

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 314/TT/2019

Coram:

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

Date of Order: 25.01.2021

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 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of 400 kV S/C Chamera-1 Kishenpur Transmission System in Northern Region.

And in the Matter of:

Power Grid Corporation of India Ltd.,
"Saudamini", Plot No. 2,
Sector 29, Gurgaon-122001

....Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,
Vidyut Bhawan, Vidyut Marg, Jaipur - 302 005
2. Ajmer Vidyut Vitran Nigam Ltd.,
132 kV , GSS RVPNL Sub- station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017
3. Jaipur Vidyut Vitran Nigam Ltd.,
132 kV , GSS RVPNL Sub- station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017
4. Jodhpur Vidyut Vitran Nigam Ltd.,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017



5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan,
Kumar House Complex Building-II,
Shimla-171 004
6. Punjab State Electricity Board,
The Mall, Patiala - 147 001
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula 134 109
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Ltd.,
(Formerly Uttar Pradesh State Electricity Board) Shakti Bhawan, 14,
Ashok Marg,
Lucknow - 226 001
10. Delhi Transco Ltd.,
Shakti Sadan, Kotla Road,
New Delhi-110 002
11. BSES Yamuna Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
12. BSES Rajdhani Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
13. Tata Power Delhi Distribution Ltd.,
33 kV Sub-station Building,
Hudson Lane, Kingsway Camp,
North Delhi - 110009
14. Chandigarh Administration,
Sector -9, Chandigarh
15. Uttarakhand Power Corporation Ltd.,
Urja Bhawan,
Kanwali Road,
Dehradun.



16. North Central Railway,
Allahabad.
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002

...Respondents

For Petitioner : Shri S.S. Raju, PGCIL
Shri Ved Prakash Rastogi, PGCIL

For Respondents : None

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the Petitioner”), a deemed transmission licensee, for truing up of the tariff for the period from 1.4.2014 to 31.3.2019 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 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 400 kV S/C Chamera-1 Kishenpur Transmission Line under Chamera Hydroelectric Project Transmission System in Northern Region (hereinafter referred to as “the transmission asset”).

2. The Petitioner has made the following prayers in the instant 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 8 and 9 above.*
- 2) *Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without*



making any application before the Commission as provided in Tariff regulations 2014 and tariff regulation'19 as per para 9.0 & 10 above for respective block.

Further it is submitted that deferred tax liability before 01.04.2009 shall be recoverable from the beneficiaries or long-term customers /DIC as the case may be, as and when the same is materialized as per regulation 49 of 2014 and regulation 67 of 2019 tariff regulation. The petitioner may be allowed to recover the deferred tax liability materialized directly without making any application before the commission as provided in the regulation

- 3) *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.*
- 4) *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.*
- 5) *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 9.5 above.*
- 6) *Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
- 7) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice”

Background

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

- a) The Ministry of Power, Government of India accorded its approval for setting up of the transmission asset vide its letter dated 10.6.1993 at a total cost of ₹6355.00 lakh including IDC of ₹12.00 lakh. Subsequently, the Ministry of Power vide its letter dated 4.9.1998 approved the Revised Cost Estimates for the transmission asset at an amount of ₹8453.00 lakh including IDC of ₹1361.00 lakh.



b) The transmission tariff in respect of the transmission asset from COD to 31.3.2001 was notified by the Ministry of Power vide notifications dated 16.11.1998 and 7.5.1999. The transmission tariff for the transmission asset from 1.4.2001 to 31.3.2004 was determined by the Commission vide order dated 31.7.2003 in Petition No. 39/2002; tariff for the period from 1.4.2004 to 31.3.2009 was determined vide order dated 6.9.2005 in Petition No. 99/2004; tariff for the period from 1.4.2009 to 31.3.2014 was determined vide order dated 13.1.2011 in Petition No. 122/2009; and the transmission tariff for the period from 1.4.2009 to 31.3.2014 was trued up and tariff for the period from 1.4.2014 to 31.3.2019 was determined vide order dated 15.2.2016 in Petition No. 147/TT/2014.

