26
M	Depreciation during the year (D*J)	484.91	484.91	484.91	484.91	484.91
N	Cumulative Depreciation at the end of the year	1872.66	2357.56	2842.47	3327.38	3812.28
0	Remaining Aggregate Depreciable Value at the end of the year	6315.88	5830.97	5346.06	4861.16	4376.25

22. The details of depreciation allowed vide order dated 29.11.2021 in Petition No. 667/TT/2020, depreciation claimed in the instant Petition, and trued-up depreciation allowed for the Combined Asset in the instant order are as follows:

(₹ in lakh) **Particulars** 2019-20 2020-21 2021-22 2022-23 2023-24 Allowed vide order dated 29.11.2021 484.91 484.91 484.91 484.91 484.91 in Petition No. 667/TT/2020 Claimed by the Petitioner in the 484.91 484.91 484.91 484.91 484.91 instant Petition Allowed after truing-up in this order 484.91 484.91 484.91 484.91 484.91

# Interest on Loan (IoL)

23. The Petitioner has claimed the Weighted Average Rate of Interest (WAROI) on loans based on its actual loan portfolio, and the rate of interest prevailed. The loL has been calculated based on the actual interest rate submitted by the Petitioner in accordance with Regulation 32 of the 2019 Tariff Regulations. The trued-up loL allowed in respect of the Combined Asset is as follows:

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Gross Normative Loan	6368.86	6368.86	6368.86	6368.86	6368.86
В	Cumulative Repayments up	1387.75	1872.66	2357.56	2842.47	3327.38
Ь	to Previous Year					
С	Net Loan-Opening (A-B)	4981.11	4496.20	4011.30	3526.39	3041.48
D	Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Е	Repayment during the year	484.91	484.91	484.91	484.91	484.91
F	Net Loan-Closing (C+D-E)	4496.20	4011.30	3526.39	3041.48	2556.58
G	Average Loan (C+F)/2	4738.66	4253.75	3768.84	3283.94	2799.03



I	Interest on Loan (G*H)	389.27	343.40	303.72	267.68	230.96
' '	Interest on Loan (in %)					
П	Weighted Average Rate of	8.2148	8.0728	8.0588	8.1511	8.2514

24. The details of the IoL allowed vide order dated 29.11.2021 in Petition No. 667/TT/2020, IoL claimed in the instant Petition, and trued-up IoL allowed in the instant order in respect of the Combined Asset are as follows:

				(1	₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Allowed vide order dated 29.11.2021 in	390.82	350.47	311.07	271.67	231.33
Petition No. 667/TT/2020					
Claimed by the Petitioner in the instant	389.27	343.40	303.72	267.68	230.96
Petition					
Approved after truing-up in this order	389.27	343.40	303.72	267.68	230.96

# Return on Equity (RoE)

- 25. The Petitioner has submitted that its Income Tax Assessment has been completed, assessment orders have been issued by the Income Tax Department for the FY 2019-20 and FY 2020-21, and the income has been assessed under MAT [115 JB of the Income Tax Act, 1961 (IT Act, 1961)]. The Petitioner has further submitted that the Income Tax Returns (ITR) have been filed for the FY 2021-22, 2022-23, and FY 2023-24 (submitted in Petition No. 401/TT/2024).
- 26. The Petitioner has also submitted that it is liable to pay the income tax at the MAT rates (17.472, i.e., 15% Income Tax + 12% Surcharge on Income Tax + 4% Health and Education Cess on Income Tax and Surcharge) and has claimed the following effective tax rates for the 2019-24 tariff period:

Year	Claimed effective	Grossed up RoE (in %)
	tax rate (in %)	[(Base Rate)/(1-t)]
2019-20	17.472	18.782
2020-21	17.472	18.782
2021-22	17.472	18.782
2022-23	17.472	18.782
2023-24	17.472	18.782

27. We have considered the Petitioner's submission. We observe that the entities covered under the MAT regime are paying Income Tax as per the MAT rates notified for



the respective financial year under the IT Act, 1961, which is levied on the book profit of the entity computed as per Section 115 JB of the IT Act, 1961. Section 115 JB (2) defines book profit as net profit in the Statement of Profit and Loss prepared in accordance with Schedule-II of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying the MAT rates of the respective financial year, the notified MAT rates for the respective financial year shall be considered as an effective tax rate for the purpose of grossing up the RoE for truing up the 2019-24 tariff period in terms of the provisions of the 2019 Tariff Regulations. The Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax Authorities shall be considered on the actual payment. However, the penalty (for default on the part of the Assessee), if any, imposed shall not be taken into account for the purpose of grossing up of the rate of RoE. Any under-recovery or over-recovery of the grossed-up rates on the RoE after truing up shall be recovered or refunded to the beneficiaries or the long-term customers, as the case may be, on a year-to-year basis. Therefore, the following effective tax rate based on the notified MAT rates are considered for the purpose of grossing up the rate of RoE:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Effective tax (in %)	Base rate of RoE (in %)	Grossed-up RoE [(Base Rate)/(1-t)] (in%)
2019-20	17.472	17.472	15.50	18.782
2020-21	17.472	17.472	15.50	18.782
2021-22	17.472	17.472	15.50	18.782
2022-23	17.472	17.472	15.50	18.782
2023-24	17.472	17.472	15.50	18.782

