

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 504/TT/2019

Coram:

**Shri Jishnu Barua, Chairperson
Shri Arun Goyal, Member
Shri P. K. Singh, Member**

Date of Order: 08.05.2024

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and true-up of transmission tariff of the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of 2 nos. of 400 kV line bays at Muzaffarpur Sub-station for termination of Muzaffarpur (PG)-Darbhanga (TBCB) 400 kV D/C (Triple snowbird) line under "Eastern Region Strengthening Scheme VI Project" in Eastern Region.

And in the matter of:

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

..... Petitioner

Vs.

1. Darbhanga-Motihari Transmission Company Limited,
Essel Infraprojects Limited,
6th Floor, Plot No. 19, Film City, Sector-16A
Gautam Buddha Nagar, Noida,
Uttar Pradesh-201301.
2. Bihar State Power (Holding) Company Limited,
Transmission Vidyut Bhawan,
4th Floor, Bailey Road,
Patna, Bihar-800021.
3. Bihar State Power (Holding) Company Limited,
(Formerly Bihar State Electricity Board-BSEB),
Vidyut Bhawan, Bailey Road,
Patna-800 001.



4. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II,
Salt Lake City, Kolkata-700091.
5. Grid Corporation of Orissa Limited,
Janpath, Bhubaneswar-751007.
6. Power Department,
Government of Sikkim,
Gangtok-737101.
7. Damodar Valley Corporation,
DVC Tower, Maniktala, Civic Centre,
VIP Road, Kolkata-700054.
8. Jharkhand Bijli Vitran Corporation Limited,
(formerly known as Jharkhand State Electricity Board)
Engineering Building, HEC
Dhurva, Ranchi-834002.
9. Maithan Power Limited,
MA-5, Gogna, PO-Maithan DAM,
District: Dhanbad , Jharkhand- 828207.Respondent(s)

For Petitioner : Ms. Swapna Seshadri, Advocate, PGCIL
Ms. Ritu Apurva, Advocate, PGCIL

For Respondents : Ms. Anushka Nagrajan, Advocate, DMTCL
Ms. Akansha Bhola, Advocate, CTUIL
Shri Siddhart Sharma, Advocate, CTUIL
Shri Akshayvat Kislay, Advocate, CTUIL

ORDER

The Commission, in an order dated 6.12.2023 in Petition No. 197/MP/2022, considering the Appellate Tribunal for Electricity's (APTEL) judgement dated 3.12.2021 in Appeal No.276 of 2021, allowed the capitalisation of IDC and IEDC of ₹55.34 lakh in respect of the two 400 kV line bays at Muzaffarpur Sub-station (hereinafter referred to as the "transmission asset") for the period 31.8.2016 to 21.4.2017 in terms of Regulation 11(A) and 11(B) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as the "2014 Tariff



Regulations), which required revision of the capital cost and the transmission tariff of the transmission asset allowed earlier vide order dated 1.2.2021 in Petition No.504/TT/2019. The Commission further observed that the consequential revision in tariff of the transmission asset shall be issued separately. The relevant portion of the order dated 6.12.2023 in Petition No.197/MP/2022 is as follows:

“23. In the present case, execution of the Muzaffarpur (PG)-Darbhanga (TBCB) 400 kV D/C (Triple Snowbird) line was within the scope of DMTCL and since DMTCL was affected by force majeure, the Petitioner could not have achieved its CoD before the CoD of the connecting line. Further, the Commission rejected the request of the Petitioner to declare CoD under proviso to Regulation 4(3) of the Tariff Regulations, 2014. Therefore, the delay in achieving CoD of 400 kV line bays at Muzaffarpur Sub-station was beyond the control of the Petitioner. Since APTEL set aside the Commission’s decision to recover the IDC and IEDC from DMTCL, the only option available under law is to capitalise the IDC and IEDC in terms of provisos to Regulation 11(A) and 11(B) to Tariff Regulations, 2014. Accordingly, we decide that ₹55.34 lakh towards IDC and IEDC shall be capitalised for the purpose of determination of tariff 400 kV line bays at Muzaffarpur Sub-station. It is, however, clarified that we have allowed capitalisation of IDC and IEDC of the 400 kV line bays at Muzaffarpur Sub-station for the period 31.8.2016 to 21.4.2017 in the peculiar nature of the facts in the present case where the entity responsible for the delay was held to be not liable by APTEL to pay on account of being affected by force majeure. The decision in this case would not be considered as a precedent in other cases of allocation of liability for the delay in commercial operation of any transmission asset, whether pending before the Commission or to be filed in future, and such cases will be decided on their own merit in accordance with law.