c) The trued-up tariff claimed by the Petitioner in the instant petition along with details of the tariff approved by the Commission in respect of the transmission asset vide order dated 15.2.2016 in Petition No. 147/TT/2014 are as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 15.2.2016 in Petition No. 147/TT/2014	1343.46	1349.17	1355.02	1361.01	1367.25
As claimed by the Petitioner in the instant petition	1344.20	1354.36	1359.71	1365.72	1374.56

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

5. The Petitioner has served the petition on the Respondents. Public notice regarding filing of this petition has also 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 notices published in the newspapers by the Petitioner. Uttar Pradesh Power



Corporation Ltd. (UPPCL), Respondent No. 9, has filed its reply vide affidavit dated 19.10.2019 and has raised issues of Return on Equity (RoE), Interest on Loan (IoL) and O&M Expenses claimed by the Petitioner. The Petitioner has filed a rejoinder to the reply of UPPCL vide affidavit dated 20.8.2020.

6. This order is issued after considering the submissions made by the Petitioner in the petition dated 27.8.2019 and vide affidavits dated 23.7.2020 and 11.9.2020, reply of UPPCL vide affidavit dated 19.10.2019 and Petitioner's rejoinder vide affidavit dated 20.8.2020 to reply of UPCCCL.

7. The hearing in this matter was held on 24.8.2020 through video conference and the order was reserved.

8. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.

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

9. The details of the trued-up transmission charges claimed by the Petitioner in respect of the transmission asset are as under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	199.12	199.12	199.12	199.13	199.12
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	948.67	953.02	952.54	952.54	955.10
Interest on Working Capital	35.32	35.72	36.01	36.33	36.71
O&M expenses	161.09	166.50	172.04	177.72	183.63
Total	1344.20	1354.36	1359.71	1365.72	1374.56

10. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner in respect of the instant transmission asset are as under:



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	13.42	13.88	14.34	14.81	15.30
Maintenance Spares	24.16	24.98	25.81	26.66	27.54
Receivables	224.03	225.73	226.62	227.62	229.09
Total	261.61	264.59	266.77	269.09	271.93
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	35.32	35.72	36.01	36.33	36.71

Capital Cost for the 2014-19 tariff period

11. The capital cost of the instant transmission asset has been calculated in accordance with the Regulations 9(3) of the 2014 Tariff Regulations. The Commission vide order dated 15.2.2016 in Petition No. 147/TT/2014 approved the transmission tariff of the transmission asset for the 2014-19 period based on the admitted capital cost of ₹8271 lakh as on 31.3.2014. The Petitioner has not claimed any ACE during the 2014-19 tariff period. Accordingly, the capital cost of ₹8271 lakh has been considered for the purpose of truing up of the tariff of the 2014-19 tariff period.

Debt-Equity Ratio

12. The debt-equity ratio has been allowed in accordance with Regulation 19(3) of the 2014 Tariff Regulations. As per Regulation 19(3) of the 2014 Tariff Regulations, the debt-equity ratio allowed by the Commission for determination of tariff for the period ending on 31.3.2014 has been considered. Accordingly, the debt-equity ratio of 41.55:58.45 for the period ending on 31.3.2014, considered for the purpose of determination of tariff of the 2014-19 tariff period has been considered for the purpose of truing up of the tariff of the transmission asset for the 2014-19 tariff period. The details of the debt-equity ratio as on 1.4.2014 and 31.3.2019 of the instant transmission asset are as follows:



Particulars	As on 1.4.2014		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	3437.00	41.55	3437.00	41.55
Equity	4834.00	58.45	4834.00	58.45
Total	8271.00	100.00	8271.00	100.00

Interest on Loan (IoL)

13. UPPCL in its reply has submitted that tariff must be calculated at normative debt-equity ratio and normative debt of ₹5789.70 lakh (70% of the capital cost) should be considered. UPPCL has further submitted that the Petitioner should work out IoL corresponding to the 2014-19 period on the basis of prevailing rates of interest. In response, the Petitioner has submitted that debt-equity ratio of 41.55:58.45 was allowed by the Commission vide order dated 15.2.2016 in Petition No. 147/TT/2014. We have considered the submissions of UPPCL and the Petitioner. In the present petition, as the loan has already been repaid prior to 31.3.2014, the Petitioner has not claimed any IoL.

