

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 419/TT/2019

Coram:

**Shri P. K. Pujari, Chairperson
Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri P. K. Singh, Member**

Date of Order: 26.05.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Communication system for DVC under Expansion / Upgradation of SCADA/ EMS System of SLDCs of Eastern Region (BSPTCL & DVC).

And in the matter of:

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

.....**Petitioner**

Versus

Damodar Valley Corporation,
VC Tower, Maniktala,
Civic Centre, VIP road,
Calcutta - 700 054.

..... **Respondent(s)**

For Petitioner : Shri S. S. Raju, PGCIL
Shri D. K. Biswal, PGCIL
Shri A. K. Verma, PGCIL
Shri Ved Prakash Rastogi, PGCIL

For Respondents : None

ORDER

The Petitioner, Power Grid Corporation of India Limited (PGCIL), has filed the instant petition for truing up of transmission tariff of 2014-19 tariff period under the



Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”); and for determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) for the Communication System for DVC under Expansion/ Up-gradation of SCADA/ EMS System of SLDCs of Eastern Region (BSPTCL & DVC).

2. The Petitioner has made the following prayers in this petition:

“1) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 10.1 and 11.0 above.

2) Approve the Completion cost and additional capitalization incurred during 2014-19.

3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 10.1 and 11.0 above for respective block.

4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.

5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.

7) Allow the petitioner to claimed initial spares.

8) 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 11.6 above.

9) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.

10) 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 Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice”

Background

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

a) The Investment Approval (IA) for implementation of "Establishment of Communication system for DVC under Expansion/ Up-gradation of SCADA/ EMS System of SLDCs of Eastern Region (BSPTCL & DVC)" was accorded by the Board of Directors of the Petitioner Company in its 313th meeting held on 17.04.2015 and communicated vide Memorandum dated 24.4.2015 for ₹8531 lakh including an IDC of ₹582 lakh based on December 2014 price level.

b) The scope of work covered in IA is as follows:

- i. Implementation of OPGW fibre optic cable on the EHV transmission line of constituents, the estimated length of such cable is approximately 1965 km.
- ii. Installation of 87 numbers of terminal equipment based upon Synchronous Digital Hierarchy (SDH) technology at sub-stations of the constituents, 116 numbers of Multiplexers/D&I/DACS at wideband nodes and Network Management System (NMS).
- iii. DC Power Supply- Presently envisaged at all the wideband locations where equipment is to be installed. However, the requirement shall be optimized during detailed engineering
- iv. Approach Cable for providing connectivity between OPGW and equipment.

c) The details of the communication assets and their COD are as follows:

Name of the Asset	COD	Petition Details
Communication System for DVC constituents consisting 1142.667 km OPGW links on EHV Transmission line at 31 different locations and associated equipment (37 numbers of Synchronous Digital Hierarchy), (8 numbers of Multiplexer) and (27 numbers of DC Power Supply).	10.10.2017	Covered in the instant Petition
Communication system for BSPTCL under Expansion/ Up-gradation of SCADA/ EMS System of SLDC	31.12.2019 (Anticipated)	To be filed as per 2019-24 Tariff Regulations.



d) The instant petition covers the following communication asset pertaining to DVC:

Asset	Particulars	COD
Asset	Communication system for DVC under Expansion/ Up-gradation of SCADA/ EMS System of SLDC	10.10.2017

e) The scope of the project is yet to be completed. The Petitioner has submitted that the scope of the work was estimated as approximately 1965 km combined for both BSPTCL and DVC, out of which 1142.67 km has been executed till 10.10.2017 solely for DVC (the Respondent) and the remaining portion of the scope is for BSPTCL and is anticipated to be put into commercial operation during the 2019-24 tariff period.

4. The tariff for the communication assets from COD on 10.10.2017 was approved by the Commission vide order dated 5.4.2019 in Petition No. 107/TT/2018.

5. The Petitioner has served the petition on the Respondent and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or objections have been received from the general public in response to the aforesaid notices published in the newspapers.

6. This order is issued considering the submissions made by the Petitioner in the petition and the Petitioner's affidavits dated 10.9.2019. No reply has been filed by DVC in the matter.

7. The hearing in this matter was held on 25.11.2021, through video conference and the order was reserved. Having heard the representatives of the Petitioner and after perusal of the materials on record, we proceed to dispose of the petition.

