

**Central Electricity Regulatory Commission
New Delhi**

Petition No. 465/TT/2024

Coram:

**Shri Jishnu Barua, Chairperson
Shri Ramesh Babu V., Member
Shri Harish Dudani, Member
Shri Ravinder Singh Dhillon, Member**

Date of Order: 27.03.2025

In the matter of:

Petition for truing up of transmission tariff for the 2019-24 period and determination of transmission tariff for the 2024-29 period for Up-gradation of Transfer Capacity of Talcher-Kolar HVDC Bipole in the Southern Region under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

And in the matter of:

**Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2,
Sector-29, Gurgaon – 122001 (Haryana).**

...Petitioner

Vs.

- 1. Tamil Nadu Generation and Distribution Corporation Ltd.,**
NPKRR Maaligai, 800, Anna Salai,
Chennai – 600 002
- 2. Kerala State Electricity Board Ltd (KSEBL)**
Vaidyuthi Bhavanam
Pattom, Thiruvananthapuram – 695 004
- 3. Electricity Department,**
Government of Goa,
Vidyuti Bhawan, Panaji - 403001, Goa
- 4. Electricity Department**
Govt of Pondicherry,
137, Netaji Subash Chandra Bose Salai,
Pondicherry - 605001



- 5. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL),**
APEPDCL, P&T Colony,
Seethmmadhara, VISHAKHAPATNAM, Andhra Pradesh,
- 6.Southern Power Distribution Company of Andhra Pradesh Ltd (APSPDCL)**
#19-13-65/A, Srinivasapuram, Tiruchanoor Road
Tirupati – 517503, Andhra Pradesh
- 7.Andhra Pradesh Central Power Distribution Company Limited (APCPDCL)**
Corporate Office, Beside Polytechnic College, ITI Road
Vijayawada - 520 008, Krishna District, Andhra Pradesh
- 8.Southern Power Distribution Company of Telangana Limited (TSSPDCL)**
6-1-50, Corporate Office, Mint Compound,
HYDERABAD – 500 063, Telangana
- 9. Northern Power Distribution Company of Telangana Limited (TSNPDCL)**
H.No. 2-5-3 1/2, Vidyut Bhawan, Corporate Office,
Nakkal Gutta, Hanamkonda, WARANGAL – 506 001,
Telangana
- 10.Bangalore Electricity Supply Company Ltd., (BESCOM),**
Corporate Office, K.R.Circle
BANGALORE – 560 001, Karanataka
- 11.Gulbarga Electricity Supply Company Ltd., (GESCOM)**
Corporate Office, Station Main Road, Opp. Parivar Hotel,
Gulbarga (Kalburgi), KARNATAKA - 585102
- 12.Hubli Electricity Supply Company Ltd., (HESCOM)**
Navanagar, PB Road, HUBLI, Karnataka- 580025
- 13.Mangalore Electricity Supply Company Ltd., (MESCOM)**
Corporate Office,1st Floor, MESCOM Bhavan,
Kavoor Cross Road, Bejai, Mangalore – 575 004, Karnataka
- 14.Chamundeswari Electricity Supply Corporation Ltd., (CESC)**
Corporate Office, #29, Vijayanagara 2nd Stage,
Hinkal, Mysuru-570017, Karnataka
- 15.Bihar State Power (Holding) Company Limited**
Vidyut Bhawan, Bailey Road,
Patna - 800001, Bihar



16. West Bengal State Electricity Distribution Company Limited

Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Kolkata - 700 091, West Bengal

17. Grid Corporation of Orissa Ltd

Shahid Nagar,
Bhubaneswar - 751 007, Odisha

18. Damodar Valley Corporation

DVC Tower, Maniktala
Civic Centre, VIP Road,
Kolkata - 700 054, West Bengal

19. Power Department, Govt. of Sikkim,
Gangtok – 737 101, Sikkim

20. Jharkhand Bijli Vitran Nigam Ltd

Engineering Building, H.E.C., Dhurwa,
Ranchi – 834 004,
Jharkhand

...Respondents

Parties Present

: Shri Mohd. Mohsin, PGCIL
Shri Amit Yadav, PGCIL
Shri Ashish Alankar, PGCIL
Ms. Ashita Chauhan, PGCIL

ORDER

The instant Petition has been filed by the Power Grid Corporation of India Limited (PGCIL) for truing-up of the transmission tariff for the 2019-24 period, in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) and the determination of transmission tariff for the 2024-29 tariff period, in terms of 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 asset (hereinafter referred to as the “transmission asset”) which is implemented under “Up-gradation of Transfer Capacity of Talcher-Kolar HVDC Bipole” (hereinafter referred to as the “transmission project”) :

2. The Petitioner has made the following prayers in the instant 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 regulations 2024 as per para 12 and 13 above for respective block.
Further it is submitted that deferred tax liability before 01.04.2009 shall be recoverable from the beneficiaries or long-term customers / DIC as the case may be, as and when the same is materialized as per regulation 67 of 2019 and regulation 89 of 2024 tariff regulation. The petitioner may be allowed to recover the deferred tax liability materialized directly without making any application before the commission as provided in the regulations.
- c) 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.
- d) 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.
- e) 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.
- f) 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.
- g) 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.
- h) 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.
- i) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition as mentioned at para 20 above.
- j) 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 Investment Approval for the transmission project was accorded by the Petitioner's Board of Directors in its 168th meeting held on 14.6.2005 vide a Memorandum dated 20.7.2005 at an estimated cost of ₹11833 lakhs, including an IDC of ₹ 704.00 lakh.