Return on Equity (RoE)

14. The Petitioner has claimed RoE for 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 MAT rates and has claimed the following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax (in %)	Grossed up RoE (Base Rate/1-t) (in %)
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

15. UPPCL has submitted that the Petitioner has claimed tariff by taking debt-equity ratio as 41.55:58.45. UPPCL has submitted that Respondents in Petition



No. 39/2002 pointed out that accepting the debt-equity ratio as claimed by the Petitioner will result in higher RoE. UPPCL has further submitted that normative equity is ₹2481.30 lakh whereas the Petitioner has considered equity @58.45% and has claimed RoE of ₹4834.40 lakh. UPPCL has placed reliance on the judgment of APTEL dated 13.6.2007 in Appeal Nos. 139 of 2006 and batch to contend that the outstanding loan should be calculated on normative basis. UPPCL has also submitted that the Petitioner has grossed up RoE on the basis of actual taxes paid during 2016-17, 2017-18 and 2018-19 but the Income Tax authorities have not issued assessment orders. Hence, they cannot be taken as authentic. In response, the Petitioner has submitted that debt-equity ratio for the transmission asset is 41.55:58.45 as allowed by the Commission vide order dated 15.2.2016 in Petition No. 147/TT/2014. The Petitioner has further submitted that the effective rates of tax considered for 2014-15, 2015-16 and 2016-17 for the purpose of grossing up of RoE rate are based on assessment orders issued by the Income Tax authorities and the effective rate of tax considered for 2017-18 and 2018-19 are based on the income tax returns filed for the purpose of grossing up of RoE rates of the respective years.

16. We have considered the submissions of the Petitioner and UPPCL. UPPCL has contended that the outstanding loan should be calculated on normative basis as per the judgment of APTEL dated 13.6.2007 in Appeal Nos. 139 of 2006 and batch. As per Regulation 19(3) of the 2014 Tariff Regulations, in case of transmission systems put into commercial operation prior to 1.4.2014, the debt equity ratio considered by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered. Accordingly, the debt equity ratio of 41.55:58.45 considered by the Commission in order dated 15.2.2016 in Petition



No. 147/TT/2014 as on 1.4.2014 and considered for the 2014-19 tariff period is considered in this order.

17. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates for the Petitioner. The relevant portion of the order dated 27.4.2020 is as under:

“26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. 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 transmission customers/ DICs as the case may be on year to year basis.

27. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up of rate of return on equity:

Year	Notified MAT rates (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

”

18. The MAT rates considered in the above order dated 27.4.2020 are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. The same are as under:



Year	Notified MAT rates (inclusive of surcharge & cess) (%)	Base rate of RoE (%)	Grossed up RoE (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

19. Accordingly, RoE allowed for the transmission asset is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	4834.00	4834.00	4834.00	4834.00	4834.00
Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	4834.00	4834.00	4834.00	4834.00	4834.00
Average Equity	4834.00	4834.00	4834.00	4834.00	4834.00
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax)	947.95	952.54	952.54	952.54	955.10

20. Accordingly, RoE approved vide order dated 15.2.2016 in Petition No. 147/TT/2014, claimed by the Petitioner in the instant petition and trued up in this order in respect of the transmission asset is shown in the table below:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 15.2.2016 in Petition No. 147/TT/2014	947.95	947.95	947.95	947.95	947.95
As claimed by the Petitioner in the instant petition	948.67	953.02	952.54	952.54	955.10
Allowed after true-up in this order	947.95	952.54	952.54	952.54	955.10

Depreciation

21. The depreciation has been worked out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. As the entire loan for the transmission asset has already been repaid during the financial year 2001-02, the depreciation has been worked out by spreading the depreciable value over the remaining useful life of the asset from the immediate next year i.e. 2002-03.



