

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 328/TT/2022

Coram:

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

Date of order: 28.04.2023

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of the transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for various assets under "Green Energy Corridors-Inter State Transmission Scheme (ISTS) Part-B" in Western Region and 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. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur,
Jabalpur-482008.
2. Madhya Pradesh Power Transmission Company Limited,
Shakti Bhawan, Rampur,
Jabalpur-482008.
3. Madhya Pradesh Audyogik Kendra,
Vikas Nigam (Indore) Limited,
3/54, Press Complex, Agra-Bombay Road,
Indore-452008.
4. Maharashtra State Electricity Distribution Company Limited,
Hongkong Bank Building, 3rd Floor,
M.G. Road, Fort, Mumbai-400001.



5. Maharashtra State Electricity Transmission Company Limited,
Prakashganga, 6th Floor, Plot No. C-19, E-Block,
Bandra Kurla Complex, Bandra (East) Mumbai-400051.
6. Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara-390007.
7. Electricity Department,
Government of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa-403001.
8. Electricity Department,
Administration of Daman & Diu,
Daman-396210.
9. DNH Power Distribution Corporation Limited,
Vidyut Bhawan, 66 kV Road, Near Secretariat Amli,
Silvassa-396230.
10. Chhattisgarh State Power Transmission Company Limited,
State Load Despatch Building,
Dangania, Raipur-492013.
11. Chhattisgarh State Power Distribution Company Limited,
P.O.Sunder Nagar, Dangania, Raipur,
Chhattisgarh-492013.
12. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg, Jaipur-302005.
13. Ajmer Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
14. Jaipur Vidyut Vitran Nigam Limited,
132 kV, Gss Rvpnl Sub-Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
15. Jodhpur Vidyut Vitran Nigam Limited,
132 kV, GSS, RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302 017 (Rajasthan).
16. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004.



17. Punjab State Electricity Board,
The Mall, Patiala-147001.
18. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula-134109 (Haryana).
19. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
20. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226001.
21. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002.
22. Bses Yamuna Power Limited,
Bses Bhawan, Nehru Place,
New Delhi.
23. Bses Rajdhani Power Limited,
Bses Bhawan, Nehru Place,
New Delhi.
24. Tata Power Delhi Distribution Limited,
33 kV Sub-station, Building, Hudson Lane,
Kingsway Camp, North Delhi-110009.
25. Chandigarh Administration,
Sector-9, Chandigarh.
26. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun.
27. North Central Railway,
Allahabad.
28. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.

.....Respondent(s)



For Petitioner: Shri S. S. Raju, PGCIL
Shri Zafrul Hasan, PGCIL
Shri Ashish Alankar, PGCIL
Shri Ashita Chauhan, PGCIL
Shri Pankaj Sharma, PGCIL

For Respondents: None

ORDER

The Petitioner, Power Grid Corporation of India Limited, has filed the instant petition for truing up of transmission tariff from COD 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 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) of the period from 1.4.2019 to 31.3.2024 in respect of following assets (hereinafter referred to as the “transmission assets / Combined Asset”) under “Green Energy Corridors-Inter State Transmission Scheme (ISTS) Part-B” (hereinafter referred to as “the transmission project”) in Western Region and Northern Region:

Asset-A: Chittorgarh-Ajmer 765 kV D/C line along with associated bays and 240 MVAR Switchable Line reactors at both end.

Asset-B1: i) 765 kV Banaskantha-Chittorgarh D/C line alongwith 2 numbers 330 MVAR, 765 kV Switchable Line Reactors at Banaskantha Sub-station and 2 numbers 240 MVAR, 765 kV Switchable Line Reactors at Chittorgarh Sub-station with associated line bays at both ends.

ii) 400 kV Banaskantha-Sankhari D/C line with associated bays at 765/400 kV Banaskantha Sub-station and 400 kV Sankhari (GETCO) Sub-station.

iii) 2 numbers 1500 MVA, 765/400 kV ICTs along with associated 765 kV and 400 kV transformer bays and 1 number 765 kV, 330 MVAR Bus Reactor along with associated bay at Banaskantha Sub-station.

Asset-B2: 1 number 400 kV, 125 MVAR Bus Reactor along with associated bay at Banaskantha Sub-station.



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

“1) Condone the delay in filling of petition.

2) Allow the addcap for 2014-19 and 2019-24 tariff block as claimed above.

3) 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 6 and 7 above.

4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before Hon'ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 9 and 9 above for respective block.

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

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

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

8) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 9 above.

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

10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the beneficiaries, if GST on transmission is levied 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 of the case

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



(a) The Investment Approval (IA) for implementation of the transmission assets under the transmission project was accorded by the Board of Directors of the Petitioner in 313th meeting held on 17.4.2015 at an estimated cost of ₹370561.00 lakh including IDC of ₹19994.00 lakh based on December, 2014 price level (communicated vide Memorandum No. C/CP/ GEC: ISTS Part B dated 22.4.2015).

(b) The transmission project was discussed and agreed in the 36th Standing Committee meeting of Western Region held on 29.8.2013. The transmission project was later discussed and agreed for implementation in the 24th WRPC meeting held on 9.10.2013.

(c) The scope of work covered under the transmission project is as follows:

Transmission Lines

- i. Banaskantha-Chittorgarh (New) 765 kV D/C line-285 km
- ii. Chittorgarh (New)-Ajmer (New) 765 kV D/C line-199 km
- iii. Banaskantha-Sankhari 400 kV D/C Line-26 km

Sub-station

a) 765/400/220 kV Banaskantha Sub-station (New)

765 kV

- | | |
|---|-------------|
| i. Line Bays | : 2 numbers |
| ii. Transformer bays | : 2 numbers |
| iii. 1500 MVA, 765/400 kV transformer | : 2 numbers |
| iv. 330 MVAR Switchable Line reactor bays | : 2 numbers |
| v. Bus reactor bay | : 1 number |
| vi. 330 MVAR Bus reactor | : 1 number |
| vii. 330 MVAR Switchable Line reactors | : 2 numbers |

400 kV

- | | |
|--------------------------------------|-------------|
| i. Line Bays | : 2 numbers |
| ii. Transformer bays | : 4 numbers |
| iii. 500 MVA, 400/220 kV transformer | : 2 numbers |
| iv. Bus reactor bay | : 1 number |
| v. 125 MVAR Bus reactor | : 1 number |



220 kV

- i. Transformer bays : 2 numbers
- ii. Transfer couple bay : 1 number
- iii. Bus reactor bay : 1 number

b) 765/400 kV Chittorgarh (New) Sub station Extension

765 kV

- i. Line Bays : 4 numbers
- ii. 240 MVAR Switchable Line reactor : 4 numbers

c) 765/400 kV Ajmer (New) Sub-station Extension

765kV

- i. Line Bays : 2 numbers
- ii. 240 MVAR Switchable Line reactor : 2 numbers

d) 400/220 kV Sankhari (GETCO) Sub-station Extension *

400 kV

- i. Line Bays : 2 numbers

**NOTE: Bay extension work at these Sub-stations to be carried out by GETCO on deposit work basis for the Petitioner.*

Reactive Compensation

a) Bus Reactor

- i. 1x330 MVAR (765 kV) and 1x125 MVAR (400 kV) at 765/400/220 kV Banaskantha Sub-station.

b) Line Reactors

- i. 240 MVAR Switchable Line reactors at both ends of Banaskantha-Chittorgarh 765 kV D/C line.
- ii. 240 MVAR Switchable Line reactors at both end of Chittorgarh-Ajmer 765 kV D/C Line.

(d) The details of the petitions covered under the transmission project are as follows:



SI No.	Assets	COD	Petition No. and order details
1	Asset-A: Chittorgarh-Ajmer 765 kV D/C line along with associated bays and 240 MVAR Switchable Line reactors at both ends	30.12.2017	Order dated 25.4.2019 in Petition No. 244/TT/2018
2	Asset B1: i) 765 kV Banaskantha - Chittorgarh D/C line alongwith 2 numbers 330 MVAR, 765 kV Switchable Line Reactors at Banaskantha Sub-station & 2 numbers 240 MVAR, 765 kV Switchable Line Reactors at Chittorgarh Sub-station with associated line bays at both ends, ii) 400 kV Banaskantha - Sankhari D/C line with associated bays at 765/400 kV Banaskantha Sub-station & 400 kV Sankhari (GETCO) Sub-station, iii) 2 numbers 1500 MVA, 765/400 kV ICTs along with associated 765 kV and 400 kV transformer bays and 1 number 765 kV, 330 MVAR Bus Reactor along with associated bay at Banaskantha Sub-station	2.3.2019	Order dated 31.1.2021 in Petition No. 113/TT/2019
3	Asset B2: 1 number 400 kV, 125 MVAR Bus Reactor along with associated bay at Banaskantha Sub-station	29.3.2019	

(e) The entire scope of work under the transmission project has been completed and is covered under the instant petition.