28. Accordingly, the trued-up RoE allowed in respect of the Combined Asset for the 2019-24 tariff period is as follows:

					(₹	₹ in lakh)
SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Opening Equity	2729.51	2729.51	2729.51	2729.51	2729.51
В	Addition due to ACE	0.00	0.00	0.00	0.00	0.00
С	Closing Equity (A+B)	2729.51	2729.51	2729.51	2729.51	2729.51



D	Average Equity (A+C)/2	2729.51	2729.51	2729.51	2729.51	2729.51
Е	Return on Equity (Base	15.50	15.50	15.50	15.50	15.50
	Rate) (in %)					
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in	18.782	18.782	18.782	18.782	18.782
	%)					
Н	Return on Equity (Pre-tax) (D*G)	512.66	512.66	512.66	512.66	512.66

29. The details of the RoE allowed vide order dated 29.11.2021 in Petition No. 667/TT/2020, RoE claimed in the instant Petition, and trued-up RoE allowed for the Combined Asset in the instant order are as follows:

₹ in lakh) 2020-21 2021-22 **Particulars** 2019-20 2022-23 2023-24 Allowed vide order dated 29.11.2021 512.65 512.65 512.65 512.65 512.65 in Petition No. 667/TT/2020. Claimed by the Petitioner in the 512.66 512.66 512.66 512.66 512.66 instant Petition. Allowed after truing-up in this order. 512.66 512.66 512.66 512.66 512.66

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

30. The Commission vide order dated 29.11.2021 in Petition No. 667/TT/2020 allowed the following O&M Expenses for the Combined Asset:

					<u>(₹ in lakh)</u>
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	47.31	48.97	50.70	52.46	54.31

31. The Petitioner, in the instant true-up Petition, has claimed the O&M Expenses for the Combined Asset. We have considered the submissions of the Petitioner. The O&M Expenses are allowed for the Combined Asset as per the norms specified in the 2019 Tariff Regulations, and the same are as follows:

				(₹ in	lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-stations:					
132 kV Bays					
2 No 132 kV Bays at Surajmaninagar Su	bstation				
Norms: 132 kV Bays	16.08	16.64	17.23	17.83	18.46
O&M Expenses of Sub-station bays	32.16	33.28	34.46	35.66	36.92
Transmission Line:					



400 kV <b>D/C (Twin)</b> Surajmaninagar-Com	illa Line –	(17.2 km)	ı		
Norms: Transmission Line D/C (Twin	0.881	0.912	0.944	0.977	1.011
O&M of transmission line	15.15	15.69	16.24	16.80	17.39
Total O&M Expenses (₹ in lakh)	47.31	48.97	50.70	52.46	54.31

32. The details of O&M Expenses allowed vide order dated 29.11.2021 in Petition No. 667/TT/2020, O&M Expenses claimed in the instant Petition, and trued-up O&M Expenses allowed in the instant order in respect of the Combined Asset are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Allowed vide order dated 29.11.2021 in Petition No. 667/TT/2020	47.31	48.97	50.70	52.46	54.31
Claimed by the Petitioner in the instant Petition	47.31	48.97	50.70	52.46	54.31
Allowed after truing-up in this order	47.31	48.97	50.70	52.46	54.31

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

33. IWC has been worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for the FY 2019-20, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for the FY 2020-21, 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for the FY 2021-22 and FY 2022-23 and 12.00% (SBI 1 year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points) for FY 2023-24. The components of the working capital and interest allowed thereon for the Combined Asset for 2019-24 are as follows:

(₹ in lakh)

SI.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No.						
Α	Working Capital for O&M	3.94	4.08	4.23	4.37	4.53
	Expenses (O&M Expenses for					
	one month)					
В	Working Capital for Maintenance	7.10	7.35	7.61	7.87	8.15
	Spares (15% of O&M Expenses)					
С	Working Capital for Receivables	179.15	173.93	169.02	164.75	160.28
	(Equivalent to 45 days of annual					
	fixed cost /annual transmission					
	charges)					
D	Total Working Capital	190.19	185.36	180.85	176.99	172.95



SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
E	Rate of Interest for working capital (in %)	12.05	11.25	10.50	10.50	12.00
F	Interest on working capital	22.92	20.85	18.99	18.58	20.75

34. The details of the IWC allowed vide order dated 29.11.2021 in Petition No. 667/TT/2020, IWC claimed in the instant Petition, and trued-up IWC allowed for the Combined Asset in the instant order are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Allowed vide order dated 29.11.2021 in	22.92	20.95	19.09	18.64	18.13
Petition No. 667/TT/2020.					
Claimed by the Petitioner in the instant	22.92	20.85	18.99	18.58	20.76
Petition.					
Allowed after truing-up in this order.	22.92	20.85	18.99	18.58	20.75

