

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 716/TT/2020

Coram:

**Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri Pravas Kumar Singh, Member**

Date of order: 18.09.2021

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, 2019 for the **Combined Asset** comprising of **Asset-A:** 400 kV D/C Kishenpur-Samba Transmission Line along with bays at both ends, 01 number 315 MVA, 400/220 kV ICT-I along with associated bays at Samba and 03 numbers 220 kV line bays; and **Combined Asset-B** consisting of **Asset-B1:** 400/220 kV, 315 MVA ICT-II at Samba Sub-station along with associated bays and three numbers 220 kV line bays and **Asset-B2:** 01 number 400 kV, 80 MVAR Bus Reactor at Samba Sub-station along with associated bays under the Transmission System associated with Northern Region Strengthening Scheme-XXII in Northern Region.

And in the matter of:

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

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg, Jaipur-302005 (Rajasthan).
2. Ajmer Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
3. Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).



4. Jodhpur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004 (Himachal Pradesh).
6. Punjab State Electricity Board,
Thermal Shed Tia, Near 22 Phatak, Patiala-147001 (Punjab).
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula-134109 (Haryana).
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001 (Uttar Pradesh).
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002.
11. BSES Yamuna Power Limited,
B-Block, Shakti Kiran Bldg. (Near Karkardooma Courts),
Karkardooma 2nd Floor, New Delhi-110092.
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi-110019.
13. North Delhi Power Limited,
Cennet Building, Adjacent to 66/11 kV Pitampura-3,
Grid Building, Near PP Jewellers,
Pitampura, New Delhi-110034.
14. Chandigarh Administration,
Sector-9, Chandigarh.
15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun (Uttarakhand).



16. North Central Railway,
Allahabad (Uttar Pradesh).

17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.

.....Respondent(s)

For Petitioner : Shri S.S. Raju, PGCIL
Shri D. K. Biswal, PGCIL
Shri V. P. Rastogi, PGCIL
Shri Amit Yadav, PGCIL

For Respondents : None

ORDER

The Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for truing-up of transmission 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 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 the following transmission assets forming part of the **Combined Asset** under the Transmission System associated with Northern Region Strengthening Scheme-XXII in Northern Region (hereinafter referred to as “the transmission system”):

Asset-A: 400 kV D/C Kishenpur-Samba Transmission Line along with bays at both ends, 01 number 315 MVA, 400/220 kV ICT-I along with associated bays at Samba and 03 numbers 220 kV line bays; and

Combined Asset B consisting of:

Asset B1: 400/220 kV, 315 MVA ICT-II at Samba Sub-station along with associated bays and three numbers 220 kV line bays; and

Asset-B2: 01 number 400 kV, 80 MVAR Bus Reactor at Samba Sub-station along with associated bays.



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 7.1 and 9.2 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 Hon'ble Commission as provided in Tariff Regulation, 2014 and Tariff Regulations, 2019 as per para 7.1 and 9.2 above for respective block.*
- 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 beneficiaries in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 5) 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 beneficiaries.*
- 6) 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 9.8 above.*
- 7) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
- 8) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the beneficiaries, 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”

3. **Backdrop of the case**

a. The administrative approval and expenditure sanction of the transmission system was accorded by the Board of Directors (BOD) of the Petitioner company vide Memorandum No. C/CP/NRSS-XXII dated 15.12.2010 at an estimated cost of ₹20978.00 lakh, including IDC of ₹1212.00 lakh (based on 2nd Quarter, 2010 price level). The Revised Cost Estimate (RCE) of the transmission system was accorded by BOD of the Petitioner Company on



18.1.2016 at an estimated cost of ₹18988.00 lakh, including IDC of ₹808.00 lakh (based on August 2015 price level).

b. The scope of works covered under the transmission system broadly includes:

i. **Transmission Line**

Kishenpur-Samba 400 kV D/C Line (with 2 x S/C portion near Kishenpur Sub-station end)

ii. **Sub-stations**

- New 2X315 MVA, 400/220 kV sub-station at Samba; and
- Extension of 400/220 kV Kishenpur Sub-station.

iii. **Reactive Compensation**

80 MVAR bus reactor at Samba Sub-station.

c. The complete scope of work as per the administrative approval dated 15.12.2010 of BOD of the Petitioner company is covered in the instant petition. The Date of Commercial Operation (COD) of the transmission assets under the transmission system was 1.4.2013.

d. The transmission tariff of Asset-B1 and Asset-B2 for the 2009-14 tariff period was determined by the Commission vide order dated 31.10.2014 in Petition No. 100/TT/2013. This was subsequently trued-up and tariff for the 2014-19 period was allowed vide order dated 23.2.2016 in Petition No. 73/TT/2015.

e. The transmission tariff of Asset-A for the 2009-14 tariff period was allowed vide order dated 9.10.2015 in Petition No. 35/TT/2013. The transmission tariff of Asset-A for the 2009-14 period was trued-up and tariff for the 2014-19 period was allowed vide order dated 6.7.2018 in Petition No. 60/TT/2018.

4. The Respondents are distribution licensees, power departments and transmission licensees, which are procuring transmission service from the Petitioner, mainly beneficiaries of Northern 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 said to be received from the general public in response to the aforesaid notices published in the newspapers. None of the Respondents have filed their reply in the matter.

6. The hearing in this matter was held on 9.7.2021 through video conference and the order was reserved.

7. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 7.1.2020 and Petitioner's affidavit dated 9.2.2021 filed in compliance of technical validation letter. Having heard the representatives of the Petitioner and after perusal of the materials on record, we proceed to dispose of the petition.

