CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI**

Petition No. 332/TT/2022

Coram:

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

Date of Order: 15.05.2023

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for determination of transmission tariff from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Asset-1: Augmentation of 500 MVA 400/220 kV ICT at Wardha Sub-station; Asset-2: Augmentation of 500 MVA 400/220 kV ICT at Seoni Sub-station; Asset-3: Augmentation of 500 MVA 400/220 kV ICT at Morena Sub-station and Asset-4: Conversion of 50 MVAr fixed line reactor at Bina (PG) end of Sagar (MP)-Bina (PG) 400 kV line into switchable line reactor under Western Region System Strengthening Scheme-WRSS XXIII.

And in the matter of:

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

.... Petitioner

Vs.

- 1. Madhya Pradesh Power Management Company Limited, Shakti Bhawan, Rampur, Jabalpur-482 008.
- 2. Madhya Pradesh Power Transmission Company Limited, Shakti Bhawan, Rampur, Jabalpur-482 008.
- Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited, 3/54, Press Complex, Agra-Bombay Road, Indore-452 008.
- 4. Maharashtra State Electricity Distribution Company Limited, Hongkong Bank Building, 3rd Floor, M.G. Road, Fort, Mumbai-400 001.
- 5. Maharashtra State Electricity Transmission Company Limited, Prakashganga, 6th Floor, Plot No. C-19, E-Block,



Bandra Kurla Complex, Bandra (East) Mumbai-400 051.

- 6. Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara-390 007.
- 7. Electricity Department. Government of Goa, Vidyut Bhawan, Panaji, Near Mandvi Hotel, Goa-403 001.
- 8. Electricity Department, Administration of Daman & Diu, Daman-396 210.
- DNH Power Distribution Corporation Limited, Vidyut Bhawan, 66 kV Road, Near Secretariat Amli, Silvassa-396 230.
- 10. Chhattisgarh State Power Transmission Company Limited, Office of the Executive Director (C&P), State Load Despacth Building, Dangania, Raipur-492 013.
- 11. Chhattisgarh State Power Distribution Company Limited, P.O.Sunder Nagar, Dangania, Raipur, Chhattisgarh-492 013. ...Respondent(s)

For Petitioner Shri S. S. Raju, PGCIL

Shri D. K. Biswal, PGCIL

Shri Ved Prakash Rastogi, PGCIL

Shri Zafrul Hasan, PGCIL Shri Amit Yadav, PGCIL

For Respondents: Shri Anindya Khare, MPPMCL

<u>ORDER</u>

Power Grid Corporation of India Limited has filed the instant petition for determination of transmission tariff for the period from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following transmission assets (hereinafter referred to as the "transmission

assets") under "Western Region System Strengthening Scheme-WRSS XXIII" (hereinafter referred to as "the transmission project"):

Asset-1a: Augmentation of 500 MVA 400/220 kV ICT at Wardha Sub-station;

Asset-1b: 400 kV and 200 kV bays associated with 500 MVA 400/220 kV ICT at Wardha Sub-station;

Asset-2: Augmentation of 500 MVA 400/220 kV ICT at Seoni Sub-station;

Asset-3: Augmentation of 500 MVA 400/220 kV ICT at Morena Sub-station;

Asset-4: Conversion of 50 MVAr fixed line reactor at Bina (PG) end of Sagar (MP)-Bina (PG) 400 kV line into switchable line reactor.

- 2. The Petitioner has made the following prayers in the instant petition:
 - "1) Allow the entire initial spares claimed under this petition.
 - 2) Allow recapitalization of ICT bays at Wardha.
 - 3) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.
 - 4) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para –7 above.
 - 5) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8 above for respective block.
 - 6) 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.
 - 7) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
 - 8) 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.
 - 9) Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately.
 - 10) Allow the petitioner to claim the capital spares at the end of tariff block as per



actual.