24. Consequential revision in tariff of 400 kV line bays at Muzaffarpur Sub-station shall be issued separately.”

2. Accordingly, the tariff allowed for the transmission asset in the order dated 1.2.2021 in Petition No. 504/TT/2019 is revised in the instant order. In the order dated 1.2.2021, the tariff approved for the transmission asset for the period from COD to 31.3.2019 vide order dated 1.9.2017 in Petition No. 209/TT/2016 was trued up, and the tariff for the 2019-24 tariff period was approved. In accordance with the order dated 6.12.2023 in Petition No.197/MP/2022, the capital cost of the transmission asset was revised by capitalizing the IDC and IEDC of ₹55.34 lakh and the tariff from its COD to 31.3.2019 and the 2019-24 tariff period is revised in this order.



3. The approved capital cost of the transmission asset as on COD and 31.3.2019 in the order dated 1.2.2021 in Petition No. 504/TT/2019 are as follows:

Capital cost considered as on COD	ACE		Total capital cost as on 31.3.2019
	2017-18	2018-19	
869.32	240.84	244.53	1354.69

4. The revised capital cost of the transmission asset after capitalization of IDC and IEDC of ₹55.34 lakh as on COD and 31.3.2019 is as follows. The amount of IDC and IEDC, which is being capitalized has been discharged at the time of COD.

Capital cost considered as on COD	ACE		Total capital cost as on 31.3.2019
	2017-18	2018-19	
924.66	240.84	244.53	1410.03

Debt-Equity Ratio

5. The revised trued up debt and equity allowed as on COD and 31.3.2019 as per Regulation 19 of the 2014 Tariff Regulations is as follows:

Particulars	Amount as on COD (₹ in lakh)	(in %)	Amount as on 31.3.2019 (₹ in lakh)	(in %)
Debt	647.26	70.00	987.02	70.00
Equity	277.40	30.00	423.01	30.00
Total	924.66	100.00	1410.03	100.00

Depreciation

6. The revised trued up depreciation allowed for the transmission asset for the period from its COD to 31.3.2019 in accordance with Regulation 27 of the 2014 Tariff Regulations is as follows:



(₹ in lakh)

Sl. No.	Particulars	2017-18 (pro-rata for 345 days)	2018-19
A	Opening Gross Block	924.66	1165.50
B	Additional Capitalisation	240.84	244.53
C	Closing Gross Block (A+B)	1165.50	1410.03
D	Average Gross Block (A+C)/2	1045.08	1287.77
E	Weighted average rate of Depreciation (WAROD) (in %)	5.31	5.31
F	Elapsed useful life at the beginning of the year	0	0
G	Balance useful life of the asset at the beginning of the year	25	25
H	Aggregated Depreciable Value (D*90%)	940.58	1158.99
I	Depreciation during the year (D*E)	52.43	68.39
J	Cumulative Depreciation at the end of the year	52.43	120.82
H	Remaining Aggregated Depreciable Value at the end of the year	888.15	1038.17

Interest on Loan (“IoL”)

7. The revised trued up IoL allowed for the transmission asset for the period from its COD to 31.3.2019 in accordance with Regulation 26 of the 2014 Tariff Regulations as follows:

(₹ in lakh)

Sl. No.	Particulars	2017-18 (pro-rata for 345 days)	2018-19
A	Gross Normative Loan	647.26	815.85
B	Cumulative Repayments up to Previous Year	0.00	52.43
C	Net Loan-Opening (A-B)	647.26	763.42
D	Addition due to Additional Capitalization	168.59	171.17
E	Repayment during the year	52.43	68.39
F	Net Loan-Closing (C+D-E)	763.42	866.20
G	Average Loan (C+F)/2	705.34	814.81
H	Weighted Average Rate of Interest on Loan (in %)	7.833	7.768
I	Interest on Loan (G*H)	52.22	63.29

Return on Equity (“RoE”)

8. The revised trued up RoE allowed for the transmission asset for the period from its COD to 31.3.2019 in accordance with Regulation 24 and Regulation 25 of the 2014 Tariff Regulations is as follows:



(₹ in lakh)

Sl. No.	Particulars	2017-18 (pro-rata for 345 days)	2018-19
A	Opening Equity	277.40	349.65
B	Addition due to Additional Capitalization	72.25	73.36
C	Closing Equity (A+B)	349.65	423.01
D	Average Equity (A+C)/2	313.53	386.33
E	Return on Equity (Base Rate) (in %)	15.50	15.50
F	Tax Rate applicable (in %)	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.705	19.758
H	Return on Equity (D*G)	58.39	76.33

