CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 646/TT/2020

Coram:

Shri P. K. Pujari, Chairperson Shri Arun Goyal, Member Shri P. K. Singh, Member

Date of Order: 13.12.2021

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 the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of **Asset-1:** Replacement of existing 01 Number 50 MVA, 220/132 kV ICTs by 160 MVA, 220/132 kV ICT at Balipara Sub-Station along with replacement of 132 kV equipment under North Eastern Region Strengthening Scheme-III (NERSS-III) in North Eastern Region.

And in the matter of:

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

..... Petitioner

Versus

- Assam Electricity Grid Corporation Limited, (Formerly Assam State Electricity Board) Bijulee Bhawan, Paltan Bazar, Guwahati-781001 (Assam).
- Meghalaya Energy Corporation Limited, (Formerly Meghalaya State Electricity Board), Short Round Road, "Lumjingshai", Shillong-793001, Meghalaya.
- Power Department, Government of Arunachal Pradesh, Vidyut Bhawan, Itanagar-791111 (Arunachal Pradesh).
- Power and Electricity Department, Government of Mizoram, Aizawl, Mizoram.

- Manipur State Electricity Distribution Company Limited, (Formerly Electricity Department, Government of Manipur), Electricity Complex, Patta No. 1293 Under 87(2), Khwai Bazar, Keishampat, District-Imphal West, Manipur-795001.
- Department of Power, Government of Nagaland, Kohima, Nagaland.
- Tripura State Electricity Corporation Limited, Vidyut Bhawan, North Banamalipur, Agartala, Tripura (W) – 799001 (Tripura)
 Respondent(s)

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

For Respondents : None

<u>ORDER</u>

The Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for truing up of transmission tariff of the 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") in respect of **Asset-1**: Replacement of existing 01 Number 50 MVA, 220/132 kV ICTs by 160 MVA, 220/132 kV ICT at Balipara Sub-station along with replacement of 132 kV equipment (hereinafter referred as "the transmission asset") under North Eastern Region Strengthening Scheme-III (NERSS-III) in North Eastern Region (hereinafter referred to as "the transmission asset").

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 11.2 and 12.1 above.
- 2) Admit the capital cost claimed and additional capitalization incurred during 2014-19 and also allow the projected additional capitalization during 2019-24.
- 3) Allow the petitioner to submit the Revised Cost estimate-II for the project.
- 4) 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 11.2 and 12.1 above for respective block.
- 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.
- 6) 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.
- 7) 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.
- 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 12.1 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 Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice"

3. Backdrop of the case

a) The scope of the transmission scheme was agreed in the joint meeting of the Standing Committee of Power System Planning of North Eastern Region held on 3.1.2014 and later was discussed and agreed for implementation in the 15th TCC and 15th NERPC meeting held on 20.8.2015 and 21.8.2015 respectively.

b) The Investment Approval (I.A.) for the transmission scheme was accorded by the Board of Directors of the Petitioner's company (in its 320th meeting held on 15.9.2015) vide Memorandum Ref. No. C/CP/ NERSS-III dated 24.9.2015 at an estimated cost of ₹13371.00 lakh, including IDC of ₹746.00 lakh (based on June 2015 Price Level) with the broad scope of work as follows:

- i. Installation of 2nd 400/220 kV, 315 MVA ICT at Bongaigaon Sub-station of POWERGRID along with following associated works:
 - New 220 kV bus arrangement (GIS) at Bongaigaon;
 - 06 Numbers of 220 kV bays at Bongaigaon;
 - 01 Number of 220 kV line bays at Salakati (for 220 kV D/C Bongaigaon-Salakati line).
- ii. Replacement of existing 60 MVA, 220/132 kV ICT by 1x160 MVA 220/132 kV ICT at Kopili HEP along with following associated works:
 - Upgradation of complete 132 kV Single AIS Bus scheme to 132 kV Double GIS Bus;
 - Replacement of bay equipment of 60 MVA Transformer;
 - Incorporation of Bus bar and LBB Scheme at 220 kV and 132 kV System.
- Replacement of existing 2x50 MVA, 220/132 kV ICTs by 2x160 MVA, 220/132 kV ICTs at Balipara Sub-station of Powergrid along with replacement of 132 kV equipment.

c) As per I.A., 04 Numbers 220 kV GIS line bays were envisaged at Bongaigaon Sub-station under the transmission scheme. However, as decided in 6th meeting of Standing Committee on Power System Planning of NER held on 3.10.2016 and special meeting regarding issues related to Assam held at CEA on 4.11.2016, AEGCL utilized only 02 Numbers 220 kV GIS line bays at Bongaigaon Sub-station for termination of existing 220 kV D/C line from Salakati. Accordingly, 02 Numbers 220 kV GIS line bays were deleted from scope of the transmission scheme.

d) In view of the above, approval of Revised Cost Estimate (RCE) was accorded by BOD of the Petitioner's company (in its 348th meeting held on 6.1.2018) vide Memorandum Ref. No. C/CP/PA1718-10-0F-RCE006 dated 29.1.2018 at RCE of ₹16731.00 lakh, including IDC of ₹810.00 lakh (based on April 2017 Price Level) with the broad scope of work being implemented as follows:

- i. <u>Installation of 2nd 400/220 kV, 315 MVA ICT at Bongaigaon Sub-station</u> of Powergrid along with following associated works:
 - 01 Number 400 kV bay for 2nd 400/220 kV, 315 MVA ICT at Bongaigaon;
 - New 220 kV bus arrangement (GIS) at Bongaigaon;
 - 01 Number 220 kV GIS bay for new 315 MVA ICT at Bongaigaon;
 - 01 Number 220 kV GIS bay for existing 3x105 MVA ICT at Bongaigaon;
 - 02 Numbers 220 kV GIS Line bays at Bongaigaon;
 - 01 Number 220 kV line bay at Salakati (for 220 kV D/C Bongaigaon-Salakati line).
- ii. <u>Replacement of existing (3X20 MVA), 220/132 kV ICT by 1x160 MVA</u> 220/132 kV ICT at Kopili HEP along with following associated works:
 - Upgradation of complete 132 kV Single AIS Bus Scheme to 132 kV Double GIS Bus;
 - Replacement of bay equipment of 60 MVA Transformer;
 - Incorporation of Bus bar and LBB Scheme at 220 kV and 132 kV System.
- iii. <u>Replacement of existing 2x50 MVA, 220/132 kV ICTs by 2x160 MVA, 220/132 kV ICTs at Balipara Sub-station of Powergrid along with replacement of 132 kV equipment.</u>

e) The transmission tariff of the transmission asset for the period from COD (1.10.2017) to 31.3.2019 was allowed by the Commission vide order dated 29.3.2020 in Petition No. 295/TT/2018. The entire scope of work as per RCE is not complete. Further, the status of work covered under the transmission scheme as submitted by the Petitioner vide affidavit dated 19.7.2021 is as follows:

Asset	Actual COD	Petition
Replacement of existing 01 Number 50MVA,	1.10.2017	Covered under instant
220/132kV ICTs by 160 MVA, 220/132 kV ICT at		petition
Balipara Sub-station along with replacement of 132 kV		
equipment		
2 nd 400/220 kV, 315 MVA ICT, new 220 kV Bus	11.4.2019	Covered under Petition
arrangement (GIS) with 04 Numbers of 220 kV Bays		No. 26/TT/2021
at Bongaigaon Sub-station of POWERGRID along		
with stringing of 2 nd Circuit of 220 kV D/C Bongaigaon-		Order reserved on
Salakati Transmission Line and 01 Number of 220 kV		29.10.2021
line bay at Salakati Sub-station (for 220 kV D/C		
Bongaigaon-Salakati Transmission Line)		
Replacement of existing 01 Number 220/132 kV, 50	2.4.2020	
MVA, ICT (existing) by 160 MVA, 220/132 kV ICT-I at		
Balipara (PG) Sub-station along with replacement of		
132 kV equipment		



Replacement of existing 60 MVA, 220/132 kV ICT by Under Implementation. Separate 1x160 MVA 220/132 kV ICT at Kopili HEP along with petition is to be filed as per the 2019 Up gradation of complete 132 kV Single AIS Bus Tariff Regulations scheme to 132 kV Double GIS Bus

f) Also, the Petitioner vide affidavit dated 19.7.2021 has submitted that the transmission asset is in use and replaced asset-50 MVA, 220/132 kV ICT at Balipara Sub-station belongs to ASEB (Assam State Electricity Board) and its tariff has not yet been claimed. Further, the replaced ICT has already been taken by ASEB and the 132 KV and 220 KV side of associated bays are maintained by ASEB.

4. The Respondents are distribution licensees, power departments, power utilities and transmission licensees, which are procuring transmission services from the Petitioner, mainly beneficiaries of Northern Eastern Region.

5. The Petitioner has served the petition on the Respondents 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 suggestions have been received from the general public in response to the aforesaid notices published in the newspapers. None of the respondents have filed reply in the matter.

6. This order is issued considering the submissions made by the Petitioner in petition vide affidavit dated 18.5.2020 and the Petitioner's affidavit dated 19.7.2021 filed in response to technical validation letter dated 14.7.2021.

7. The hearing in this matter was held on 31.8.2021 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 as claimed by the Petitioner in respect of the transmission asset for the 2014-19 tariff period are as follows:

(₹ in lakh)



Particulars	2017-18 (Pro-rata 182 days)	2018-19
Depreciation	25.28	54.68
Interest on Loan	24.42	50.26
Return on Equity	28.31	61.39
O&M Expenses	39.79	82.46
Interest on Working Capital	3.72	7.81
Total	121.52	256.60

9. The details of the trued-up Interest on Working Capital (IWC) as claimed by the

Petitioner in respect of the transmission asset are as follows:

Particulars	2017-18 (Pro-rata 182 days)	2018-19
Working Capital for O&M Expenses	6.65	6.87
Working Capital for Maintenance Spares	11.97	12.37
Working Capital for Receivables	40.62	42.77
Total Working Capital	59.24	62.01
Rate of Interest (in %)	12.60	12.60
Interest on Working Capital	3.72	7.81

Capital Cost

10. The capital cost of the transmission asset has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations.

11. With respect to the transmission asset, the details of the apportioned approved cost (RCE) along with capital cost as on COD and 31.3.2019 [including projected Additional Capital Expenditure (ACE) during the 2014-19 period] as allowed by the Commission vide order dated 29.3.2020 in Petition No. 295/TT/2018 and as submitted by the Petitioner in this petition are as follows:

				(₹ in lakh)
Apportioned	Capital Cost	ACE	allowed	Estimated Completion
approved Capital Cost (as per RCE)	allowed (as on COD)	2017-18	2018-19	Capital Cost allowed (as on 31.3.2019)
1224.07	932.51	173.34	80.27	1186.12

12. Based on the Auditor's Certificate dated 31.7.2019, the details of the capital cost as on COD (claimed) along with un-discharged IDC, IDC and IEDC dis-allowed due to time over-run and excess initial spares dis-allowed, as submitted by the Petitioner in this petition are as follows:

					(₹ in lakh)
Capital Cost (as per Auditor Certificate) (A)	Un-discharged IDC (B)	IDC Disallowed (due to time over-run) (C)	IEDC Disallowed (due to time over-run) (D)	Excess Initial Spares disallowed (E)	Capital Cost claimed (as on COD) (E) = (A-B-C-D-E)
956.40	23.66	0.0 0	0.00	0.00	932.74

Time over-run

13. The transmission scheme was scheduled to be commissioned within 27 months from the date of I.A. Accordingly, SCOD was 15.12.2017 against which the transmission asset was put into commercial operation from 1.10.2017. Therefore, there was no time over-run.