Accordingly, the depreciation for the entire 2014-19 tariff period has been allowed by spreading the remaining depreciable value as on 1.4.2014 over its balance useful life.

22. The trued-up depreciation allowed for the instant transmission asset is as under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	8271.00	8271.00	8271.00	8271.00	8271.00
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	8271.00	8271.00	8271.00	8271.00	8271.00
Average Gross Block	8271.00	8271.00	8271.00	8271.00	8271.00
Weighted Average rate of Depreciation (WAROD) (%)	1.40	1.40	1.40	1.40	1.40
Balance useful life of the asset at the beginning of year	15	14	13	12	11
Elapsed life at the beginning of the year	16.00	17.00	18.00	19.00	20.00
Aggregated Depreciable Value	7443.90	7443.90	7443.90	7443.90	7443.90
Depreciation during the year	115.58	115.58	115.58	115.58	115.58
Aggregate Cumulative Depreciation	4572.67	4688.26	4803.84	4919.43	5035.01
Remaining Aggregate Depreciable Value at the end of the year	2871.23	2755.64	2640.06	2524.47	2408.89

23. Accordingly, the depreciation approved vide order dated 15.2.2016 in Petition No. 147/TT/2014, claimed by the Petitioner in the instant petition and trued up in this order in respect of the transmission asset is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 15.2.2016 in Petition No. 147/TT/2014	199.12	199.12	199.12	199.12	199.12
As claimed by the Petitioner in the instant petition	199.12	199.12	199.12	199.13	199.12
Allowed after true-up in this order	115.58	115.58	115.58	115.58	115.58



Operation & Maintenance Expenses (O&M Expenses)

24. UPPCL has submitted that the Petitioner is claiming higher O&M Expenses and it should be allowed as per the tariff regulations. In response, the Petitioner has submitted that O&M Expenses are claimed as per the 2014 Tariff Regulations.

25. We have considered the submissions of Petitioner and UPPCL. O&M Expenses are allowed strictly in accordance with Regulation 29(3) of the 2014 Tariff Regulations. The details of the O&M Expenses claimed by the Petitioner and allowed for the instant transmission asset are as under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station Bays					
Bay of Chamera-I Kishenpur TL	2	2	2	2	2
Norm (₹ lakh/bay)					
220 kV Sub-station Bays (AIS)	60.30	62.30	64.37	66.51	68.71
Total Sub-station O&M Expenses	120.60	124.60	128.74	133.02	137.42
Transmission Lines (Line length in km)					
400 kV S/C Chamera-I Kishenpur TL	100.23	100.23	100.23	100.23	100.23
Norm (₹ lakh/km)					
S/C Twin Conductor	0.40	0.42	0.43	0.45	0.46
Total Transmission Line O&M Expenses	40.49	41.90	43.30	44.70	46.21
Total O&M Expenses	161.09	166.50	172.04	177.72	183.63

26. Accordingly, the O&M Expenses approved vide order dated 15.2.2016 in Petition No. 147/TT/2014, claimed by the Petitioner in the instant petition and trued up in this order in respect of the transmission asset is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 15.2.2016 in Petition No. 147/TT/2014	161.09	166.50	172.04	177.72	183.63
As claimed by the Petitioner in the instant petition	161.09	166.50	172.04	177.72	183.63
Allowed after true-up in this order	161.09	166.50	172.04	177.72	183.63



Interest on Working Capital (“IWC”)

27. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations. The components of the working capital and the Petitioner’s entitlement to interest thereon are discussed hereunder:-

i. Maintenance spares:

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses.

ii. O & M Expenses:

O&M Expenses have been considered for one month of the allowed O&M Expenses.

iii. Receivables:

The receivables have been worked out on the basis of 2 months of annual transmission charges as worked out above.

iv. Rate of interest on working capital:

Rate of interest on working capital is considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

28. The Interest on Working Capital allowed for the transmission asset is as under:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	13.42	13.87	14.34	14.81	15.30
Maintenance Spares	24.16	24.97	25.81	26.66	27.54
Receivables	209.67	211.40	212.38	213.38	214.85
Total	247.26	250.25	252.52	254.84	257.70
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	33.38	33.78	34.09	34.40	34.79

29. Accordingly, IWC approved vide order dated 15.2.2016 in Petition No. 147/TT/2014, claimed by the Petitioner in the instant petition and tried up in this order in respect of the transmission asset are as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 15.2.2016 in Petition No. 147/TT/2014	35.30	35.60	35.91	36.22	36.55
As claimed by the Petitioner in the instant petition	35.32	35.72	36.01	36.33	36.71
Allowed after true-up in this order	33.38	33.78	34.09	34.40	34.79

Approved Annual Fixed Charges for the 2014-19 Tariff Period

30. The annual fixed charges allowed for the transmission asset after truing up for the 2014-19 tariff period are as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	115.58	115.58	115.58	115.58	115.58
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	947.95	952.54	952.54	952.54	955.10
Interest on Working Capital	33.38	33.78	34.09	34.40	34.79
O & M Expenses	161.09	166.50	172.04	177.72	183.63
Total	1258.00	1268.40	1274.25	1280.25	1289.10

31. Accordingly, annual transmission charges approved vide order dated 15.2.2016 in Petition No. 147/TT/2014, claimed by the Petitioner in the instant petition and trued up in this order in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 15.2.2016 in Petition No. 147/TT/2014	1343.46	1349.17	1355.02	1361.01	1367.25
As claimed by the Petitioner in the instant petition	1344.20	1354.36	1359.71	1365.72	1374.56
Allowed after true-up in this order	1258.00	1268.40	1274.25	1280.25	1289.10

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

32. The Petitioner has claimed the following transmission charges for the transmission asset for the 2019-24 tariff period:



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	199.13	199.11	199.13	199.11	199.13
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	955.10	955.10	955.10	955.10	955.10
Interest on Working Capital	22.36	22.59	22.77	22.96	23.10
Operation and Maintenance	114.72	118.78	122.92	127.25	131.75
Total	1291.31	1295.58	1299.92	1304.42	1309.08

33. The Petitioner has claimed the following IWC for the transmission asset for the 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	9.56	9.90	10.24	10.60	10.98
Maintenance Spares	17.21	17.82	18.44	19.09	19.76
Receivables	158.77	159.73	160.26	160.82	160.95
Total	185.54	187.45	188.94	190.51	191.69
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	22.36	22.59	22.77	22.96	23.10

Capital Cost as on 1.4.2019

34. Regulation 19 of the 2019 Tariff Regulations provides as under:

“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 up to the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;

(k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;

(l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;

(m) Expenditure on account of 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 renovation and modernisation as admitted by this Commission in accordance with these regulations;

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

(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto 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 de-capitalised 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.”

35. The capital cost of ₹8271 lakh has been considered by the Commission for the transmission asset as on 31.3.2019. The Petitioner has not claimed any ACE during the 2019-24 period. Therefore, the capital cost of ₹8271 lakh as on 31.3.2019 has been considered for the purpose of determination of transmission tariff for the 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations.

Debt-Equity Ratio

36. Regulation 18 of the 2019 Tariff Regulations provides as under:-

“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.”