4. The scope of work includes the up-gradation of the Talcher-Kolar HVDC Bipole System from the present continuous capacity of 1000 MW to 1250 MW (long duration) for each pole at the terminal stations at Talcher and Kolar and other associated works. It would require:

- i. Design studies; and
- ii. Following modifications at terminal stations of Talcher and Kolar:
 - Additional 2 filter sub banks of a total 217 MVAR at Talcher and three sub-banks of 337 MVAR at Kolar;
 - Up-gradation of transformer cooling (installation of new Cooler banks/Fans);
 - Implementation of a load factor indication system to take advantage of variation in ambient temperature;
 - Control and Protection panels for new filters; and
 - Modification in control and protection settings.

5. The provisional transmission tariff with respect to the up-gradation scheme for the period from 1.8.2007 to 31.3.2009 was allowed by the Commission vide order dated 26.2.2008 in Petition No. 2/2008.

6. The final transmission tariff for the period from 1.8.2007 to 31.3.2009, after accounting for Additional Capital Expenditure (ACE) for FY 2007-08, was allowed vide order dated 30.4.2009 in Petition No.131/2008. In this order, the Petitioner's claim of IEDC amounting to ₹2144.96 lakh, on account of the reduction in fixed charges and incentive due to the mandatory shutdown of Talcher Kolar HVDC System during 2007-08, was restricted to ₹369.09 lakh. Aggrieved with the above, the Petitioner filed Appeal No. 127/2009 before the Appellate Tribunal for Electricity (the APTEL), seeking the full IEDC amount of ₹2144.96



lakh, which was dismissed vide judgment dated 20.1.2011. Subsequently, the Petitioner filed Civil Appeal No. 3166/2011 before the Hon'ble Supreme Court, which is pending disposal.

7. The transmission tariff with respect to the up-gradation scheme for the 2004-09 tariff period was revised on account of ACE during 2008-09 vide order dated 4.4.2013 in Petition No. 8/2010. The transmission tariff for the period from 1.4.2009 to 31.3.2014 was allowed vide order dated 2.12.2014 in Petition No. 107/TT/2013 which was subsequently trued-up along with the tariff determination of the 2014-19 tariff period vide order dated 30.12.2015 in Petition No. 74/TT/2015.

8. Based on the APTEL judgment dated 22.1.2007 and dated 13.6.2007 in Appeal No. 81/2005 & batch matters and Appeal No. 139/2006 & batch cases respectively, the Commission, vide order dated 22.12.2021 in Petition No. 25/TT/2021, revised the transmission tariff for the 2004-09 and 2009-14 tariff periods, trued-up the tariff for the 2014-19 tariff period, and determined the Annual Fixed Charges (AFC) for the 2019-24 tariff period.

9. The Respondents include Distribution Licensees, Power Departments, and Transmission Licensees that receive transmission services from the Petitioner, primarily benefiting the Southern Region.

10. 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.

11. The hearing on the matter was held on 25.2.2025, and the order was reserved.



12. In compliance with the directions of the Commission given vide Record of Proceedings (RoP) dated 26.12.2024, the Petitioner, vide affidavit dated 7.1.2025, has submitted the copy of the Investment Approval (IA). The Petitioner has further submitted that the IA for the Talcher-Kolar HVDC bi-pole system was accorded by the Ministry of Power, Government of India, vide letter dated 9.2.2000. The project was commissioned with effect from 1.6.2003. This project was the first project of an inter-regional nature in which the entire power from the Talcher-II generation project (2000 MW) located in the Eastern Region was allocated to the beneficiaries of the Southern Region. At the time of planning the Talcher-Kolar HVDC bi-pole system, it was decided to undertake the back-up system, under the contingency of outage of any pole of the Talcher-Kolar HVDC line, separately to limit the cost of the system. Till the back-up system is made available, the contingency was met through the deployment of a Special Protection Scheme (SPS) involving runback of the system coupled with tripping of units at Talcher-II generation and commensurate load-shedding in the Southern region.

13. Subsequently, based on the operational experience, a need was felt to provide a contingency arrangement under the outage of one pole of the Talcher-Kolar HVDC bi-pole. Accordingly, in the 18th meeting of the Standing Committee on Power System Planning in the Southern Region, it was to upgrade the capacity of the HVDC pole from 2000 MW to 2500 MW so that under the contingency of one pole, the power injection on the healthy pole can be increased to 1250 MW which shall reduce the jerk on the combined Eastern-Western grid. Accordingly, a separate investment approval was accorded for the upgradation of Talcher-Kolar from 2000 MW to 2500 MW, as per the IA dated 20.7.2005, approved by the Board of Directors of the Petitioner.