Cost Over-run

14. Based on the Auditor's Certificate dated 31.7.2019, the details of claimed capital cost as on COD, as on 31.3.2019 and actual ACE during the 2014-19 tariff period as submitted by the Petitioner in this petition are as follows:

					(₹ in lakh)
Apportione	Apportioned	Actual	A	CE	Total Capital
d Approved Capital Cost (as per FR)	Approved Capital Cost (as per RCE)	Capital Cost as on COD	2017-18	2018-19	Cost (as on 31.3.2019)
895.85	1224.07	932.74	55.09	95.73	1083.56

15. The Petitioner vide affidavit dated 19.7.2021 has submitted that the overall cost of the transmission asset is within the RCE approved cost. Further, being a Government enterprise, the Petitioner has been following a well laid down procurement policy which ensures both transparency and competitiveness in the bidding process. Domestic Competitive Bidding (DCB) process had been followed to award this project. Through this process, lowest possible market prices for required product/ services as per detailed designing is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market conditions, design and site requirements whereas, the estimates are prepared by the Petitioner as per well-defined procedures for cost estimate. The FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts/ general practice. The Petitioner has submitted that the cost estimate of the project is on the basis of April 2017 Price Level, whereas the contract date is at June 2015 Price Level.

16. The Petitioner has submitted the detailed break-up of cost under various heads in a tabular form and has further submitted reasons of cost variation with respect to FR which are as follows:

a) The cost variation (increase) of ₹302.07 lakh with respect to FR is on account of difference between FR rates and Actual award rates for major equipment and Civil works etc.

b) The quantities for Civil works in the FR have been indicated as Lump Sum (LS). As such, it is not possible to ascertain the variation in quantity and cost between FR and actual executed quantities. In addition, the actual site condition encountered during execution like soil conditions, shutdown issues, layout modifications, etc. also resulted in change in the actual cost of execution. However, all civil works have been executed in line with approved drawings and within the scope of the project as per actuals.

c) FR costs of individual items/ materials are exclusive of taxes and duties which have been indicated under a separate head while the cost of items as per the actual expenditure is inclusive of taxes and duties. Increase of about ₹88.55 lakh is mainly on accounts of actual taxes and duties, custom duty, excise duty, GST, etc. paid based on the prevailing rate and charges raised by respective district, State and statutory authorities at the time of execution of project.

d) IDC for the transmission asset as per FR cost was estimated at ₹49.98
 lakh and the actual IDC for the transmission asset works out to ₹40.40 lakh.

Thus, there is a decrease of ₹9.58 lakh with respect to FR in IDC. The actual IDC accrued up to COD has been considered in the Auditor's Certificate dated 31.7.2019.

e) IEDC including contingencies, establishment and other overheads for the transmission asset in approved FR was estimated at ₹102.25 lakh, whereas, based on the actual expenditure incurred, IEDC works out to ₹51.24 lakh. Thus, IEDC under the project has decreased by ₹51.01 lakh with respect to FR.

17. We have considered the submissions of the Petitioner and note that the actual completion cost as on 31.3.2019 in respect of the transmission asset (including actual ACE during the 2014-19 period) is within apportioned approved capital cost as per RCE. Therefore, there is no cost over-run.

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

18. The Petitioner has submitted that as per the Auditor's Certificate dated 31.7.2019, total claimed IDC of ₹40.40 lakh, IDC of ₹16.75 lakh has been discharged up to COD and the remaining amount has been discharged during 2017-19 and 2018-19 which has been considered as part of ACE for 2017-18 and 2018-19 and, therefore, the corresponding loan has been reduced from loan as on COD and added in loan component of ACE to calculate tariff.

19. The Petitioner has submitted that in view of the above, cash IDC statement was made after considering the total loan as on COD (including loan component of ACE for cash IDC). Further, while submitting cash IDC statement, the Petitioner has prayed to allow claimed IDC as per revised cash IDC statement showing interest rate.

20. The Petitioner has submitted IDC computation statement which contains name of the loan, drawl date, loan amount, interest rate and interest claimed. IDC is worked

out based on the details given in IDC statement. Further, the loan amount as on COD has been mentioned in Form 6 and Form 9C.

21. On perusal of the documents, certain discrepancies have been noticed such as mismatch in Ioan amount between IDC statement and in Form 6 and Form 9C. Accordingly, the allowable IDC is worked out based on the information available on record and relying on Ioan amount as per tariff Form 9C. Therefore, IDC as per the Auditor's Certificate, IDC dis-allowed due to computational difference and IDC allowed in this order for the purpose of tariff determination is as follows:

		(₹ in lakh)
IDC as per Auditor's	IDC dis-allowed due to	IDC allowed in the instant
Certificate	computational difference	order
40.40	0.20	40.20

22. IDC allowed in this order, IDC discharged up to COD and IDC discharged during 2017-18 and 2018-19 for the purpose of tariff determination is as follows:

IDC allowed in the
instant orderIDC discharged up to CODIDC discharged40.2016.7217.685.80

23. The Petitioner has submitted that entire IEDC amount mentioned in the Auditor's Certificate is on cash basis and is paid up to COD and is within the percentage of hard cost as indicated in the abstract cost estimate. IEDC details considered for the purpose of tariff calculation are as follows:

(₹ in lakh)

IEDC (as per Auditor's Certificate)	IEDC disallowed (due to time over-run not condoned)	IEDC considered (up to COD)
51.24	0.00	51.24



Initial Spares

24. The Petitioner has claimed Initial Spares in respect of the transmission asset in accordance with Regulation 13(d) of the 2014 Tariff Regulations 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 - 5.00%

25. The Petitioner has claimed the Initial Spares in respect of the transmission

asset as follows:

				(₹ in lakh)
Plant & Machinery Cost up to cut-off date (excluding IDC and IEDC) (A)	Initial Spares claimed (B)	Ceiling (in %) (C)	Initial Spares worked out D = [(A-B)*C /(100-C)]	Excess Initial Spares
1134.25	19.20	6.0	71.17	0.00

26. The Petitioner has submitted that the expenditure on initial spares included in the Auditor's Certificate is as per actual cash expenditure incurred i.e. the initial spares discharged up to COD included in the COD cost of auditor certificate and discharged after COD has been included in the respective year ACE in the Auditor's Certificate. The Petitioner has submitted Initial Spares discharge summary as follows:

ParticularsTotal Value of Initial SparesTotal Value of Initial SparesActual Expenditure up to CODActual Expenditure COD to 31.3.2018Expenditure in 2018-19Balance Estimated Expenditure during 2019-20

27. We have considered the submissions of the Petitioner. The Initial Spares claimed by the Petitioner in respect of the transmission asset are within ceiling as specified in the 2014 Tariff Regulations. Therefore, the details of allowable Initial Spares for the 2014-19 tariff period are as follows:

-					(₹ in lakh)
	Plant & Machinery cost up to cut- off date (excluding IDC and IEDC)	Initial Spares claimed by the	Ceiling (in %)	Initial Spares worked out	Initial Spares
	(A)	Petitioner (B)	(C)	D = [(A-B)*C /(100-C)]	allowed
	1134.25	19.20	6.0	71.17	19.20

28. Accordingly, with respect to the transmission asset, the details of the capital cost now approved as on COD after adjustment of IDC, IEDC and Initial Spares are as follows:

					(₹ in lakh)
Capital Cost (as per Auditor's Certificate) (A)	Un-discharged IDC (B)	IDC Disallowed (due to computational difference) (C)	IEDC Disallowed (due to time over-run) (D)	Excess Initial Spares disallowed (E)	Capital Cost allowed (as on COD) (E) = (A-B-C-D-E)
956.40	23.48	0.20	0.00	0.00	932.72

Additional Capital Expenditure

29. As per Regulation 3(13) of the 2014 Tariff Regulations, the cut-off date in respect of the transmission asset is 31.3.2020.

30. The Commission vide order dated 29.3.2020 in Petition No. 295/TT/2018 has allowed ACE of ₹173.34 lakh for 2017-18 and ₹80.27 lakh for 2018-19 for the 2014-19 tariff period towards balance and retention payments. The details of actual ACE during the 2014-19 tariff period have been claimed by the Petitioner in this petition.

31. The Petitioner has submitted that ACE during the 2014-19 period has been claimed under Regulation 14(1)(i) of the 2014 Tariff Regulations and is on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date. Further, ACE allowed by the Commission vide order dated 29.3.2020 in Petition No. 295/TT/2018 were based on projections and while projecting the estimated ACE, contracts were not closed and liabilities were not finalized. However, in the instant petition, ACE is claimed on the basis of actual payments made to the contractor after receipt of final invoices from the contractor and incorporating the amendments. Also, actual ACE incurred after closing

of contract may happen to be higher or lower than the estimated ACE prepared and submitted. The payments were made after submission of invoice and after reconciliation in accordance with contractual clause as per provisions of contract.

32. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner has been allowed under Regulation 14(1) (i) of the 2014 Tariff Regulations as it is towards balance and retention payments. The entitled un-discharged IDC liability as on COD has been allowed as ACE during the year of its discharge. ACE allowed in respect of the transmission asset from COD to 31.3.2019 is as follows:

	(₹ in lakh							(₹ in lakh)
	ACE (as per Auditor's		IDC Discharged		Excess Initial		ACE	
			during	2018-19	Spares			
	Certificate)		after	COD				
	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19
	37.41	89.75	17.68	5.80	0.00	0.00	55.09	95.55

33. Accordingly, the details of the capital cost as on COD, ACE during the 2014-19 period and capital cost as on 31.3.2019 in respect of the transmission asset are as follows:

(₹ in lakh)

Capital Cost (as on COD)	ACE (including accrual IDC discharged)		Capital Cost (as on 31.3.2019)
	2017-18	2018-19	
932.72	55.09	95.55	1083.36

Debt-Equity Ratio

34. Debt-equity ratio has been allowed in accordance with Regulations 19(1), 19(3) and 19(5) of the 2014 Tariff Regulations. The debt-equity ratio of 70:30 has been considered for ACE allowed during 2014-19 period in accordance to Regulation 19(3) of the 2014 Tariff Regulations. Accordingly, the details of the debt-equity ratio as on COD and 31.3.2019 in respect of the transmission asset considered for the purpose of determination of tariff for the 2014-19 period are as follows:

						(₹ in lakh)
Funding	Capital Cost (as on COD)	(in %)	ACE (2014-19)	(in %)	Total cost (as on 31.3.2019)	(in %)
Debt	652.90	70.00	105.45	70.00	758.35	70.00
Equity	279.81	30.00	45.19	30.00	325.01	30.00
Total	932.72	100.00	150.64	100.00	1083.36	100.00

Depreciation

35. Depreciation has been worked out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. The Gross Block in respect of the transmission asset during the 2014-19 tariff period has been depreciated at WAROD. WAROD at Annexure-I has been worked out after taking into account the depreciation rates of assets as specified in the 2014 Tariff Regulations and the details of the trued-up depreciation allowed during the 2014-19 is as follows:

		(₹ in lakh)
Particulars	2017-18	2018-19
	(Pro-rata 182 days)	
Opening Gross Block	932.72	987.81
ACE	55.09	95.55
Closing Gross Block	987.81	1083.36
Average Gross Block	960.26	1035.58
Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28
Balance useful life of the asset beginning of the year (Year)	25	25
Lapsed life at the beginning of the year (Year)	0	0
Depreciable Value	864.23	932.02
Depreciation during the year	25.28	54.68
Cumulative depreciation at the end of the year	25.28	79.96
Remaining Depreciable Value at the end of the year	838.95	852.06

36. Depreciation in respect of the transmission asset as allowed *vide* order dated 29.3.2020 in Petition No. 295/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

	(₹ in lakh)
2017-18(Pro-rata 182 days)	2018-19
26.91	60.51
25.28	54.68
25.28	54.68
	26.91 25.28

Interest on Loan (IoL)

37. The Petitioner has claimed the 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 rate submitted by the Petitioner, in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of the trued-up IoL allowed in respect of the transmission asset for the 2014-19 tariff period is as follows:

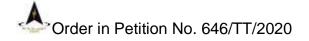
		₹ in lakh)
Particulars	2017-18 (Pro-rata 182 days)	2018-19
Gross Normative Loan	652.90	691.46
Cumulative Repayments up to Previous Year	0.00	25.28
Net Loan-Opening	652.90	666.18
Additions due to ACE	38.56	66.89
Repayment during the year	25.28	54.68
Net Loan-Closing	666.18	678.39
Average Loan	659.54	672.29
Weighted Average Rate of IoL (in %)	7.4255	7.4755
Interest on Loan	24.42	50.26

38. IoL in respect of the transmission asset as allowed vide order dated 29.3.2020 in Petition No. 295/TT/2018, claimed by the Petitioner in the instant petition and truedup in the instant order is as follows:

	(₹ in lakh)
Particulars	2017-18(Pro-rata 182 days)	2018-19
Allowed vide order dated 29.3.2020 in Petition No. 295/TT/2018	26.24	55.83
Claimed by the Petitioner in the instant petition	24.42	50.26
Approved after true-up in this order	24.42	50.26

Return on Equity (RoE)

39. The Petitioner has claimed RoE in respect of the transmission 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 rate (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

40. We have considered the submissions of by the Petitioner. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 had arrived at the effective tax rate 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

41. 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 2014-19 period, in terms of the provisions of the 2014 Tariff Regulations, is considered in the instant case which are as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Base rate of RoE (in %)	Grossed up RoE (in %) [Base Rate/(1-t)]
2014-15	20.961	15.50	19.610
2015-16	21.342	15.50	19.705
2016-17	21.342	15.50	19.705
2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758

42. The Petitioner has claimed RoE for the 2014-19 tariff period after grossing up RoE @15.50% with Effective Tax rates (based on MAT rates) each year as per Regulation 25(3) of the 2014 Tariff Regulations. Accordingly, RoE is trued-up on the basis of MAT rates applicable in the respective years and is allowed in respect of the transmission asset for the 2014-19 tariff period as follows:

		(₹ in lakh)
Particulars	2017-18 (Pro-rata 182 days)	2018-19
Opening Equity	279.81	296.34
Additions due to ACE	16.53	28.67
Closing Equity	296.34	325.01
Average Equity	288.08	310.67
Return on Equity (Base Rate) (in %)	15.500	15.500
MAT Rate for respective year (in %)	21.342	21.549
Rate of Return on Equity (in %)	19.705	19.758
Return on Equity	28.31	61.38

43. RoE in respect of the transmission asset as allowed vide order dated 29.3.2020

in Petition No. 295/TT/2018, claimed by the Petitioner in the instant petition and trued-

up in the instant order is as follows:

		(₹ in lakh)
Particulars	2017-18 (Pro-rata 182 days)	2018-19
Allowed vide order dated 29.3.2020 in Petition No. 295/TT/2018	29.98	67.42
Claimed by the Petitioner in the instant petition	28.31	61.39
Approved after true-up in this order	28.31	61.38

Operation & Maintenance Expenses (O&M Expenses)

44. The O&M Expenses as claimed by the Petitioner in respect of the various elements covered under the transmission asset are as follows:

	(₹	(₹ in lakh)	
Particulars	2017-18 (Pro-rata 182 days)	2018-19	
Sub-station			
200 kV			
Number of Bays	1	1	
Norms (₹ lakh/bay)	46.55	48.10	
132 kV			
Number of Bays	1	1	
Norms (₹ lakh/bay)	33.25	34.36	
Total O&M Expenses (₹ in lakh)	39.79	82.46	

45. O&M Expenses claimed by the Petitioner are within the norms specified under the 2014 Tariff Regulations and, therefore, the O&M Expenses allowed in respect of the various elements covered under the transmission asset are as follows:

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		(₹ in lakh)
Particulars	2017-18 (Pro-rata 182 days)	2018-19
Sub-station		
200 kV		
Number of Bays	1	1
Norms (₹ lakh/bay)	46.55	48.10
132 kV		
Number of Bays	1	1
Norms (₹ lakh/bay)	33.25	34.36
Total O&M Expenses (₹ in lakh)	39.79	82.46

46. O&M Expenses in respect of the transmission asset as allowed vide order dated 29.3.2020 in Petition No. 295/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

		(₹ in lakh)
Particulars	2017-18 (Pro-rata 182 days)	2018-19
Allowed vide order dated 29.3.2020 in Petition	39.79	82.46
No. 295/TT/2018		
Claimed by the Petitioner	39.79	82.46
in the instant petition		
Approved after true-up in this order	39.79	82.46

Interest on Working Capital

47. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and the trued-up IWC allowed in respect of the transmission asset for the 2014-19 tariff period is as follows:

		(₹ in lakh)
Particulars	2017-18 (Pro-rata 182 days)	2018-19
Working Capital for O&M Expenses (O&M Expenses for one Month)	6.65	6.87
Working Capital for Maintenance Spares (15% of O&M Expenses)	11.97	12.37
Working Capital for Receivables (Equivalent to two months of annual fixed costs/annual transmission charges)	40.62	42.72
Total Working Capital	59.24	62.01
Rate of Interest (in %)	12.60	12.60
Interest on Working Capital	3.72	7.81

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48. Accordingly, details of IWC allowed *vide* order dated 29.3.2020 in Petition No. 295/TT/2018, claimed by the Petitioner and trued-up IWC in the instant order is as follows:

		(₹ in lakh)
Particulars	2017-18 (Pro-rata 182 days)	2018-19
Allowed vide order dated 29.3.2020 in Petition No. 295/TT/2018	3.83	8.19
As claimed by the Petitioner in the instant petition	3.72	7.81
Approved after true-up in this order	3.72	7.81

Approved Annual Fixed Charges for the 2014-19 Tariff Period

49. The trued-up Annual Fixed Charges (AFC) in respect of the transmission asset

for the 2014-19 tariff period are as follows:

		(₹ in lakh)
Particulars	2017-18(Pro-rata 182 days)	2018-19
Depreciation	25.28	54.68
Interest on Loan	24.42	50.26
Return on Equity	28.31	61.38
O&M Expenses	39.79	82.46
Interest on Working Capital	3.72	7.81
Total	121.52	256.59