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

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

(₹ in lakh)

Particulars	Asset-A				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	667.98	690.47	716.28	727.78	728.41
Interest on Loan	813.90	780.30	745.05	686.65	620.95
Return on Equity	832.58	865.92	896.16	910.29	914.81
Interest on Working Capital	80.63	82.05	83.47	83.68	83.29
O&M Expenses	495.13	511.58	528.57	546.10	564.22
Total	2890.22	2930.32	2969.53	2954.50	2911.68

(₹ in lakh)

Particulars	Combined Asset-B				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	115.27	122.55	126.19	127.64	128.20
Interest on Loan	116.33	114.23	107.08	97.18	86.22
Return on Equity	120.81	129.51	133.52	135.15	136.14
Interest on Working Capital	24.10	24.95	25.51	25.92	26.29



O&M Expenses	289.44	299.04	308.98	319.22	329.82
Total	665.95	690.28	701.28	705.11	706.67

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

(₹ in lakh)

Particulars	Asset-A				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	41.26	42.63	44.05	45.51	47.02
Maintenance Spares	74.27	76.74	79.29	81.92	84.63
Receivables	481.70	488.39	494.92	492.42	485.28
Total Working Capital	597.23	607.76	618.26	619.85	616.93
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	80.63	82.05	83.47	83.68	83.29

(₹ in lakh)

Particulars	Combined Asset-B				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	24.12	24.92	25.75	26.60	27.49
Maintenance Spares	43.42	44.86	46.35	47.88	49.47
Receivables	110.99	115.05	116.88	117.52	117.78
Total Working Capital	178.53	184.83	188.98	192.00	194.74
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	24.10	24.95	25.51	25.92	26.29

Capital Cost

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

11. The Commission vide order dated 23.2.2016 and 6.7.2018 in Petition No. 73/TT/2015 and Petition No. 60/TT/2018 respectively allowed the capital cost and Additional Capital Expenditure (ACE) for the transmission assets as follows:

(₹ in lakh)

Asset	Capital Cost (as on 31.3.2014)	ACE				
		2014- 2015	2015- 2016	2016- 2017	2017-2018	2018-2019
Asset-A	13942.68	397.53	600.70	437.53	135.30	0.00
Combined Asset-B	1966.54	316.27	210.85	0.00	0.00	0.00



12. The details of capital cost and ACE incurred up to 31.3.2019 as claimed by the Petitioner in the instant true-up petition for the transmission assets are as follows:

(₹ in lakh)

Asset	Capital cost (as on 31.3.2014)	ACE					Capital cost (as on 31.3.2019)
		2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-A	13942.68	397.53	600.70	437.53	40.26	29.86	15448.56

(₹ in lakh)

Asset	Capital Cost (as on 31.3.2014)	ACE					Capital Cost (as on 31.3.2019)
		2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-B1	1395.36	81.91	82.69	23.75	10.68	0.00	1594.39
Asset-B2	571.18	89.20	21.73	9.81	10.68	0.00	702.60
Combined Asset-B	1966.54	171.11	104.42	33.56	21.36	0.00	2296.99

13. The capital cost of ₹13942.68 lakh for Asset-A as on 31.3.2014 and ₹1966.54 lakh for Combined Asset-B as on 31.3.2014 as approved vide orders dated 6.7.2018 and 23.2.2016 in Petition No. 60/TT/2018 and Petition No. 73/TT/2015 respectively have been considered as capital cost as on 1.4.2014 for the respective transmission assets for true-up of transmission tariff for the 2014-19 tariff period.

Additional Capital Expenditure

14. The Commission had allowed ACE vide orders dated 23.2.2016 and 6.7.2018 in Petition No. 73/TT/2015 and Petition No. 60/TT/2018 respectively for the transmission assets as follows:

(₹ in lakh)

Asset	ACE allowed (2014-19)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-A	397.53	600.70	437.53	135.30	0.00
Combined Asset-B	316.27	210.85	0.00	0.00	0.00



15. The details of ACE claimed by the Petitioner in respect of the transmission assets are as follows:

Asset	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-A	397.53	600.70	437.53	40.26	29.86
Combined Asset-B	171.11	104.42	33.56	21.36	0.00

16. The Petitioner has submitted that COD of the transmission assets was 1.4.2013 and cut-off date comes out to 31.3.2016 and ACE claimed during 2014-15 and 2015-16 pertains to un-discharged liabilities recognized to be payable at a future date and works deferred for execution. The Petitioner has claimed ACE during 2014-15 and 2015-16 under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations, whereas, ACE claimed from 2016-17 onwards is beyond the cut-off date and has been claimed under Regulation 14(3)(v) of the 2014 Tariff Regulations.

17. The Petitioner has submitted the details of ACE claimed beyond the cut-off date as follows:

Asset-A			
Year	ACE (₹ in lakh)	Party Name	Package
2016-17	11.22	Land compensation	Land
	24.91	Misc. Petty Contractors	Civil & Building
	391.58	Siemens, GET&D India Ltd and other contractors	Sub-station
	9.82	GE T&D India Ltd	PLCC
2017-18	20.67	Land compensation	Land
	8.91	Misc. Petty Contractors	Civil & Building
	10.68	Misc. Petty Contractors	Sub-station
2018-19	17.52	Land compensation	Land
	12.34	Misc. Petty Contractors	Civil & Building

Asset-B1			
Year	ACE (₹ in lakh)	Party Name	Package
2016-17	23.75	GE T&D India Ltd	Sub-station
2017-18	10.68	Misc. Petty Contractors	Sub-station