Interest on Working Capital (IWC)

9. The revised trued up IWC allowed for the transmission asset for the period from its COD to 31.3.2019 as per Regulation 28(1)(c) of the 2014 Tariff Regulations is as follows:

(₹ in lakh)

Sl. No.	Particulars	2017-18 (pro-rata for 345 days)	2018-19
A	Working Capital for O&M Expenses (O&M Expenses for 1 month)	11.09	11.45
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	19.95	20.61
C	Working Capital for Receivables (Equivalent to 2 months of annual fixed cost / annual transmission charges)	52.68	59.50
D	Total of Working Capital (A+B+C)	83.72	91.56
E	Rate of Interest on working capital (in %)	12.60	12.60
F	Interest of working Capital (D*E)	9.97	11.54

Revised Annual Fixed Charges for the 2014-19 Tariff Period

10. The revised trued up annual transmission charges allowed for the transmission asset for the period from its COD to 31.3.2019 is as follows:

(₹ in lakh)

Particulars	2017-18 (pro-rata for 345 days)	2018-19
Depreciation	52.43	68.39
Interest on Loan	52.22	63.29
Return on Equity	58.39	76.33
Interest on Working Capital	9.97	11.54



Particulars	2017-18 (pro-rata for 345 days)	2018-19
O&M Expenses	125.73	137.42
Total	298.74	356.97

ANNUAL TRANSMISSION CHARGES FOR THE 2019-24 TARIFF PERIOD

11. The annual transmission charges of the transmission asset for the 2019-24 tariff period are revised in the following paragraphs.

Capital Cost

12. The Commission, in the order dated 1.2.2021 in Petition No. 504/TT/2019, approved the additional capital expenditure of ₹261.16 lakh in 2019-20. Accordingly, the capital cost of the transmission asset considered for the 2019-24 tariff period, subject to true up, is as follows:

Capital cost considered as on 31.3.2019/ 1.4.2019	ACE	Total capital cost as on 31.3.2024
	2019-20	
1410.03	261.16	1671.19

13. The above capital cost has been considered as per Regulation 19 of the 2019 Tariff Regulations for the purpose of computation of tariff of the transmission asset for the 2019-24 tariff period.

Debt-Equity Ratio

14. The revised debt-equity ratio of the transmission asset as on 1.4.2019 and 31.3.2024 allowed in accordance with Regulation 18 of the 2019 Tariff Regulations is as follows:

Particulars	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	987.02	70.00	1169.84	70.00
Equity	423.01	30.00	501.36	30.00
Total	1410.03	100.00	1671.19	100.00



Depreciation

15. The revised depreciation allowed for the transmission asset for the 2019-24 tariff period as per Regulation 33 of the 2019 Tariff Regulations is as follows:

(₹ in lakh)						
Sl. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	1410.03	1671.19	1671.19	1671.19	1671.19
B	Addition during the year 2019-24 due to projected ACE	261.16	0.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	1671.19	1671.19	1671.19	1671.19	1671.19
D	Average Gross Block (A+C)/2	1540.61	1671.19	1671.19	1671.19	1671.19
E	Average Gross Block (90% depreciable assets)	1540.61	1671.19	1671.19	1671.19	1671.19
F	Average Gross Block (100% depreciable assets)	0.00	0.00	0.00	0.00	0.00
G	Depreciable value (excluding IT equipment and software) (E*90%)	1386.55	1504.07	1504.07	1504.07	1504.07
H	Depreciable value of IT equipment and software (F*100%)	0.00	0.00	0.00	0.00	0.00
I	Total Depreciable Value (G+H)	1386.55	1504.07	1504.07	1504.07	1504.07
J	Weighted average rate of Depreciation (WAROD) (in %)	5.31	5.30	5.30	5.30	5.30
K	Lapsed useful life at the beginning of the year (Year)	1	2	3	4	5
L	Balance useful life at the beginning of the year (Year)	24	23	22	21	20
M	Depreciation during the year (D*J)	81.74	88.64	88.64	88.64	88.64
N	Cumulative Depreciation at the end of the year	202.57	291.21	379.85	468.49	557.13
O	Remaining Aggregate Depreciable Value at the end of the year	1183.98	1212.87	1124.23	1035.59	946.95

Interest on Loan ("IoL")