# <u>Trued-up Annual Fixed Charges for the 2019-24 Tariff Period</u>

35. Accordingly, the annual fixed charges allowed after truing-up for the 2019-24 tariff period in respect of the Combined Asset are as follows:

(₹ in lakh)

Particulars	2019-20	2022-21	2021-22	2022-23	2023-24
Depreciation	484.91	484.91	484.91	484.91	484.91
Interest on Loan	389.27	343.40	303.72	267.68	230.96
Return on Equity	512.66	512.66	512.66	512.66	512.66
O&M Expenses	47.31	48.97	50.70	52.46	54.31
Interest on Working	22.92	20.85	18.99	18.58	20.75
Capital					
Total	1457.06	1410.78	1370.98	1336.28	1303.59

36. The details of annual transmission charges allowed vide order dated 29.11.2021 in Petition No. 667/TT/2020, annual transmission charges claimed in the instant Petition, and trued-up annual transmission charges allowed in the instant order in respect of the Combined Asset are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Allowed vide order dated 29.11.2021	1458.63	1417.94	1378.41	1340.33	1301.32
in Petition No. 667/TT/2020.					
Claimed by the Petitioner in the	1457.07	1410.79	1370.98	1336.29	1303.60
instant Petition.					
Allowed after truing-up in this order.	1457.06	1410.78	1370.98	1336.28	1303.59



#### DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2024-29 TARIFF PERIOD

37. The Petitioner has claimed the following transmission charges in respect of the Combined Asset for the 2024-29 tariff period:

(₹ in lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Depreciation	522.16	522.16	517.56	457.71	112.23
Interest on Loan	189.34	146.04	103.17	63.30	39.92
Return on Equity	512.66	512.66	512.66	512.66	512.66
Interest on Working Capital	20.22	19.68	19.09	17.67	12.35
O&M Expenses	46.37	48.80	51.35	54.05	56.86
Total	1290.75	1249.34	1203.83	1105.39	734.02

38. The Petitioner has claimed the following IWC in respect of the Combined Asset for the 2024-29 tariff period:

(₹ in lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
O&M Expenses	3.86	4.07	4.28	4.50	4.74
Maintenance Spares	6.96	7.32	7.70	8.11	8.53
Receivables	159.13	154.03	148.42	135.91	90.50
Total Working Capital	169.95	165.42	160.40	148.52	103.77
Rate of Interest (in %)	11.90	11.90	11.90	11.90	11.90
Interest on Working Capital	20.22	19.68	19.09	17.67	12.35

#### **Capital Cost**

- 39. Regulation 19 of the 2024 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 checks in accordance with these regulations shall form the basis for the 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 and, in the event actual equity is in excess of 30% on a pari-passu basis, by treating the excess equity over and above 30% of the funds deployed as a normative loan, or (ii) being equal to the actual amount of the loan in the event of actual equity being 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 the sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 6 of these regulations;
- (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal 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 the 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)......
- (p).....
- (3) The Capital cost of an existing project shall include the following:
  - (a) Capital cost admitted by the Commission prior to 1.4.2024 duly trued up by excluding liability, if any, as on 1.4.2024;
  - (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
  - (c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;
  - (d) to (h).....
  - (i) Expenditure on account of change in law and force majeure events;
- (4) (5) .....
- (6) The following shall be excluded from the capital cost of the existing and new projects:
  - (a) The assets forming part of the project but not in use, as declared in the tariff petition:
  - (b) De-capitalised Assets after the date of commercial operation on account of obsolescence;
  - (c) De-capitalised Assets on account of upgradation or shifting from one project to another project:

Provided that in case such an asset is recommended for further utilisation by the Regional Power Committee in consultation with CTU, such asset shall be decapitalised from the original project only after its redeployment;

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



(d).....

- (e) Proportionate cost of land of the existing generation or transmission project, as the case may be, which is being used for generating power from a generating station based on renewable energy as may be permitted by the Commission; and
- (f) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project that does not carry any liability of repayment."
- 40. The capital cost allowed as on 31.3.2024 is ₹ 9098.37 lakh. This is considered as the opening capital cost for the Combined Asset as on 1.4.2024 for the determination of the transmission tariff for the 2024-29 period.

## **Additional Capital Expenditure**

41. The Petitioner has not claimed any Additional Capital Expenditure (ACE) for the Combined Asset for the 2024-29 tariff period.

#### **Debt Equity Ratio**

- 42. Regulation 18 of the 2024 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 the approval of the competent authority in other cases regarding the 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 the case of the generating station and the transmission system, including the communication system declared under commercial operation prior to 1.4.2024, the debt-



equity ratio allowed by the Commission for the determination of tariff for the period ending 31.3.2024 shall be considered:

Provided that in the case of a generating station or a transmission system, including a communication system which has completed its useful life as on 1.4.2024 or is completing its useful life during the 2024-29 tariff period, if the equity actually deployed 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 96 of these regulations.