14. From the above, it may be seen that the original Talcher-Kolar HVDC bi-pole system and the upgradation of the Talcher-Kolar system were two separate projects envisaged at different time frames with different investment approvals and got commissioned in different



tariff blocks. Accordingly, for the upgradation of the Talcher Kolar HVDC project, a separate tariff petition was filed during tariff block 2004-09, and the tariff was approved by the Commission, vide order dated 30.4.2009 in Petition No. 131/2008 and order dated 4.4.2013 in Petition No. 08/2010. Further, during 2009-2014, 2014-19 and 2019-24 tariff blocks, the tariff was allowed by the Commission through various orders viz. orders dated 2.12.2014 in Petition No.107/TT/2013, dated 30.12.2015 in Petition No. 74/TT/2015 and dated 22.12.2021 in Petition No. 25/TT/2021.

15. This order is being issued considering the Petitioner's submissions in the Petition vide affidavits dated 30.7.2024 and 7.1.2025.

16. We have considered the Petitioner's submission and have gone through the record. The tariff for the 2019-24 period is being trued-up and the tariff for the 2024-29 period is determined based on the information available on record, which includes the information given in the data, tariff forms, and documents available on record and called for, by the Petitioner.

17. Having heard the Petitioner's representative and perused the material available on record, we proceed to dispose of the Petition.

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

18. The Commission, vide order dated 22.12.2021 in Petition No. 25/TT/2021, allowed the following transmission charges for the transmission asset for the 2019-24 tariff period:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	554.37	223.17	223.17	223.17	223.17
Interest on Loan	104.13	66.31	44.41	22.46	5.64
Return on Equity	591.54	591.54	591.54	591.54	591.54
Interest on Working Capital	18.80	12.39	11.27	10.98	10.73
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Total	1268.83	893.41	870.38	848.15	831.08

19. The details of the trued-up transmission charges 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
Depreciation	554.37	223.17	223.17	223.17	223.17
Interest on Loan	103.92	65.55	43.48	21.74	5.55
Return on Equity	591.54	591.54	591.54	591.54	591.54
Interest on Working Capital	18.80	12.38	11.25	10.97	12.28
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Total	1268.63	892.64	869.44	847.42	832.54

Capital Cost for the 2019-24 Tariff Period

20. The Commission, vide order dated 22.12.2021 in Petition No. 25/TT/2021, considered the capital cost of ₹10499.34 lakh in respect of the transmission asset as on 31.3.2019. Therefore, the capital cost of ₹10499.34 lakh in respect of transmission asset as on 31.3.2019 has been considered as an opening capital cost as on 1.4.2019 for trueing up the transmission tariff for the 2019-24 tariff period in accordance with Regulation 19 of the 2019 Tariff Regulations.

21. The Petitioner, in the instant true-up Petition, has not claimed Additional Capital Expenditure (ACE) for the 2019-24 tariff period related to the transmission asset.

22. We have considered the Petitioner's submission. The details of the capital cost allowed as on 31.3.2019 and as on 31.3.2024 are as follows:

(₹ in lakh)			
Apportioned Approved Cost as per FR/RCE	Expenditure as on 31.3.2019	Expenditure during 2019-24 Tariff Block	Actual Capital Cost as on 31.3.2024
11833.00/NA	10499.34	0.00	10499.34

Debt-Equity Ratio

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



Funding	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	7349.85	70.00%	7349.85	70.00%
Equity	3149.49	30.00%	3149.49	30.00%
Total	10499.34	100.00%	10499.34	100.00%

Depreciation

24. The depreciation has been worked out considering the admitted capital expenditure as on 1.4.2019 and thereafter up to 31.3.2024. Since the transmission asset has already completed 12 years as on 1.4.2020, the depreciation for the period 2019-20 has been calculated by applying the weighted average rate of depreciation (WAROD), and for the year 2021-24, depreciation has been calculated by spreading the balance depreciable value over the remaining useful life. The Weighted Average Rate of Depreciation (WAROD) has been worked out for the transmission asset as per the rates of depreciation specified in the 2019 Tariff Regulations. The depreciation allowed for the transmission asset is as follows:

		(₹ in lakh)				
SI No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	10499.34	10499.34	10499.34	10499.34	10499.34
B	Addition during the year 2019-24 due to projected ACE	0	0	0	0	0
C	Closing Gross Block (A+B)	10499.34	10499.34	10499.34	10499.34	10499.34
D	Average Gross Block (A+C)/2	10499.34	10499.34	10499.34	10499.34	10499.34
E	Average Gross Block (90% depreciable assets)	10499.34	10499.34	10499.34	10499.34	10499.34
F	Average Gross Block (100% depreciable assets)	0	0	0	0	0
G	Depreciable value (excluding IT equipment and software) (E*90%)	9449.41	9449.41	9449.41	9449.41	9449.41
H	Depreciable value of IT equipment and software (F*100%)	0	0	0	0	0
I	Total Depreciable Value (G+H)	9449.41	9449.41	9449.41	9449.41	9449.41
J	Weighted average rate of Depreciation (WAROD) (in %)	5.28%	Spread-over			
K	Lapsed useful life at the beginning of the year (Year)	11	12	13	14	15
L	Balance useful life at the beginning of the year (Year)	14	13	12	11	10
M	Depreciation	554.37	223.17	223.17	223.17	223.17
N	Cumulative Depreciation at the end of the year	6548.19	6771.36	6994.53	7217.70	7440.87
O	Remaining Aggregate Depreciable Value at the end of the year	2901.22	2678.05	2454.88	2231.71	2008.54

