CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 19/TT/2025

Coram:

Shri Ramesh Babu V., Member Shri Harish Dudani, Member

Date of Order: 13.05.2025

In the matter of:

Petition for truing up of the transmission tariff for the 2019-24 tariff period and determination of transmission tariff for the 2024-29 tariff period for Combined Assets under "Transmission System associated with Substation works associated with System Strengthening in the Southern Region for Import of Power from Eastern Region" in the Southern Region under Section 62 read with Section 79 (1)(d) of the Electricity Act, 2003 and under Regulation 15 (1)(a) and Regulation 23 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and the 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

Versus

1. Tamil Nadu Generation and Distribution Corporation Limited,

NPKRR Maaligai, 800, Anna Salai, Chennai - 600002

2. Kerala State Electricity Board Limited,

Vaidyuthi Bhavanam Pattom, Thiruvananthapuram - 695004

3. Electricity Department Government of Goa,

Vidyuti Bhawan, Panaji, Goa - 403001

4. Electricity Department, Government of Pondicherry,

137, Netaji Subash Chandra Bose Salai, Pondicherry - 605001



Eastern Power Distribution Company of Andhra Pradesh Limited, APEPDCL, P&T Colony, Seethmmadhara, Vishakhapatnam, Andhra Pradesh,

- 6. Southern Power Distribution Company of Andhra Pradesh Limited, #19-13-65/A, Srinivasapuram, Tiruchanoor Road Tirupati- 517503, Andhra Pradesh
- 7. Andhra Pradesh Central Power Distribution Company Limited, Corporate Office, Beside Polytechnic College, ITI Road Vijayawada, Krishna District, Andhra Pradesh - 520008
- Southern Power Distribution Company of Telangana Limited,
 6-1-50, Corporate Office, Mint Compound,
 Hyderabad- 500063, Telangana
- 9. Northern Power Distribution Company of Telangana Limited, H.No 2-5-3 1/2, Vidyut Bhawan, Corporate Office, Nakkal Gutta, Hanamkonda, Warangal- 506001, Telangana
- Bangalore Electricity Supply Company Limited,
 Corporate Office, K.R.Circle,
 Bangalore- 560001, Karnataka
- Gulbarga Electricity Supply Company Limited,
 Corporate Office, Station Main Road, Opp. Parivar Hotel,
 Gulbarga (Kalburgi) 585102, Karnataka
- **12.** Hubli Electricity Supply Company Limited, Navanagar, PB Road, Hubli- 580025, Karnataka
- 13. Mangalore Electricity Supply Company Limited, Corporate Office,1st Floor, MESCOM Bhavan, Kavoor Cross Road, Bejai, Mangalore- 575004, Karnataka
- 14. Chamundeswari Electricity Supply Corporation Limited,
 Corporate Office, #29, Vijayanagara 2nd Stage,
 Hinkal, Mysuru, 570017
 Karnataka ...Respondents

Parties Present:
Shri Divyanshu Bhatt, Advocate, PGCIL
Shri Mohd. Mohsin, PGCIL
Shri Amit Yadav, PGCIL



Shri Vishal Sagar, PGCIL Shri Angaru Naresh Kumar, PGCIL Ms. Suchitra Gautam, PGCIL Shri Arjun Malhotra, PGCIL Shri Piyush Awasthi, PGCIL Shri Amit Garg, PGCIL Ms. Ashita Chauhan, PGCIL

ORDER

The instant Petition has been filed by Power Grid Corporation of India Limited (PGCIL) 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 for the determination of the transmission tariff for the 2024-29 tariff 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 (hereinafter collectively referred to as "Combined Assets*") under "Transmission System associated with Substation works associated with System Strengthening in the Southern Region for Import of Power from Eastern Region" in Southern Region (hereinafter referred to as "the transmission system"):

Asset-1: 2 nos. 400 kV bays at Khammam (existing) Substation and 2 nos. 400 kV bays at Nagarjunasagar Substation;

Asset-2: LILO of Gazuwaka -Vijayawada 400 kV S/C line at Vemagiri Pooling Station along with associated bays;

Asset-3: Establishment of 765/400 kV GIS PoolingStation at Vemagiri with 1x1500 MVA 765/400 kV Transformers, 2 nos. 240 MVAR 765 kV and 1 no. 80 MVAR 400 kV Bus Reactors at Vemagiri and 2 nos. 765 kV bays along with 1 no. 240 MVAR switchable line reactor each at Vemagiri & Srikakulam PoolingStation each for both circuits of Srikakulam PoolingStation-Vemagiri Pooling-station 765 kV D/C line; and

Asset-4: 1x1500 MVA, 765/400 kV ICT-II along with associated bays and Equipment at Vemagiri Pooling Station.

*Assets 1 to 4 have been collectively referred to as the "Combined



Assets" for the 2019-24 and 2024-29 tariff periods.