- (4) In the case of the generating station and the transmission system, including communication system declared under commercial operation prior to 1.4.2024, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2024, 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 1.4.2024 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."
- 43. The details of the debt ratio and equity considered for the purpose of computation of tariff for the 2024-29 tariff period is as under:

	Capital Cos 1.4.20		Capital Cost as on 31.3.2029			
Funding	(₹ in lakh)	(in %)	(₹ in lakh)	(in %)		
Debt	6368.86	70.00	6368.86	70.00		
Equity	2729.51	30.00	2729.51	30.00		
Total	9098.37	100.00	9098.37	100.00		

#### **Depreciation**

- 44. Regulation 33 of the 2024 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 the case of the tariff of all the units of a generating station or all elements of a transmission system including the 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 the 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 a 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, the weighted average life for the generating station or the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In the case of commercial operation of the asset for a part of the year, depreciation shall be charged on a pro rata basis.
- (3) The salvage value of the asset shall be considered as 10%, and depreciation shall be allowed up to the maximum of 90% of the capital cost of the asset:

P	rovided	that the	salvage	value for IT	equipment	and :	software	shall b	ес	onside	əred
as NIL ar	nd 100%	s value o	of the ass	ets shall be	considered	depi	reciable;				

......

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	)						

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

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

. . . . . . . . . .

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

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 15 years from the effective date of commercial operation of the generating station or the transmission system, as the case may be, shall be spread over the balance useful life of the assets.

- (7) In the case of the existing projects, the balance depreciable value as on 1.4.2024 shall be worked out by deducting the cumulative depreciation as admitted to by the Commission up to 31.3.2024 from the gross depreciable value of the assets.
- (8) The generating company or the transmission licensee, as the case may be, shall submit the details of capital expenditure proposed to be incurred during five years before the completion of useful life along with proper justification and proposed life extension. The Commission, based on prudence check of such submissions, shall approve the depreciation by equally spreading the depreciable value over the balance Operational Life of the generating station or unit thereof or fifteen years, whichever is lower, and in case of the transmission system shall equally spread the depreciable value over the balance useful life



of the Asset or 10 years whichever is higher.

- (9) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalised asset during its useful service......"
- 45. The depreciation has been worked out considering the admitted capital expenditure as on 1.4.2024 and thereafter up to 31.3.2029. The WAROD has been worked out for the Combined Asset as per the rates of depreciation specified in the 2024 Tariff Regulations. The Combined Asset is completing 12 years of useful life as on 31.3.2028 and, therefore, the remaining depreciable value of ₹ 2356.67 lakh has been spread across the balance useful life of 21 years of the Combined Asset in accordance with the 2024 Tariff Regulations.
- 46. The depreciation allowed for the Combined Asset under Regulation 33 of the 2024 Tariff Regulations for the 2024-29 tariff period is as under:

(₹ in lakh) Particulars 2024-25 2025-26 2026-27 2027-28 2028-29 9098.37 9098.37 9098.37 A Opening Gross Block 9098.37 9098.37 B Addition during the year 0.00 0.00 0.00 0.00 0.00 2024-29 due to ACE C Closing Gross Block (A+B) 9098.37 9098.37 9098.37 9098.37 9098.37 D Average Gross Block 9098.37 9098.37 9098.37 9098.37 9098.37 (A+C)/2E Average Gross Block (90% 9098.37 9098.37 9098.37 9098.37 9098.37 depreciable assets) F Average Gross Block 0.00 0.00 0.00 0.00 0.00 (100% depreciable assets) G Depreciable value 8188.53 8188.53 8188.53 8188.53 8188.53 (excluding IT equipment and software) (E\*90%) H Depreciable value of IT 0.00 0.00 0.00 0.00 0.00 equipment and software (F\*100%) I Total Depreciable Value 8188.53 8188.53 8188.53 8188.53 8188.53 (G+H) J Weighted average rate of 5.7390 5.7390 5.6885 5.0307 Spread over Depreciation (WAROD) (in depreciation 9 K Lapsed useful life at the 8 10 11 12 beginning of the year (Year) Balance useful life at the 25 24 23 22 21 L beginning of the year (Year) M Depreciation during the 522.16 522.16 517.56 457.71 112.22



	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
	year (D*J)					
	Cumulative Depreciation at	4334.44	4856.59	5374.16	5831.87	5944.09
Ν	the end of the year					
	Remaining Aggregate	3854.09	3331.94	2814.38	2356.67	2244.44
	Depreciable Value at the					
C	end of the year					

## **Interest on Loan (IoL)**

- 47. Regulation 32 of the 2024 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 gross normative loans for the calculation of interest on loans.
  - (2) The normative loan outstanding as on 1.4.2024 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2024 from the gross normative loan.
  - (3) The repayment for each of the years of the tariff period 2024-29 shall be deemed to be equal to the depreciation allowed for the corresponding year or period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis, and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalisation of such asset.
  - (4) Notwithstanding any moratorium period availed of by the generating company or the transmission licensee, as the case may be, the repayment of the 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 or allocated loan portfolio;

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

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

Provided that the rate of interest on the loan for the installation of the emission control system commissioned subsequent to date of commercial operation of the generating station or unit thereof, shall be the weighted average rate of interest of the actual loan portfolio of the emission control system, and in the absence of the actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered, subject to a ceiling of 14%;

Provided further that if the generating company or the transmission licensee, as the case may be, does not have any actual loan, then the rate of interest for a loan shall be considered as 1-year MCLR of the State Bank of India as applicable as on April 01, of the relevant financial year.