25. The details of depreciation allowed vide order dated 22.12.2021 in Petition No. 25/TT/2021, depreciation claimed in the instant Petition, and trued-up depreciation allowed in respect of the transmission 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 22.12.2021 in Petition No. 25/TT/2021	554.37	223.17	223.17	223.17	223.17
Claimed by the Petitioner in the instant Petition	554.37	223.17	223.17	223.17	223.17
Allowed after truing-up in this order	554.37	223.17	223.17	223.17	223.17

Interest on Loan (IoL)

26. The Petitioner has claimed the Weighted Average Rate of Interest (WAROI) based on its actual loan portfolio and interest rate. The IoL has been calculated considering WAROI based on the actual interest rate submitted by the Petitioner in accordance with Regulation 32 of the 2019 Tariff Regulations. The trued-up IoL allowed in respect of the transmission asset is as follows:

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Gross normative loan	7349.85	7349.85	7349.85	7349.85	7349.85
B	Cumulative repayments up to the previous year	5993.82	6548.19	6771.36	6994.53	7217.70
C	Net loan-Opening (A-B)	1356.03	801.66	578.49	355.32	132.15
D	Addition due to ACE	0.00	0.00	0.00	0.00	0.00
E	Repayment during the year	554.37	223.17	223.17	223.17	132.15
F	Net loan-Closing (C+D-E)	801.66	578.49	355.32	132.15	0.00
G	Average loan (C+F)/2	1078.85	690.08	466.91	243.74	66.08
H	WAROI	9.633	9.499	9.313	8.918	8.401
I	Interest on Loan (G*H)	103.92	65.55	43.48	21.74	5.55

27. The details of the IoL allowed vide order dated 22.12.2021 in Petition No.25/TT/2021, IoL claimed in the instant Petition, and trued-up IoL allowed in the instant order in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Allowed vide order dated 22.12.2021 in Petition No. 25/TT/2021	104.13	66.31	44.41	22.46	5.64
Claimed by the Petitioner in the instant Petition	103.92	65.55	43.48	21.74	5.55
Allowed after truing-up in this order	103.92	65.55	43.48	21.74	5.55

Return on Equity (RoE)

28. The Petitioner has submitted that its Income Tax assessment has been completed, assessment orders have been issued by the Income Tax Department for FY 2019-20 and



FY 2020-21, and the income has been assessed under MAT (115JB of the Income Tax Act, 1961). The Petitioner has further submitted that the Income Tax Returns (ITRs) have been filed for FY 2021-22, FY 2022-23 and FY 2023-24 (submitted in Petition No. 401/TT/2024).

29. The Petitioner has further submitted that it is liable to pay income tax at 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 tax rate (in %)	Grossed up RoE (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

30. We have considered the submissions of the Petitioner. 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. 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	15.500	18.782
2020-21	17.472	17.472	15.500	18.782
2021-22	17.472	17.472	15.500	18.782
2022-23	17.472	17.472	15.500	18.782
2023-24	17.472	17.472	15.500	18.782

31. Accordingly, the trued-up RoE allowed in respect of the transmission asset for the 2019-24 tariff period is as follows:

(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	3149.49	3149.49	3149.49	3149.49	3149.49
B	Addition due to ACE	0.00	0.00	0.00	0.00	0.00
C	Closing Equity (A+B)	3149.49	3149.49	3149.49	3149.49	3149.49
D	Average Equity (A+C)/2	3149.49	3149.49	3149.49	3149.49	3149.49
E	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 (Pre-tax) (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity (Pre-tax) (D*G)	591.54	591.54	591.54	591.54	591.54

32. The details of the RoE allowed vide order dated 22.12.2021 in Petition No. 25/TT/2021, 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	2019-20	2020-21	2021-22	2022-23	2023-24
RoE allowed vide order dated 22.12.2021 in Petition No. 25/TT/2021	591.54	591.54	591.54	591.54	591.54
Claimed by the Petitioner in the instant Petition	591.54	591.54	591.54	591.54	591.54
Allowed after truing-up in this order	591.54	591.54	591.54	591.54	591.54

Operation & Maintenance Expenses (O&M Expenses)

33. Since the Petitioner had not claimed O&M Expenses in the 2019-24 tariff period, the Commission vide order dated 22.12.2021 in Petition No. 25/TT/2021 had not allowed any O&M Expenses.



34. The Petitioner, in the instant true-up Petition, has not claimed O&M Expenses for the 2019-24 tariff period.

35. We have considered the Petitioner's submission. As the Petitioner has not claimed any O&M Expenses for the 2019-24 tariff period, no O&M Expenses have been allowed for the purpose of determination of transmission tariff for the 2019-24 tariff period.