(f) The transmission assets were scheduled to be put into commercial operation within 36 months from the date of IA which was 17.4.2015. Accordingly, the transmission project was scheduled to be put into commercial operation by 17.4.2018. The details of scheduled commercial operation date (SCOD), date of commercial operation (COD) and time over-run are as follows:

Assets	SCOD	COD	Time over-run
Asset-A	17.4.2018	30.12.2017	-
Asset-B1		2.3.2019	319 days
Asset-B2		29.3.2019	346 days

(g) The transmission tariff in respect of Asset-A was approved by the Commission from COD to 31.3.2019 vide order dated 25.4.2019 in Petition No. 244/TT/2018. The transmission tariff in respect of Asset-B1 and Asset-B2 was approved from their respective CODs to 31.3.2019 vide order dated 31.1.2021 in Petition No. 113/TT/2019.



4. The Respondents are transmission licensees, power utilities, distribution licensees and power departments, which are procuring transmission services from the Petitioner, mainly beneficiaries of the Western Region and 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 objections have been received from the general public in response to the aforesaid notices published in the newspapers. MPPMCL i.e. Respondent No. 1, has filed its reply vide affidavit dated 28.11.2022 and has raised issues regarding effective tax rate and grossing up of Return on Equity (RoE) during 2014-19 period, calculation of Initial Spares, ACE claimed in 2019-24 tariff period and effects of GST. The Petitioner vide affidavit dated 12.12.2022 has filed rejoinder to MPPMCL's reply.

6. It is observed that MPPMCL has raised the issue of grossing up of RoE in few other petitions and the contentions of MPPMCL with reference to RoE have been rejected by the Commission in other petitions including order dated 25.4.2021 in Petition No. 348/TT/2019. Since MPPMCL did not challenged the findings of the Commission, the same has attained finality. In view of this, the pleas raised by MPPMCL with reference to grossing up of RoE are rejected. The submissions of MPPMCL on RoE, Petitioner's response thereto and the Commission's finding thereon have not been reproduced here again to avoid repetition. Other issues raised by MPPMCL which are specific to the present petition and the Petitioner's response have been addressed in the relevant portions of this order.



7. This order is issued considering the submissions made in the petition vide affidavit dated 30.5.2022, the Petitioner's affidavits dated 17.8.2022 and 20.12.2022, MPPMCL's reply vide affidavit dated 28.11.2022 and the Petitioner's rejoinder vide affidavit dated 12.12.2022.

8. The hearing in this matter was held on 1.12.2022 and the order was reserved.

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

10. The Petitioner has submitted that there is delay in filing of the instant petition due to second and third wave of covid-19 and has requested to condone the same as it was beyond the control of the Petitioner.

11. We have considered the submissions of the Petitioner. As per Regulation 9(2) of the 2019 Tariff Regulations, the Petitioner was required to file the truing up petition in case of the existing transmission system or element thereof by 31.10.2019. The Petitioner filed Petition No. 331/MP/2019 seeking extension of time by 180 days to file the tariff petition in case of the existing assets where orders have already been issued and 180 days extension in cases where final tariff orders for 2014-19 period are yet to be issued. The Commission, vide order dated 28.10.2019, granted time upto 31.1.2020 to file truing up petitions in cases where final orders have already been issued and three months from the date of issue of the final order, where final orders for 2014-19 period are yet to be issued. Later, NTPC and NHPC made representations seeking further extension of time. Taking into consideration their representations and the outbreak of Covid-19 pandemic and the subsequent declaration of lockdown by the Central Government, the Commission



extended the date of filing of truing up petitions of 2014-19 period in case of the existing generating stations and transmission licensees up to 30.6.2020 vide suo-motu orders dated 6.7.2020 and 7.7.2020 in Petition No. 7/SM/2020. The period was further extended upto 30.9.2020 in case of NHPC and Teesta Urja Ltd., on an application filed by them, vide order dated 6.7.2020 in Petition No.7/SM/2020 and in case of Teesta valley Power Transmission Ltd. vide order dated 23.7.2020 in Petition No.7/SM/2020.

12. Accordingly, the Commission has already granted time upto 30.9.2020 in cases where tariff orders have already been issued and 90 days from the date of issue of the order where tariff orders are yet to be issued. The tariff for Asset-A for the 2014-19 tariff period was approved vide order 25.4.2019 in Petition No. 244/TT/2018 and for Asset-B1 and Asset-B2 was approved vide order 31.1.2021 in Petition No. 113/TT/2019, accordingly, as per the Commission's order dated 28.10.2019 in Petition No. 331/MP/2019, the Petitioner should have filed the truing up petition by 30.4.2021. However, the Petitioner has filed the instant petition on 30.5.2022. Thus, there is a delay of 394 days in filing of the instant petition. Taking into consideration the Covid-19 Pandemic and the consequent lockdown, the delay of 394 days in filing of the instant petition is condoned.

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

13. The details of the trued up transmission charges claimed by the Petitioner are as follows:



(₹ in lakh)

Particulars	Asset-A		Asset-B1	Asset-B2
	2017-18 (Pro-rata for 92 days)	2018-19	2018-19 (Pro-rata for 30 days)	2018-19 (Pro-rata for 3 days)
Depreciation	1321.73	5331.07	806.45	0.66
Interest on Loan	530.67	2050.36	337.03	0.27
Return on Equity	1479.36	5982.65	930.71	0.74
Interest on working capital	87.55	352.59	50.92	0.06
O&M Expenses	312.42	1280.63	157.94	0.56
Total	3731.73	14997.30	2283.05	2.29

14. The details of the Interest on Working Capital (IWC) claimed by the Petitioner are as follows:

(₹ in lakh)

Particulars	Asset-A		Asset-B1	Asset-B2
	2017-18 (Pro-rata for 92 days)	2018-19	2018-19 (Pro-rata for 30 days)	2018-19 (Pro-rata for 3 days)
O&M Expenses	103.29	106.72	160.08	5.73
Maintenance Spares	185.92	192.09	288.14	10.31
Receivables	2467.53	2499.55	4629.40	46.59
Total	2756.74	2798.36	5077.62	62.63
Rate of Interest (in %)	12.60	12.60	12.20	12.20
Interest on Working Capital	87.55	352.59	50.92	0.06

Capital Cost

15. The Commission vide order dated 25.4.2019 in Petition No. 244/TT/2018 has approved the capital cost as on COD and ACE up to 31.3.2019 for Asset-A and vide order dated 31.1.2021 in Petition No. 113/TT/2019 has approved the capital cost as on COD and ACE up to 31.3.2019 for Asset-B1 and Asset-B2. The details of the same are as follows:

(₹ in lakh)

Assets	FR AppORTIONED approved cost	Capital cost allowed as on COD	ACE		Total capital cost as on 31.3 2019
			2017-18	2018-19	
Asset-A	129279.87	98334.56	9590.29	9408.75	117333.60
Asset-B1	242837.56	184157.55	0.00	2324.23	186481.78
Asset-B2	2012.22	1457.41	0.00	0.00	1457.41



16. The Petitioner has claimed the capital cost as on COD and ACE incurred for Asset-A, Asset-B1 and Asset-B2 and has submitted Auditor's Certificates dated 24.1.2022 and 31.1.2021 with respect to Asset-A and Asset-B1 respectively, in support of the same. Further, the Petitioner, vide affidavit dated 20.12.2022, has submitted the revised Auditor's Certificate dated 31.1.2021 with respect to Asset-B2 stating that the Petitioner has inadvertently placed old Auditor's Certificate dated 14.5.2021 in place of latest Auditor's Certificate dated 31.1.2022 vide affidavit dated 17.8.2022. The details of the capital cost claimed are as follows:

Assets	FR Apportioned approved cost	Capital cost as on COD	ACE		Total capital cost as on 31.3.2019
			2017-18	2018-19	
			(₹ in lakh)		
Asset-A	129279.87	98668.26	1222.65	2082.65	101973.56
Asset-B1	242837.56	189877.18	0.00	2324.23	192201.41
Asset-B2	2012.22	1516.59	0.00	0.00	1516.59

17. The Petitioner has claimed capital cost of ₹98668.26 lakh, ₹189877.18 lakh and ₹1516.59 lakh for Asset-A, Asset-B1 and Asset-B2 respectively as on COD.

18. The total completion cost including ACE as on 31.3.2019 in respect of Asset-A, Asset-B1 and Asset-B2 is ₹101973.56 lakh, ₹192201.41 lakh and ₹1516.59 lakh and the FR apportioned approved cost is ₹129279.87 lakh, ₹242837.56 lakh and ₹2012.22 lakh, respectively. Hence, the completion cost as on 31.3.2019 in respect of the transmission assets is within the FR apportioned approved cost and, therefore, there is no cost over-run with respect to FR cost.



Time Over-run

19. As per the IA dated 17.4.2015, the transmission assets were scheduled to be put under commercial operation within 36 months from the date of IA. Accordingly, the scheduled date of commercial operation was 17.4.2018 against which Asset-A, Asset-B1 and Asset-B2 were put into commercial operation on 30.12.2017, 2.3.2019 and 29.3.2019. Hence, there is time over-run of 319 days in case of Asset-B1 and 346 days in case of Asset-B2.

20. The Commission vide order dated 31.1.2021 in Petition No. 113/TT/2019 has condoned the entire time over-run of 319 days and 346 days in case of Asset-B1 and B2, respectively (Asset-1 and Asset-2 in Petition No. 113/TT/2019).