37. The debt-equity ratio for the 2019-24 tariff period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The details of the debt-equity ratio considered in respect of the instant transmission asset for the purpose of computation of tariff for the 2019-24 tariff period are as follows:

Particulars	As on 1.4.2019		As on 31.3.2024	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	3437.00	41.55	3437.00	41.55
Equity	4834.00	58.45	4834.00	58.45



Total	8271.00	100.00	8271.00	100.00
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Return on Equity (RoE)

38. Regulations 30 and 31 of the 2019 Tariff Regulations provide as under:

“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 project including communication project 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 project;

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 project 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 project up to load dispatch centre or protection project 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:

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

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 trueing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”

39. UPPCL has submitted that the debt-equity ratio should be as per the judgment of Appellate Tribunal for Electricity. UPPCL has further submitted that



the Petitioner has considered equity @58.45% and has also submitted the following table comparing RoE claimed by the Petitioner and the normative RoE:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
RoE as per the Petitioner	955.10	955.10	955.10	955.10	955.10
RoE based on normative debt-equity ratio	490.25	490.25	490.25	490.25	490.25
Difference	464.85	464.85	464.85	464.85	464.85
Total	2324.25				

40. UPPCL has submitted that the figures shown in the table above are based on gross rate of RoE as per the MAT rates of 2018-19 and the same have not yet been approved by Income Tax Authorities. UPPCL has submitted that RoE based on gross rate of RoE approved by the Income Tax Authorities should be furnished by the Petitioner.

41. We have considered the submissions of the Petitioner and UPPCL. As regards UPPCL's contention that the Petitioner has claimed equity @54.85%, Regulation 18(3) of the 2019 Tariff Regulations provides for continuation of the rate of equity allowed by the Commission for the period ending on 31.3.2019. In the instant case, equity was approved @54.85% as on 31.3.2019. Accordingly, as provided under Regulation 18(3) of the 2019 Tariff Regulations, equity has been considered @54.85% for the 2019-24 tariff period. As regards UPPCL's contention on MAT rate, the MAT rate applicable during 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. Accordingly, RoE allowed for the transmission asset is as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	4834.00	4834.00	4834.00	4834.00	4834.00
Addition due to ACE	0.00	0.00	0.00	0.00	0.00



Closing Equity	4834.00	4834.00	4834.00	4834.00	4834.00
Average Equity	4834.00	4834.00	4834.00	4834.00	4834.00
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax) (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	907.92	907.92	907.92	907.92	907.92

Interest on Loan (IoL)

42. As stated above, the loan availed in case of the instant transmission asset has already been repaid prior to 31.3.2014. Therefore, the Petitioner has not claimed any IoL.

Depreciation

43. Regulation 33 of the 2019 Tariff Regulations provides as under:

"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 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.”

44. The depreciation has been worked out as per the methodology provided in Regulation 33 of the 2019 Tariff Regulations. As the entire loan for the transmission lines covered in the present petition has already been repaid during the financial year 2001-02, the depreciation has been worked out by spreading the depreciable value over the remaining useful life of the asset from the



immediate next year i.e. 2002-03. Accordingly, the depreciation for entire 2019-24 has been allowed by spreading the remaining depreciable value as on 1.4.2019 over its balance useful life.

45. The depreciation allowed for the instant transmission asset is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Opening Gross Block	8271.00	8271.00	8271.00	8271.00	8271.00
Addition during 2019-24 due to Projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	8271.00	8271.00	8271.00	8271.00	8271.00
Average Gross Block	8271.00	8271.00	8271.00	8271.00	8271.00
Weighted Average Rate of Depreciation (WAROD) (%)	1.40	1.40	1.40	1.40	1.40
Balance useful life of the asset	10	9	8	7	6
Elapsed Life at the beginning of the year	21.00	22.00	23.00	24.00	25.00
Aggregate Depreciable Value	7443.90	7443.90	7443.90	7443.90	7443.90
Depreciation during the year	115.58	115.58	115.58	115.58	115.58
Cumulative Depreciation up to previous year	5035.01	5150.59	5266.18	5381.76	5497.35
Aggregate Cumulative Depreciation	5150.59	5266.18	5381.76	5497.35	5612.93
Remaining Depreciable Value	2293.31	2177.72	2062.14	1946.55	1830.97