36. Accordingly, O&M Expenses approved vide dated 22.12.2021 in Petition No. 25/TT/2021, O&M Expenses claimed in the instant Petition, and trued up O&M Expenses allowed in respect of the transmission asset are as under:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Approved vide order dated 22.12.2021 in Petition No. 25/TT/2021	0.00	0.00	0.00	0.00	0.00
As claimed by the Petitioner in the instant Petition	0.00	0.00	0.00	0.00	0.00
Allowed in the instant true-up Petition	0.00	0.00	0.00	0.00	0.00

Interest on Working Capital (IWC)

37. IWC is 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 FY 2019-20, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for FY 2020-21, 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 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.

38. The components of the working capital and interest allowed thereon for the transmission asset are as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for 1 month)	0.00	0.00	0.00	0.00	0.00
Working Capital for Maintenance Spares	0.00	0.00	0.00	0.00	0.00



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
(15% of O&M Expenses)					
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	155.98	110.05	107.19	104.48	102.36
Total Working Capital	155.98	110.05	107.19	104.48	102.36
Rate of Interest for Working Capital	12.05	11.25	10.50	10.50	12.00
Interest on Working Capital	18.80	12.38	11.26	10.97	12.28

39. The details of the IWC Expenses allowed vide order dated 22.12.2021 in Petition No. 25/TT/2021, 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)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Allowed vide order dated 22.12.2021 in Petition No.25/TT/2021.	18.80	12.39	11.27	10.98	10.73
Claimed by the Petitioner in the instant Petition	18.80	12.38	11.25	10.97	12.28
Allowed after truing-up in this order	18.80	12.38	11.26	10.97	12.28

Trued-up Annual Transmission Charges for the 2019-24 Tariff Period

40. Accordingly, the annual transmission charges allowed after truing-up for the 2019-24 tariff period in respect of the transmission asset are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	554.37	223.17	223.17	223.17	223.17
Interest on Loan	103.92	65.55	43.48	21.74	5.55
Return on Equity	591.54	591.54	591.54	591.54	591.54
Interest on Working Capital	18.79	12.38	11.25	10.97	12.28
Operation & Maintenance Expenses	0.00	0.00	0.00	0.00	0.00
Total	1268.63	892.64	869.44	847.42	832.54

41. The details of annual transmission charges allowed vide order dated 22.12.2021 in Petition No. 25/TT/2021, annual transmission charges 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	2019-20	2020-21	2021-22	2022-23	2023-24
Allowed vide order dated 22.12.2021 in Petition No. 25/TT/2021	1268.83	893.41	870.38	848.15	831.08
Claimed by the Petitioner in the instant Petition	1268.63	892.64	869.44	847.42	832.54
Allowed after truing-up in this order	1268.63	892.64	869.44	847.42	832.54



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

42. The Petitioner has claimed the following transmission charges for the transmission asset for the 2024-29 tariff period:

(₹ in lakh)					
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Depreciation	223.17	223.17	223.17	223.17	223.17
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	591.54	591.54	591.54	591.54	591.54
Interest on Working Capital	12.13	12.13	12.13	12.10	12.13
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Total	826.84	826.84	826.84	826.81	826.84

Capital Cost

43. 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;



- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
- (m) Expenditure on account of 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) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under the Perform, Achieve and Trade (PAT) scheme of the Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (p) Expenditure required to enable flexible operation of the generating station at lower loads.

(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 tried 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) 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;
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under the Perform, Achieve and Trade (PAT) scheme of the Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries;
- (g) Expenditure required to enable flexible operation of the generating station at lower loads;
- (h) Capital expenditure on account of biomass handling equipment and facilities, for cofiring; and
- (i) Expenditure on account of change in law and force majeure events;

(4) The capital cost in case of existing or new hydro generating stations 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 the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (c) For uninterrupted and timely development of Hydro projects, expenditure incurred towards developing local infrastructure in the vicinity of the power plant not exceeding Rs. 10 lakh/MW shall be considered as part of the Capital cost, and in case the same work is covered under budgetary support provided by the Government of India, the funding of such works shall be adjusted on receipt of such funds.

Provided that such funds shall be allowed only if the funds are spent through Indian Governmental Instrumentality;

(5) For Projects acquired through NCLT proceedings under the Insolvency and Bankruptcy Code, 2016, the following shall be considered while approving Capital Costs for the determination of tariff:

- (a) For projects already under operation, historical GFA of the project acquired or the acquisition cost paid by the generating company, whichever is lower;
- (b) For considering the historical GFA for the purpose of Sub-Clause (a) above, the same shall be the capital cost approved by the appropriate commission till the date of acquisition;



Provided that in the absence of any prior approved capital cost of an Appropriate Commission, the Commission shall consider the same on the basis of audited accounts subject to prudence check;

Provided further, that in case additional capital expenditure is required post acquisition of an already operational project, the same shall be considered under the provisions of Chapter 7 of these Regulations;

(c) In case any under construction project is acquired that has yet to achieve commercial operation, the acquisition cost or the actual audited cost incurred till the date of acquisition, whichever is lower, shall be considered and;

(d) any additional capital expenditure incurred post acquisition of such project up to the date of commercial operation of the project in line with the investment approval of the Board of Directors of the generating company or the transmission licensees shall also be considered on a case to case basis subject to prudence check.