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

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



	(₹ in lakh)	
	2017-18 (Pro-rata for 173 days)	2018-19
Depreciation	73.12	187.02
Interest on Loan	58.02	142.25
Return on Equity	68.29	175.12
Interest on Working Capital	4.28	10.82
O&M Expenses	0.00	0.00
Total	203.71	515.21

9. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner for the communication asset for the 2014-19 tariff period are as follows:

	(₹ in lakh)	
	2017-18 (Pro-rata for 173 days)	2018-19
O&M Expenses	0.00	0.00
Maintenance Spares	0.00	0.00
Receivables	71.63	85.87
Total	71.63	85.87
Rate of Interest (%)	12.60	12.60
Interest on Working Capital	4.28	10.82

Capital Cost

10. The Commission vide order dated 5.4.2019 in Petition No. 107/TT/2018 has approved the following capital cost and Additional Capital Expenditure (ACE) for the communication asset covered in the instant petition which are as follows:

(₹ in lakh)				
Apportioned Approved Cost (as per FR)	Capital Cost allowed (as on COD)	ACE		Total Capital Cost (as on 31.3.2019)
		2017-18	2018-19	
3333.55	2101.09	434.43	295.25	2830.77

11. The Petitioner in the instant true-up petition has submitted the details of the capital cost as on COD and as on 31.3.2019 (including actual ACE during 2014-19 period) claimed and has submitted the Auditor's Certificate dated 9.7.2019 by the Petitioner in support of the same.

(₹ in lakh)			
Capital Cost (as on COD)	ACE		Total Cost (as on 31.3.2019)
	2017-18	2018-19	



2126.55	672.50	336.21	3135.26
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Cost Over-run

12. Based on separate Auditor's Certificate dated 9.7.2019, the Petitioner has claimed capital cost as on COD of ₹ 2126.55 lakh. The total completion cost as on 31.3.2019 including ACE during the 2014-19 period in respect of the communication asset is ₹3135.26 lakh and FR cost is ₹3333.55 lakh. Hence, the completion cost of the communication asset is within the approved FR cost.

Time Over-run

13. As per the IA, the communication assets were scheduled to be put under commercial operation within 30 months from the date of IA, i.e. 17.4.2015. Hence, the scheduled COD of the communication was 17.10.2017 against which the subject asset has been put under commercial operation on 10.10.2017. Hence, there is no time over-run in case of the communication asset.

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

14. The Petitioner has claimed IDC in respect of the communication asset and in support of the same has submitted separate Auditor's Certificate dated 9.7.2019. The Petitioner has submitted computation of IDC along with year-wise details of IDC discharged.

15. The allowable IDC has been worked out considering the information submitted by the Petitioner separately on cash basis. The loan details submitted in Form-9C for the 2014-19 tariff period and IDC computation sheet have been considered for the purpose of IDC calculation on cash basis and accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.

16. Accordingly, based on the information furnished by the Petitioner, IDC considered, is as follows:



IDC as per Auditor's Certificates	IDC admissible	IDC disallowed due to time over-run/ computational difference	IDC discharged as on COD	IDC un-discharged as on COD	IDC discharge during	
					2017-18	2018-19
					A	B
25.46	25.46	-	0.00	25.46	-	25.46

17. The Petitioner has claimed IEDC of ₹2.21 lakh for the communication asset for the 2014-19 tariff period as per Auditor's Certificate. The Petitioner has submitted that entire IEDC has been discharged as on COD in respect of the communication asset and IEDC claimed is within the percentage of the hard cost. Accordingly, IEDC of ₹2.21 lakh has been allowed for the purpose of tariff calculation.

Initial Spares

18. Regulation 13(d) of the 2014 Tariff Regulations provides as follows:

“Initial Spares: Initial spares shall be capitalized as a percentage of the Plant and machinery cost upto cut-off date, subject to the following ceiling norms:

(d) Transmission system

- (i) Transmission line - 1.00%*
- (ii) Transmission Sub-station (Green Field) - 4.00%*
- (iii) Transmission Sub-station (Brown Field) - 6.00%*
- (iv) Series Compensation devices and HVDC Station - 4.00%*
- (v) Gas Insulated Sub-station (GIS) - 5.00%*
- (vi) Communication system - 3.5%*

19. The Petitioner has claimed the following Initial Spares for the communication asset:

PLCC						
Estimated Completion Cost (A)	Initial Spares Claimed (B)	Ceiling limit (in %) (C)	Initial Spares worked Out D = [(A-B)*C/(100-C)]	Excess Initial Spares	Excess Initial Spares deducted in Petitioner's claim	Initial Spares claimed after deduction of excess spares
3083.09	63.59	3.50%	109.52	-	-	63.59