Operation & Maintenance Expenses (O&M Expenses)

46. Regulations 35(3) and (4) of the 2019 Tariff Regulations provide as under:

“35 (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
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
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
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
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
<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011



<i>Single Circuit (Bundled conductor with four sub-conductors)</i>	0.755	0.781	0.809	0.837	0.867
<i>Single Circuit (Twin & Triple Conductor)</i>	0.503	0.521	0.539	0.558	0.578
<i>Single Circuit (Single Conductor)</i>	0.252	0.260	0.270	0.279	0.289
<i>Double Circuit (Bundled conductor with four or more sub-conductors)</i>	1.322	1.368	1.416	1.466	1.517
<i>Double Circuit (Twin & Triple Conductor)</i>	0.881	0.912	0.944	0.977	1.011
<i>Double Circuit (Single Conductor)</i>	0.377	0.391	0.404	0.419	0.433
<i>Multi Circuit (Bundled Conductor with four or more sub-conductor)</i>	2.319	2.401	2.485	2.572	2.662
<i>Multi Circuit (Twin & Triple Conductor)</i>	1.544	1.598	1.654	1.713	1.773
<i>Norms for HVDC stations</i>					
<i>HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)</i>	834	864	894	925	958
<i>Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)</i>	1,666	1,725	1,785	1,848	1,913
<i>500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)</i>	2,252	2,331	2,413	2,498	2,586
<i>±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)</i>	2,468	2,555	2,645	2,738	2,834
<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)</i>	2,563	2,653	2,746	2,842	2,942



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.

(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”



47. The total O&M Expenses claimed by the Petitioner are as follows:

(₹ in lakh)				
2019-20	2020-21	2021-22	2022-23	2023-24
114.72	118.78	122.92	127.25	131.75

48. We have considered the submissions of the Petitioner. The O&M Expenses worked out as per the norms and the total allowable O&M Expenses for the instant transmission asset are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station Bays					
Bay of Chamera-I Kishenpur TL	2	2	2	2	2
Norm (₹ lakh/bay)					
220 kV Sub-station Bays (AIS)	32.15	33.28	34.45	35.66	36.91
Total Sub-station O&M Expenses	64.30	66.56	68.90	71.32	73.82
Transmission Lines (Line length in km)					
400 kV S/C Chamera-I Kishenpur TL	100.23	100.23	100.23	100.23	100.23
Norm (₹ lakh/km)					
S/C Twin Conductor	0.50	0.52	0.54	0.56	0.58
Total Transmission Line O&M Expenses	50.42	52.22	54.02	55.93	57.93
Total O&M Expenses	114.72	118.78	122.92	127.25	131.75

Interest on Working Capital (IWC)

49. 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 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. Definition.....

(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;”

50. The Petitioner has submitted that it has computed IWC for the 2019-24 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 of 8.55% plus 350 basis points) for 2019-20 and 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-24. The components of the working capital and interest allowed thereon are as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	9.56	9.90	10.24	10.60	10.98
Maintenance Spares	17.21	17.82	18.44	19.09	19.76
Receivables	142.45	143.20	143.73	144.29	144.46
Total Working Capital	169.22	170.92	172.41	173.98	175.21
Rate of Interest (%)	12.05%	11.25%	11.25%	11.25%	11.25%
Interest on working capital	20.39	19.23	19.40	19.57	19.71



Annual Fixed Charges for the 2019-24 Tariff Period

51. The various components of the annual fixed charges for the instant transmission asset for the 2019-24 tariff period are summarized below:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	115.58	115.58	115.58	115.58	115.58
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	907.92	907.92	907.92	907.92	907.92
Interest on Working Capital	20.39	19.23	19.40	19.57	19.71
Operation and Maintenance	114.72	118.78	122.92	127.25	131.75
Total	1158.61	1161.51	1165.83	1170.33	1174.97

Filing Fee and Publication Expenses

52. 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.