Provided that post commercial operation, additional capital expenditure shall be allowed under the provisions of Chapter 7 of these Regulations.

(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 de-capitalised 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) In the 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;

(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.”

44. The capital cost approved as on 1.4.2024 is ₹10499.34 lakh. Therefore, the capital cost of ₹10499.34 lakh as on 31.3.2024 has been considered as the opening capital cost as on 1.4.2024 for the purpose of determination of transmission tariff for the 2024-29 period in accordance with Regulation 19 of the 2024 Tariff Regulations.

45. The Petitioner has not claimed Additional Capital Expenditure (ACE) for the transmission asset for the 2024-29 tariff period. Therefore, the details of the capital cost allowed as on 31.3.2024 and as on 31.3.2029 are as follows:



(₹ in lakh)

Apportioned Approved Cost as per FR/RCE	Expenditure as on 31.3.2024	Expenditure during 2024-29 Tariff Block	Actual Capital Cost as on 31.3.2029
		2024-29	
11833.00/NA	10499.34	0.00	10499.34

Debt Equity Ratio

46. 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. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*

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.”

47. The debt-equity ratio for the 2024-29 tariff period is dealt with in line with Regulation 18 of the 2024 Tariff Regulations. Accordingly, the debt-equity ratio considered for the 2024-29 tariff period for the transmission asset is as follows:

Funding	Capital cost as on 1.4.2024 (₹ in lakh)	(in %)	Capital cost as on 31.3.2029 (₹ in lakh)	(in %)
Debt	7349.85	70.00%	7349.85	70.00%
Equity	3149.49	30.00%	3149.49	30.00%
Total	10499.34	100.00%	10499.34	100.00%

Depreciation

48. 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:



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

Provided further that in the 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 the development of the generating station:

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of the 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 a reservoir in case of a hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing the depreciable value of the asset.

(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.

Provided further that in the case of an existing hydro generating station, the generating company, with the consent of the beneficiaries, may charge depreciation at a rate lower than that specified in Appendix I and Appendix II to these Regulations to reduce front loading of tariff.

(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.

Provided further that in the case of a new hydro generating stations, the generating company, with the consent of the beneficiaries, may charge depreciation at a rate lower than that specified in Appendix II to these Regulations to reduce front loading of tariff.

(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.

(10) 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 (9) of this Regulation.

(11) Depreciation of the emission control system of an existing generating station that is yet to complete its useful life 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 the straight line method at rates specified in Appendix- I to these regulations;

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the date of operation of such emission control system shall be spread over the balance period of thirteen years or balance operational life of generating station, whichever is lower;

Provided also that in case the date of operation of the emission control system is after the 20th year of commercial operation of the generating station or unit thereof, but before the completion of the useful life of the generating station, the depreciation on emission control system (ECS) shall be computed annually from the date of operation of such ECS based on the straight line method, with a salvage value of 10% and the depreciable value shall be recovered till the operational life of the generating station.

(12) In case the date of operation of the emission control system is subsequent to the date of completion of the useful life of generating station commercial operation of the generating station or unit thereof, depreciation of ECS shall be computed annually from the date of operation of such emission control system based on the straight line method, with a salvage value of 10% and recovered over ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher.”

49. The depreciation has been worked out considering the admitted capital expenditure as on 1.4.2024 and thereafter up to 31.3.2029. Since the transmission asset has already completed 12 years as on 31.3.2024, and as such the remaining depreciable value has been spread over the balance of the useful life of the transmission asset in accordance with the 2024 Tariff Regulations .

50. The depreciation allowed for the transmission asset for the 2024-29 tariff period is as under:



(₹ in lakh)

Sl.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
A	Opening Gross Block	10499.34	10499.34	10499.34	10499.34	10499.34
B	Addition during the year 2019-24 due to projected ACE	0	0	0	0	0
C	Closing Gross Block (A+B)	10499.34	10499.34	10499.34	10499.34	10499.34
D	Average Gross Block (A+C)/2	10499.34	10499.34	10499.34	10499.34	10499.34
E	Average Gross Block (90% depreciable assets)	10499.34	10499.34	10499.34	10499.34	10499.34
F	Average Gross Block (100% depreciable assets)	0	0	0	0	0
G	Depreciable value (excluding IT equipment and software) (E*90%)	9449.41	9449.41	9449.41	9449.41	9449.41
H	Depreciable value of IT equipment and software (F*100%)	0	0	0	0	0
I	Total Depreciable Value (G+H)	9449.41	9449.41	9449.41	9449.41	9449.41
J	Weighted average rate of Depreciation (WAROD) (in %)	Spread Over				
K	Lapsed useful life at the beginning of the year (Year)	16	17	18	19	20
L	Balance useful life at the beginning of the year (Year)	9	8	7	6	5
M	Depreciation	223.17	223.17	223.17	223.17	223.17
N	Cumulative Depreciation at the end of the year	7664.04	7887.21	8110.38	8333.55	8556.72
O	Remaining Aggregate Depreciable Value at the end of the year	1785.37	1562.19	1339.02	1115.85	892.68

Interest on Loan (IoL)

51. 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 de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis, and the adjustment should not exceed cumulative depreciation recovered 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.”