20. We have considered the submissions of the Petitioner. The Initial spares claimed



by the Petitioner are within ceiling limit of 3.5% specified under Regulation 13(d)(vi) of the 2014 Tariff Regulations. Accordingly, the details of the Initial Spares allowed in respect of the communication asset for the 2014-19 tariff period are as follows:

(₹ in lakh)

PLCC						
Estimated Completion Cost (A)	Initial Spares Claimed (B)	Ceiling limit (in %) (C)	Initial Spares worked Out	Excess Initial Spares	Excess Initial Spares deducted in Petitioner's claim	Initial Spares claimed after deduction of excess spares
			$D = [(A-B)*C/(100-C)]$			
3083.09	63.59	3.50%	109.52	-	-	63.59

Capital Cost allowed as on COD

21. Accordingly, the capital cost allowed as on COD is summarized as follows:

(₹ in lakh)

Capital Cost as on COD as per Auditor's Certificates	Less: IDC as on COD due to		Less: IEDC dis-allowed on account of time over-run	Less: Excess Initial Spares dis-allowed	Capital Cost as on COD
	IDC dis-allowed	Un-discharged IDC			(on cash basis)
2126.55	0.00	25.46	0.00	0.00	2101.09

Additional Capital Expenditure

22. The Commission vide order dated 5.4.2019 in Petition No. 107/TT/2018 had allowed ACE for the 2014-19 tariff period as follows:

(₹ in lakh)

2017-18	2018-19
434.43	295.25

23. The Petitioner has claimed ACE after adjustment of IDC, IEDC and Initial Spares in respect of the communication asset covered in the instant petition as follows:

(₹ in lakh)

2017-18	2018-19
672.50	336.21

24. The Petitioner has submitted that ACE during 2014-19 period has been claimed under Regulation 14(1)(i) of the 2014 Tariff Regulations and the same is within the cut-



off date. The Petitioner has submitted Auditor's Certificate in support of the same. The Petitioner vide affidavit dated 10.9.2021 has also submitted Liability Flow Statement.

25. We have considered the submissions of the Petitioner. The un-discharged IDC as on COD have been allowed as ACE during the year of discharge. ACE claimed by the Petitioner is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations which pertains to balance and retention payments and un-discharged liability for works executed prior to cut-off date.

26. Accordingly, ACE allowed for 2014-19 tariff period is as follows:

Particulars	(₹ in lakh)	
	2017-18	2018-19
Balance & Retention Payment	135.00	336.21
Unexecuted Work	537.50	0.00
IDC Discharged	0.00	25.46

27. The capital cost approved as on 31.3.2019 after inclusion of ACE in respect of the communication asset is as follows:

Particulars	Capital Cost as on COD on cash basis	(₹ in lakh)		
		2017-18	2018-19	Total Capital Cost including ACE as on 31.3.2019
Allowed vide order dated 5.4.2019 in Petition No. 107/TT/2018	2101.09	434.43	295.25	2830.77
Claimed by the Petitioner in the instant petition per Auditor's Certificate	2126.55	672.50	336.21	3135.26
Approved after truing up in this order	2101.09	672.50	361.67	3135.26

Debt-Equity Ratio

28. The Petitioner has claimed debt-equity ratio of 70:30 as on COD and for ACE. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff



Regulations. The details of debt-equity ratio in respect of the communication asset as on COD and as on 31.3.2019 is as follows:

Funding	Amount as on COD (₹ in lakh)	(in %)	Amount as on 31.3.2019 (₹ in lakh)	(in %)
Debt	1470.76	70.00	2194.69	70.00
Equity	630.33	30.00	940.57	30.00
Total	2101.09	100.00	3135.26	100.00

Depreciation

29. The Gross Block during 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD at Annexure-I has been worked out after considering the depreciation rates of communication asset as specified in the 2014 Tariff Regulations and the trued-up depreciation allowed for 2014-19 period in respect of communication asset is as follows:

		(₹ in lakh)	
	Particulars	2017-18 (Pro-rata for 173 days)	2018-19
A	Opening Gross Block	2101.09	2773.59
B	ACE	672.50	361.67
C	Closing Gross Block (A+B)	2773.59	3135.26
D	Average Gross Block [(A+C)/2]	2437.34	2954.43
E	Average Gross Block (90% depreciable asset)	2437.34	2954.43
F	Average Gross Block (100% depreciable asset)	0.00	0.00
G	Depreciable value (excluding IT equipment and software) (E*90%)	2193.61	2658.98
H	Depreciable value of IT equipment and software	0.00	0.00
I	Total Depreciable Value (G+H)	2193.61	2658.98
J	Weighted Average Rate of Depreciation (WAROD) (in %)	6.33	6.33
K	Elapsed useful life at the beginning of the year (Year)	0.00	0.00
L	Balance useful life at the beginning of the year (Year)	15.00	15.00
M	Depreciation during the year (D*J)	73.13	187.02
N	Aggregate Cumulative Depreciation at the end of the year	0.00	73.13
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	73.13	260.14

30. Depreciation allowed vide order dated 5.4.2019 in Petition No. 107/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order is as



follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 173 days)	2018-19
Allowed vide order dated 5.4.2019 in Petition No. 107/TT/2018	69.55	169.84
Claimed by the Petitioner in the instant petition	73.12	187.02
Approved after true-up in this order	73.13	187.02

Interest on Loan (IoL)

31. The Petitioner has claimed Weighted Average Rate of Interest (WAROI) on loan based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rates in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed for the communication asset for the 2014-19 tariff period is as follows:

	Particulars	(₹ in lakh)	
		2017-18 (Pro-rata for 173 days)	2018-19
A	Gross Normative Loan	1470.76	1941.51
B	Cumulative Repayments up to Previous Year	0.00	73.13
C	Net Loan-Opening (A-B)	1470.76	1868.39
D	Addition due to Additional Capitalization	470.75	253.18
E	Repayment during the year	73.13	187.02
F	Net Loan-Closing (C+D-E)	1868.39	1934.55
G	Average Loan [(A+F)/2]	1669.57	1901.47
H	Weighted Average Rate of Interest on Loan (%)	7.332	7.481
I	Interest on Loan (GxH)	58.02	142.25

32. IoL Allowed vide order dated 5.4.2019 in Petition No. 107/TT/2018, claimed by the Petitioner in the instant petition and trued-up in this order is as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 173 days)	2018-19
Allowed vide order dated 5.4.2019 in Petition No. 107/TT/2018	54.55	124.92
Claimed by the Petitioner in the instant petition	58.02	142.25
Approved after true-up in this order	58.02	142.25



Return on Equity (RoE)

33. The Petitioner has claimed RoE for the communication asset in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at Minimum Alternate Tax (MAT) rates and has claimed the effective tax rates for the 2014-19 tariff period as follows:

Year	Claimed effective tax (in %)	Grossed-up RoE (in %) [(Base Rate)/(1-t)]
2014-15	21.018	19.625
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

34. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 had arrived at the effective tax rates based on the notified MAT rates for the Petitioner which are as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Effective tax (in %)
2014-15	20.961	20.961
2015-16	21.342	21.342
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

35. MAT rates considered in order dated 27.4.2020 for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 period, in terms of the provisions of the 2014 Tariff Regulations, have been considered in the instant case which are as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Grossed-up RoE (in %) [(Base Rate)/(1-t)]
2014-15	20.961	19.610
2015-16	21.342	19.705
2016-17	21.342	19.705
2017-18	21.342	19.705
2018-19	21.549	19.758



36. Accordingly, RoE allowed in respect of the communication asset is as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 173 days)	2018-19
Opening Equity	630.33	832.08
Addition due to ACE	201.75	108.49
Closing Equity	832.08	940.57
Average Equity	731.20	886.32
Return on Equity (Base Rate) (in %)	15.500	15.500
Tax Rate applicable (in %)	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.758
Return on Equity (Pre-tax)	68.29	175.12

37. RoE Allowed vide order dated 5.4.2019 in Petition No. 107/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 173 days)	2018-19
Allowed vide order dated 5.4.2019 in Petition No. 107/TT/2018	64.64	157.85
Claimed by the Petitioner in the instant petition	68.29	175.12
Approved after true-up in this order	68.29	175.12

Operation & Maintenance Expenses (O&M Expenses)

38. The Petitioner has submitted that the Annual Maintenance Contract (AMC) of SCADA/EMS system established under ULDC Scheme for all the constituents shall be responsibility of the respective SLDCs in line with ER-ULDC Project. Accordingly, the Petitioner has not claimed any O&M Expenses for the instant communication asset.