- (6) The interest on the 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."
- 48. The Petitioner has submitted that (IoI) has been calculated based on interest rates prevailing as on 1.4.2024 for the respective loans. Accordingly, the weighted average rate of Interest on Loan (IoL) has been considered as claimed by the Petitioner. The Petitioner has prayed that the change in interest rate due to the floating rate of interest applicable, if any, during the 2024-29 tariff period will be adjusted. Accordingly, the floating interest rate, if any, shall be considered at the time of truing-up.
- 49. We have considered the submissions of the Petitioner, and the IoL has been worked out in accordance with Regulation 32 of the 2024 Tariff Regulations. The IoL allowed for the Combined Asset for the 2024-29 tariff period is as follows:

(₹ in lakh)

	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Α	Gross Normative Loan	6368.86	6368.86	6368.86	6368.86	6368.86
В	Cumulative Repayments up	3812.28	4334.44	4856.59	5374.16	5831.87
Ь	to Previous Year					
С	Net Loan-Opening (A-B)	2556.58	2034.42	1512.26	994.70	536.99
D	Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Е	Repayment during the year	522.16	522.16	517.56	457.71	112.22
F	Net Loan-Closing (C+D-E)	2034.42	1512.26	994.70	536.99	424.77
G	Average Loan (C+F)/2	2295.50	1773.34	1253.48	765.85	480.88
Н	Weighted Average Rate of	8.2486	8.2352	8.2311	8.2656	8.3010
П	Interest on Loan (in %)					
	Interest on Loan (G*H)	189.35	146.04	103.18	63.30	39.92

#### Return on Equity (RoE)

- 50. Regulations 30 and 31 of the 2024 Tariff Regulations provide as follows:
  - **"30. Return on Equity**: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.
  - (2) Return on equity for existing project shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-ofriver hydro generating station and at the base rate of 16.50% for storage type hydro generating stations, pumped storage hydro generating stations and run-of-river generating station with pondage;
  - (3) Return on equity for new project achieving COD on or after 01.04.2024 shall be



computed at the base rate of 15.00% for the transmission system, including the communication system, at the base rate of 15.50% for Thermal generating station and run-of-river hydro generating station and at the base rate of 17.00% for storage type hydro generating stations, pumped storage hydro generating stations and run-of-river generating station with pondage;

Provided that return on equity in respect of additional capitalization beyond the original scope, including additional capitalization on account of the emission control system, Change in Law, and Force Majeure shall be computed at the base rate of one-year marginal cost of lending rate (MCLR) of the State Bank of India plus 350 basis points as on 1st April of the year, subject to a 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 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;

....."

**31. Tax on Return on Equity.** (1) The 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. The effective tax rate 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 concerned generating company or the transmission licensee by excluding the income of nongeneration or non-transmission business, as the case may be, and the corresponding tax thereon.

Provided that in case a generating company or transmission licensee is paying Minimum Alternate Tax (MAT) under Section 115JB of the Income Tax Act, 1961, the effective tax rate shall be the MAT rate, including surcharge and cess;

Provided further that in case a generating company or transmission licensee has opted for Section 115BAA, the effective tax rate shall be tax rate including surcharge and cess as specified under Section 115BAA of the Income Tax Act, 1961.

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

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

(3) The generating company or the transmission licensee, as the case may be, shall true up the effective tax rate for 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 2024-29 on actual gross income of any financial year. Further, any penalty arising on account of delay in deposit or short deposit of tax amount shall not be considered while computing the actual tax paid for the generating company or the transmission licensee, as the case may be.

Provided that in case a generating company or transmission licensee is paying Minimum Alternate Tax (MAT) under Section 115JB, 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 with the applicable MAT rate including surcharge and cess.

Provided that in case a generating company or transmission licensee is paying tax under Section 115BAA, 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 with the tax rate including surcharge and cess as specified under Section 115BAA.

Provided that 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 a year to year basis."

51. The Petitioner has submitted that the MAT rate applies to it. The applicable MAT rate has been considered for the purpose of RoE, which will be trued-up with the actual tax rate in accordance with Regulation 31(3) of the 2024 Tariff Regulations. The RoE allowed for the Combined Asset is as under:

<u>(₹ in lakh)</u>

SI.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No						
Α	Opening Equity	2729.51	2729.51	2729.51	2729.51	2729.51
В	Addition due to ACE	0.00	0.00	0.00	0.00	0.00
С	Closing Equity (A+B)	2729.51	2729.51	2729.51	2729.51	2729.51
D	Average Equity (A+C)/2	2729.51	2729.51	2729.51	2729.51	2729.51
Е	Return on Equity (Base Rate) (in	15.50	15.50	15.50	15.50	15.50
	%)					
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
Н	Return on Equity (D*G)	512.66	512.66	512.66	512.66	512.66

## **Operation and Maintenance Expenses ("O&M Expenses")**

52. The O&M Expenses claimed by the Petitioner for the 2024-29 tariff period for the Combined Asset is as follows:

(₹ in lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
O&M Expenses	46.37	48.80	51.35	54.05	56.86

- 53. Regulation 36(3) of the 2024 Tariff Regulations provides as follows:
  - "36. Operation and Maintenance Expenses:

. . . .