16. The revised IoL allowed for the transmission asset for the 2019-24 tariff period in accordance with Regulation 32 of the 2019 Tariff Regulations as follows:

(₹ in lakh)						
Sl. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	987.02	1169.84	1169.84	1169.84	1169.84
B	Cumulative Repayments up to Previous Year	120.82	202.57	291.21	379.85	468.49
C	Net Loan-Opening (A-B)	866.20	967.27	878.63	789.99	701.35
D	Addition due to ACE	182.81	0.00	0.00	0.00	0.00
E	Repayment during the year	81.74	88.64	88.64	88.64	88.64



F	Net Loan-Closing (C+D-E)	967.27	878.63	789.99	701.35	612.71
G	Average Loan (C+F)/2	916.73	922.95	834.31	745.67	657.03
H	Weighted Average Rate of Interest on Loan (in %)	7.843	7.834	7.875	7.931	7.917
I	Interest on Loan (G*H)	71.90	72.31	65.70	59.14	52.02

Return on Equity (“RoE”)

17. The revised RoE allowed for the transmission for the 2019-24 tariff period in accordance with Regulation 30 and Regulation 31 of the 2019 Tariff Regulations as follows:

(₹ in lakh)						
Sl. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	423.01	501.36	501.36	501.36	501.36
B	Addition due to ACE	78.35	0.00	0.00	0.00	0.00
C	Closing Equity (A+B)	501.36	501.36	501.36	501.36	501.36
D	Average Equity (A+C)/2	462.18	501.36	501.36	501.36	501.36
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 (D*G)	86.81	94.17	94.17	94.17	94.17

Interest on Working Capital (“IWC”)

18. The revised IWC allowed for the transmission asset for the 2019-24 tariff period in accordance with Regulation 34 of the 2019 Tariff Regulations as follows:

(₹ in lakh)						
Sl. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for one month)	5.36	5.55	5.74	5.94	6.15
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	9.65	9.98	10.34	10.70	11.07
C	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	38.26	40.43	39.91	39.40	38.72
D	Total Working Capital	53.26	55.96	55.99	56.04	55.95
E	Rate of Interest for working capital (in %)	12.05	11.25	11.25	11.25	11.25
F	Interest on working capital	6.42	6.30	6.30	6.30	6.29



Revised Annual Fixed Charges for the 2019-24 Tariff Period

19. The revised annual transmission charges approved for the transmission asset for the 2019-24 tariff period, subject to true-up, are as follows:

Particular	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	81.74	88.64	88.64	88.64	88.64
Interest on Loan	71.90	72.31	65.70	59.14	52.02
Return on Equity	86.81	94.17	94.17	94.17	94.17
Interest on Working Capital	6.42	6.30	6.30	6.30	6.29
O&M Expenses	64.30	66.56	68.90	71.32	73.82
Total	311.17	327.98	323.71	319.57	314.94

20. Annexure-I and Annexure-II in the order dated 1.2.2021 are revised and given hereafter form part of the order.

21. All other terms of the order dated 1.2.2021 in Petition No. 504/TT/2019 shall remain unaltered.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(Jishnu Barua)
Chairperson



Annexure-I

2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations	
Capital Expenditure as on COD		2017-18 (₹ in lakh)	2018-19 (₹ in lakh)			2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Sub-Station	907.83	219.55	244.53	1371.91	5.28	53.73	65.98
PLCC	16.83	21.29	0.00	38.12	6.33	1.74	2.41
Total	924.66	240.84	244.53	1410.03		55.47	68.39
				Average Gross Block (₹ in lakh)		1045.08	1287.77
				Weighted Average Rate of Depreciation (in %)		5.31	5.31



Annexure-II

2019-24	Admitted Capital Cost as on COD (₹ in lakh)	ACE					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations					
		2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)			2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)	
Sub-Station	1371.91	261.16	0.00	0.00	0.00	0.00	1633.07	5.28	79.33	86.23	86.23	86.23	86.23	86.23
PLCC	38.12	0.00	0.00	0.00	0.00	0.00	38.12	6.33	2.41	2.41	2.41	2.41	2.41	2.41
Total	1410.03	261.16	0.00	0.00	0.00	0.00	1671.19		81.74	88.64	88.64	88.64	88.64	88.64
								Average Gross Block (₹ in lakh)	1540.61	1671.19	1671.19	1671.19	1671.19	
								Weighted Average Rate of Depreciation (in %)	5.31	5.30	5.30	5.30	5.30	