- 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 14 and 15 above.
 - b) Admit the capital cost claimed and additional capitalization incurred during 2019-24 and also allow the projected additional capitalization during 2024-29.
 - 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 Regulations, 2024 as per para 14 and 15 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 RLDC fees & charges and Licensee fee 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 21 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 21 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 21 above.
 - j) Allow the Petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition as mentioned at para 22 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 (IA) and expenditure sanction for the transmission system were accorded by the Board of Directors of the Petitioner on 11.11.2014 vide Memorandum No. C/CP/Import ER to SR dated 18.11.2014 with an estimated cost of ₹97242.00 lakh, including an IDC of ₹5972.00 lakh based on August, 2014 price level. The Board of Directors of the Petitioner have accorded approval for Revised Cost Estimates (RCE) vide Memorandum No. C/CP/PA167-09-0P-RCE004 dated 21.9.2016 with an estimated cost of ₹116930 lakh, including IDC of ₹8145 lakh based on February, 2016 price level.
 - (b) The Scope of the transmission system in the Southern Region is as under:

Transmission Line:

 LILO of Gazuwaka-Vijayawada 400 kV S/C line at Vemagiri Pooling Station.

Sub-station:

- Establishment of 765/400 kV GIS Pooling station at Vemagiri with 2x1500 MVA 765/400 kV transformers.
- 2 nos. 765 kV bays each at Vemagiri Pooling Station and Srikakulam Pooling Station for terminating Srikakulam PP- Vemagiri-II Pooling Station 765 kV D/C line being implemented under tariff based competitive bidding.
- 2 nos. 400 kV bays at Khammam (existing) and Nagarjunasagar for terminating Khammam-Nagarjunasagar 400 kV D/C line being implemented under tariff based competitive bidding.

Reactive Compensation:

- 2 nos 240 MVAR, 765 kV Bus Reactors at Vemagiri Pooling Station.
- 1 no 80 MVAR, 400 kV Bus Reactor at Vemagiri Pooling Station.



- 1 no 240 MVAR Switchable Line Reactor at Vemagiri PS and Srikakulam PS, each for both circuits of Srikakulam PP-Vemagiri-II PS 765 kV D/C line.
- (c) The transmission tariff for Asset-1 from COD to 31.3.2019 was determined vide order dated 23.5.2016 in Petition No. 270/TT/2015, and the transmission tariff for Assets-2, 3 and 4 was determined from COD to 31.3.2019 vide order dated 19.7.2018 in Petition No. 45/TT/2017.
- (d) The Commission vide order dated 31.1.2021 in Petition No. 515/TT/2019 approved the capital cost of Combined Assets as ₹102300.88 lakh on 31.3.2019. Initial Spares were allowed for the 2014-19 tariff period based on the cost of the individual assets. The assets covered in the transmission system are combined and the overall project cost is arrived at in the 2019-24 tariff period and, therefore, Initial Spares are allowed during the 2019-24 tariff period based on the overall project cost as per APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017.
 - Accordingly, Initial Spares of ₹80.59 lakh against substation are being allowed as part of the combined capital cost as on 1.4.2019 in accordance with APTEL's judgement dated 14.9.2019 in Appeal 74 of 2017.
- (e) The trued-up capital cost of ₹102381.47 lakh for the Combined Assets is considered as admitted capital cost as on 1.4.2019 for working out the tariff for the 2019-24 tariff period.
- 4. The Respondents include Distribution Licensees, Power Departments, and Transmission Licensees that receive transmission services from the Petitioner, primarily benefiting the Southern Region.
- 5. 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). Comments/suggestions were sought from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. However, no comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers. None of the Respondents have filed their reply in the instant Petition.

6. The matter was held on 11.3.2025 and 25.3.2025, and order was reserved on 25.3.2025. This order is being issued considering the submissions made by the Petitioner vide affidavits dated 7.10.2024 and 24.3.2025. Having heard the Petitioner's representatives and perused the material on record, we proceed to dispose of the Petition.

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

7. The details of the trued-up transmission charges claimed by the Petitioner in respect of the Combined Assets are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	5140.61	5164.03	5172.94	5165.25	5164.69
Interest on Loan	4720.49	4208.19	3788.41	3445.10	3104.19
Return on Equity	5573.35	5601.18	5613.71	5607.35	5607.07
O&M Expenses	2108.76	2182.19	2259.25	2340.20	2421.94
Interest on Working Capital	324.00	299.38	276.86	275.24	312.89
Total	17867.21	17454.97	17111.17	16833.14	16610.78

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	175.73	181.85	188.27	195.02	201.83
Maintenance Spares	316.31	327.33	338.89	351.03	363.29
Receivables	2,196.79	2,151.98	2,109.60	2,075.32	2,042.31
Total Working Capital	2,688.83	2,661.16	2,636.76	2,621.37	2,607.43
Rate of Interest on working capital (in %)	12.05%	11.25%	10.50%	10.50%	12.00%
Interest on Working Capital	324.00	299.38	276.86	275.24	312.89



Capital Cost for the 2019-24 Tariff Period

9. The Commission allowed the capital cost of ₹102300.88 lakh for the Combined Assets (4 nos.) as on 31.3.2019, excluding the Initial Spares. The Initial Spares are allowable subject to the ceiling specified in Regulation 13(d) of the 2014 Tariff Regulations. This results in allowance of cumulative Initial Spares of ₹4060.59 lakh as on 1.4.2019.