50. Accordingly, AFC in respect of the transmission asset as allowed vide order dated 29.3.2020 in Petition No. 295/TT/2018, claimed by the Petitioner in the instant petition and approved after truing up in the instant order are as follows:

		(₹ in lakh)
Particulars	2017-18 (Pro-rata 182 days)	2018-19
Allowed vide order dated 29.3.2020 in Petition No. 295/TT/2018	126.74	274.40
Claimed by the Petitioner in the instant petition	121.52	256.60
Approved after true-up in this order	121.52	256.59

DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 PERIOD

51. The Petitioner has claimed the following transmission charges in respect of the

transmission asset for the 2019-24 tariff period:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	58.70	62.46	64.73	64.73	64.73
Interest on Loan	50.35	49.49	47.40	43.23	38.16
Return on Equity	62.64	66.65	69.07	69.07	69.07
O&M Expenses	77.79	80.58	83.43	86.31	89.42
Interest on Working Capital	5.97	6.21	6.37	6.43	6.48
Total	255.45	265.39	271.00	269.77	267.86

(₹ in lakh)

52. The Petitioner has claimed IWC in respect of the transmission asset for the

2019-24 period as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses	6.48	6.72	6.95	7.19	7.45
Working Capital for Maintenance Spares	11.67	12.09	12.51	12.95	13.41
Working Capital for Receivables	31.41	32.72	33.41	33.26	32.93
Total Working Capital	49.56	51.53	52.87	53.40	53.79
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	5.97	6.21	6.37	6.43	6.48

Capital Cost

53. 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;

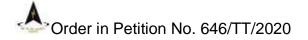
(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of 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 capitalization 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 assets before the date of commercial operation;

(i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(*j*) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal 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;

(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 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 capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;

(c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; 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 assets forming part of the project, but not in use, as declared in the tariff petition;

(b) De-capitalised Assets after the date of commercial operation on account of 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-capitalization of the concerned assets.

(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."

54. The Petitioner has submitted that capital cost as on 31.3.2019 of ₹1083.56 lakh

in respect of the transmission asset has been considered for computation of tariff of

the 2019-24 tariff period. Further, the tariff has been claimed on the capital cost as on

COD along with actual/ projected expenditure up to 31.3.2024.

55. We have considered the submissions of the Petitioner and, accordingly, capital

cost of ₹1083.36 lakh has been worked out and considered as the opening capital

cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the

2019 Tariff Regulations.

Additional Capital Expenditure

56. Regulations 24 and 25 of the 2019 Tariff Regulations provide 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;

Order in Petition No. 646/TT/2020

(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 capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

(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."

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

- (1) The additional capital expenditur0065 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 capitalization 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."

- 57. The Petitioner has projected ACE of ₹56.31 lakh and ₹86.02 lakh during 2019-
- 20 and 2020-21 respectively and accordingly the details of the capital cost as on

31.3.2024 as claimed and submitted by the Petitioner in this petition is as follows:

_					(₹ in lakh)
	Apportioned	Capital Cost	st Projected ACE		Capital Cost
	Approved Cost (RCE)	(as on 31.3.2019)	2019-20	2020-21	(as on 31.3.2024)
	1224.07	1083.56	56.31	86.02	1225.89

58. The Petitioner has submitted that RCE-II in this case is under process for approval by the BOD and the same will be submitted shortly. It has further requested to allow tariff on estimated completion cost in respect of the transmission asset.

59. The Petitioner has further submitted that ACE projected during 2019-20 and 2020-21 respectively have been claimed under Regulation 24(1)(b) and Regulation 25(1)(f) of the 2019 Tariff Regulations respectively. Further, ACE claimed on account of unexecuted work under the approved scope within cut-off date is under Regulation 24(1)(b) of the 2019 Tariff Regulations and liability of works admitted by the Commission after cut-off date to the extent of actual payments is under Regulation 24(1)(f) of the 2019 Tariff Regulations.

60. We have considered the submissions of the Petitioner and observe that completion cost of the transmission asset as on 31.3.2024 including ACE is beyond RCE apportioned approved capital cost and there is cost over-run of ₹1.62 lakh. As RCE-II is not on record, we have considered RCE for tariff computation during the 2019-24 tariff period. Accordingly, we have restricted capital cost of the transmission asset as on 31.3.2024 to RCE apportioned approved capital cost and have disallowed cost over-run of ₹1.62 lakh from ACE claimed during 2020-21 in the instant order. The capital cost allowed is subject to true-up.

61. Accordingly, ACE in the instant order is allowed as follows:

					(₹ in lakh)
Year	Estimated Expenditure (as per Auditor's Certificate)	IDC discharged after COD	Excess Initial Spares disallowed	Cost disallowed due to Cost Over-run	ACE allowed
2019-20	56.31	0.00	0.00	0.00	56.31
2020-21	86.02	0.00	0.00	1.62	84.40

62. Accordingly, with respect to the transmission asset, the capital cost as on 1.4.2019 and 31.3.2024 (including ACE during 2019-24 period) considered for the purpose of tariff determination of the 2019-24 tariff period is as follows:

				(₹ in lakn)
Capital Cost (as on 1.4.2019)		A	Capital Cost	
		2019-20	2020-21	(as on 31.3.2024)
	1083.36	56.31	84.40	1224.07

Debt-Equity Ratio

63. Regulation 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 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 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 ACE 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."

64. The debt-equity considered for the purpose of computation of tariff in respect of

the transmission asset for the 2019-24 tariff period is as follows:

(₹ in lakh)

Funding	Capital Cost (as on 1.4.2019)	(in %)	ACE (2019-24)	(in %)	Capital Cost (as on 31.3.2024)	(in %)
Debt	758.35	70.00	98.50	70.00	856.85	70.00
Equity	325.01	30.00	42.21	30.00	367.22	30.00
Total	1083.36	100.00	140.71	100.00	1224.07	100.00

Depreciation

65. 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 project or element thereof including communication project. In case of the tariff of all the units of a generating station or all elements of a transmission project including communication project 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 project 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 project, 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 project, weighted average life for the generating station of the transmission project 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 assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the 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-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 decapitalized asset during its useful services."