Asset-B2			
Year	ACE (₹ in lakh)	Party Name	Package
2016-17	9.81	GE T&D India Ltd	Sub-station
2017-18	10.68	Misc. Petty Contractors	Sub-station

18. We have considered the submissions of the Petitioner. ACE claimed during 2014-15 and 2015-16 is within the cut-off date and pertains to un-discharged liabilities recognized to be payable at a future date and works deferred for execution. Hence, it is allowed under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations. ACE claimed for 2016-17, 2017-18 and 2018-19 is beyond the cut-off date and pertains to the balance and retention payments for works executed within the cut-off date. Hence, it is allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations. Accordingly, the capital cost of the transmission assets considered for the 2014-19 tariff period is as follows:

Asset	Capital Cost (as on 31.3.2014)	(₹ in lakh)					Capital Cost (as on 31.3.2019)
		2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-A	13942.68	397.53	600.70	437.53	40.26	29.86	15448.56
Combined Asset-B	1966.54	171.11	104.42	33.56	21.36	0.00	2296.99
Total	15909.22	568.64	705.12	471.09	61.62	29.86	17745.55

Debt-Equity Ratio

19. 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 transmission tariff for the period ending on 31.3.2014 shall be considered. Accordingly, the details of the debt-equity ratio as on 1.4.2014 and 31.3.2019 for the transmission assets are as follows:



Asset-A						
Funding	Capital Cost (as on 1.4.2014) (₹ in lakh)	(in %)	ACE 2014-19	(in %)	Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)
Debt	9759.88	70.00	1054.12	70.00	10814.00	70.00
Equity	4182.80	30.00	451.76	30.00	4634.56	30.00
Total	13942.68	100.00	1505.88	100.00	15448.56	100.00

Combined Asset-B						
Funding	Capital Cost (as on 1.4.2014) (₹ in lakh)	(in %)	ACE (2014-19)	(in %)	Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)
Debt	1376.62	70.00	231.32	70.00	1607.94	70.00
Equity	589.92	30.00	99.14	30.00	689.06	30.00
Total	1966.54	100.00	330.45	100.00	2296.99	100.00

Depreciation

20. The Petitioner's claim towards depreciation in this petition was found higher than the depreciation allowed for the transmission assets vide orders dated 23.2.2016 and 6.7.2018 in Petition No. 73/TT/2015 and Petition No. 60/TT/2018 respectively. The Petitioner has neither given any justification for claiming higher depreciation as allowed earlier nor made any specific prayer for allowing higher depreciation in this petition. Petitioner has claimed higher depreciation in several other true-up petitions compared to what was allowed while tariff was initially approved by the Commission. This issue has been considered and decided by the Commission vide order dated 9.5.2020 in Petition No. 19/TT/2020.

21. In terms of order dated 9.5.2020 in Petition No. 19/TT/2020, the depreciation has been considered for IT Equipment @5.28% as part of the sub-station up to 31.3.2019 while trueing up the capital expenditure for the 2014-19 period. However, for the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I



(Depreciation Schedule) of the 2019 Tariff Regulations. The Gross Block during the 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD) and working of WAROD is at Annexure-I. WAROD has been worked out after considering the depreciation rates of the transmission assets as specified in the 2014 Tariff Regulations and depreciation approved during the 2014-19 tariff period is as follows:

(₹ in lakh)

Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	13942.68	14340.21	14940.91	15378.44	15418.70
ACE	397.53	600.70	437.53	40.26	29.86
Closing Gross Block	14340.21	14940.91	15378.44	15418.70	15448.56
Average Gross Block	14141.45	14640.56	15159.68	15398.57	15433.63
Freehold land	1581.24	1581.24	1592.46	1613.13	1630.65
Weighted Average Rate of Depreciation (in %)	4.67	4.66	4.68	4.68	4.67
Aggregate Depreciable Value	11304.18	11753.39	12210.49	12406.90	12422.68
Balance useful life of the asset (Year)	30.00	29.00	28.00	27.00	26.00
Lapsed life (Year)	1.00	2.00	3.00	4.00	5.00
Combined Depreciation during the year	660.47	682.96	708.77	720.26	720.90
Cumulative depreciation at the end of the year	1302.91	1985.86	2694.63	3414.89	4135.79
Remaining Depreciable Value at the end of the year	10001.28	9767.52	9515.86	8992.01	8286.90

(₹ in lakh)

Combined Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	1966.54	2137.65	2242.07	2275.63	2296.99
ACE	171.11	104.42	33.56	21.36	0.00
Closing Gross Block	2137.65	2242.07	2275.63	2296.99	2296.99
Average Gross Block	2052.10	2189.86	2258.85	2286.31	2296.99
Freehold land	0.00	0.00	0.00	0.00	0.00



Weighted Average Rate of Depreciation (in %)	5.28	5.28	5.28	5.28	5.28
Aggregate Depreciable Value	1846.89	1970.87	2032.97	2057.68	2067.29
Balance useful life of the asset (Year)	23.00	22.00	21.00	20.00	19.00
Lapsed life (Year)	1.00	2.00	3.00	4.00	5.00
Combined Depreciation during the year	108.35	115.62	119.27	120.72	121.28
Cumulative depreciation at the end of the year	201.38	317.01	436.27	556.99	678.27
Remaining Depreciable Value at the end of the year	1645.50	1653.87	1596.69	1500.69	1389.02

22. The details of depreciation allowed vide orders dated 6.7.2018 and 23.2.2016 in Petition No. 60/TT/2018 and Petition No. 73/TT/2015 respectively, claimed by the Petitioner in the instant petition and true-up in the instant order are as follows:

(₹ in lakh)

Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 6.7.2018 in Petition No. 60/TT/2018	711.79	735.77	761.77	775.41	777.79
Claimed by the Petitioner in the instant petition	667.98	690.47	716.28	727.78	728.41
Approved after true-up in this order	660.47	682.96	708.77	720.26	720.90

(₹ in lakh)

Combined Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 23.2.2016 in Petition No. 73/TT/2015	112.18	126.10	131.67	131.67	131.67
Claimed by the Petitioner in the instant petition	115.27	122.55	126.19	127.64	128.20
Approved after true-up in this order	108.35	115.62	119.27	120.72	121.28

Interest on Loan (IoL)

23. The Petitioner has claimed the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. IoL has been calculated based on actual



interest rate submitted by the Petitioner in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed in respect of the transmission assets is as follows:

(₹ in lakh)

Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan					
Gross Normative Loan	9759.88	10038.15	10458.64	10764.91	10793.09
Cumulative Repayments up to Previous Year	642.44	1302.91	1985.86	2694.63	3414.89
Net Loan-Opening	9117.44	8735.25	8472.78	8070.28	7378.20
Additions	278.27	420.49	306.27	28.18	20.90
Repayment during the year	660.47	682.96	708.77	720.26	720.90
Net Loan-Closing	8735.25	8472.78	8070.28	7378.20	6678.21
Average Loan	8926.34	8604.01	8271.53	7724.24	7028.21
Weighted Average Rate of Interest on Loan (in %)	9.1218	9.0809	9.0279	8.9199	8.8779
Interest on Loan	814.24	781.32	746.75	689.00	623.96

(₹ in lakh)

Combined Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan					
Gross Normative Loan	1376.62	1496.40	1569.49	1592.98	1607.94
Cumulative Repayments up to Previous Year	93.03	201.38	317.01	436.27	556.99
Net Loan-Opening	1283.59	1295.02	1252.49	1156.71	1050.95
Additions	119.78	73.09	23.49	14.95	0.00
Repayment during the year	108.35	115.62	119.27	120.72	121.28
Net Loan-Closing	1295.02	1252.49	1156.71	1050.95	929.66
Average Loan	1289.30	1273.75	1204.60	1103.83	990.30
Weighted Average Rate of Interest on Loan (in %)	9.0472	9.0416	9.0187	9.0012	8.9894
Interest on Loan	116.65	115.17	108.64	99.36	89.02



24. The details of IoL allowed vide orders dated 6.7.2018 and 23.2.2016 in Petition No. 60/TT/2018 and Petition No. 73/TT/2015 respectively, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 6.7.2018 in Petition No. 60/TT/2018	811.90	777.39	741.05	688.46	621.55
Claimed by the Petitioner in the instant petition	813.90	780.30	745.05	686.65	620.95
Approved after true-up in this order	814.24	781.32	746.75	689.00	623.96

(₹ in lakh)

Combined Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 23.2.2016 in Petition No. 73/TT/2015	120.92	126.83	121.80	109.84	97.92
Claimed by the Petitioner in the instant petition	116.33	114.23	107.08	97.18	86.22
Approved after true-up in this order	116.65	115.17	108.64	99.36	89.02

Return on Equity (RoE)

25. The Petitioner has claimed RoE for the transmission assets 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 rate (in %)	Grossed-up RoE (in %) [Base Rate/(1-t)]
2014-15	21.018	19.625
2015-16	21.382	19.715
2016-17	21.338	19.705
2017-18	21.337	19.705
2018-19	21.549	19.758



26. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given as follows:

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

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

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Base rate of RoE (in %)	Grossed-up ROE [Base Rate/(1-t)] (in %)
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

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

(₹ in lakh)

Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	4182.80	4302.06	4482.27	4613.53	4625.61
Additions	119.26	180.21	131.26	12.08	8.96
Closing Equity	4302.06	4482.27	4613.53	4625.61	4634.56
Average Equity	4242.43	4392.16	4547.90	4619.57	4630.09



Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
Return on Equity	831.94	865.48	896.16	910.29	914.81

(₹ in lakh)

Combined Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	589.92	641.25	672.58	682.65	689.06
Additions	51.33	31.33	10.07	6.41	0.00
Closing Equity	641.25	672.58	682.65	689.06	689.06
Average Equity	615.59	656.92	677.61	685.85	689.06
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
Return on Equity	120.72	129.45	133.52	135.15	136.14

29. The details of RoE allowed vide orders dated 6.7.2018 and 23.2.2016 in Petition No. 60/TT/2018 and Petition No. 73/TT/2015 respectively, claimed by the Petitioner in the instant petition and true-up in the instant order are as follows:

(₹ in lakh)

Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 6.7.2018 in Petition No. 60/TT/2018	858.79	889.11	920.63	938.02	942.13
Claimed by the Petitioner in the instant petition	832.58	865.92	896.16	910.29	914.81
Approved after true-up in this order	831.94	865.48	896.16	910.29	914.81

(₹ in lakh)

Combined Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 23.2.2016 in Petition No. 73/TT/2015	124.99	140.49	146.70	146.70	146.70
Claimed by the Petitioner in the instant petition	120.81	129.51	133.52	135.15	136.14
Approved after true-up in this order	120.72	129.45	133.52	135.15	136.14



Operation & Maintenance Expenses (O&M Expenses)