Initial Spares

10. The Commission vide its Order dated 31.1.2021 in Petition No. 515/TT/2019 has approved the initial spares as follows:

(₹ in lakh) Plant and Initial Additional Machinery cost Initial Initial Norm as per Spares Initial Spares up to cut-off Spares Spares Regulations Allowed in allowed in Component date (excluding claimed allowable 2014-19 2019-24 (%) IDC and IEDC) (₹ in lakh) Sub-Stations (GIS) 95.20 Asset-1 1474.37 72.59 74593.33 3797.46 3726.10 Asset-3 4045.78 80.59 5% Asset-4 4861.20 166.50 166.50 Total 80928.90 4059.16 4045.78 3965.19 80.59 Transmission Line Asset-2 3605.65 14.81 0.00 14.81 1% 36.27

- 11. Accordingly, the Commission vide its Order dated 31.1.2021 in Petition No. 515/TT/2019 has allowed the initial spares of ₹4045.78 lakh for cumulative asset-1,3&4 and ₹14.81 lakh is for asset-2 respectively.
- 12. The Petitioner in its true up Petition for 2019-24 claimed the initial spares for transmission assets as follows:



(₹ in lakh)

Component	Plant and Machinery cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norm as per Regulations (%)	Initial Spares worked out (₹ in lakh)
	Sub-9	Stations (GIS)		
Asset-1	1622.20	95.20		80.37
Asset-3	74381.55	3774.08	5%	3716.18
Asset-4	5158.23	166.50	3%	262.72
Total	81161.98	4035.78		4059.27
	Trans	mission Line		
Asset-2	3657.83	14.81	1%	36.80

- 13. We have considered the submissions of the Petitioner. The Hon'ble APTEL vide its judgment dated 14.9.2019 in Appeal No. 74 of 2017 observed that the Commission for the purpose of prudence check may restrict the Initial Spares to the cost of the individual asset and later at the time of truing-up allow Initial Spares as per the ceiling limit on the overall project cost. The relevant portion of the said judgment is extracted here under:
 - "18.13. We do not agree with this methodology of restricting initial spares asset / element wise as adopted by the Central Commission. The Central Commission to have a prudence check on the initial spares, being restricted based on the individual asset wise cost initially, but subsequently ought to have allowed as per the ceiling limits on the overall project cost basis during the true-up."
- 14. In accordance with the Hon'ble APTEL above-said order, the details of Initial Spares allowed by the Commission in this true up order are as follows:

Component	Plant and Machinery cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares claimed in True-up Petition (₹ in lakh)	Norm as per Regulations (in %)	Initial Spares allowable (₹ in lakh)	Initial Spares Allowed in earlier Order (₹ in lakh)	Additional Initial Spares allowed/ disallowed in this Order (₹ in lakh)
	(A)	(B)	(C)	(D)=(A-B)/ (100-C)*C	(E)	(F)=min of (D-E) or (B-E)
		Sub-St	tations (Brow	n Field)		
Combined Assets (Asset-1,3&4)	81161.98	4035.78	5%	4059.27	4045.78	(10.00)
		Tr	ansmission L	ine		
Asset-2	3657.83	14.81	1%	36.80	14.81	0.00



- 15. Therefore, the Capital cost allowed in accordance with Regulation 19(3) of the Tariff Regulations 2019 as on 1.4.2019 is ₹102371.47 lakh (₹102381.47 lakh minus ₹10.00 lakh for initial spares on combined basis).
- 16. The capital cost of the Combined Assets as on 1.4.2024 is worked out as under:

Asset	Approved Cost as per FR	Approved Cost as per RCE	Combined Capital Cost as on 31.3.2019	Additional Spares allowed as per APTEL judgment dated 14.9.2019	Combined Capital Cost as on 1.4.2019
Combined Assets	97242.10	116930	102381.47	(10.00)	102371.47

- 17. The Petitioner has claimed Additional Capital Expenditure (ACE) of ₹761.94 lakh for the 2019-24 tariff period in the instant true-up Petition against the approved value of ₹1214.97 lakh in Petition No. 515/TT/2019.
- 18. The Commission vide RoP dated 11.3.2025, directed the Petitioner to provide the reasons for variation in claiming ACE with respect to the approved ACE.
- 19. In response, the Petitioner vide affidavit dated 24.3.2025 has submitted that the ACE incurred during the 2019-24 tariff block is claimed under Regulations 24(1)(a), 24(1)(b) and 25(1)(d) of the 2019 Tariff Regulations. Further, the primary reason for variations in the approved ACE and actual ACE is that while projecting the estimated additional capitalization, contracts were not closed, and liabilities were not finalized. However, in the instant true-up Petition, ACE is claimed on the basis of actual payments made to the vendors after receipt of final invoices, incorporating the amendments and after due reconciliation in accordance with the contractual clauses as per provisions of the contract.
- 20. The Petitioner vide affidavits dated 7.10.2024 and 24.3.2025, has submitted



the following Liability Flow statement:

(₹ in lakh)

Headwise/ Partywise	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Site Packages-1	TL	0.24	194.33	3.57	24.88	-
NHVS	SS	8.51	259.51	-	3.74	-
Site Packages-2	SS	190.8	59.67	(365.23)	(65.87)	-
Site Packages-3	Building & Civil Works	127.67	146.93	145.99	30.94	-
Total	_	327.22	660.44	(215.67)	(6.31)	-

21. We have considered the Petitioner's submissions and are of the view that the Petitioner's claim does not match with the Auditor's Certificate submitted by it along with the Petition. In FY 2022-23, the total ACE as per the Auditor's Certificate is ₹10.05 lakh, whereas the Petitioner has claimed only ₹6.31 lakh as per the Liability Flow statement. The total claim of ACE ₹761.94 lakh for the 2019-24 tariff period matches with the Auditor's Certificate, in case the claim of ₹3.74 lakh on account of NHVS is not considered. Thus, we have considered the ACE as per audited accounts and have allowed the ACE for the 2019-24 tariff period as ₹761.94 lakh. The ACE allowed with respect to the Combined Assets is as follows:

(₹ in lakh)

Particulars Regulations		ACE allowed					
Particulars	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24	
Balance and Retention Payments other than IDC	Regulation 24(1)(a) of the 2019 Tariff Regulations	327.22	660.44	(215.67)	(10.05)	-	
То	tal	327.22	660.44	(215.67)	(10.05)	-	

22. After considering the submissions and the justification provided by the Petitioner for its claim, the allowed capital cost as on 31.3.2019 and as on 31.3.2024 are as follows:



(₹ in lakh)

Asset	Approved Cost as	Approved Cost as	Expenditure as on	Admitted ACE	Actual Capital
ASSEL	per FR	per RCE	1.4.2019	2019-24	Cost as on 31.3.2024
Combined Assets	97242.10	116930	102371.47	761.94	103133.41

Debt-Equity Ratio

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

Funding	Capital Cos 1.4.20		ACE 2019-24		Capital Cost as on 31.3.2024	
	(₹ in lakh)	(in %)	(₹ in lakh) (in %)		(₹ in lakh)	(in %)
Debt	72753.42	71.07	533.358	70.00	73286.78	71.06
Equity	29618.05	28.93	228.582	30.00	29846.63	28.94
Total	102371.47	100.00	761.94	100.00	103133.41	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 for the Combined Assets. The Weighted Average Rate of Depreciation (WAROD) has been worked out for the Combined Assets as per the rates of depreciation specified in the 2019 Tariff Regulations. The depreciation allowed for the Combined Assets is as follows:

SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Opening Gross Block	102371.47	102698.69	103359.13	103143.46	103133.41
В	Addition during the year 2019-24 due to ACE	327.22	660.44	-215.67	-10.05	0.00
С	Closing Gross Block (A+B)	102698.69	103359.13	103143.46	103133.41	103133.41
D	Average Gross Block (A+C)/2	102535.08	103028.91	103251.30	103138.44	103133.41
Е	Average Gross Block (90% depreciable assets)	102137.90	102631.73	102854.12	102741.26	102736.23
F	Average Gross Block (100% depreciable assets)	397.18	397.18	397.18	397.18	397.18
G	Depreciable value (excluding IT equipment and software) (E*90%)	91924.11	92368.56	92568.70	92467.13	92462.61
Н	Depreciable value of IT equipment and software (F*100%)	397.18	397.18	397.18	397.18	397.18



I	Total Depreciable Value (G+H)	92321.29	92765.74	92965.88	92864.31	92859.79
J	Weighted average rate of Depreciation (WAROD) (in %)	5.01%	5.01%	5.01%	5.01%	5.01%
K	Elapsed useful life at the beginning of the year (Year)	2	3	4	5	6
L	Balance useful life at the beginning of the year (Year)	23	22	21	20	19
M	Depreciation during the year (D*J)	5139.38	5162.79	5171.69	5164.02	5163.45
N	Cumulative Depreciation at the end of the year	15501.76	20664.56	25836.25	31000.27	36163.72
0	Remaining Aggregate Depreciable Value at the end of the year	76819.53	72101.18	67129.63	61864.04	56696.06

25. The details of depreciation allowed vide order dated 31.1.2021 in Petition No. 515/TT/2019, depreciation claimed in the instant Petition, and trued-up depreciation allowed for the Combined Assets in the instant order are as follows:

(₹ in lakh)