Interest on Working Capital

39. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and the trued-up IWC allowed for the communication asset are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 173 days)	2018-19
Working Capital for O&M Expenses (O&M Expenses for one month)	0.00	0.00
Working Capital for Maintenance Spares (15% of O&M Expenses)	0.00	0.00



Working Capital for Receivables (Equivalent to Two months of annual fixed cost /annual transmission charges)	71.64	85.87
Total Working Capital	71.64	85.87
Rate of Interest (in %)	12.60	12.60
Interest on Working Capital	4.28	10.82

40. IWC Allowed vide order dated 5.4.2019 in Petition No. 107/TT/2018, claimed by the Petitioner and trued-up in the instant order is as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 173 days)	2018-19
Allowed vide order dated 5.4.2019 in Petition No. 107/TT/2018	4.05	9.71
Claimed by the Petitioner in the instant petition	4.28	10.82
Approved after true-up in this order	4.28	10.82

Approved Annual Fixed Charges for the 2014-19 Tariff Period

41. The trued-up Annual Fixed Charges (AFC) approved for the communication asset for the 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 173 days)	2018-19
Depreciation	73.13	187.02
Interest on Loan	58.02	142.25
Return on Equity	68.29	175.12
O&M Expenses	0.00	0.00
Interest on Working Capital	4.28	10.82
Total	203.72	515.21

42. Accordingly, the Annual Transmission Charges Allowed vide order dated 5.4.2019 in Petition No. 107/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 173 days)	2018-19
Allowed vide order dated 5.4.2019 in Petition No. 107/TT/2018	192.79	462.32
Claimed by the Petitioner in the instant petition	203.71	515.21
Approved after true-up in this order	203.72	515.21



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

43. The Petitioner has submitted tariff forms for the 2019-24 tariff period and claimed the following transmission charges for the 2019-24 tariff period:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	198.56	198.66	198.66	198.66	198.66
Interest on Loan	138.91	123.75	108.54	93.38	78.26
Return on Equity	185.93	186.03	186.03	186.03	186.03
Interest on Working Capital	7.87	7.67	7.44	7.21	6.96
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Total	531.27	516.11	500.67	485.28	469.91

44. The Petitioner has claimed the following IWC for the 2019-24 tariff period:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	0.00	0.00	0.00	0.00	0.00
Working Capital for Maintenance Spares (15% of O&M Expenses)	0.00	0.00	0.00	0.00	0.00
Working Capital for Receivables (Equivalent to Two months of annual fixed cost/ annual transmission charges)	65.32	63.63	61.73	59.83	57.78
Total Working Capital	65.32	63.63	61.73	59.83	57.78
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	7.87	7.67	7.44	7.21	6.96

Capital Cost

45. Regulation 19 of the 2019 Tariff Regulations provides as follows:

“19. Capital Cost: (1) *The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.*

(2) *The Capital Cost of a new project shall include the following:*

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*



- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
 - (e) *Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;*
 - (f) *Expenditure on account of additional capitalisation and de-capitalisation determined in accordance with these regulations;*
 - (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
 - (h) *Adjustment of revenue earned by the transmission licensee by using the Asset-before the date of commercial operation;*
 - (i) *Capital expenditure on account of ash disposal and utilisation including handling and transportation facility;*
 - (j) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
 - (k) *Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
 - (l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
 - (m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
 - (n) *Expenditure on account of change in law and force majeure events; and*
 - (o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (3) *The Capital cost of an existing project shall include the following:*
- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
 - (b) *Additional capitalisation and de-capitalisation for the respective year of tariff as determined in accordance with these regulations;*
 - (c) *Capital expenditure on account of ash disposal and utilisation including handling and transportation facility;*
 - (d) *Capital expenditure on account of ash disposal and utilisation including handling and transportation facility;*
 - (e) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
 - (f) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (4) *The capital cost in case of existing or new hydro generating station shall also include:*
- (a) *cost of approved rehabilitation and resettlement (R&R) plan of the project in*



- conformity with National R&R Policy and R&R package as approved; and
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.

(5) The following shall be excluded from the capital cost of the existing and new projects:

- (a) The Asset-forming part of the project, but not in use, as declared in the tariff petition;
- (b) De-capitalised Asset-after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”

46. The Petitioner has claimed the capital cost as on 31.3.2019 as opening capital cost as on 1.4.2019 as per the following details:

(₹ in lakh)			
Apportioned Approved Capital Cost	Capital Cost claimed as on 31.3.2019	ACE	Estimated Completion Cost as on 31.3.2024
		2019-20	
3333.55	3135.26	3.17	3138.43

47. Against the overall apportioned approved capital cost of ₹3333.55 lakh, the estimated completion cost is ₹3138.43 lakh. The individual capital cost of the communication asset is o within FR apportioned cost. Therefore, there is no cost over-run.

48. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations and has been considered as on 1.4.2019 as ₹3135.26 lakh. The trued-up capital cost of ₹3135.26 lakh is considered as admitted capital cost as on 31.3.2019 for



working out tariff for 2019-24 tariff period.

Additional Capital Expenditure

49. Regulation 24 of the 2019 Tariff Regulations provides as follows:

“24. Additional Capitalisation within the original scope and up to the cut-off date:

(1) The Additional Capital Expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (a) Undischarged liabilities recognized to be payable at a future date;*
- (b) Works deferred for execution;*
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;*
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;*
- (e) Change in law or compliance of any existing law; and*
- (f) Force Majeure events:*

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

(2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.”

50. Regulation 25 of the 2019 Tariff Regulations provides as follows:

“25. Additional Capitalisation within the original scope and after the cut-off date:

(1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:

- (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- (b) Change in law or compliance of any existing law;*
- (c) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (d) Liability for works executed prior to the cut-off date;*
- (e) Force Majeure events;*
- (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and*
- (g) Raising of ash dyke as a part of ash disposal system.*

2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalisation may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

- (a) The useful life of the assets is not commensurate with the useful life of the project*



and such assets have been fully depreciated in accordance with the provisions of these regulations;

(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;

(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission.”

51. The Petitioner has claimed projected ACE of ₹3.17 lakh in 2019-20 on account of Balance and Retention payments due to un-discharged liability for works executed after cut-off date/ work deferred for execution.

52. We have considered the submissions of the Petitioner. ACE claimed on account of Balance and Retention payments due to un-discharged liability for works executed after cut-off date/ work deferred for execution is allowed under Regulation 24(1)(a) of the 2019 Tariff Regulations. Accordingly, ACE of ₹3.17 lakh in 2019-20 is allowed.

Capital Cost for the 2019-24 Tariff Period

53. Accordingly, capital cost considered for the 2019-24 tariff period is as follows:

(₹ in lakh)		
Capital Cost as on 1.4.2019	Admitted ACE	Capital Cost as on 31.3.2024
	2019-24	
3135.26	3.17	3138.43

Debt-Equity Ratio

54. Regulations 18 of the 2019 Tariff Regulations provides as follows:

“18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.



Explanation.-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilisation made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation.”

55. The debt-equity considered for the purpose of computation of tariff for the 2019-24 period is as follows:

Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Total Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	2194.69	70.00	2196.91	70.00
Equity	940.57	30.00	941.52	30.00
Total	3135.26	100.00	3138.43	100.00



Depreciation

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

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

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

(2) *The value base for the purpose of depreciation shall be the capital cost of the Asset- admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the Asset-for part of the year, depreciation shall be charged on pro rata basis.*

(3) *The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:*

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

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

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

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

(4) *Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.*

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

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall



be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

(8) In case of de-capitalisation 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 services.

(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.

(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of-

- a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or
- b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or
- c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life. ”

57. WAROD has been worked out after taking into account the depreciation rate as specified in the 2019 Tariff Regulations at Annexure-II. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 an accumulated depreciation up to 31.3.2019. The depreciation allowed is as follows:

(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	3135.26	3138.43	3138.43	3138.43	3138.43
B	ACE	3.17	0.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	3138.43	3138.43	3138.43	3138.43	3138.43
D	Average Gross Block [(A+C)/2]	3136.85	3138.43	3138.43	3138.43	3138.43
E	Average Gross Block	3136.85	3138.43	3138.43	3138.43	3138.43



	(90% depreciable assets)					
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%)	2823.16	2824.59	2824.59	2824.59	2824.59
H	Depreciable value of IT equipment and software	0.00	0.00	0.00	0.00	0.00
I	Total Depreciable Value (G+H)	2823.16	2824.59	2824.59	2824.59	2824.59
J	Weighted Average Rate of Depreciation (WAROD) (in %)	6.33%	6.33%	6.33%	6.33%	6.33%
K	Elapsed useful life at the beginning of the year (Year)	1.00	2.00	3.00	4.00	5.00
L	Balance useful life at the beginning of the year (Year)	14.00	13.00	12.00	11.00	10.00
M	Depreciation during the year (D*J)	198.56	198.66	198.66	198.66	198.66
N	Aggregate Cumulative Depreciation at the end of the year	458.70	657.37	856.03	1054.69	1253.35
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	2364.46	2167.22	1968.56	1769.90	1571.23

Interest on Loan (IoL)

58. Regulation 32 of the 2019 Tariff Regulations provides as follows:

“32. Interest on loan capital: (1) *The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*

(2) *The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.*

(3) *The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalisation of asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.*

(4) *Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*

(5) *The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalised:*

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

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



(5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.”