30. The total O&M Expenses claimed by the Petitioner for the transmission assets are as follows:

Asset-A					
	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station					
400 kV bays at: Kishanpur:Samba Bays at Kishenpur Sub-station (2 numbers) Samba:Kishenpur Bays at Samba Sub-station (2 numbers) Samba:Samba ICT-I 400 kV Bay (1 number)					
Number of bays	5	5	5	5	5
220 kV bays at: Samba:Samba ICT 220 kV Bay + 3 Bays					
Number of bays	4	4	4	4	4
Transmission lines					
Kishenpur-Samba					
D/C Twin/Triple Conductor (km)	35.070	35.070	35.070	35.070	35.070
Total O&M Expenses (₹ in lakh)	495.13	511.58	528.57	546.10	564.22

Combined Asset-B					
	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station					
400 kV bays at: Samba:Bus Reactor Bay (1 number) Samba:ICT-II Bay (1 number)					
Number of bays	2	2	2	2	2
220 kV bays at: Samba:Samba ICT-II 220 kV Bay + 3 Bays					
Number of bays	4	4	4	4	4
Total O&M Expenses (₹ in lakh)	289.44	299.04	308.98	319.22	329.82

31. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The norms specified in respect of the elements covered in the transmission assets are as follows:

Element	Norms for 2014-15	Norms for 2015-16	Norms for 2016-17	Norms for 2017-18	Norms for 2018-19
D/C (Twin/Triple Conductor) (₹ lakh/km)	1.062	1.097	1.133	1.171	1.210
220 kV sub-station	42.21	43.61	45.06	46.55	48.10



(₹ lakh/ bay)					
400 kV sub-station (₹ lakh/ bay)	60.30	62.30	64.37	66.51	68.71

32. The O&M Expenses are allowed for the transmission assets as per the norms specified in Regulation 29(3) of the 2014 Tariff Regulations and are as follows:

(₹ in lakh)

Asset-A					
Details	2014-15	2015-16	2016-17	2017-18	2018-19
4 Numbers of 220 kV Sub-station bays	168.84	174.44	180.24	186.20	192.40
5 Numbers of 400 kV Sub-station bays	301.50	311.50	321.85	332.55	343.55
35.070 km D/C (Twin/Triple Conductor) transmission line	24.79	25.64	26.48	27.35	28.27
Total	495.13	511.58	528.57	546.10	564.22

(₹ in lakh)

Combined Asset-B					
Details	2014-15	2015-16	2016-17	2017-18	2018-19
4 Numbers of 220 kV Sub-station bays	168.84	174.44	180.24	186.20	192.40
2 Numbers of 400 kV Sub-station bays	120.60	124.60	128.74	133.02	137.42
Total	289.44	299.04	308.98	319.22	329.82

33. The details of O&M Expenses allowed vide orders dated 6.7.2018 and 23.2.2016 in Petition No. 60/TT/2018 and Petition No. 73/TT/2015 respectively, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 6.7.2018 in Petition No. 60/TT/2018	495.13	511.58	528.57	546.10	564.22
Claimed by the Petitioner in the instant petition	495.13	511.58	528.57	546.10	564.22
Approved after true-up in this order	495.13	511.58	528.57	546.10	564.22

(₹ in lakh)

Combined Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated	289.44	299.04	308.98	319.22	329.82



23.2.2016 in Petition No. 73/TT/2015					
Claimed by the Petitioner in the instant petition	289.44	299.04	308.98	319.22	329.82
Approved after true-up in this order	289.44	299.04	308.98	319.22	329.82

Interest on Working Capital

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

(₹ in lakh)

Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Working capital for O&M Expenses (O&M Expenses for one month)	41.26	42.63	44.05	45.51	47.02
Working capital for Maintenance Spares (15% of O&M Expenses)	74.27	76.74	79.29	81.92	84.63
Working capital for Receivables (Equivalent to two months of annual transmission charges)	480.37	487.20	493.93	491.53	484.51
Total Working Capital	595.90	606.57	617.26	618.96	616.16
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	80.45	81.89	83.33	83.56	83.18

(₹ in lakh)

Combined Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Working capital for O&M Expenses (O&M Expenses for one month)	24.12	24.92	25.75	26.60	27.49
Working capital for Maintenance Spares (15% of O&M Expenses)	43.42	44.86	46.35	47.88	49.47
Working capital for Receivables (Equivalent to two months of annual transmission charges)	109.85	114.01	115.97	116.71	117.08
Total Working Capital	177.39	183.79	188.06	191.19	194.03
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	23.95	24.81	25.39	25.81	26.19



35. The details of IWC allowed vide orders dated 6.7.2018 and 23.2.2016 in Petition No. 60/TT/2018 and Petition No. 73/TT/2015 respectively, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 6.7.2018 in Petition No. 60/TT/2018	82.19	83.56	84.98	85.45	85.06
Claimed by the Petitioner in the instant petition	80.63	82.05	83.47	83.68	83.29
Approved after true-up in this order	80.45	81.89	83.33	83.56	83.18

(₹ in lakh)

Combined Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 23.2.2016 in Petition No. 73/TT/2015	24.23	25.58	26.28	26.57	26.88
Claimed by the Petitioner in the instant petition	24.10	24.95	25.51	25.92	26.29
Approved after true-up in this order	23.95	24.81	25.39	25.81	26.19

Approved Annual Fixed Charges for the 2014-19 Tariff Period

36. The trued-up Annual Fixed Charges (AFC) approved for the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	660.47	682.96	708.77	720.26	720.90
Interest on Loan	814.24	781.32	746.75	689.00	623.96
Return on Equity	831.94	865.48	896.16	910.29	914.81
Interest on Working Capital	80.45	81.89	83.33	83.56	83.18
O&M Expenses	495.13	511.58	528.57	546.10	564.22
Total	2882.23	2923.22	2963.58	2949.21	2907.07