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

|--|



Norms for sub-station Bays (Rs Lakh pe	er bay)								
765 kV	41.34	43.51	45.79	48.20	50.73				
400 kV	29.53	31.08	32.71	34.43	36.23				
220 kV	20.67	21.75	22.90	24.10	25.36				
132 kV and below	15.78	16.61	17.48	18.40	19.35				
Norms for Transformers/Reactors (Rs Lakh per MVA or MVAR)									
O&M expenditure per MVA or per MVAr (Rs Lakh per MVA or per MVAr)	0.262	0.276	0.290	0.305	0.322				
Norms for AC and HVDC lines (Rs Lakh per km)									
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.861	0.906	0.953	1.003	1.056				
Single Circuit (Bundled conductor with four or more sub-conductors)	0.738	0.776	0.817	0.860	0.905				
Single Circuit (Twin & Triple Conductor)	0.492	0.518	0.545	0.573	0.603				
Single Circuit (Single Conductor)	0.246	0.259	0.272	0.287	0.302				
Double Circuit (Bundled conductor with four or more sub-conductors)	1.291	1.359	1.430	1.506	1.585				
Double Circuit (Twin & Triple Conductor)	0.861	0.906	0.953	1.003	1.056				
Double Circuit (Single Conductor)	0.369	0.388	0.409	0.430	0.453				
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.266	2.385	2.510	2.642	2.781				
Multi Circuit (Twin & Triple Conductor)	1.509	1.588	1.671	1.759	1.851				
Norms for HVDC stations									
HVDC Back-to-Back stations (Rs Lakh per MW)	2.07	2.18	2.30	2.42	2.55				
Gazuwaka BTB (Rs Lakh/MW)	1.83	1.92	2.03	2.13	2.24				
HVDC bipole scheme (Rs Lakh/MW)	1.04	1.10	1.16	1.22	1.28				

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 that the O&M expense norms of Double Circuit quad AC line shall be applicable to for HVDC bi-pole line;

Provided that the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2500 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for HVDC bipole scheme;

Provided further that the O&M expenses for Transmission Licensees whose transmission assets are located solely in NE Region (including Sikkim), States of Uttarakhand, Himachal Pradesh, the Union Territories of Jammu and Kashmir and Ladakh, district of Darjeeling of West Bengal shall be worked out by multiplying 1.50 to the normative O&M expenses prescribed above.

- (b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of substation bays, transformer capacity of the transformer/reactor/Static Var Compensator/Static Synchronous Compensator (in MVA/MVAr) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA/MVAr and per km respectively.
- (c) Communication system: The operation and maintenance expenses for the ULDC or



such similar scheme shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up. The expenses in case of U-NMS shall be allowed on actual basis after due prudence check.

(d) The Security Expenses, Capital Spares individually costing more than Rs. 10 lakh and Insurance expenses arrived through competitive bidding for the transmission system and associated communication system shall be allowed separately after prudence check: Provided that in case of self insurance, the premium shall not exceed 0.09% of the GFA of the assets insured;

Provided that the transmission licensee shall submit the along with estimated security expenses based on assessment of the security requirement, capital spares and insurance expenses, which shall be trued up based on details of the year-wise actuals along with appropriate justification for incurring the same and along with confirmation that the same is not claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization.

(e) On the occurrence of any change in law event affecting O&M expenses, the impact shall be allowed to the transmission licensee at the time of truing up of tariff.

Provided that such impact shall be allowed only in case the overall impact of such change in law event in a year is more than 5% of normative O&M expenses of the project for the year.

- (f) In case of a transmission licensee owned by the Central or State Government, the impact on account of implementation of wage or pay revision shall be allowed at the time of truing up of tariff."
- 54. We have considered the submissions of the Petitioner. The O&M Expenses for the 2024-29 tariff period have been worked out as per the norms specified in the 2024 tariff Regulations. The O&M Expenses allowed for the 2024-29 tariff period for the Combined Asset as per Regulation 36 of the 2024 Tariff Regulations are as under:

(₹ in lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29				
Substations:		•	•	•	•				
132 kV Bays									
2 Nos. 132 kV Bays at Surajmaninagar Sub-station									
Norms: 132 kV Bays	15.78	16.61	17.48	18.4	19.35				
O&M Expenses of bays	31.56	33.22	34.96	36.8	38.7				
Transmission Line:  400 kV D/C (Twin) Surajmaninagar-Comilla Line – (17.2 km)									
Norms: Transmission Line D/C (Twin)	0.861	0.906	0.953	1.003	1.056				
O&M Expenses of transmission line	14.81	15.58	16.39	17.25	18.16				
Total O&M Expenses allowed	46.37	48.80	51.35	54.05	56.86				



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

55. Regulations 34(1)(d), 34(3) and 34(4) of the 2024 Tariff Regulations provides as follows:

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

.....