59. WAROI on loan has been considered on the basis of the rates prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. In view of above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL considered for the communication asset is as follows:

(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	2194.69	2196.91	2196.91	2196.91	2196.91
B	Cumulative Repayments up to Previous Year	260.14	458.70	657.37	856.03	1054.69
C	Net Loan-Opening (A-B)	1934.55	1738.21	1539.55	1340.88	1142.22
D	Addition due to Additional Capitalization	2.22	0.00	0.00	0.00	0.00
E	Repayment during the year	198.56	198.66	198.66	198.66	198.66
F	Net Loan-Closing (C+D-E)	1738.21	1539.55	1340.88	1142.22	943.56
G	Average Loan [(A+F)/2]	1836.38	1638.88	1440.22	1241.55	1042.89
H	Weighted Average Rate of Interest on Loan (%)	7.5645	7.5508	7.5364	7.5214	7.5038
I	Interest on Loan (GxH)	138.91	123.75	108.54	93.38	78.26

Return on Equity (RoE)

60. Regulations 30 and 31 of the 2019 Tariff Regulations provides as follows:

“30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

Provided that return on equity in respect of additional capitalization after cut-off date



beyond the original scope, excluding additional capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%;

Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

ii. In case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. In case of a thermal generating station, with effect from 1.4.2020:

- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

(3) The return on equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (ODe) occurs plus 350 basis point, subject to ceiling of 14%;”

“31. Tax on Return on Equity:(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

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

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

Where “t” is the effective tax rate in accordance with clause (1) of this Regulation and



shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

$$\text{Rate of return on equity} = 15.50 / (1 - 0.2155) = 19.758\%$$

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore / Rs 1000 Crore = 24%;

(d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long-term customers, as the case may be, on year-to-year basis."

61. The Petitioner has submitted that it is liable to pay income tax at MAT rate applicable to the Petitioner Company. RoE has been calculated @18.782% after grossing up RoE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given in Regulation 31(2) of the 2019 Tariff Regulations for 2019-24 tariff period. As per Regulation 31(3) of the 2019 Tariff Regulations, grossed-up rate of RoE at the end of every financial year shall be trued-up 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 IT authorities pertaining to 2019-24 tariff period on actual gross income. However, if any penalty arising on account of



delay in deposit or short deposit of tax amount shall not be claimed by the Petitioner. Any under-recovery or over-recovery of grossed-up rate on RoE after truing up shall be recovered or refunded to beneficiaries or the long term customers on yearly basis. The Petitioner has further submitted that any adjustment due to additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable/ adjustable during 2019-24 tariff period on yearly basis on receipt of Income Tax assessment order.

62. We have considered the submissions of the Petitioner. MAT rate applicable in 2019-20 has been considered for the purpose of RoE which will be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the communication asset for the 2019-24 tariff period is as follows:

		(₹ in lakh)				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	940.57	941.52	941.52	941.52	941.52
B	Additions	0.95	0.00	0.00	0.00	0.00
C	Closing Equity (A-B)	941.52	941.52	941.52	941.52	941.52
D	Average Equity [(A+B)/2]	941.04	941.52	941.52	941.52	941.52
E	Return on Equity (Base Rate) (%)	15.5	15.5	15.5	15.5	15.5
F	MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity	18.782	18.782	18.782	18.782	18.782
H	Return on Equity (DxG)	176.75	176.84	176.84	176.84	176.84

Operation & Maintenance Expenses

63. The Petitioner has submitted that the Annual Maintenance Contract (AMC) of SCADA/EMS system established under ULDC Scheme for all the constituents shall be responsibility of the respective SLDCs in line with ER-ULDC Project. Accordingly, the Petitioner has not claimed any O&M expenses for the instant Communication asset.

Interest on Working Capital (IWC)

64. Regulations 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations provide as follows:



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

.....

(c) *For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:*

(i) *Receivables equivalent to 45 days of annual fixed cost;*

(ii) *Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*

(iii) *Operation and maintenance expenses, including security expenses for one month.”*

“(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.”