Interest During Construction (IDC) and Incidental expenditure during construction (IEDC)

21. The Petitioner has claimed IDC for the transmission assets and has submitted the Auditor's Certificates in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the IDC discharged.

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



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

Assets	IDC as per Auditor's Certificate	IDC Admissible	IDC Disallowed due to computational difference	IDC Discharged as on COD	IDC Undischarged as on COD	IDC Discharge during
	A	B	C=A-B	D	E=B-D	2019-20
Asset-A	2198.11	2198.11	0.00	2198.11	0.00	0.00
Asset-B1	7676.99	7676.99	0.00	7676.99	0.00	0.00
Asset-B2	66.53	66.53	0.00	62.16	4.37	4.37

24. The Petitioner has claimed IEDC of ₹1613.29 lakh, ₹5839.73 lakh and ₹88.94 lakh for Asset-A, Asset-B1 and Asset-B2 respectively, and has submitted Auditor's Certificates in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the transmission assets. Accordingly, IEDC of ₹1613.29 lakh, ₹5839.73 lakh and ₹88.94 lakh respectively has been allowed for Asset-A, Asset-B1 and Asset-B2.

Initial Spares

25. Regulation 13(d) of the 2014 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of plant and machinery cost up to the cut-off date, subject to the following ceiling norms:

“(d) Transmission system

<i>(i) Transmission line:</i>	<i>1.00%</i>
<i>(ii) Transmission Sub-station</i>	
<i>Green Field:</i>	<i>4.00%</i>
<i>Brown Field:</i>	<i>6.00%</i>
<i>(iv) Series Compensation devices and HVDC Station:</i>	<i>4.00%</i>
<i>(v) Gas Insulated Sub-station (GIS)</i>	
- <i>Green Field:</i>	<i>5.00%</i>
- <i>Brown Field:</i>	<i>7.00%</i>
<i>(vi) Communication system:</i>	<i>3.50%</i>
<i>(vii) Static Synchronous Compensator:</i>	<i>6.00%</i>



26. The Petitioner has claimed the following Initial Spares and submitted that initial spares on overall project basis are within the norms:

Assets	Plant & machinery cost up to cut-off date (excluding IDC and IEDC (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Ceiling limit (in %)	Initial Spares allowable (₹ in lakh)	Excess Initial Spares (₹ in lakh)
Transmission Line					
Asset-A	85209.53	948.50	1	851.12	97.38
Asset-B1	138872.11	1447.00	1	1388.13	58.87
Sub-station					
Asset-A	14696.60	535.00	6	903.93	-
Asset-B1	39354.71	1418.64	4	1580.67	-
Asset-B2	1552.41	61.19	6	95.18	-

27. MPPMCL has submitted that Initial Spares claimed for Asset-A and Asset-B1 (transmission lines) are beyond the ceiling limit and the same may be restricted as per the norms.

28. In response, the Petitioner has submitted that the excess Initial Spares amounting to ₹97.38 and ₹58.87 lakh in case of Asset-A and Asset-B1 (transmission lines) respectively, has been reduced from the capital cost claimed as on COD. The Petitioner has further submitted that the APTEL vide judgement dated 14.9.2019 in Appeal No. 74 of 2017 has allowed the calculation of Initial Spares on overall project basis. The Petitioner has requested to allow Initial Spares as claimed in the petition.

29. We have considered the submissions of the Petitioner and MPPMCL. Asset-A and Asset-B1 consists of transmission line besides sub-station portion. Asset-2 does not contain any transmission line portion. The Initial Spares claimed by the Petitioner for the transmission line portion of Asset-A and Asset-B1 even after combining their capital cost is more than the norms specified for transmission line in the 2014 Tariff Regulations. Therefore, APTEL's judgement dated 14.9.2019 in



Appeal No. 74 of 2017, referred to by the Petitioner, does not come to the rescue of the Petitioner. Accordingly, Initial Spares claimed by the Petitioner towards transmission lines for Asset-A and Asset-B1 is restricted to ceiling limit of 1%. Initial Spares claimed by the Petitioner Asset-B2 is within norm. The details of the Initial Spares allowed in respect of the transmission assets for 2014-19 tariff period are as follows:

Assets	Plant & machinery cost up to cut-off date (excluding IDC and IEDC (₹ in lakh) (A)	Initial Spares claimed (₹ in lakh) (B)	Ceiling limit (in %) (C)	Initial Spares allowable (₹ in lakh) $D = (A-B) * C / (100 - C)$	Initial Spares allowed (₹ in lakh) (E)	Excess Initial Spares (₹ in lakh) $F = (B-E)$
Transmission Line						
Asset-A	85209.53	948.50	1	851.12	851.12	97.38
Asset-B1	138872.11	1447.00	1	1388.13	1388.13	58.87
Sub-station						
Asset-A	14696.60	535.00	6	903.93	535.00	-
Asset-B1	39354.71	1418.64	4	1580.67	1418.64	-
Asset-B2	1552.41	61.19	6	95.18	61.19	-

Capital cost considered as on COD

30. The details of capital cost considered as on COD after adjustment of IDC, IEDC and excess Initial Spares is as follows:

Assets	Capital cost as on COD as per Auditor's Certificate	Less: IDC as on COD due to		Excess Initial Spares	Capital cost considered as on COD (on cash basis)
		Computational difference	Un-discharged		
		1	2		
Asset-A	98668.26	0.00	0.00	97.38	98570.88
Asset-B1	189877.18	0.00	0.00	58.87	189818.31
Asset-B2	1516.59	0.00	4.37	0.00	1512.22



Additional Capital Expenditure (“ACE”)

31. The Petitioner has claimed the following ACE in respect of the transmission assets:

Assets	(₹ in lakh)	
	ACE	
	2017-18	2018-19
Asset-A	1222.65	2082.65
Asset-B1	0.00	2324.23
Asset-B2	0.00	0.00

32. The Petitioner has submitted that the cut-off date of the transmission assets which have been put into commercial operation during 2014-19 period, is in the 2019-24 tariff period. The details of cut-off date of the transmission assets are as follows:

Assets	COD	Cut-off date
Asset-A	30.12.2017	31.3.2020
Asset-B1	2.3.2019	31.3.2022
Asset-B2	29.3.2019	31.3.2022

33. The Petitioner has submitted that ACE has been claimed under Regulations 14(1)(i) of the 2014 Tariff Regulations and the same is within the cut-off date. The Petitioner has submitted the Auditor’s Certificate in support of the same. The Petitioner vide affidavit dated 16.8.2022 has submitted party-wise liability flow statement.

34. We have considered the submissions of Petitioner. The undischarged IDC as on COD have been allowed as ACE during the year of discharge. ACE claimed by the Petitioner is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations which pertains to un-discharged liabilities recognized to be payable at a future date respectively. Accordingly, ACE allowed for 2014-19 tariff period are as follows:



(₹ in lakh)

Assets	ACE	
	2017-18	2018-19
Asset-A	1222.65	2082.65
Asset-B1	0.00	2324.23
Asset-B2	0.00	0.00

35. The capital cost allowed as on 31.3.2019 after inclusion of ACE in respect of the transmission assets is as follows:

(₹ in lakh)

Assets	Particulars	Capital cost as on COD on cash basis	ACE		Total capital cost including ACE as on 31.3.2019
			2017-18	2018-19	
Asset-A	Allowed vide order dated 25.4.2019 in Petition No. 244/TT/2018	98334.56	9590.29	9408.75	117333.60
	Claimed by the Petitioner in the instant petition	98668.26	1222.65	2082.65	101973.56
	Allowed after truing up in this Order	98570.88	1222.65	2082.65	101876.18
Asset-B1	Allowed vide order dated 31.1.2021 in Petition No. 113/TT/2019	184157.55	0.00	2324.23	186481.78
	Claimed by the Petitioner in the instant petition	189877.18	0.00	2324.23	192201.41
	Allowed after truing up in this Order	189818.31	0.00	2324.23	192142.54
Asset-B2	Allowed vide order dated 31.1.2021 in Petition No. 113/TT/2019	1457.41	0.00	0.00	1457.41
	Claimed by the Petitioner in the instant petition	1512.22	0.00	0.00	1512.22
	Allowed after truing up in this Order	1512.22	0.00	0.00	1512.22

Debt-Equity Ratio

36. The Petitioner has considered debt-equity ratio of 70:30 as on COD and for ACE. Debt-equity ratio of 70:30 has been considered as provided under Regulation 19 of the 2014 Tariff Regulations and the same are as follows:

Asset-A	Amount as on COD (₹ in lakh)	(in %)	Amount as on 31.3.2019 (₹ in lakh)	(in %)
Debt	68999.62	70.00	71313.33	70.00
Equity	29571.26	30.00	30562.85	30.00
Total	98570.88	100.00	101876.18	100.00
Asset-B1	Amount as on	(in %)	Amount as on	(in %)