(₹ in lakh)

Combined Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	108.35	115.62	119.27	120.72	121.28
Interest on Loan	116.65	115.17	108.64	99.36	89.02



Return on Equity	120.72	129.45	133.52	135.15	136.14
Interest on Working Capital	23.95	24.81	25.39	25.81	26.19
O&M Expenses	289.44	299.04	308.98	319.22	329.82
Total	659.10	684.09	695.80	700.25	702.46

37. Accordingly, the Annual Transmission Charges allowed vide orders dated 6.7.2018 and 23.2.2016 in Petition No. 60/TT/2018 and Petition No. 73/TT/2015 respectively, claimed by the Petitioner in the instant petition and approved after true-up in the instant order is as follows:

(₹ in lakh)

Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 6.7.2018 in Petition No. 60/TT/2018	2959.80	2997.40	3037.00	3033.45	2990.76
Claimed by the Petitioner in the instant petition	2890.22	2930.32	2969.53	2954.50	2911.68
Approved after true-up in this order	2882.23	2923.22	2963.58	2949.21	2907.07

(₹ in lakh)

Combined Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 23.2.2016 in Petition No. 73/TT/2015	671.77	718.03	735.42	733.99	732.98
Claimed by the Petitioner in the instant petition	665.95	690.28	701.28	705.11	706.67
Approved after true-up in this order	659.10	684.09	695.80	700.25	702.46

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

38. The Petitioner has claimed the transmission charges for the 2019-24 tariff period for the Combined Asset as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	857.22	842.36	835.35	835.35	835.35
Interest on Loan	635.08	561.37	486.58	412.79	338.95
Return on Equity	1002.02	1004.16	1004.16	1004.16	1004.16
Interest on Working Capital	66.42	66.28	66.09	66.08	65.94
O&M Expenses	663.43	686.94	711.00	736.16	761.35
Total	3224.17	3161.11	3103.18	3054.54	3005.75



39. The details of IWC claimed by the Petitioner for the 2019-24 period for the Combined Asset are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	55.29	57.25	59.25	61.35	63.45
Maintenance Spares	99.51	103.04	106.65	110.42	114.20
Receivables	396.41	389.72	382.58	376.59	369.56
Total Working Capital	551.21	550.01	548.48	548.36	547.21
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	66.42	66.28	66.09	66.08	65.94

Effective Date of Commercial Operation (E-COD)

40. The Petitioner has claimed E-COD of the Combined Asset as 1.4.2013. Since COD of both the transmission assets is 1.4.2013, E-COD is allowed as 1.4.2013.

41. E-COD is used to determine the lapsed life of the project as a whole, which works out as 6 (six) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (WAL)

42. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of WAL.

43. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have different span of life. Therefore, the concept of WAL has been used as the useful life of the project as a whole.

44. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff



Regulations. Accordingly, WAL of the Combined Asset has been worked out as follows:

Particulars	Capital Cost (as on 31.3.2019) (₹ in lakh) (1)	Life (in years) (2)	Weighted Cost (₹ in lakh) (3) = (1) x (2)	Weighted Avg. Life of Asset (in years) (4) = (3)/ (1)
Land – Freehold	0.00	N/A	0.00	
Land - Leasehold	0.00	N/A	0.00	
Building & Civil Works	487.62	25	12190.50	29.62(rounded off to 30 years)
Transmission Line	7812.14	35	273424.90	
Sub Station	7573.51	25	189337.75	
PLCC	93.11	15	1396.65	
IT Equipment (Incl. Software)	148.52	6.67	990.63	
Total	16114.90		477340.43	

45. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed above, E-COD of the Combined Asset is 1.4.2013 and the lapsed life of the project as a whole works out as 6 years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 24 (30 minus 6) years.

Capital Cost

46. 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;

(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 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 assets 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."*

47. The Petitioner has claimed capital cost as on 31.3.2019 of ₹17745.55 lakh for the Combined Asset. The capital cost of ₹17745.55 lakh has been worked out by the Commission as on 31.3.2019 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

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

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



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

(a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;

(b) Change in law or compliance of any existing law;

(c) Deferred works relating to ash pond or ash handling system in the original scope of work;

(d) Liability for works executed prior to the cut-off date;

(e) Force Majeure events;

(f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and

(g) Raising of ash dyke as a part of ash disposal system.

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional 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.

(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.”

49. The Petitioner has projected ACE of ₹75.99 lakh during 2019-20 for the Combined Asset.

50. The Petitioner has submitted the details of ACE claimed during 2019-20 beyond the cut-off date as follows:

Year	ACE (₹ in lakh)	Party Name	Package
2019-20	51.65	Land compensation	Land
	24.34	Misc. Petty Contractors	Civil & Building



51. We have considered the submissions of the Petitioner. ACE claimed during 2019-20 is beyond the cut-off date and pertains to liability for works executed prior to the cut-off date. Hence, it is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations.

52. Accordingly, the capital cost of the Combined Asset considered for the 2019-24 tariff period, subject to truing-up, is as follows:

(₹ in lakh)		
Capital Cost (as on 1.4.2019)	ACE (2019-24)	Capital Cost (as on 31.3.202)
17745.55	75.99	17821.54

Debt-Equity Ratio

53. 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 additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.”