- "(d) For Hydro generating station (including Pumped Storage Hydro generating station) and Transmission System:
- (i) Receivables equivalent to 45 days of annual fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
- (iii) Operation and maintenance expenses, including security expenses for one month.

.....

(3) Rate of interest on working capital shall be on a normative basis and shall be considered at the Reference Rate of Interest as on 1.4.2024 or as on 1st April of the year during the tariff period 2024- 29 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 Reference Rate of Interest as on 1st April of each of the financial year during the tariff period 2024-29.

- (4) Interest on working capital shall be payable on a normative basis, notwithstanding that the generating company or the transmission licensee has not taken a loan for working capital from any outside agency."
- The Petitioner has considered the rate of IWC as 11.90% as on 1.4.2024. IWC is worked out in accordance with the Regulation 34 of the 2024 Tariff Regulations. The Rate of Interest (ROI) considered is 11.90% (SBI 1-year MCLR applicable as on 1.4.2024 of 8.65% plus 325 basis points) for the FY 2024-25 to FY 2028-29.
- 57. The components of the working capital and interest allowed thereon under Regulation 34 of the 2024 Tariff Regulations for the 2024-29 tariff period in respect of the Combined Asset are as under:

(₹ in lakh)

SI. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Α	Working Capital for O&M Expenses (O&M Expenses for one month)	3.86	4.07	4.28	4.50	4.74
В	Working Capital for Maintenance Spares (15% of	6.96	7.32	7.70	8.11	8.53



SI. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
	O&M Expenses)					
С	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	159.13	154.03	148.42	135.91	90.49
D	Total Working Capital (A+B+C)	169.95	165.41	160.40	148.52	103.76
E	Rate of Interest for working capital (in %)	11.90	11.90	11.90	11.90	11.90
F	Interest on working capital (D*E)	20.22	19.68	19.09	17.67	12.35

# Annual Fixed Charges for the 2024-29 Tariff Period

58. The annual transmission charges allowed in respect of the Combined Asset for the 2024-29 tariff period are as follows:

(₹ in lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Depreciation	522.16	522.16	517.56	457.71	112.22
Interest on Loan	189.35	146.04	103.18	63.30	39.92
Return on Equity	512.66	512.66	512.66	512.66	512.66
O&M Expenses	46.37	48.80	51.35	54.05	56.86
Interest on Working Capital	20.22	19.68	19.09	17.67	12.35
Total	1290.75	1249.33	1203.83	1105.39	734.00

# Filing Fee and Publication Expenses

- 59. The Petitioner has claimed reimbursement of the fee paid by it for filing the Petition and publication expenses. The Petitioner has further submitted that it is entitled to the reimbursement of the filing fee and the expenses incurred on publication of notices in the application for approval of tariff directly from the beneficiaries or the long-term customers, as the case may be, in accordance with Regulation 94(1) of the 2024 Tariff Regulations.
- 60. We have considered the Petitioner's submissions. The Petitioner is entitled to reimbursement of the fee paid for filing the Petition and publication expenses incurred on this count directly from the beneficiaries or long-term customers, as the case may be.

#### Fees and Charges of Central Transmission Utility of India Limited (CTUIL)

61. The Petitioner has submitted that as per Regulation 99 of the 2024 Tariff



Regulations, the fees and charges of the CTUIL may be allowed separately through a separate regulation. The Petitioner has further submitted that in the absence of such regulation, the expenses of CTUIL will be borne by the Petitioner, which will be recovered by the Petitioner as additional O&M Expenses through a separate Petition at the end of the tariff period.

- 62. It is apt here to refer to Regulation 99 of the 2024 Tariff Regulations, which provides as under:
  - "99. Special Provisions relating to Central Transmission Utility of India Ltd. (CTUIL):
    The fee and charges of CTUIL shall be allowed separately by the Commission through a separate regulation:

Provided that until such regulation is issued by the Commission, the expenses of CTUIL shall be borne by Power Grid Corporation of India Ltd. (PGCIL) which shall be recovered by PGCIL as additional O&M expenses through a separate petition."

63. We have considered the Petitioner's submissions and perused Regulation 99 of the 2024 Tariff Regulations. In view of the explicit provision made under Regulation 99 of the 2024 Tariff Regulations, we permit the Petitioner, i.e., PGCIL, to bear the fees and charges expenses of CTUIL and recover the same as an additional O&M Expenses through a separate Petition until such regulation is notified and issued by the Commission.

#### **Licence Fee and RLDC Fees and Charges**

64. The Petitioner has claimed reimbursement of the licence fee, RLDC Fees, and Charges. The Petitioner is allowed the reimbursement of the license fee in accordance with Regulation 94(4) of the 2024 Tariff Regulations for the 2024-29 tariff period. The Petitioner is also allowed to recover the RLDC fee and charges from the beneficiaries in terms of Regulation 94(3) of the 2024 Tariff Regulations for the 2024-29 tariff period.