	COD (₹ in lakh)		31.3.2019 (₹ in lakh)	
Debt	132872.82	70.00	134499.78	70.00
Equity	56945.49	30.00	57642.76	30.00
Total	189818.31	100.00	192142.54	100.00
Asset-B2	Amount as on COD (₹ in lakh)	(in %)	Amount as on 31.3.2019 (₹ in lakh)	(in %)
Debt	1058.55	70.00	1058.55	70.00
Equity	453.67	30.00	453.67	30.00
Total	1512.22	100.00	1512.22	100.00

Depreciation

37. The Gross Block during 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 taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations. Depreciation allowed for 2014-19 tariff period is as follows:

(₹ in lakh)					
	Particulars	Asset-A		Asset-B1	Asset-B2
		2017-18 (Pro-rata for 92 days)	2018-19	2018-19 (Pro-rata for 30 days)	2018-19 (Pro-rata for 3 days)
A	Opening Gross Block	98570.88	99793.53	189818.31	1512.22
B	ACE	1222.65	2082.65	2324.23	0.00
C	Closing Gross Block (A+B)	99793.53	101876.18	192142.54	1512.22
D	Average Gross Block (A+C)/2	99182.21	100834.86	190980.43	1512.22
E	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.14	5.28
F	Depreciable Value	89263.99	90751.37	167361.08	1361.00
G	Combined Depreciation during the year (D*E)	1320.42	5325.93	806.19	0.66
H	Cumulative depreciation at the end of the year	1320.42	6646.35	806.19	0.66
I	Remaining Depreciable Value at the end of the year	87943.56	84105.02	166554.89	1360.34

38. The details of depreciation allowed approved for the transmission assets vide order dated 25.4.2019 in Petition No. 244/TT/2018 and order dated 31.1.2021 in



Petition No. 113/TT/2019, claimed by the Petitioner in the instant Petition and allowed after tried up in the instant order are as follows:

(₹ in lakh)			
Assets	Particulars	2017-18	2018-19
Asset-A	Allowed vide order dated 25.4.2019 in Petition No. 244/TT/2018	1373.02	5948.91
	Claimed by the Petitioner in the instant petition	1321.73	5331.07
	Approved after true-up in this order	1320.42	5325.93
Asset-B1	Allowed vide order dated 31.1.2021 in Petition No. 113/TT/2019	0.00	783.80
	Claimed by the Petitioner in the instant petition	0.00	806.45
	Approved after true-up in this order	0.00	806.19
Asset-B2	Allowed vide order dated 31.1.2021 in Petition No. 113/TT/2019	0.00	0.63
	Claimed by the Petitioner in the instant petition	0.00	0.66
	Approved after true-up in this order	0.00	0.66

Interest on Loan (“IoL”)

39. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest. Accordingly, IoL is calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations.

The details of IoL allowed are as follows:

(₹ in lakh)					
	Particulars	Asset-A		Asset-B1	Asset-B2
		2017-18 (Pro-rata for 92 days)	2018-19	2018-19 (Pro-rata for 30 days)	2018-19 (Pro-rata for 3 days)
A	Opening Normative Loan	68999.62	69855.47	132872.82	1058.55
B	Cumulative Repayments up to Previous Year	0.00	1320.42	0.00	0.00
C	Net Loan-Opening (A-B)	68999.62	68535.05	132872.82	1058.55
D	Addition due to ACE	855.86	1457.86	1626.96	0.00
E	Repayment during the year	1320.42	5325.93	806.19	0.66
F	Net Loan-Closing (C+D-E)	68535.05	64666.98	133693.59	1057.90
G	Average Loan (C+F)/2	68767.33	66601.01	133283.20	1058.23
H	Weighted Average Rate of Interest on Loan (in %)	3.059	3.076	3.076	3.076
I	Interest on Loan (G*H)	530.15	2048.39	336.93	0.27

40. The details of interest on loan approved for the transmission assets vide order dated 25.4.2019 in Petition No. 244/TT/2018 and order dated 31.1.2021 in Petition



No. 113/TT/2019, claimed by the Petitioner in the instant Petition and allowed after trued up in the instant order are as follows:

(₹ in lakh)			
Assets	Particulars	2017-18	2018-19
Asset-A	Allowed vide order dated 25.4.2019 in Petition No. 244/TT/2018	520.93	2153.31
	Claimed by the Petitioner in the instant petition	530.67	2050.36
	Approved after true-up in this order	530.15	2048.39
Asset-B1	Allowed vide order dated 31.1.2021 in Petition No. 113/TT/2019	0.00	338.62
	Claimed by the Petitioner in the instant petition	0.00	337.03
	Approved after true-up in this order	0.00	336.93
Asset-B2	Allowed vide order dated 31.1.2021 in Petition No. 113/TT/2019	0.00	0.26
	Claimed by the Petitioner in the instant petition	0.00	0.27
	Approved after true-up in this order	0.00	0.27

Return on Equity ("RoE")

41. The Petitioner has claimed RoE for the transmission assets in terms of Regulation 24 and Regulation 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 tariff period as follows:

Year	Claimed effective tax rate (in %)	Grossed up RoE [(Base Rate)/(1-t)] (in %)
2014-15	21.018	19.624
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

42. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 had arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is 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

43. MAT rates as allowed vide order dated 27.4.2020 in Petition No. 274/TT/2019 for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 period, in terms of the provisions of the 2014 Tariff Regulations, are considered in the instant case and the same is as follows:

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	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

44. The Petitioner has claimed RoE for the 2014-19 period after grossing up the RoE @15.50% with effective tax rates (based on MAT rates) each year as per the above said Regulation. RoE is trued-up on the basis of MAT rates applicable in the respective years and the RoE approved for the transmission assets for the 2014-19 tariff period is as follows:

		(₹ in lakh)			
	Particulars	Asset-A		Asset-B1	Asset-B2
		2017-18 (Pro-rata for 92 days)	2018-19	2018-19 (Pro-rata for 30 days)	2018-19 (Pro-rata for 3 days)
A	Opening Equity	29571.26	29938.06	56945.49	453.67
B	Addition due to ACE	366.80	624.80	697.27	0.00
C	Closing Equity(A+B)	29938.06	30562.85	57642.76	453.67
D	Average Equity(A+C)/2	29754.66	30250.46	57294.13	453.67
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	21.342	21.549	21.549	21.549
G	Applicable ROE Rate (in %)	19.705	19.758	19.758	19.758
H	Return on Equity for the year(D*G)	1477.84	5976.89	930.43	0.74

45. The details of RoE allowed approved for the transmission assets vide order dated 25.4.2019 in Petition No. 244/TT/2018 and order dated 31.1.2021 in Petition



No. 113/TT/2019 , claimed by the Petitioner in the instant Petition and allowed after trued up in the instant order are as follows:

		(₹ in lakh)	
Assets	Particulars	2017-18	2018-19
Asset-A	Allowed vide order dated 25.4.2019 in Petition No. 244/TT/2018	1529.25	6625.98
	Claimed by the Petitioner in the instant petition	1479.36	5982.65
	Approved after true-up in this order	1477.84	5976.89
Asset-B1	Allowed vide order dated 31.1.2021 in Petition No. 113/TT/2019	0.00	850.30
	Claimed by the Petitioner in the instant petition	0.00	930.71
	Approved after true-up in this order	0.00	930.43
Asset-B2	Allowed vide order dated 31.1.2021 in Petition No. 113/TT/2019	0.00	0.71
	Claimed by the Petitioner in the instant petition	0.00	0.74
	Approved after true-up in this order	0.00	0.74

Operation & Maintenance Expenses (“O&M Expenses”)

46. The Commission vide order dated 25.4.2019 in Petition No. 244/TT/2018 has considered the line length of Chittorgarh-Ajmer 765 kV line as 211.17 km as per the Petitioner’s claim and allowed O&M Expenses for 211.17 km. It is observed that the Petitioner had inadvertently claimed the length of Chittorgarh-Ajmer 765 kV transmission line as 422.34 km in the instant petition. The transmission line length of 211.17 km for Chittorgarh-Ajmer 765 kV transmission line is considered for the grant of O&M Expenses.