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

Funding	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	ACE 2019-24	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	12421.93	70.00	53.19	70.00	12475.12	70.00
Equity	5323.62	30.00	22.80	30.00	5346.42	30.00
Total	17745.55	100.00	75.99	100.00	17821.54	100.00

Depreciation

55. Regulations 33(1), 33(2) and 33(5) of the 2019 Tariff Regulations provides as follows:

"33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element there of 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 or 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”

“(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.”

56. The depreciation has been worked out considering the admitted capital expenditure as on 1.4.2019 and accumulated depreciation up to 31.3.2019. The depreciation has been calculated in accordance with Regulation 33(5) of the 2019 Tariff Regulations. The Gross Block during the 2019-24 tariff period has been depreciated at WAROD and working of WAROD is at Annexure-II. The depreciation allowed for the Combined Asset for the 2019-24 tariff period is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	17745.55	17821.54	17821.54	17821.54	17821.54
Addition during the year 2019-24 due to projected ACE	75.99	0.00	0.00	0.00	0.00
Closing Gross Block	17821.54	17821.54	17821.54	17821.54	17821.54
Average Gross Block	17783.55	17821.54	17821.54	17821.54	17821.54
Freehold Land	1656.48	1682.30	1682.30	1682.30	1682.30
Weighted average rate of Depreciation (WAROD) (in %)	4.82	4.81	4.81	4.81	4.81
Balance useful life at the beginning of the year (Year)	24.00	23.00	22.00	21.00	20.00
Lapsed life of the asset (Year)	6	7	8	9	10
Depreciable Value	14529.22	14540.17	14540.17	14540.17	14540.17



Depreciation during the year	857.23	857.63	857.63	857.63	857.63
Cumulative Depreciation	5671.28	6528.92	7386.55	8244.19	9101.82
Remaining Depreciable Value	8857.93	8011.25	7153.62	6295.98	5438.35

Interest on Loan

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

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

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

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

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.”*

58. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be



adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the Combined 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	12421.93	12475.12	12475.12	12475.12	12475.12
Cumulative Repayments up to Previous Year	4814.06	5671.28	6528.92	7386.55	8244.19
Net Loan-Opening	7607.87	6803.84	5946.21	5088.57	4230.94
Additions	53.19	0.00	0.00	0.00	0.00
Repayment during the year	857.23	857.63	857.63	857.63	857.63
Net Loan-Closing	6803.84	5946.21	5088.57	4230.94	3373.30
Average Loan	7205.86	6375.02	5517.39	4659.76	3802.12
Weighted Average Rate of Interest on Loan (in %)	8.9025	8.8958	8.8927	8.9034	8.9175
Interest on Loan	641.50	567.11	490.65	414.88	339.05

Return on Equity

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

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

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization 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.”

60. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. 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 for the Combined Asset for the 2019-24 tariff period is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	5323.62	5346.42	5346.42	5346.42	5346.42
Additions	22.80	0.00	0.00	0.00	0.00
Closing Equity	5346.42	5346.42	5346.42	5346.42	5346.42
Average Equity	5335.02	5346.42	5346.42	5346.42	5346.42
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	1002.02	1004.16	1004.16	1004.16	1004.16

Operation & Maintenance Expenses

61. The O&M Expenses claimed by the Petitioner for the various elements included in the Combined Asset for the 2019-24 tariff period are as follows:

O&M Expenses					
	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station					
400 kV bays at:					
Kishanpur:Samba Bays at Kishenpur Sub-station (2 numbers)					
Samba:Kishenpur Bays at Samba Sub-station (2 numbers)					



Samba:Samba ICT-I 400 kV Bay (1 number) Samba:Bus Reactor Bay (1 number) Samba:ICT-II Bay (1 number)					
Number of bays	7	7	7	7	7
220 kV bays at: Samba:Samba ICT 220 kV Bay + 3 Bays Samba:Samba ICT-II 220 kV Bay + 3 Bays					
Number of bays	4	4	4	4	4
Transmission line					
Kishenpur-Samba transmission line					
D/C Twin/Triple Conductor (km)	35.070	35.070	35.070	35.070	35.070
Transformers					
Samba: 315 MVA, 400/220 kV ICT at Samba					
Number of transformers	2	2	2	2	2
O&M claimed for PLCC (2% of ₹93.11 lakh)	1.86	1.86	1.86	1.86	1.86
Total O&M Expenses (₹ in lakh)	663.43	686.94	711.00	736.16	761.35

62. Regulations 35(3)(a) and 35(4) of the 2019 Tariff Regulations provide 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 (₹ Lakh 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 (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867



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

(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."*

63. We have considered the submissions of the Petitioner. The Petitioner has claimed O&M Expenses separately for PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station has been



specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner’s claim for separate O&M Expenses for PLCC @2% is not allowed.

64. The O&M Expenses allowed for the Combined Asset are as follows:

(₹ in lakh)					
Details	2019-20	2020-21	2021-22	2022-23	2023-24
8 Numbers of 220 kV Sub-station bays	180.08	186.40	192.96	199.68	206.72
7 Numbers of 400 kV Sub-station bays	225.05	232.96	241.15	249.62	258.37
35.070 kms D/C (Twin/Triple Conductor) transmission line	30.90	31.98	33.11	34.26	35.46
2 numbers of 400 kV 315 MVA transformers	225.54	233.73	241.92	250.74	258.93
Total	661.57	685.07	709.14	734.30	759.48

Interest on Working Capital

65. Regulations 34(1)(c), 34(3), 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specify 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 interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:



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

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

“3. Definitions ...

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

66. 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%.