66. The Gross Block in respect of the transmission asset during the 2019-24 tariff

period has been depreciated at WAROD. WAROD at Annexure-II has been worked

out after considering the depreciation rates of assets as prescribed in the 2019 Tariff

Regulations. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed in respect of the transmission asset for the 2019-24 tariff period is as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	1083.36	1139.67	1224.07	1224.07	1224.07
ACE	56.31	84.40	0.00	0.00	0.00
Closing Gross Block	1139.67	1224.07	1224.07	1224.07	1224.07
Average Gross Block	1111.51	1181.87	1224.07	1224.07	1224.07
Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
Balance useful life at the beginning of the year (Year)	24	23	22	21	20
Lapsed life of the asset at the beginning of the year (Year)	1	2	3	4	5
Depreciable Value	1000.36	1063.68	1101.66	1101.66	1101.66
Depreciation during the year	58.69	62.40	64.63	64.63	64.63
Cumulative Depreciation	138.65	201.05	265.68	330.31	394.94
Remaining Depreciable Value	861.71	862.63	835.98	771.35	706.72

Interest on Loan

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

"32. Interest on Ioan 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 decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered 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 capitalized:



(**3** :... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

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.

(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."

68. The Petitioner has submitted that WAROI on loan has been calculated on the basis of interest rates prevailing as on 1.4.2019 for respective loans. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period to be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up.

69. We have considered the submissions of the Petitioner. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the transmission asset for the 2019-24 tariff period is as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	758.35	797.77	856.85	856.85	856.85
Cumulative Repayments up to Previous Year	79.96	138.65	201.05	265.68	330.31
Net Loan-Opening	678.39	659.12	655.80	591.16	526.53
Additions due to ACE	39.42	59.08	0.00	0.00	0.00
Repayment during the year	58.69	62.40	64.63	64.63	64.63
Net Loan-Closing	659.12	655.80	591.16	526.53	461.90
Average Loan	668.75	657.46	623.48	558.85	494.22
Weighted Average Rate of Interest on Loan (in %)	7.5268	7.5202	7.5888	7.7199	7.7061
Interest on Loan	50.34	49.44	47.31	43.14	38.08

<u>Return on Equity</u>

70. Regulations 30 and 31 of the 2019 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 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 due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

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."

"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:

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."

71. The Petitioner has submitted that it is liable to pay Income Tax at MAT rate

prescribed under the Taxation laws (Amendment) Ordinance 2019. Further, RoE has

been calculated @18.782% after grossing up the 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 the 2019-24 tariff period. As per

Regulation 31(3) of the 2019 Tariff Regulations, the 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 generating company or the transmission licensee, as the case may be. 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 the 2019-24 tariff period on yearly basis on receipt of Income Tax assessment order.

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

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	325.01	341.90	367.22	367.22	367.22
Additions due to ACE	16.89	25.32	0.00	0.00	0.00
Closing Equity	341.90	367.22	367.22	367.22	367.22
Average Equity	333.45	354.56	367.22	367.22	367.22
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
Return on Equity	62.63	66.59	68.97	68.97	68.97

Operation & Maintenance Expenses

73. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as follows:

"35. Operation and Maintenance Expenses (3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:

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



Norms for sub-station Bays (₹ La	kh per bay)				
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh	per MVA)				
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹	ELakh per kn	n)			
Single Circuit (Bundled	0.881	0.912	0.944	0.977	1.011
Conductor with six or more					
sub-conductors)					
Single Circuit (Bundled	0.755	0.781	0.809	0.837	0.867
conductor with four sub-					
conductors)					
Single Circuit (Twin	0.503	0.521	0.539	0.558	0.578
& Triple Conductor)					
Single Circuit (Single	0.252	0.260	0.270	0.279	0.289
Conductor)					
Double Circuit (Bundled					
conductor with four or	1.322	1.368	1.416	1.466	1.517
more sub-conductors)					
Double Circuit (Twin	0.881	0.912	0.944	0.977	1.011
& Triple Conductor)	0.007	0.072	0.077	0.077	1.011
Double Circuit (Single	0.377	0.391	0.404	0.419	0.433
Conductor)					
Multi Circuit (Bundled	0.040	0 404	0.405	0.570	0.000
Conductor with four or more	2.319	2.401	2.485	2.572	2.662
sub-conductor)					
Multi Circuit (Twin &	1.544	1.598	1.654	1.713	1.773
Triple Conductor)					
Norms for HVDC stations					
HVDC Back-to-Back stations	834	864	894	925	958
(Rs Lakh per 500 MW)					
(Except Gazuwaka BTB)					
Gazuwaka HVDC Back-to-	1,666	1,725	1,785	1,848	1,913
Back station (₹ Lakh per 500					-
MW)					
500 kV Rihand-Dadri	2,252	2,331	2,413	2,498	2,586
HVDC bipole scheme (Rs					
Lakh) (1500 MW)					
±500 kV Talcher- Kolar	2,468	2,555	2,645	2,738	2,834
HVDC bipole scheme (Rs					
Lakh) (2000 MW)					
±500 kV Bhiwadi-Balia	1,696	1,756	1,817	1,881	1,947
HVDC bipole scheme (Rs					
Lakh) (2500 MW)					

±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs	2,563	2,653	2,746	2,842	2,942
Lakh) (3000 MW)					

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 further that:

- *i.* the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- *ii.* the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

(b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification."