47. We have considered the submission of the Petitioner. O&M Expenses are allowed for the various elements covered under the transmission system as per the norms under the 2014 Tariff Regulations , and, the same are allowed as follows:

(₹ in lakh)		
Asset-A		
Particulars	2017-18 (Pro-rata for 92 days)	2018-19
Sub-station		
765 kV: Chittorgarh:Ajmer I & II	2	2
765 kV: Chittorgarh:Ajmer I & II SLR	2	2



765 kV: Ajmer:Chittorgarh I & II	2	2
765 kV: Ajmer:Chittorgarh I & II SLR	2	2
Total	8	8
Norm (₹ lakh/ bay)		
765 kV	93.11	96.20
Total Sub-station O&M Expenses	744.88	769.60
Transmission Line (TL)		
D/C having 6 sub-conductor- 765 kV Chittorgarh-Ajmer Transmission Line	211.170	211.170
Norm (₹ lakh/ bay)		
D/C having 6 sub-conductor	1.171	1.210
Total Transmission Line O&M Expenses	247.28	255.52
Total O&M Expenses	250.08	1025.12

(₹ in lakh)

Asset-B1	
Particulars	2018-19 (Pro-rata for 30 days)
Sub-station	1
765 kV: Banaskatha:Chittorgarh Bay-I Banaskatha Banaskantha	1
765 kV: Banaskatha:Chittorgarh Bay- II-Banaskatha-Banaskantha	1
765 kV: Banaskatha:Chittorgarh SLR Bay- I-Banaskatha-Banaskantha	1
765 kV: Banaskatha:Chittorgarh SLR Bay- II Banaskatha Banaskantha	1
765 kV: Chittorgarh:Banaskatha-1-Chittorgarh-Chittorgarh	1
765 kV: Chittorgarh:Banaskatha-1 Line Reactor Chittorgarh Chittorgarh	1
765 kV: Chittorgarh:Banaskatha-2 Chittorgarh Chittorgarh	1
765 kV: Chittorgarh:Banaskatha-2 Line Reactor-Chittorgarh Chittorgarh	1
765 kV: Banaskatha:BR-I Bay-Banaskatha-Banaskantha	1
765 kV: Banaskatha:ICT-I Bay (765/400) Banaskatha Banaskantha	1
765 kV: Banaskatha:ICT-II Bay (765/400)-Banaskatha-Banaskantha	1
400 kV: GETCO Sankhari:Banaskantha Bay-I-GETCO Sankhari Banaskantha	1
400 kV: GETCO Sankhari:Banaskantha Bay-II-GETCO Sankhari-Banaskantha	1
400 kV: Banaskatha:ICT-I Bay (765/400)-Banaskatha-Banaskantha	1
400 kV: Banaskatha:ICT-II Bay (765/400)-Banaskatha-Banaskantha	1
400 kV: Banaskatha:Sankhari Bay-I-Banaskatha-Banaskantha	1
400 kV: Banaskatha:Sankhari Bay- II-Banaskatha-Banaskantha	1
Total	
765 kV	11
400 kV	6
Norm (₹ lakh/ bay)	
765 kV	96.20
400 kV	68.71
Total Sub-station Expenses	1470.46
Transmission Line (TL)	
D/C having 2 sub-conductor- Banaskanta - Sankhari 400 kV D/C Line	21.705
D/C having 6 sub-conductor- 765 kV D/C Banaskanta-Chittorgarh Line	146.656
D/C having 6 sub-conductor- Chittorgarh (New)-Banaskantha (New) 765 kV D/C Line	211.17



Total	
D/C having 2 sub-conductor	21.705
D/C having 6 sub-conductor	357.826
Norm (₹ lakh/ bay)	
D/C having 2 sub-conductor	0.806
D/C having 6 sub-conductor	1.210
Total Transmission Line Expenses	450.46
Total O&M Expenses	157.94

(₹ in lakh)

Asset-B2	
Particulars	2018-19 (Pro-rata for 3 days)
Sub-station	
400 kV: Banaskatha:Bus Reactor-I Bay-Banaskatha-Banaskantha	1
Norm (₹ lakh/ bay)	
400 kV	68.71
Total Sub-station Expenses	68.71
Total O&M Expenses	0.56

48. The details of O&M Expenses approved approved for the transmission assets vide order dated 25.4.2019 in Petition No. 244/TT/2018 and order dated 31.1.2021 in Petition No. 113/TT/2019, claimed by the Petitioner in the instant Petition and allowed after trued up in the instant order are as follows:

(₹ in lakh)

Assets	Particulars	2017-18	2018-19
Asset-A	Allowed vide order dated 25.4.2019 in Petition No.244/TT/2018	250.07	1025.11
	Claimed by the Petitioner in the instant petition	312.42	1280.63
	Approved after true-up in this order	250.08	1025.12
Asset-B1	Allowed vide order dated 31.1.2021 in Petition No.113/TT/2019	0.00	157.88
	Claimed by the Petitioner in the instant petition	0.00	157.94
	Approved after true-up in this order	0.00	157.94
Asset-B2	Allowed vide order dated 31.1.2021 in Petition No.113/TT/2019	0.00	0.56
	Claimed by the Petitioner in the instant petition	0.00	0.56
	Approved after true-up in this order	0.00	0.56



Interest on Working Capital (“IWC”)

49. 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 system are as follows:

		(₹ in lakh)			
	Particulars	Asset-A		Asset-B1	Asset-B2
		2017-18 (Pro-rata for 92 days)	2018-19	2018-19 (Pro-rata for 30 days)	2018-19 (Pro-rata for 3 days)
A	Working Capital for O&M Expenses (O&M Expenses for one Month)	82.68	85.43	160.08	5.73
B	Working Capital for Maintenance Spares (15% of O&M)	148.82	153.77	288.14	10.31
C	Working Capital for Receivables (Equivalent to two months of annual transmission charges)	2421.93	2452.58	4628.18	46.39
D	Total Working Capital (A+B+C)	2653.44	2691.77	5076.39	62.42
E	Rate of Interest on working capital (in %)	12.60	12.60	12.20	12.20
F	Interest of working capital (D*E)	84.27	339.16	50.90	0.06

50. The details of IWC approved for the transmission assets vide order dated 25.4.2019 in Petition No. 244/TT/2018 and order dated 31.1.2021 in Petition No. 113/TT/2019, claimed by the Petitioner in the instant Petition and trued up in the instant order are as follows:

		(₹ in lakh)	
Assets	Particulars	2017-18	2018-19
Asset-A	Allowed vide order dated 25.4.2019 in Petition No. 244/TT/2018	86.30	368.70
	Claimed by the Petitioner in the instant petition	87.55	352.59
	Approved after true-up in this order	84.27	339.16
Asset-B1	Allowed vide order dated 31.1.2021 in Petition No. 113/TT/2019	0.00	48.81
	Claimed by the Petitioner in the instant petition	0.00	50.92
	Approved after true-up in this order	0.00	50.90
Asset-B2	Allowed vide order dated 31.1.2021 in Petition No. 113/TT/2019	0.00	0.06
	Claimed by the Petitioner in the instant petition	0.00	0.06
	Approved after true-up in this order	0.00	0.06



Approved Annual Fixed Charges for 2014-19 Tariff Period

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

Particulars	Asset-A		Asset-B1	Asset-B2
	2017-18 (Pro-rata for 92 days)	2018-19	2018-19 (Pro-rata for 30 days)	2018-19 (Pro-rata for 3 days)
Depreciation	1320.42	5325.93	806.19	0.66
Interest on Loan	530.15	2048.39	336.93	0.27
Return on Equity	1477.84	5976.89	930.43	0.74
O&M Expenses	250.08	1025.12	157.94	0.56
Interest on Working Capital	84.27	339.16	50.90	0.06
Total	3662.76	14715.49	2282.39	2.29

52. Accordingly, the Annual Transmission Charges allowed approved for the transmission assets vide order dated 25.4.2019 in Petition No. 244/TT/2018 and order dated 31.1.2021 in Petition No. 113/TT/2019 , claimed by the Petitioner in the instant petition and allowed after trued-up in the instant order are as follows:

Assets	Particulars	(₹ in lakh)	
		2017-18	2018-19
Asset-A	Allowed vide order dated 25.4.2019 in Petition No. 244/TT/2018	3759.58	16122.01
	Claimed by the Petitioner in the instant petition	3731.73	14997.30
	Approved after true-up in this order	3662.76	14715.49
Asset-B1	Allowed vide order dated 31.1.2021 in Petition No. 113/TT/2019	0.00	2179.42
	Claimed by the Petitioner in the instant petition	0.00	2283.05
	Approved after true-up in this order	0.00	2282.39
Asset-B2	Allowed vide order dated 31.1.2021 in Petition No. 113/TT/2019	0.00	2.22
	Claimed by the Petitioner in the instant petition	0.00	2.29
	Approved after true-up in this order	0.00	2.29

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

53. The Petitioner has submitted the tariff forms combining all the transmission assets into a single asset, namely, Combined Asset. Accordingly, as per proviso (i)



of Regulation 8(1) of the 2019 Tariff Regulations, tariff for the Combined Asset has been worked out for 2019-24 tariff period.