52. The Petitioner has not claimed any IoL for the 2024-29 tariff period as entire normative loan has been repaid during 2023-24.

Return on Equity (RoE)

53. 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-of-river 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;
- ii. in case of an 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, the rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;
- iii. in the case of a thermal generating station:
 - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate as specified under Regulation 45(9) of IEGC Regulations, 2023.
 - b) an additional rate of return on equity of 0.125% shall be allowed for every incremental ramp rate of 0.50% per minute achieved over and above the ramp rate specified by Central Electricity Authority, subject to the ceiling of additional rate of return on equity of 1.00%:

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 non-generation 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:

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

(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.”

54. The Petitioner has submitted that the MAT rate applies to it. MAT rate applicable has been considered for the purpose of RoE which shall be trued up in accordance with the 2024 Tariff Regulations. The RoE allowed to the transmission asset for the 2024-29 tariff period is as follows:

(₹ in lakh)						
	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
A	Opening Equity	3149.49	3149.49	3149.49	3149.49	3149.49
B	Addition due to ACE	0.00	0.00	0.00	0.00	0.00
C	Closing Equity (A+B)	3149.49	3149.49	3149.49	3149.49	3149.49
D	Average Equity (A+C)/2	3149.49	3149.49	3149.49	3149.49	3149.49
E	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 (Pre-tax) (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity (Pre-tax) (D*G)	591.54	591.54	591.54	591.54	591.54

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

55. The Petitioner has not claimed any O&M Expenses in respect of the transmission asset for the 2024-29 tariff period.

56. We have considered the Petitioner's submissions. The Petitioner has not claimed any O&M Expenses for the 2024-29 tariff period. Accordingly, no O&M Expenses have been considered for the purpose of determination of transmission tariff for the 2024-29 tariff period.

Interest on Working Capital (IWC)

57. Regulation 34 of the 2024 Tariff Regulations provides as follows:

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



(a) For Coal-based/lignite-fired thermal generating stations:

(i) Cost of coal or lignite, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity, whichever is lower;

(ii) Limestone towards stock for 15 days corresponding to the normative annual plant availability

(iii) Advance payment for 30 days towards the cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;

(iv) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;

(v) Maintenance spares @ 20% of operation and maintenance expenses, including water charges and security expenses;

(vi) Receivables equivalent to 45 days of capacity charge and energy charge for the sale of electricity calculated on the normative annual plant availability factor; and

(vii) Operation and maintenance expenses, including water charges and security expenses, for one month.

(b) For emission control system of coal or lignite based thermal generating stations:

(i) Cost of limestone or reagent towards stock for 20 days corresponding to the normative annual plant availability factor;

(ii) Advance payment for 30 days towards the cost of reagent for generation corresponding to the normative annual plant availability factor;

(iii) Receivables equivalent to 45 days of supplementary capacity charge and supplementary energy charge for the sale of electricity calculated on the normative annual plant availability factor;

(iv) Operation and maintenance expenses in respect of the emission control system for one month;

(v) Maintenance spares @20% of operation and maintenance expenses in respect of emission control system.

(c) For Open-cycle Gas Turbine/Combined Cycle thermal generating stations:

(i) Fuel cost for 15 days corresponding to the normative annual plant availability factor, duly taking into account the mode of operation of the generating station on gas fuel and liquid fuel;

(ii) Liquid fuel stock for 15 days corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;

Provided that the above shall only be allowed to generating stations that have facilities to store liquid fuel.

(iii) Maintenance spares @ 30% of operation and maintenance expenses, including water charges and security expenses;

(iv) Receivables equivalent to 45 days of capacity charge and energy charge for the sale of electricity calculated on the normative plant availability factor, duly taking into account the mode of operation of the generating station on gas fuel and liquid fuel;

(v) Operation and maintenance expenses, including water charges and security expenses, for one month.

(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.

(2) The cost of fuel in cases covered under sub-clauses (a) and (c) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 59 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the preceding financial year in case of each financial year for which tariff is to be determined:

Provided that in the case of a new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 59 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.

(3) Rate of interest on working capital shall be on 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.”

58. The Petitioner has considered the rate of IWC as 11.90% as on 1.4.2024. The IWC is worked out in accordance with 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 FY 2024-25 to FY 2028-29.

59. 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 transmission asset are as under:

(₹ in lakh)					
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Working Capital for O&M Expenses (O&M Expenses for one month)	0.00	0.00	0.00	0.00	0.00
Working Capital for Maintenance Spares (15% of O&M Expenses)	0.00	0.00	0.00	0.00	0.00
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	101.94	101.94	101.94	101.66	101.94
Total Working Capital	101.94	101.94	101.94	101.66	101.94
Rate of Interest for working capital	11.90%	11.90%	11.90%	11.90%	11.90%
Interest on Working Capital	12.13	12.13	12.13	12.10	12.13



Annual Transmission Charges for the 2024-29 Tariff Period

60. The transmission charges allowed in respect of the transmission asset for the 2024-29 tariff period are as follows:

(₹ in lakh)					
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Depreciation	223.17	223.17	223.17	223.17	223.17
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	591.54	591.54	591.54	591.54	591.54
Interest on Working Capital	12.13	12.13	12.13	12.10	12.13
Operation & Maintenance Expenses	0.00	0.00	0.00	0.00	0.00
Total	826.84	826.84	826.84	826.81	826.84

Filing Fee and Publication Expenses

61. 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 shall be 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.