“(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.”

“3. Definitions ...

(7) ‘Bank Rate’ means the one-year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;”

65. The Petitioner has submitted that it has computed IWC for 2019-24 tariff period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1year MCLR applicable as on 1.4.2019 i.e. 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1year MCLR applicable as on 1.4.2020 i.e. 7.75% plus 350 basis points) for 2020-21, 10.50% (SBI 1year MCLR applicable as on 1.4.2021 i.e 7.00% plus 350 basis points) for 2021-22 and 10.60% (SBI 1year MCLR applicable as on 1.4.2022 i.e. 7.10% plus 350 basis points) for 2022-24. The components of the working capital and interest allowed thereon in respect of the instant Asset is as follows:



(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	WC for O&M Expenses (Equivalent to annualized O&M Expenses for 1 month)	0.00	0.00	0.00	0.00	0.00
B	WC for Maintenance Spares (Equivalent to 15% of O&M Expenses)	0.00	0.00	0.00	0.00	0.00
C	WC for Receivables (Equivalent to 45 days of annual transmission charges)	64.17	62.42	60.46	58.57	56.53
D	Total Working Capital (A+B+C)	64.17	62.42	60.46	58.57	56.53
E	Rate of Interest (in %)	12.05	11.25	10.50	10.60	10.60
F	Interest on Working Capital (DxE)	7.73	7.02	6.35	6.21	5.99

Annual Fixed Charges for the 2019-24 Tariff Period

66. The transmission charges allowed for the communication asset for the 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	198.56	198.66	198.66	198.66	198.66
Interest on Loan	138.91	123.75	108.54	93.38	78.26
Return on Equity	176.75	176.84	176.84	176.84	176.84
Interest on Working Capital	7.73	7.02	6.35	6.21	5.99
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Total	521.95	506.27	490.39	475.09	459.75

Filing Fee and Publication Expenses

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

License Fee and RLDC Fees and Charges

68. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner shall also be entitled for recovery of RLDC fee and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.



Goods and Services Tax

69. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on Charges of Transmission of Electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

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

Security Expenses

71. The Petitioner has submitted that security expenses for the communication asset is not claimed in the instant petition, and it would file a separate petition for claiming the overall security expenses and consequential IWC.

72. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the communication assets owned by it on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved security expenses from 1.4.2019 to 31.3.2024. Therefore, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. Accordingly, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.



Capital Spares

73. The Petitioner has sought reimbursement of capital spares at the end of tariff period. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

Sharing of Transmission Charges

74. The communication asset covered in the instant petition is executed solely for DVC. Accordingly, the transmission charges approved in this order for the period from COD to 31.3.2014 and 2014-19 tariff period shall be recovered from DVC on monthly basis in accordance with Regulation 43 of 2014 Tariff Regulations and Regulation 57 of the 2019 Tariff Regulations respectively.

75. To summarize:

- a) The trued-up AFC approved for the communication asset for the 2014-19 tariff period are as follows:

(₹ in lakh)	
2017-18 (Pro-rata for 173 days)	2018-19
203.72	515.21

- b) AFC allowed in respect of the communication asset for the 2019-24 tariff period in this order are as follows:

(₹ in lakh)				
2019-20	2020-21	2021-22	2022-23	2023-24
521.95	506.27	490.39	475.09	459.75

76. Annexure-I and Annexure-II given hereinafter form part of the order.

77. This order disposes of Petition No. 419/TT/2020 in terms of the above discussions and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson



Annexure-I

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2014 Regulations	
		2017-18	2018-19			2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
PLCC	2101.09	672.50	361.67	3135.26	6.33	154.28	187.02
TOTAL	2101.09	672.50	361.67	3135.26		154.28	187.02
Average Gross Block (₹ in lakh)						2437.34	2954.43
Weighted Average Rate of Depreciation (in %)						6.33	6.33



Annexure-II

2019-24 Capital Expenditure as on 1.4.2019	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2019 Tariff Regulations				
					2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
PLCC	3135.26	3.17	3138.43	6.33	198.56	198.66	198.66	198.66	198.66
TOTAL	3135.26	3.17	3138.43	6.33	198.56	198.66	198.66	198.66	198.66
Average Gross Block (₹ in lakh)					3136.85	3138.43	3138.43	3138.43	3138.43
Weighted Average Rate of Depreciation (in %)					6.33	6.33	6.33	6.33	6.33