54. The details of the transmission charges claimed by the Petitioner in this petition for the Combined Asset for 2019-24 tariff period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	15586.30	16007.73	16262.48	16316.09	16316.09
Interest on Loan	5576.32	5437.37	5170.96	4742.57	4287.74
Return on Equity	16896.52	17353.50	17644.89	17715.01	17715.01
Interest on Working Capital	733.37	751.75	761.70	763.10	760.54
O&M Expenses	3694.94	3820.62	3951.92	4089.43	4228.94
Total	42487.45	43370.97	43791.95	43626.20	43308.32

55. The details of IWC claimed by the Petitioner in this petition for the Combined Asset for 2019-24 tariff period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	307.91	318.39	329.33	340.79	352.41
Maintenance Spares	554.24	573.09	592.79	613.14	634.34
Receivables	5223.87	5347.11	5399.01	5378.57	5324.79
Total Working Capital	6086.02	6238.59	6321.13	6332.50	6311.54
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	733.37	751.75	761.70	763.10	760.54

Effective Date of Commercial Operation (“E-COD”)

56. The Petitioner has claimed E-COD of the Combined Asset as 6.10.2018. Based on the tried-up admitted capital cost and actual COD of all the assets, the E-COD has been worked out as follows:

Computation of E-COD					
Assets	Actual COD	Admitted capital cost as on 31.3.2019 (₹ in lakh)	Weight of the cost (in %)	No. of days from last COD	Weighted days
Asset-A	30.12.2017	101876.18	34.47	454.00	156.50
Asset-B1	2.3.2019	192142.54	65.02	27.00	17.55
Asset-B2	29.3.2019	1512.22	0.51	0.00	0.00
Total		295530.94	100.00		174.00
E-COD (Latest COD-Total weighted Days) 6.10.2018					



57. E-COD is used to determine the lapsed life of the project as a whole, which works out as (0) zero 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”)

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

59. 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. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 33 years as follows:

Admitted capital cost as on 31.3.2019				
Particulars	Combined asset cost (₹ in lakh) (1)	Life in years (2)	Weighted cost (3)=(1) x (2)	Weighted average life of assets (in years) (4)=(3)/(1)
Building & Other Civil Works	1088.85	25	27221.25	
Transmission Line	231941.85	35	8117964.75	
Sub-Station Equipment	55955.69	25	1398892.25	
PLCC	1242.37	15	18635.55	
IT Equipment and Software	278.51	6.67	1857.66	
Total	290507.27		9564571.46	32.92 years, rounded off to 33 years



60. 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, E-COD of the transmission assets is 6.10.2018 and the lapsed life of the project as a whole, works out as zero (0) year 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 33 years.

Capital Cost

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

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



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

(c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;

(d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and

(e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment. “

62. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, Sub-station and PLCC) as admitted by the Commission as on 31.3.2019 in respect of the transmission assets are clubbed together and has been considered as capital cost of the Combined Asset as on 1.4.2019 as follows:

				(₹ in lakh)
Elements	Asset-A	Asset-B1	Asset-B2	Capital cost for the Combined Asset as on 31.3.2019
Freehold Land	0.00	5023.67	0.00	5023.67
Leasehold Land	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	1088.85	0.00	1088.85
Transmission Line	87986.88	143954.97	0.00	231941.85
Sub-station Equipment	13711.08	40732.39	1512.22	55955.69
PLCC	178.22	1064.15	0.00	1242.37
IT Equipment and Software	0.00	278.51	0.00	278.51
Total	101876.18	192142.54	1512.22	295530.94

63. The trued-up capital cost of ₹295530.94 lakh for the Combined Asset is considered as admitted capital cost as on 31.3.2019 for working out tariff for 2019-24 tariff period.

Additional Capital Expenditure (“ACE”)

64. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as follows:



“24. Additional Capitalisation within the original scope and upto the cut-off date

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

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

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

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

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

(1) *The ACE 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 cutoff 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.”

65. The details of ACE claimed by the Petitioner during 2019-24 tariff period is as follows:

Asset	FR Apportioned cost	Projectd ACE			(₹ in lakh)
		2019-20	2020-21	2021-22	Total ACE
Asset-A	129279.87	1219.82	701.27	5.00	1926.09
Asset-B1	242837.56	7127.24	6894.45	2483.86	16505.55
Asset-B2	2012.22	15.01	258.48	-	273.49
Total	374129.65	8362.07	7854.20	2488.86	18705.13

66. The Petitioner has submitted that ACE projected to be incurred during 2019-20 is within cut-off date and is accordingly claimed as per Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations.

67. The Petitioner has claimed projected ACE for 2019-24 tariff period under Regulation 24 of the 2019 Tariff Regulations and is within the cut-off date.

68. MPPMCL has submitted that the Petitioner has proposed ACE for 2019-20, 2020-21 and 2021-22 and has not supported its contentions with proper documents and justification.

69. In response, the Petitioner has submitted that asset wise ACE is already mentioned in the Auditor's Certificate submitted with the Petition. Further, the Petitioner has submitted the asset wise cut-off date and regulations under which the ACE has been claimed. The asset wise cut-off date along with ACE regulation has been tabulated as follows:



Assets	COD	Cut-off date	ACE Regulation for 2019-24	Remarks
Asset-A1	30.12.2017	31.3.2020	Regulation 24(1)(a) for within cutoff date and Regulation 25(1)(d) for after cut off date	ACE on account of balance and retention payments due to undischarged liability for works executed within cut-off date
Asset-B1	2.3.20 19	31.3.2022	Regulation 24(1)(a) for within cut off date	
Asset-B2	29.3.2019	31.3.2022		

70. The Petitioner vide affidavit dated 16.8.2022 has submitted the liability flow statement. The details of the same are as follows:

(₹ in lakh)

Asset-A					
Head wise/ Party wise	Particulars	Discharge			Unexecuted Work
		2019-20	2020-21	2021-22	2019-20
KEC, KPTL, Gupta Power	Transmission Line	160.02	93.51	0.00	195.94
CGL, BHEL, Siemens	Sub-station	385.53	603.48	5.00	472.02
BHEL	PLCC	2.84	4.28	0.00	3.47
Total		548.39	701.27	5.00	671.43

(₹ in lakh)

Asset-B1							
Head wise/ Party wise	Particulars	Discharge			Unexecuted Work		
		2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
HSCC	Civil and Building	0.00	0.00	227.79	0.00	197.40	0.00
EMC Ltd., KEC, Nanjing Electric and Material Diversion	Transmission Line	194.61	2831.42	8.50	0.00	307.14	0.00
CGL, BHEL, Siemens	Sub-station	383.01	233.60	20.35	0.00	83.41	0.00
BHEL	IT Equipment	38.08	25.50	0.00	0.00	1.91	0.00
Crop & Land Compensation	Transmission Line	0.00	0.00	0.00	3251.73	975.71	406.68
EMC Ltd.	Transmission Line	1792.75	50.97	4.65	43.31	0.00	0.00
EMC Ltd.	PLCC	68.19	0.00	0.00	0.00	0.00	0.00
L&T	Transmission Line	73.16	0.00	0.00	78.23	0.00	0.00
L&T	PLCC	4.27	0.00	0.00	0.00	0.00	0.00
Phoenix Technology Group Co. Ltd.	Transmission Line	64.76	0.00	160.17	0.00	0.00	0.00
Sterlite Power Transmission Ltd.	Transmission Line	0.00	0.00	4.29	0.00	0.00	0.00
Gupta Power Infrastructure Ltd.	Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00
M/s CG Power and	Sub-station	41.39	178.67	0.00	0.00	115.56	0.00



Industrial Solutions							
BHEL	Sub-station	77.65	848.66	110.50	350.90	485.99	520.38
Siemens Ltd	Sub-station	240.51	0.00	0.00	125.68	0.00	0.00
BHEL	PLCC	47.21	65.46	0.00	16.55	0.00	0.00
Other Sub-station Packages	Sub-station	0.00	0.00	0.00	37.91	0.00	0.00
Civil Packages	Civil	0.00	205.25	118.73	191.10	287.80	504.64
BHEL	IT Equipment	6.24	0.00	0.00	0.00	0.00	0.00
Total		3031.83	4439.53	654.98	4095.41	2454.92	1431.70

(₹ in lakh)

		Asset-B2					
Head wise/ Party wise	Particulars	Discharge			Unexecuted Work		
		2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
BHEL	Sub-station	15.01	20.99	0.00	0.00	237.49	0.00
Total		15.01	20.99	0.00	0.00	237.49	0.00

71. We have considered the submissions of the Petitioner and MPPMCL. ACE claimed by the Petitioner for Asset-A towards undischarged liability upto cut-off date is allowed under Regulation 24(1)(a) of the 2019 Tariff Regulation and unexecuted work completed before COD and claimed after cut-off date is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations. ACE claimed for Asset-B1 and Asset-B2 is within cut-off date and is towards undischarged liability and the same is allowed under Regulations 24(1)(a) of the 2019 Tariff Regulations.

72. The details of the proposed ACE allowed in respect of the Combined Asset are as follows:

Particulars	Proposed ACE		
	2019-20	2020-21	2021-22
Proposed ACE allowed under Regulations 24(1)(a), 24(1)(b) and 25(1)(d) of the 2019 Tariff Regulations	8362.07	7854.20	2488.86
Add: IDC discharge	4.37	0.00	0.00
Total	8366.44	7854.20	2488.86



Capital cost for 2019-24 tariff period

(₹ in lakh)

Combined capital cost as on 1.4.2019	Combined Asset			Combined capital cost as on 31.3.2024
	ACE			
	2019-20	2020-21	2021-22	
295530.94	8366.44	7854.20	2488.86	314240.44

73. The combined capital cost of the transmission assets allowed as on 31.3.2024 is ₹314240.44 lakh which is under the combined apportioned approved cost of ₹ 374129.65 lakh .

Debt-Equity Ratio

74. 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:

- where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- 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.

(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.

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

75. Debt-equity ratio for 2019-24 period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The details of debt-equity ratio considered for the purpose of computation of tariff for 2019-24 tariff period for the Combined Asset are as follows:

Particulars	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	206871.66	70.00	219968.31	70.00
Equity	88659.28	30.00	94272.13	30.00
Total	295530.94	100.00	314240.44	100.00

Depreciation

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

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

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



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

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

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the asset 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 asset of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

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

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

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

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the asset.