				,	,
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1 FEIIION NO 313/11/2019	5160.86				5189.22
Claimed by the Petitioner in the instant Petition	5140.61	5164.03	5172.94	5165.25	5164.69
Allowed after truing-up in this order	5139.38	5162.79	5171.69	5164.02	5163.45

Interest on Loan (IoL)

26. The Petitioner has claimed the Weighted Average Rate of Interest (WAROI) on loans based on its actual loan portfolio and the prevailing interest rate. The IoL 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 IoL allowed in respect of the Combined Assets is as follows:

SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Gross Normative Loan	72753.42	72982.48	73444.79	73293.82	73286.78
В	Cumulative Repayments up to Previous Year	10362.38	15501.76	20664.56	25836.25	31000.27
С	Net Loan-Opening (A-B)	62391.04	57480.71	52780.23	47457.56	42286.51
D	Addition due to ACE	229.05	462.31	-150.97	-7.04	0.00
Е	Repayment during the year	5139.38	5162.79	5171.69	5164.02	5163.45
F	Net Loan-Closing (C+D-E)	57480.71	52780.23	47457.56	42286.51	37123.06
G	Average Loan (C+F)/2	59935.88	55130.47	50118.90	44872.04	39704.78
Н	Weighted Average Rate of	7.87%	7.63%	7.56%	7.68%	7.82%



Ī		Interest on Loan (in %)					
	ı	Interest on Loan (G*H)	4719.26	4207.06	3787.39	3444.15	3103.30

27. The details of IoL allowed vide order dated 31.1.2021 in Petition No. 515/TT/2019, IoL claimed in the instant Petition, and trued-up IoL allowed for the Combined Assets in the instant order are as follows:

(₹ in lakh)

				•	,
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Allowed vide order dated 31.1.2021 in Petition No. 515/TT/2019	4672.93	4297.26			
Claimed by the Petitioner in the instant Petition	4720.49	4208.19	3788.41	3445.10	3104.19
Allowed after truing-up in this order	4719.26	4207.06	3787.39	3444.15	3103.30

Return on Equity (RoE)

- 28. The Petitioner has submitted that its Income Tax assessment has been completed, and the 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 (IT Act, 1961)].
- 29. The Petitioner has further submitted that it is liable to pay the 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 Petitioner's submissions and have also gone through the record. We noted 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 of the RoE for truing up of 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 considered for the purpose of grossing up the rate of the 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 is considered for the purpose of grossing up the rate of RoE:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Effective tax (in %) (t)	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

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

SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Opening Equity	29618.06	29716.22	29914.35	29849.65	29846.64
В	Addition due to ACE	98.17	198.13	-64.70	-3.02	0.00
С	Closing Equity (A+B)	29716.22	29914.35	29849.65	29846.64	29846.64
D	Average Equity (A+C)/2	29667.14	29815.29	29882.00	29848.15	29846.64



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)	5572.08	5599.91	5612.44	5606.08	5605.80

32. The details of RoE allowed vide order dated 31.1.2021 in Petition No. 515/TT/2019, RoE claimed in the instant Petition, and trued-up RoE allowed for the Combined Assets in the instant order are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Allowed vide order dated 31.1.2021 in Petition No. 515/TT/2019	5597.64	5631.86	5631.86	5631.86	5631.86
Claimed by the Petitioner in the instant Petition	5573.35	5601.18	5613.71	5607.35	5607.07
Allowed after truing-up in this order	5572.08	5599.91	5612.44	5606.08	5605.80

Operation & Maintenance Expenses (O&M Expenses)

33. The Commission, vide order dated 31.1.2021 in Petition No. 515/TT/2019, allowed the following O&M Expenses for the Combined Assets:

				(₹ ו	n lakh)
OSM Expanses	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	2108.76	2182.18	2259.24	2340.22	2421.93

34. The Petitioner has claimed the following O&M Expenses in respect of the Combined Assets for the 2019-24 tariff period:

				(₹ :	in lakh)
OSM Evnances	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	2108.76	2182.18	2259.24	2340.22	2421.93

35. We have considered the Petitioner's submission. We are of the view that the O&M Expenses claimed by the Petitioner in the instant true-up Petition are as per Regulation 35(3) of the 2019 Tariff Regulations. The O&M Expenses worked out for the Combined Assets are as follows:

				,	· III Iakii)
O&M Expenses	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station Bays					
400 kV (AIS) Bays	4	4	4	4	4



765 kV (GIS) Bays	12	12	12	12	12
400 kV (GIS) Bays	5	5	5	5	5
Norms (₹ Lakh per Bay)					
400 kV (AIS) Bays	32.15	33.28	34.45	35.66	36.91
765 kV (GIS) Bays	31.51	32.62	33.76	34.95	36.18
400 kV (GIS) Bays	22.51	23.30	24.12	24.96	25.84
Total Sub-station O&M	619.21	641.04	663.51	686.86	710.94
Transformers					
765 kV Transformers (MVA)	3000	3000	3000	3000	3000
Norms (₹ Lakh per MVA)					
765 kV	0.49	0.51	0.53	0.55	0.56
Total Transformers O&M	1473.00	1524	1578	1635	1692
AC & HVDC Lines					
400 kV D/C (KM)	18.79	18.79	18.79	18.79	18.79
Norms (₹ Lakh per KM)					
400 kV D/C Twin Conductor	0.881	0.912	0.944	0.977	1.011
Total Transmission Line	16.55	17.14	17.74	18.36	19.00
Total O&M Expenses	2108.76	2182.18	2259.24	2340.22	2421.93