Licence Fee and RLDC Fees and Charges

53. The Petitioner has claimed licence fee and RLDC fees and charges. UPPCL has submitted that the onus of the license fee rests with the Petitioner. In response, the Petitioner has submitted that fees and charges are recoverable from the Respondents in terms of the provisions of Regulation 70(3) of the 2019 Tariff Regulations.

54. We have considered the submissions of Petitioner and UPPCL. 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

55. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if at any time GST on transmission is withdrawn from negative list in future. The Petitioner has submitted that any taxes including GST, duties, cess etc. imposed by statutory/ Government/ Municipal Authorities shall be allowed to be recovered from the beneficiaries. We have considered the submission of the Petitioner. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is premature.

Security Expenses

56. The Petitioner has submitted that security expenses for the instant transmission asset have not been claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as



per the audited accounts may be allowed to be recovered from the beneficiaries on yearly basis.

57. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. It is observed that the Commission observes that the Petitioner has already filed the Petition No.260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

Capital Spares

58. The Petitioner has sought reimbursement of capital spares at the end of the 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

59. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

60. To summarise, the trued-up Annual Fixed Charges allowed for the instant transmission asset for the 2014-19 tariff period are as under:



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	1258.00	1268.40	1274.25	1280.25	1289.10

The Annual Fixed Charges allowed for the 2019-24 tariff period in this order are as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	1158.61	1161.51	1165.83	1170.33	1174.97

61. This order disposes of Petition No. 314/TT/2019.

Sd/
(Arun Goyal)
Member

Sd/
(I. S. Jha)
Member

Sd/
(P. K. Pujari)
Chairperson



Annexure-I

2014-19 Capital Expenditure as on 1.4.2014	Admitted capital cost as on 1.4.2014 (₹ in lakh)	Admitted capital cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
				2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Land	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00
Building	84.33	84.33	3.34	2.19	2.19	2.19	2.19	2.19
Transmission Line	5181.16	5181.16	5.28	71.65	71.65	71.65	71.65	71.65
Sub-station	2990.00	2990.00	5.28	41.35	41.35	41.35	41.35	41.35
PLCC	0.00	0.00	6.33	0.00	0.00	0.00	0.00	0.00
Leasehold Land	15.51	15.51	3.34	0.40	0.40	0.40	0.40	0.40
IT Equipment and software	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00
TOTAL	8271.00	8271.00		115.58	115.58	115.58	115.58	115.58
		Average Gross Block (₹ in lakh)		8271.00	8271.00	8271.00	8271.00	8271.00
		Weighted Average Rate of Depreciation (%)		1.40	1.40	1.40	1.40	1.40



Annexure-II

2019-24 Capital Expenditure as on 1.4.2019	Admitted capital cost as on 1.4.2019 (₹ in lakh)	Admitted capital cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
				2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Land	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00
Building	84.33	84.33	3.34	2.19	2.19	2.19	2.19	2.19
Transmission Line	5181.16	5181.16	5.28	71.65	71.65	71.65	71.65	71.65
Sub-station	2990.00	2990.00	5.28	41.35	41.35	41.35	41.35	41.35
PLCC	0.00	0.00	6.33	0.00	0.00	0.00	0.00	0.00
Leasehold Land	15.51	15.51	3.34	0.40	0.40	0.40	0.40	0.40
IT Equipment and software	0.00	0.00	15	0.00	0.00	0.00	0.00	0.00
TOTAL	8271.00	8271.00		115.58	115.58	115.58	115.58	115.58
		Average Gross Block (₹ in lakh)		8271.00	8271.00	8271.00	8271.00	8271.00
		Weighted Average Rate of Depreciation (%)		1.40	1.40	1.40	1.40	1.40