62. We have considered the Petitioner's submissions. The Petitioner is entitled to reimbursement of the fees 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)

63. 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.



64. 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.”

65. 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.

License Fee and RLDC Fees and Charges

66. The Petitioner has claimed reimbursement of the license 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

67. 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 also be paid by the Respondents and be charged and billed separately by the Petitioner. It is also prayed that additional taxes, if any, are 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.



68. We have considered the Petitioner's. Since GST is not levied on 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

69. 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 separately after prudence check. 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. 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 FY 2023-24 after escalating the same at 5.25% per annum to arrive at the estimated insurance expense for the financial years 2024-25, 2025-26, 2026-27, 2027-28, and 2028-29.

70. The Petitioner has not claimed capital spares for the transmission assets in the instant Petition for the 2024-29 tariff period. According to the Petitioner, it shall 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 0.12% 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 an estimated basis in terms of the 2024 Tariff Regulations for the 2024-29 tariff period.

Sharing of Transmission Charges

73. The petitioner has submitted that the tariff for Transmission of Electricity (Annual Fixed Cost) for 2019-24 shall be recovered on monthly basis in accordance with Regulation 57 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and shall be shared by the beneficiaries and long-term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 & 2020 or as amended from time to time. The Tariff for Transmission of Electricity (Annual Fixed Cost) for 2024-29 shall be recovered on monthly basis in accordance with Regulation 78 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 and shall be shared by the



beneficiaries and long-term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 or as amended from time to time.

74. We have considered the submissions of the petitioner. With effect from 1.11.2020, the 2010 Sharing Regulations has been repealed and sharing of transmission charges is governed by the provisions of the 2020 Sharing Regulations. Regulation 5 and Regulation 6 of the 2020 Sharing Regulations provide as follows:

“5. Components and sharing of National Components (NC) (1) National Component shall be sum of the following components:

(a) -----” and

(b) National Component-HVDC (NC-HVDC).

(2)-----.

(3) National Component-HVDC shall comprise of the following:

(a) 100% of Yearly Transmission Charges for “back-to-back HVDC” transmission system;

(b) 100% of Yearly Transmission Charges for Biswanath-Chariali/ Alipurduar to Agra HVDC transmission system;

(c) Yearly Transmission Charges of Mundra–Mohindergarh 2500 MW HVDC transmission system corresponding to 1005 MW capacity Provided that Yearly Transmission Charges corresponding to 1495 MW for the said transmission system shall be borne by M/s Adani Power (Mundra) Limited or its successor company; and

(d) 30% of Yearly Transmission Charges for all other HVDC transmission systems except those covered under sub-clauses (a), (b) and (c) of this clause of this Regulation.

(4) The Yearly Transmission Charges for the National Component shall be shared by all drawee DICs and injecting DICs with untied LTA in proportion to their quantum of Long Term Access plus Medium-Term Open Access and untied LTA respectively.”

“6. Components and sharing of Regional Component (RC)

(1) Regional Component shall be sum of the following components: (a) Regional Component of HVDC (RC-HVDC) comprising of 70% of Yearly Transmission Charges of HVDC transmission systems planned to supply power to the concerned region, except HVDC transmission systems covered under sub clauses (a), (b) and (c) of Clause (3) of Regulation 5; and”

75. The instant transmission asset is upgradation of Talcher-Kolar HVDC bi-pole system. As per Regulation 5(3)(d) of the 2020 Sharing Regulations and 6(1) of the 2020 sharing Regulations, 30% of the Yearly Transmission Charges (YTC) with effect from 1.11.2020 shall be part of National Component and 70% of Yearly transmission charges for Talcher-Kolar HVDC bi-pole is under Regional Component.

76. The billing, collection, and disbursement of the transmission charges for the transmission asset shall be recovered in terms of provisions of the 2020 Sharing

Regulations as provided in Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period and Regulation 78 of the 2024 Tariff Regulations for the 2024-29 tariff period.

77. To summarize:

- a. The trued-up Annual Transmission Charges approved for the 2019-24 tariff period in respect of the transmission asset are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC Claimed	1268.63	892.64	869.44	847.42	832.54
AFC Allowed	1268.63	892.64	869.44	847.42	832.54

- b. The Annual Transmission Charges approved in respect of the transmission asset for the 2024-29 tariff period are as follows:

(₹ in lakh)					
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
AFC Claimed	826.84	826.84	826.84	826.81	826.84
AFC Allowed	826.84	826.84	826.84	826.81	826.84

78. This order disposes of Petition No. 465/TT/2024 in terms of the above discussions and findings.

sd/-
(Ravinder Singh Dhillon)
Member

sd/-
(Harish Dudani)
Member

sd/-
(Ramesh Babu V.)
Member

sd/-
(Jishnu Barua)
Chairperson