36. Accordingly, the details of O&M Expenses allowed vide order dated 31.1.2021 in Petition No. 515/TT/2019, O&M Expenses claimed in the instant Petition and trued-up O&M Expenses allowed for the Combined Assets in the instant order are as follows:

(₹ in lakh)

				, ,	
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Allowed vide order dated 31.1.2021 in Petition No. 515/TT/2019	2108.76	2182.18	2259.24	2340.22	2421.93
Claimed by the Petitioner in the instant petition	2108.76	2182.18	2259.24	2340.22	2421.93
Allowed after truing-up in this order	2108.76	2182.18	2259.24	2340.22	2421.93

Interest on Working Capital (IWC)

37. 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 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 Combined Assets are as follows:

(₹ in lakh)

SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Working Capital for O&M Expenses (O&M Expenses for one month)	175.73	181.85	188.27	195.02	201.83
В	Working Capital for Maintenance Spares (15% of O&M Expenses)	316.31	327.33	338.89	351.03	363.29
С	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	2196.32	2151.53	2109.15	2074.89	2041.88
D	Total Working Capital (A+B+C)	2688.37	2660.70	2636.31	2620.94	2607.00
Е	Rate of Interest for working capital (in %)	12.05%	11.25%	10.50%	10.50%	12.00%
F	Interest on Working Capital (D*E)	323.95	299.33	276.81	275.20	312.84

39. The details of IWC allowed vide order dated 31.1.2021 in Petition No. 515/TT/2019, IWC claimed in the instant Petition, and trued-up IWC allowed for the Combined Assets in the instant order are as follows:

(₹ in lakh)

Particulars Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Allowed vide order dated 31.1.2021 in Petition No. 515/TT/2019	323.96	301.42	298.80	296.32	293.28
Claimed by the Petitioner in the instant Petition	324.00	299.38	276.86	275.24	312.89
Allowed after truing-up in this order	323.95	299.33	276.81	275.20	312.84

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

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	5139.38	5162.79	5171.69	5164.02	5163.45
Interest on Loan	4719.26	4207.06	3787.39	3444.15	3103.30
Return on Equity	5572.08	5599.91	5612.44	5606.08	5605.80
O&M Expenses	2108.76	2182.18	2259.24	2340.22	2421.93
Interest on Working Capital	323.95	299.33	276.81	275.20	312.84
Total	17863.43	17451.27	17107.58	16829.67	16607.32



41. The details of annual transmission charges allowed vide order dated 31.1.2021 in Petition No. 515/TT/2019, annual transmission charges claimed in the instant Petition and trued-up annual transmission charges allowed in the instant order in respect of the Combined Assets are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Pelilion No. 515/11/2019			17267.03		
Claimed by the Petitioner in the instant Petition					
Allowed after truing-up in this order	17863.43	17451.27	17107.58	16829.67	16607.32

<u>DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2024-29 TARIFF PERIOD</u>

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

(₹ in lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Depreciation	5207.65	5156.00	5143.71	5077.62	5077.62
Interest on Loan	2693.58	2280.74	1878.90	1496.37	1107.48
Return on Equity	5607.07	5607.07	5607.07	5607.07	5607.07
O&M Expenses	1769.15	1863.12	1958.69	2060.55	2173.12
Interest on Working Capital	277.33	274.46	272.41	269.53	269.18
Total	15554.78	15181.39	14860.78	14511.14	14234.47

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;
- Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
- Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
- Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
- 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;
- Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
- Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- 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;
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	(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)
	(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

- g
- tariff petition;
- 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)
- (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 of ₹103133.41 lakh has been considered by the Commission for the Combined Assets as on 31.3.2024 as allowed in the instant Petition. Therefore, the capital cost of ₹103133.41 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.

Additional Capital Expenditure

- 45. The Petitioner has not claimed ACE in respect of the Combined Assets for the 2024-29 tariff period.
- 46. The capital cost approved as on 31.3.2024, as allowed in the present order, is ₹103133.41 lakh, and the same has been considered for the determination of the tariff for the 2024-29 tariff period. The details of the capital cost allowed as on 31.3.2024 and as on 31.3.2029 are as follows:



(₹ in lakh)

Capital Cost allowed	ACE allowed for the	•
as on 1.4.2024	year 2024-29	Cost up to 31.3.2029
103133.41	0.00	103133.41

Debt Equity Ratio

47. 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 utilized 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 subclause (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."
- 48. 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 purpose of computation of tariff for the 2024-29 period for the Combined Assets is as follows:

Funding	Capital Cost a	s on 1.4.2024	Capital Cost as on 31.3.2029		
Funding	(₹ in lakh)	(in %)	(₹ in lakh)	(in %)	
Debt	73286.78	71.06	73286.78	71.06	
Equity	29846.63	28.94	29846.63	28.94	
Total	103133.41	100.00	103133.41	100.00	

Depreciation

- 49. 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 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:
- (6) 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.