(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 up to 31.3.2019 from the gross depreciable value of the asset.

(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 asset in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.



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

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

a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or

b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or

c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”

77. We have considered the submissions of the Petitioner. The IT equipment has been considered as part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). WAROD has been worked out and placed as Annexure-II after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100% depreciable. Depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. Depreciation allowed in respect of the Combined Asset is as follows:

(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	295530.94	303897.38	311751.58	314240.44	314240.44
B	ACE	8366.44	7854.20	2488.86	0.00	0.00
C	Closing Gross Block (A+B)	303897.38	311751.58	314240.44	314240.44	314240.44
D	Average Gross Block (A+C)/2	299714.16	307824.48	312996.01	314240.44	314240.44



	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
E	Depreciable Value	265249.61	272549.21	277203.58	278323.57	278323.57
F	Weighted average rate of Depreciation (WAROD) (in %)	5.20	5.20	5.19	5.19	5.19
G	Remaining life at the beginning of the year (Year)	33.00	32.00	31.00	30.00	29.00
H	Lapsed life at the beginning of the year (Year)	0.00	1.00	2.00	3.00	4.00
K	Depreciation during the year (D*F)	15578.05	15999.48	16254.24	16307.84	16307.84
M	Cumulative Depreciation at the end of the year	23031.24	39030.73	55284.97	71592.81	87900.66
N	Remaining depreciable value at the end of the year	242218.36	233518.48	221918.61	206730.76	190422.92

Interest on Loan (“IoL”)

78. 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 Asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to 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 project, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(5a) *The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control*



system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.

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

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

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

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	206871.66	212728.17	218226.11	219968.31	219968.31
B	Cumulative Repayments upto Previous Year	7453.20	23031.24	39030.73	55284.97	71592.81
C	Net Loan-Opening (A-B)	199418.46	189696.92	179195.38	164683.34	148375.50
D	Addition due to ACE	5856.51	5497.94	1742.20	0.00	0.00
E	Repayment during the year	15578.05	15999.48	16254.24	16307.84	16307.84
F	Net Loan-Closing (C+D-E)	189696.92	179195.38	164683.34	148375.50	132067.66
G	Average Loan (C+F)/2	194557.69	184446.15	171939.36	156529.42	140221.58
H	Weighted Average Rate of Interest on Loan (in %)	2.865	2.947	3.006	3.028	3.056
I	Interest on Loan (G*H)	5573.49	5434.71	5168.50	4740.34	4285.73

Return on Equity (“RoE”)

80. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations specify 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 or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

Provided further that:

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

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

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

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

“31. Tax on Return on Equity:*(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rates 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 follows:

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."

81. The Petitioner has submitted that it is liable to pay income tax at MAT rate specified under the Taxation Laws (Amendment) Ordinance 2019. We have considered the submissions of the Petitioner. MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which will be trued-up with actual tax rate



in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the transmission system for 2019-24 tariff period is as follows:

(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	88659.28	91169.22	93525.48	94272.13	94272.13
B	Additions due to ACE	2509.93	2356.26	746.66	0.00	0.00
C	Closing Equity (A+B)	91169.22	93525.48	94272.13	94272.13	94272.13
D	Average Equity (A+C)/2	89914.25	92347.35	93898.80	94272.13	94272.13
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity (D*G)	16887.69	17344.68	17636.07	17706.19	17706.19

Operation & Maintenance Expenses (“O&M Expenses”)

82. The O&M Expenses claimed by the Petitioner for the Combined Asset are as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station					
765 kV: Chittorgarh:Ajmer I & II	2	2	2	2	2
765 kV: Chittorgarh:Ajmer I & II SLR	2	2	2	2	2
765 kV: Ajmer:Chittorgarh I & II	2	2	2	2	2
765 kV: Ajmer:Chittorgarh I & II SLR	2	2	2	2	2
765 kV: Banaskatha:Chittorgarh Bay-I Banaskatha Banaskantha	1	1	1	1	1
765 kV: Banaskatha:Chittorgarh Bay- II-Banaskatha-Banaskantha	1	1	1	1	1
765 kV: Banaskatha:Chittorgarh SLR Bay-I-Banaskatha-Banaskantha	1	1	1	1	1
765 kV: Banaskatha:Chittorgarh SLR Bay-II Banaskatha Banaskantha	1	1	1	1	1
765 kV: Chittorgarh:Banaskatha-1-Chittorgarh-Chittorgarh	1	1	1	1	1
765 kV: Chittorgarh:Banaskatha-1 Line Reactor Chittorgarh Chittorgarh	1	1	1	1	1
765 kV: Chittorgarh:Banaskatha-2 Chittorgarh Chittorgarh	1	1	1	1	1
765 kV: Chittorgarh:Banaskatha-2 Line Reactor-Chittorgarh Chittorgarh	1	1	1	1	1
765 kV: Banaskatha:Bus Reactor-I Bay-Banaskatha-Banaskantha	1	1	1	1	1
765 kV: Banaskatha:ICT-I Bay (765/400) Banaskatha Banaskantha	1	1	1	1	1
765 kV: Banaskatha:ICT-II Bay (765/400)-Banaskatha-Banaskantha	1	1	1	1	1



400 kV: GETCO Sankhari:Banaskantha Bay-I-GETCO Sankhari Banaskantha	1	1	1	1	1
400 kV: GETCO Sankhari:Banaskantha Bay-II-GETCO Sankhari -Banaskantha	1	1	1	1	1
400 kV: Banaskatha:ICT-I Bay (765/400)-Banaskatha-Banaskantha	1	1	1	1	1
400 kV: Banaskatha:ICT-II Bay (765/400)-Banaskatha-Banaskantha	1	1	1	1	1
400 kV: Banaskatha:Sankhari Bay-I Banaskatha Banaskantha	1	1	1	1	1
400 kV: Banaskatha:Sankhari Bay- II-Banaskatha-Banaskantha	1	1	1	1	1
400 kV: Banaskatha:Bus Reactor-I Bay-Banaskatha-Banaskantha	1	1	1	1	1
Total					
765 kV	19	19	19	19	19
400 kV	7	7	7	7	7
Norm (₹ lakh/ 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
Total Sub-station Expenses (A)	1080.24	1118.36	1157.52	1198.29	1240.29
Transmission Line (TL)					
D/C having 2 sub-conductor-Banaskantha - Sankhari 400 kV D/C Line	21.705	21.705	21.705	21.705	21.705
D/C having 6 sub-conductor-Chittorgarh-Ajmer Transmission Line	422.340	422.340	422.340	422.340	422.340
D/C having 6 sub-conductor-765 kV D/C Banaskantha-Chittorgarh Line	146.656	146.656	146.656	146.656	146.656
D/C having 6 sub-conductor- Chittorgarh (New)-Banaskantha (New) 765 kV D/C Line	211.17	211.17	211.17	211.17	211.17
Total					
D/C having 2 sub-conductor	21.705	21.705	21.705	21.705	21.705
D/C having 6 sub-conductor	780.166	780.166	780.166	780.166	780.166
Norm (₹ lakh/ bay)					
D/C having 2 sub-conductor	0.881	0.912	0.944	0.977	1.011
D/C having 6 sub-conductor	1.322	1.368	1.416	1.466	1.517
Total Transmission Line Expenses (B)	1050.50	1087.06	1125.20	1164.93	1205.46
Transformer (in MVA)					
765 kV: Banaskatha: 765/400 kV Banaskantha Sub-station (New)	3000	3000	3000	3000	3000
Norm (₹ lakh/MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
Total Transformer (C)	1473.00	1524.00	1578.00	1635.00	1692.00
Communication System					
PLCC (₹ in lakh)	1520.14	1520.14	1520.14	1520.14	1520.14
Norms (in %)	2	2	2	2	2
Total Communication System (D)	91.20	91.20	91.20	91.20	91.20
Total O&M Expenses (A+B+C+D)	3694.94	3820.62	3951.93	4089.42	4228.95



83. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations are 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



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000</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.”*



84. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 @2% of its original project cost in the instant petition and 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 and 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.