67. 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, 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-2021 and from 2021-22 onwards as 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Working capital for O&M Expenses (O&M Expenses for one month)	55.13	57.09	59.09	61.19	63.29
Working capital for Maintenance Spares (15% of O&M Expenses)	99.24	102.76	106.37	110.15	113.92
Working capital for Receivables (Equivalent to 45 days of annual transmission cost)	396.98	391.56	384.58	378.33	371.05
Total Working Capital	551.34	551.41	550.04	549.67	548.26
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	66.44	62.03	57.75	57.72	57.57



Annual Fixed Charges for the 2019-24 Tariff Period

68. The transmission charges allowed for the Combined Asset for the 2019-24 tariff period are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	857.23	857.63	857.63	857.63	857.63
Interest on Loan	641.50	567.11	490.65	414.88	339.05
Return on Equity	1002.02	1004.16	1004.16	1004.16	1004.16
Interest on Working Capital	66.44	62.03	57.75	57.72	57.57
O&M Expenses	661.57	685.07	709.14	734.30	759.48
Total	3228.75	3176.01	3119.33	3068.69	3017.89

Filing Fee and the Publication Expenses

69. 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 & RLDC Fees and Charges

70. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 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 2019-24 tariff period.

Goods and Services Tax

71. 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



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

Security Expenses

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

74. 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 Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved security expenses from 1.4.2019 to 31.3.2024. Therefore, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. 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

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

Sharing of Transmission Charges

76. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission system were governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2010. With effect from



1.11.2020, sharing of transmission charges are governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (in short, “2020 Sharing Regulations”). Accordingly, the liabilities of the 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 shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. The billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

77. To summarise:

(a) The trued-up AFC approved for the transmission assets for the 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-A	2882.23	2923.22	2963.58	2949.21	2907.07
Combined Asset-B	659.10	684.09	695.80	700.25	702.46

(b) AFC allowed for the Combined Asset for the 2019-24 tariff period in the instant order are as follows:

	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
	3228.75	3176.01	3119.33	3068.69	3017.89

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

79. This order disposes of Petition No. 716/TT/2020 in terms of the above discussions and findings.

sd/-
(Pravas Kumar Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member



Asset-A

2014-19		ACE (₹ in lakh)							Depreciation as per Regulations					
Capital Cost	Capital Cost as on 1.4.2014 / COD (₹ in lakh)	2014-15	2015-16	2016-17	2017-18	2018-19	Allowed ACE (₹ in lakh)	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depn.	2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	1491.80	89.44	0.00	11.22	20.67	17.52	138.85	1630.65	-	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	286.78	39.71	114.97	24.91	8.91	12.34	200.84	487.62	3.34%	10.24	12.82	15.16	15.73	16.08
Transmission Line	7802.64	9.50	0.00	0.00	0.00	0.00	9.50	7812.14	5.28%	412.23	412.48	412.48	412.48	412.48
Sub Station	4200.83	258.88	485.73	391.58	10.68	0.00	1146.87	5347.70	5.28%	228.64	248.30	271.46	282.08	282.36
PLCC	83.29	0.00	0.00	9.82	0.00	0.00	9.82	93.11	6.33%	5.27	5.27	5.58	5.89	5.89
IT Equipment (Incl. Software)	77.34	0.00	0.00	0.00	0.00	0.00	0.00	77.34	5.28%	4.08	4.08	4.08	4.08	4.08
Total	13942.68	397.53	600.70	437.53	40.26	29.86	1505.88	15448.56	Total	660.47	682.96	708.77	720.26	720.90
Average Gross Block (₹ in lakh)										14141.4	14640.5	15159.6	15398.5	15433.6
Weighted Average Rate of Depreciation										4.67%	4.66%	4.68%	4.68%	4.67%



Combined Asset-B

2014-19		ACE (₹. in lakh)						Depreciation as per Regulations					
Capital Cost	Capital Cost as on 1.4.2014 / COD (₹ in lakh)	2014-19	2015-16	2016-17	2017-18	2018-19	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depn.	2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	-	-	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	-	3.34%	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Sub Station	1895.36	171.11	104.42	33.56	21.36	0.00	2225.81	5.28%	104.59	111.87	115.51	116.96	117.52
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00	0.00	0.00
IT Equipment (Incl. Software)	71.18	0.00	0.00	0.00	0.00	0.00	71.18	5.28%	3.76	3.76	3.76	3.76	3.76
Total	1966.54	171.11	104.42	33.56	21.36	0.00	2296.99	Total	108.35	115.62	119.27	120.72	121.28
Average Gross Block (₹ in lakh)									2052.10	2189.86	2258.85	2286.31	2296.99
Weighted Average Rate of Depreciation									5.28%	5.28%	5.28%	5.28%	5.28%



2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-20			2019-20	2020-21	2021-22	2022-23	2023-24
Land - Freehold	1630.65	51.65	1682.30	-	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	487.62	24.34	511.96	3.34%	16.69	17.10	17.10	17.10	17.10
Transmission Line	7812.14	0.00	7812.14	5.28%	412.48	412.48	412.48	412.48	412.48
Sub Station	7573.51	0.00	7573.51	5.28%	399.88	399.88	399.88	399.88	399.88
PLCC	93.11	0.00	93.11	6.33%	5.89	5.89	5.89	5.89	5.89
IT Equipment (Incl. Software)	148.52	0.00	148.52	15.00%	22.28	22.28	22.28	22.28	22.28
Total	17745.55	75.99	17821.54		857.23	857.63	857.63	857.63	857.63
Average Gross Block (₹ in lakh)					17783.55	17821.54	17821.54	17821.54	17821.54
Weighted Average Rate of Depreciation					4.82%	4.81%	4.81%	4.81%	4.81%