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(7) 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:

(8) 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.

- (9) 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.
- (10) 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.
- (11) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful service
- 50. The depreciation has been worked out considering the admitted capital expenditure as on 1.4.2024 and, thereafter, up to 31.3.2029. The Weighted Average Rate of Depreciation (WAROD) has been worked out for the Combined Assets as per the rates of depreciation specified in the 2024 Tariff Regulations.
- 51. The depreciation allowed for the Combined Assets under Regulation 33 of the 2024 Tariff Regulations for the 2024-29 tariff period is as under:

	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Α	Opening Gross Block	103133.41	103133.41	103133.41	103133.41	103133.41
В	Addition during the year 2024-29 due to projected ACE	0.00	0.00	0.00	0.00	0.00
С	Closing Gross Block (A+B)	103133.41	103133.41	103133.41	103133.41	103133.41



D	Average Gross Block (A+C)/2	103133.41	103133.41	103133.41	103133.41	103133.41
E	Average Gross Block (90% depreciable assets)	102736.23	102736.23	102736.23	102736.23	102736.23
F	Average Gross Block (100% depreciable assets)	397.18	397.18	397.18	397.18	397.18
G	Depreciable value (excluding IT equipment and software) (E*90%)	92462.61	92462.61	92462.61	92462.61	92462.61
Н	Depreciable value of IT equipment and software (F*100%)	397.18	397.18	397.18	397.18	397.18
I	Total Depreciable Value (G+H)	92859.79	92859.79	92859.79	92859.79	92859.79
J	Weighted average rate of Depreciation (WAROD) (in %)	5.05%	5.00%	5.00%	4.92%	4.92%
K	Elapsed useful life at the beginning of the year (Year)	7	8	9	10	11
L	Balance useful life at the beginning of the year (Year)	18	17	16	15	14
M	Depreciation during the year (D*J)	5206.43	5154.76	5152.88	5076.38	5076.38
N	Cumulative Depreciation at the end of the year	41370.15	46524.92	51677.80	56754.18	61830.57
0	Remaining Aggregate Depreciable Value at the end of the year	51489.63	46334.87	41181.99	36105.60	31029.22

Interest on Loan (IoL)

- 52. 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."
- 53. The Petitioner has claimed the Weighted Average Rate of Interest (WAROI) on loans based on its actual loan portfolio and the rate of interest prevailing as on 1.4.2024. The IoL has been calculated based on the actual interest rate of various loans deployed for each year in accordance with the 2024 Tariff Regulations. The loL allowed in respect of the Combined Assets is as follows:

(₹ in lakh)

SI. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Α	Gross Normative Loan	73286.78	73286.78	73286.78	73286.78	73286.78
В	Cumulative Repayments up to Previous Year	36163.72	41370.15	46524.92	51677.80	56754.18
С	Net Loan-Opening (A-B)	37123.06	31916.63	26761.87	21608.98	16532.60
D	Addition due to ACE	0.00	0.00	0.00	0.00	0.00
E	Repayment during the year	5206.43	5154.76	5152.88	5076.38	5076.38
F	Net Loan-Closing (C+D-E)	31916.63	26761.87	21608.98	16532.60	11456.21
G	Average Loan (C+F)/2	34519.84	29339.25	24185.42	19070.79	13994.41
Н	Weighted Average Rate of Interest on Loan (in %)	7.80%	7.77%	7.76%	7.84%	7.90%
I	Interest on Loan (G*H)	2692.74	2280.04	1877.90	1495.04	1106.23



Return on Equity (RoE)

- 54. 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;



"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: 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."

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



(₹ in lakh)

SI. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Α	Opening Equity	29846.64	29846.64	29846.64	29846.64	29846.64
В	Addition due to ACE	0.00	0.00	0.00	0.00	0.00
С	Closing Equity (A+B)	29846.64	29846.64	29846.64	29846.64	29846.64
D	Average Equity (A+C)/2	29846.64	29846.64	29846.64	29846.64	29846.64
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 (in %)	18.782%	18.782%	18.782%	18.782%	18.782%
Н	Return on Equity (D*G)	5605.80	5605.80	5605.80	5605.80	5605.80

Operation and Maintenance Expenses (O&M Expenses)

56. The O&M Expenses claimed by the Petitioner for the 2024-29 tariff period in respect of the Combined Assets are as follows:

(₹ in lakh)

					(
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
O&M Expenses	1769.15	1863.12	1958.69	2060.55	2173.12