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station					
765 kV: Chittorgarh:Ajmer I & II	2	2	2	2	2
765 kV: Chittorgarh:Ajmer I & II SLR	2	2	2	2	2
765 kV: Ajmer:Chittorgarh I & II	2	2	2	2	2
765 kV: Ajmer:Chittorgarh I & II SLR	2	2	2	2	2
765 kV: Banaskatha:Chittorgarh Bay-I Banaskatha Banaskantha	1	1	1	1	1
765 kV: Banaskatha:Chittorgarh Bay-II Banaskatha-Banaskantha	1	1	1	1	1
765 kV: Banaskatha:Chittorgarh SLR Bay-I Banaskatha-Banaskantha	1	1	1	1	1
765 kV: Banaskatha:Chittorgarh SLR Bay-II Banaskatha Banaskantha	1	1	1	1	1
765 kV: Chittorgarh:Banaskatha-1- Chittorgarh-Chittorgarh	1	1	1	1	1
765 kV: Chittorgarh:Banaskatha-1 Line Reactor Chittorgarh Chittorgarh	1	1	1	1	1
765 kV: Chittorgarh:Banaskatha-2 Chittorgarh Chittorgarh	1	1	1	1	1
765 kV: Chittorgarh:Banaskatha-2 Line Reactor-Chittorgarh Chittorgarh	1	1	1	1	1
765 kV: Banaskatha:Bus Reactor-I Bay- Banaskatha-Banaskantha	1	1	1	1	1
765 kV: Banaskatha:ICT-I Bay (765/400) Banaskatha Banaskantha	1	1	1	1	1



765 kV: Banaskatha:ICT-II Bay (765/400)-Banaskatha-Banaskantha	1	1	1	1	1
400 kV: GETCO Sankhari:Banaskantha Bay-I-GETCO Sankhari Banaskantha	1	1	1	1	1
400 kV: GETCO Sankhari:Banaskantha Bay-II-GETCO Sankhari -Banaskantha	1	1	1	1	1
400 kV: Banaskatha:ICT-I Bay (765/400)-Banaskatha-Banaskantha	1	1	1	1	1
400 kV: Banaskatha:ICT-II Bay (765/400)-Banaskatha-Banaskantha	1	1	1	1	1
400 kV: Banaskatha:Sankhari Bay-I Banaskatha Banaskantha	1	1	1	1	1
400 kV: Banaskatha:Sankhari Bay- II-Banaskatha-Banaskantha	1	1	1	1	1
400 kV: Banaskatha:Bus Reactor-I Bay_Banaskatha-Banaskantha	1	1	1	1	1
Total					
765 kV	19	19	19	19	19
400 kV	7	7	7	7	7
Norm (₹ lakh/ 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
Total Sub-station Expenses (A)	1080.24	1118.36	1157.52	1198.29	1240.29
Transmission Line (TL)					
D/C having 2 sub-conductor- Banaskanta - Sankhari 400 kV D/C Line	21.705	21.705	21.705	21.705	21.705
D/C having 6 sub-conductor-Chittorgarh-Ajmer Transmission Line	211.170	211.170	211.170	211.170	211.170
D/C having 6 sub-conductor-765 kV D/C Banaskanta-Chittorgarh Line	146.656	146.656	146.656	146.656	146.656
D/C having 6 sub-conductor-Chittorgarh (New)-Banaskantha (New) 765 kV D/C Line	211.17	211.17	211.17	211.17	211.17
Total					
D/C having 2 sub-conductor	21.705	21.705	21.705	21.705	21.705
D/C having 6 sub-conductor	568.996	568.996	568.996	568.996	568.996
Norm (₹ lakh/ bay)					
D/C having 2 sub-conductor	0.881	0.912	0.944	0.977	1.011
D/C having 6 sub-conductor	1.322	1.368	1.416	1.466	1.517
Total Transmission Line Expenses (B)	771.33	798.18	826.19	855.35	885.11
Transformer (in MVA)					
765 kV: Banaskatha: 765/400 kV Banaskanta Sub-station (New)	3000	3000	3000	3000	3000
Norm (₹ lakh/MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
Total Transformer (C)	1473.00	1524.00	1578.00	1635.00	1692.00
Total O&M Expenses (A+B+C)	3324.57	3440.54	3561.71	3688.64	3817.40



Interest on Working Capital (“IWC”)

86. Regulation 34(1)(c), Regulation 34(3), Regulation 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;”

87. The Petitioner has submitted that it has computed IWC for 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 interest 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 2020-21 and from 2021-22 onwards has been considered



as 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points).

88. We have considered the submissions of the Petitioner and, accordingly, IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations and the components of the working capital and interest allowed thereon for the Combined Asset for 2019-24 tariff period are as follows:

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for one month)	277.05	286.71	296.81	307.39	318.12
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	498.69	516.08	534.26	553.30	572.61
C	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost/annual transmission charges)	5173.86	5289.63	5334.40	5312.61	5257.72
D	Total Working Capital (A+B+C+D)	5949.60	6092.43	6165.46	6173.30	6148.44
E	Rate of Interest of working capital (in %)	12.05	11.25	10.50	10.50	10.50
F	Interest of working capital (D*E)	716.93	685.40	647.37	648.20	645.59

Annual Fixed Charges for 2019-24 Tariff Period

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

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Depreciation	15578.05	15999.48	16254.24	16307.84	16307.84
	Interest on Loan	5573.49	5434.71	5168.50	4740.34	4285.73
	Return on Equity	16887.69	17344.68	17636.07	17706.19	17706.19
	O&M Expenses	3324.57	3440.54	3561.71	3688.64	3817.40
	Interest on Working Capital	716.93	685.40	647.37	648.20	645.59
	Total	42080.73	42904.81	43267.89	43091.21	42762.75

Filing Fee and Publication Expenses

90. 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

91. The Petitioner shall be entitled to 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 to RLDC fee and charges in accordance with Regulation 70(3) of the 2019 Tariff Regulations for 2019-24 tariff period.

Security Expenses

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

93. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission asset owned by it on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission vide order dated 3.8.2021. 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.

Goods and Services Tax ("GST")

94. The Petitioner has submitted that if GST is levied at any rate and at any point of time in future on 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, paid by the Petitioner on account of demand from Government / Statutory authorities, may also be allowed to be recovered from the beneficiaries.

95. MPPMCL has submitted that the demand of the Petitioner is premature and need not be considered at this juncture. In response, the Petitioner has reiterated its submission.

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

Capital Spares

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

Sharing of Transmission Charges

98. We have considered the submissions of the Petitioner. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. With effect from 1.11.2020, the sharing of transmission charges is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the billing, collection and disbursement of the transmission charges shall be recovered in terms of provisions of the 2010 Sharing Regulations and 2020 Sharing Regulations as provided in Regulation 43 of the 2014 Tariff Regulations and Regulation 57 of the 2019 Tariff Regulations respectively.



99. To summarise:

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

(₹ in lakh)

Particulars	Asset-A		Asset-B1	Asset-B2
	2017-18 (Pro-rata for 92 days)	2018-19	2018-19 (Pro-rata for 30 days)	2018-19 (Pro-rata for 3 days)
AFC	3662.76	14715.49	2282.39	2.29

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	42080.73	42904.81	43267.89	43091.21	42762.75

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

101. This order disposes of Petition No. 328/TT/2020 in terms of the above discussion and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member



Asset-A

Annexure – I

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations	
		2017-18	2018-19			2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Transmission Line	85958.41	913.27	1115.20	87986.88	5.28	4562.71	4616.27
Sub Station	12439.23	309.38	962.47	13711.08	5.28	664.96	698.54
PLCC	173.24	0.00	4.98	178.22	6.33	10.97	11.12
TOTAL	98570.88	1222.65	2082.65	101876.18		5238.64	5325.93
Average Gross Block (₹ in lakh)						99182.21	100834.86
Weighted Average Rate of Depreciation (in %)						5.28	5.28



Asset-B1

2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations
Capital Expenditure as on COD		2018-19			2018-19 (₹ in lakh)
Free Hold Land	5023.67	0.00	5023.67	0.00	0.00
Building	1068.40	20.45	1088.85	3.34	36.03
Transmission Line	143354.76	600.21	143954.97	5.28	7584.98
Sub Station	39050.82	1681.57	40732.39	5.28	2106.28
PLCC	1042.72	21.43	1064.15	6.33	66.68
IT Equipment and software	277.94	0.57	278.51	5.28	14.69
TOTAL	189818.31	2324.23	192142.54		9808.65
Average Gross Block (₹ in lakh)					190980.43
Weighted Average Rate of Depreciation (in %)					5.14



Asset – B2

2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations
Capital Expenditure as on COD		2018-19			2018-19 (₹ in lakh)
Sub Station	1512.22	0.00	1512.22	5.28	79.85
TOTAL	1512.22	0.00	1512.22		79.85
Average Gross Block (₹ in lakh)					1512.22
Weighted Average Rate of Depreciation (in %)					5.28



Annexure - II

Combined Assets									
2019-24 Capital Expenditure as on 1.4.2019	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
					2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Free Hold Land	5023.67	0.00	5023.67	0.00	0.00	0.00	0.00	0.00	0.00
Building	1088.85	2129.90	3218.75	3.34	39.56	54.28	86.66	107.51	107.51
Transmission Line	231941.85	10697.51	242639.36	5.28	12401.09	12668.08	12795.93	12811.36	12811.36
Sub Station	55955.69	5598.08	61553.77	5.28	3010.80	3141.26	3232.71	3250.04	3250.04
PLCC	1242.37	277.77	1520.14	6.33	84.36	93.15	96.22	96.22	96.22
IT Equipment and software	278.51	6.24	284.75	15.00	42.24	42.71	42.71	42.71	42.71
TOTAL	295530.94	18709.50	314240.44		15578.05	15999.48	16254.24	16307.84	16307.84
			Average Gross Block (₹ in lakh)		299714.16	307824.48	312996.01	314240.44	314240.44
			Weighted Average Rate of Depreciation (in %)		5.20	5.20	5.19	5.19	5.19