74. The O&M Expenses as claimed by the Petitioner in respect of the various

elements covered under the transmission asset for the 2019-24 tariff period are as

follows:

					(₹ in lakh)	
O&M Expenses	2019-20	2020-21	2021-22	2022-23	2023-24	
Sub-station						
220 kV						
Number of bays	1	1	1	1	1	
Norms (₹ lakh/Bay)	22.51	23.3	24.12	24.96	25.84	
O&M Claimed (₹ in lakh)	22.51	23.3	24.12	24.96	25.84	
132 kV						
Number of bays	1	1	1	1	1	
Norms (₹ lakh/Bay)	16.08	16.64	17.23	17.83	18.46	
O&M Claimed (₹ in lakh)	16.08	16.64	17.23	17.83	18.46	
220 kV ICT						
Capacity (MVA)	160	160	160	160	160	
Norms (₹ lakh/MVA)	0.245	0.254	0.263	0.272	0.282	
O&M Claimed (₹ in lakh)	39.20	40.64	42.08	43.52	45.12	
Total O&M Expenses (₹ in lakh)	77.79	80.58	83.43	86.31	89.42	

75. We have considered the submissions of the Petitioner. The O&M Expenses in respect of the various elements covered under the transmission asset have been worked out as per the norms specified in the 2019 Tariff Regulations and the same are allowed as follows:

					(₹ in lakh)
O&M Expenses	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station					
220 kV					
Number of bays	1	1	1	1	1
Norms (₹ lakh/Bay)	22.51	23.3	24.12	24.96	25.84
O&M Claimed (₹ in lakh)	22.51	23.3	24.12	24.96	25.84
132 kV					
Number of bays	1	1	1	1	1
Norms (₹ lakh/Bay)	16.08	16.64	17.23	17.83	18.46
O&M Claimed (₹ in lakh)	16.08	16.64	17.23	17.83	18.46
220 kV ICT					
Capacity (MVA)	160	160	160	160	160
Norms (₹ lakh/MVA)	0.245	0.254	0.263	0.272	0.282

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O&M Claimed (₹ in lakh)	39.20	40.64	42.08	43.52	45.12
Total O&M Expenses (₹ in lakh)	77.79	80.58	83.43	86.31	89.42

Interest on Working Capital

76. Regulations 34(1)(c), 34(3), 34(4) and 3(7) of the 2019 Tariff Regulations

provide as follows:

"34. Interest on Working Capital

- (1) ...
- (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
 - *i.* Receivables equivalent to 45 days of 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 IWC 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 IWC shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24."

"(4) IWC 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;"

77. The Petitioner has submitted that it has computed IWC for the 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%.

78. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff

Regulations. The Rate of Interest (ROI) considered is 12.05% (SBI 1 year MCLR

applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, ROI for 2020-

21 has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points), whereas ROI for 2021-22 onwards has been considered as 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). Therefore, IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations and the components of the working capital and interest thereon allowed in respect of the transmission asset for the 2019-24 tariff period are as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M	6.48	6.72	6.95	7.19	7.45
Expenses					
(O&M Expenses for 1 month)					
Working Capital for Maintenance	11.67	12.09	12.51	12.95	13.41
Spares (15% of O&M Expenses)					
Working Capital for Receivables	31.40	32.65	33.27	33.12	32.80
(Equivalent to 45 days of annual					
fixed cost/annual transmission					
charges)					
Total Working Capital	49.55	51.45	52.74	53.26	53.66
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	5.97	5.79	5.54	5.59	5.63

Annual Fixed Charges for the 2019-24 Tariff Period

79. The transmission charges allowed in respect of the transmission asset for the

2019-24 tariff period are as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	58.69	62.40	64.63	64.63	64.63
Interest on Loan	50.34	49.44	47.31	43.14	38.08
Return on Equity	62.63	66.59	68.97	68.97	68.97
O&M Expenses	77.79	80.58	83.43	86.31	89.42
Interest on Working Capital	5.97	5.79	5.54	5.59	5.63
Total	255.41	264.81	269.88	268.65	266.74

Filing Fee and Publication Expenses

80. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner is 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.

Licence Fee & RLDC Fees and Charges

81. 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 Regulation 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

Goods and Services Tax

82. 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.

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

Security Expenses

84. The Petitioner has submitted that security expenses for the transmission assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC.

85. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses 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 said petition has already been disposed of by the Commission vide order dated 3.8.2021 wherein the Commission has 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. Therefore, 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

86. 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

87. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the 2010 Sharing Regulations and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of the transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

88. To summarise:

a) The trued-up AFC approved in respect of the transmission asset for the 2014-19 tariff period are as follows:

(₹ in lakh)

	(
2017-18 (Pro-rata 182 days)	2018-19
121.52	256.59

b) AFC allowed in respect of the transmission 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				
255.41	264.81	269.88	268.65	266.74				

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

90. This order disposes of Petition No. 646/TT/2020 in terms of the above discussions and findings.

sd/-(P. K. Singh) Member sd/-(Arun Goyal) Member sd/-(P. K. Pujari) Chairperson



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<u>Annexure-I</u>

2014-19	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per the 2014 Tariff Regulations	Annual Depreciation as per Regulations (₹ in lakh)		
Capital		2017-18	2018-19	Total			2017-18	2018-19
Expenditure								
Sub-station	932.72	55.09	95.55	150.64	1083.36	5.28%	50.70	54.68
Total	932.72	55.09	95.55	150.64	1083.36		50.70	54.68
					Average Gross Block (₹ in lakh)		960.26	1035.58
					Weighted Aven of Depreciation	5.28%	5.28%	

Annexure-II

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in Iakh)	Projected ACE (₹ in lakh)		Admitted Rate of Capital Depreciation Cost as on as per the 24.2 2024	Annual Depreciation as per Regulations (₹ in lakh)						
		2019-20	2020-21	Total	_ 31.3.2024 (₹ in lakh)	2019 Tariff Regulations	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station	1083.36	56.31	84.40	140.71	1224.07	5.28%	58.69	62.40	64.63	64.63	64.63
Total	1083.36	56.31	84.40	140.71	1224.07		58.69	62.40	64.63	64.63	64.63
					Average Gross Block (≹ in lakh)	ross Block	1111.51	1181.87	1224.07	1224.07	1224.07
					Weighted Average Rate of Depreciation		5.28%	5.28%	5.28%	5.28%	5.28%