57. 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:

Particulars	2024-	2025-	2026-	2027-	2028-
Norms for sub-station Bays (Rs Lakh	per 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 (R	s Lakh pe	er MVA d	or MVAR	2)	
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 La	kh per kı	n)			
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	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 "
- We have considered the Petitioner's submissions. 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 approved for the Combined Assets for the 2024-29 tariff period as per Regulation 36 of the 2024 Tariff Regulations are as under:

O&M Expenses	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station Bays					
400 kV (AIS) Bays	4	4	4	4	4
765 kV (GIS) Bays	12	12	12	12	12
400 kV (GIS) Bays	5	5	5	5	5



Norms (₹ Lakh per Bay)					
400 kV (AIS) Bays	29.53	31.08	32.71	34.43	36.23
765 kV (GIS) Bays	28.938	30.457	32.053	33.74	35.511
400 kV (GIS) Bays	20.671	21.756	22.897	24.101	25.361
Total Sub-station O&M	568.73	598.58	629.96	663.11	697.86
Transformers					
765 kV Transformers (MVA)	3000	3000	3000	3000	3000
Norms (₹ Lakh per MVA)					
765 kV	0.26	0.28	0.29	0.31	0.32
Total Transformers O&M	1184.24	1247.52	1310.8	1378.6	1455.44
AC & HVDC Lines					
400 kV D/C (KM)	18.79	18.79	18.79	18.79	18.79
Norms (₹ Lakh per KM)					
400 kV D/C Twin Conductor	0.86	0.91	0.95	1.00	1.06
Total Transmission Line	16.18	17.02	17.91	18.85	19.84
Total O&M Expenses	1769.15	1863.13	1958.67	2060.55	2173.14

Interest on Working Capital (IWC)

59. Regulations 34(1)(d), 34(3) and 34(4) of the 2024 Tariff Regulations provide 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."

- 60. The Petitioner has considered the rate of IWC as 11.90% as on 1.4.2024. IWC has been worked out in accordance with 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 FY 2024-25 to FY 2028-29.
- 61. 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 Assets 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)	147.43	155.26	163.22	171.71	181.09
В	Working Capital for Maintenance Spares (15% of O&M Expenses)	265.37	279.47	293.80	309.08	325.97
С	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	1917.30	1871.28	1833.01	1783.68	1754.47
D	Total Working Capital (A+B+C)	2330.10	2306.01	2290.03	2264.47	2261.53
Е	Rate of Interest for working capital (in %)	11.90%	11.90%	11.90%	11.90%	11.90%
F	Interest on Working Capital (D*E)	277.28	274.41	272.51	269.47	269.12

Annual Fixed Charges for the 2024-29 Tariff Period

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

(₹ in lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Depreciation	5206.43	5154.76	5152.88	5076.38	5076.38
Interest on Loan	2692.74	2280.04	1877.90	1495.04	1106.23
Return on Equity	5605.80	5605.80	5605.80	5605.80	5605.80
O&M Expenses	1769.15	1863.13	1958.67	2060.55	2173.14
Interest on Working Capital	277.28	274.41	272.51	269.47	269.12
Total	15551.40	15178.14	14867.76	14507.24	14230.67

Filing Fee and Publication Expenses

63. 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.

64. 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)

- 65. 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.
- 66. 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."

67. 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 additional O&M Expenses through a separate Petition until such a regulation is notified and issued by the Commission.

Licence Fee and RLDC Fees and Charges

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

- 69. 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, 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.
- 70. 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

- 71. 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 for the transmission system shall be allowed separately after a prudence check.
- 72. As regards the security expenses of the transmission assets, the Petitioner



has submitted that it will 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 Combined Assets are not claimed in the instant Petition.

- 73. The Petitioner has also submitted that it has not claimed insurance expenses in the instant Petition and has submitted that it will file a separate Petition for claiming the overall insurance expenses and consequential 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 FY 2024-25, FY 2025-26, FY 2026-27, FY 2027-28, and FY 2028-29.
- 74. The Petitioner has not claimed capital spares for the Combined Assets in the instant 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.
- 75. 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."

76. 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

77. Regarding the sharing of transmission charges, the Petitioner is authorized to bill, collect, and disburse these charges for the Combined Assets. We have allowed the same in terms of the 2020 Sharing Regulations, as specified 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.

78. To summarize:

a) The trued-up Annual Fixed Charges (AFC) allowed in respect of the Combined Assets for the 2019-24 tariff period are as follows:

					(₹ in	lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
AFC Allowed	17863.43	17451.27	17107.58	16829.67	16607.32	

b) The AFC allowed in respect of the Combined Assets for the 2024-29 tariff period are as follows:

					()
Particulars				2027-28	
AFC Allowed	15551.40	15178.14	14867.76	14507.24	14230.67



79. This order disposes of Petition No. 19/TT/2025 in terms of the above discussions and findings.

sd/-(Harish Dudani) Member sd/-(Ramesh Babu V) Member