#### **Goods and Services Tax**

65. The Petitioner has submitted that the transmission charges claimed herein are exclusive of GST, and in case GST is levied in the future, the same shall be additionally paid by the Respondents and be charged and billed separately by the Petitioner. It is also



prayed that additional taxes, if any, be paid by the Petitioner on account of the demand from the Government/ statutory authorities, and the Commission may allow the same to be recovered from the beneficiaries.

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

# Security Expenses, Insurance, and Capital Spares

- 67. The Petitioner has submitted that as per Regulation 36(3) (d) of the 2024 Tariff Regulations, the security expenses and capital spares of more than ₹10 lakh and insurance expenses arrived through the competitive bidding for the transmission system and associated communication system shall be allowed by the Commission separately after prudence check.
- 68. As regards the security expenses of the transmission assets, the Petitioner has submitted that it shall file a separate Petition for the truing up of security expenses from 1.4.2019 to 31.3.2024 under Regulation 35(3)(c) of the 2019 Tariff Regulations and recovery of security expenses from 1.4.2024 to 31.3.2029 under Regulation 36 (3) (d) of the 2024 Tariff Regulations. According to the Petitioner, the security expenses regarding the transmission assets are not claimed in the instant Petition.
- 69. The Petitioner has also submitted that it has not claimed insurance expenses in the instant Petition and has submitted that it shall file a separate Petition for claiming the overall insurance expenses and consequential Interest on Working Capital (IWC) on the same, considering the actual insurance expenses incurred by it for the FY 2023-24 after escalating the same at 5.25% per annum to arrive at the estimated insurance expense for the FY 2024-25, FY 2025-26, FY 2026-27, FY 2027-28, and FY 2028-29.
- 70. The Petitioner has not claimed capital spares for the transmission assets in the



Petition for the 2024-29 tariff period. According to the Petitioner, it will file a separate Petition for the capital spares consumed and consequential IWC thereon on an actual basis for the 2024-29 tariff period as per the 2024 Tariff Regulations. The Petitioner has also submitted that it has filed Petition No. 45/MP/2024, claiming therein capital spares for the 2019-24 tariff period as per the 2019 Tariff Regulations.

71. We have considered the Petitioner's submissions and have perused the record. We deem it proper here to refer to Regulation 36(3) (d) of the 2024 Tariff Regulations which provides as follows:

*"36(3)* 

(d) The Security Expenses, Capital Spares individually costing more than Rs. 10 lakh and Insurance expenses arrived through competitive bidding for the transmission system and associated communication system shall be allowed separately after prudence check:

Provided that in case of self insurance, the premium shall not exceed 0.09% of the GFA of the assets insured;

Provided that the transmission licensee shall submit the along with estimated security expenses based on assessment of the security requirement, capital spares and insurance expenses, which shall be trued up based on details of the year-wise actuals along with appropriate justification for incurring the same and along with confirmation that the same is not claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization."

72. On perusal of Regulation 36 (3) (d) of the 2024 Tariff Regulations and considering the Petitioner's submissions, the Petitioner is allowed to file a single consolidated Petition comprising of security expenses, capital spares individually costing more than ₹10 lakh and insurance expenses on the estimated basis as per the 2024 Tariff Regulations for the 2024-29 tariff period.

#### **Sharing of Transmission Charges**

- 73. 83. The Commission vide order dated 8.12.2016 in Petition No. 18/TT/2016 observed as follows:
  - "61. The BPTA signed between BPDB and POWERGRID provides as under: "3.2 BPDB shall pay the transmission tariff and other charges on account of the said transmission system mentioned at para 2.1 to POWERGRID INDIA with effect from the date of commercial operation in accordance with the norms/order/notification issued by CERC from time to time. POWERGRID INDIA shall ensure intimation to



BPDB about Tariff hearing process of CERC and facilitate BPDB's participation for the same. However, any other taxes and duties imposed by Government of Bangladesh shall be paid by BPDB."

Therefore, the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the BPTA signed between the Bangladesh Power Development Board (BPDB) and the Petitioner. The transmission charges shall be paid by BPDB as per the provisions of Clause 3.0 of the BPTA and the same shall not be considered under the POC pool. The line may be considered at zero cost in the POC network model.

#### 74. To summarize:

a. The trued-up Annual Fixed Charges approved for the 2019-24 tariff period in respect of the Combined Asset are as follows:

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

 AFC allowed
 1457.06
 1410.78
 1370.98
 1336.28
 1303.59

b. The Annual Fixed Charges allowed in respect of the Combined Asset for the 2024-29 tariff period are as follows:

					(₹ in lakh)
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
AFC Allowed	1290.75	1249.33	1203.83	1105.39	734.00

75. This order disposes of Petition No. 81/TT/2025 in terms of the above discussions and findings.

sd/- sd/- sd/- (Harish Dudani) (Ramesh Babu V.) (Jishnu Barua) Member Chairperson