- 11) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.
- 12) Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.
- 13) Allow Final tariff in accordance with Regulation 10 (5) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.
- 14) Approve tariff under Regulation: 86 of CERC (Conduct of Business) Regulations, 1999 and CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of Transmission Tariff from 02.11.2015 to 31.03.2019 for 400kV and 220kV bays associated with 500 MVA ICT at Wardha Substation (Asset-1b) under Western Region System Strengthening Scheme – WRSS XXIII.

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

Background

- 3. The brief facts of the case are as follows:
 - The Investment Approval (I.A.) and expenditure sanction of the transmission project was accorded by the Competent Authority of the Petitioner on 5.5.2021 and communicated vide Memorandum No. C/CP/PA 2122-02-0A-IA001 dated 6.5.2021 at an estimated cost of ₹9234.00 lakh including an IDC of ₹331.00 lakh based on December, 2020 price level.
 - The scope of the scheme was discussed and agreed in 2nd Western Region Standing Committee on Transmission (WRSCT) held on 21.5.2019, and in 1st Western Region Power Committee (WRPCTP) meeting held on 11.1.2020.
 - The scope of work covered under "Western Region System" Strengthening Scheme (WRSS)-XXIII" is as follows:



Part-A: Augmentation of ICTs at Wardha and Seoni 400/220 kV Sub-station of POWERGRID and Morena 400/220 kV Sub-station of CWRTL in Western Region:

i) Wardha 400/220 kV Sub-station:

- 400/220 kV ICT 500 MVA-1 number
- All bay equipment already existing at Site for 400 kV bay and 220 kV bay (except surge arrester).

Seoni 400/220 kV Sub-station: ii)

- 400/220 kV 500 MVA ICT-1 number
- 400 kV ICT bay-1 number
- 220 kV ICT bay-1 number

iii) Morena 400/220 kV Sub-station:

- 400/220 kV 500 MVA ICT-1 number
- 400 kV ICT bay-1 number
- 220 kV ICT bay-1 number

Part-B: Conversion of 50 MVAr fixed line reactor at Bina (PG) end of Sagar (MP)-Bina (PG) 400 kV line into switchable line reactor:

 Conversion of 50 MVAr fixed line reactor at Bina (PG) end of Sagar (MP)-Bina (PG) 400 kV line into switchable line reactor along with NGR bypassing arrangement*.

(*Scope of works related to NGR bypassing needs to be taken up for ratification in the WRPCTP meeting).

The Petitioner has submitted that entire scope of the transmission project has been completed and covered under the instant petition. The details of transmission assets including SCOD, COD and time over-run as per original petition are as follows:

Asset	Name of Asset	SCOD	Actual COD	Time Over-run
Asset-1a	Augmentation of 500 MVA 400/220 kV ICT at Wardha Sub-station		19.2.2022	Nil
Asset-1b	400 kV and 200kV bays associated with 500 MVA 400/220kV ICT at Wardha Sub-station	F 0 0000	19.2.2022	Nil
Asset-2	Augmentation of 500 MVA 400/220 kV ICT at Seoni Sub-station	5.8.2022	7.3.2022	Nil
Asset-3	Augmentation of 500 MVA 400/220 kV ICT at Morena Sub-station		11.6.2022	Nil

Asset	Name of Asset	SCOD	Actual COD	Time Over-run
Asset-4	Conversion of 50 MVAr fixed line reactor at Bina (PG) end of Sagar (MP)-Bina (PG) 400 kV line into switchable line reactor	5.1.2022	2.8.2021	Nil

- 4. The Respondents are distribution licensees and power departments, which are procuring transmission service from the Petitioner, mainly beneficiaries of the Western 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/ objections have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No.1, has filed its reply vide affidavit dated 28.11.2022 and has raised the issues like calculation of initial spares, ACE for 2019-24 period and effects of GST. The Petitioner vide affidavit dated 6.1.2023, has filed its rejoinder to the reply of MPPMCL. The issues raised by MPPMCL and the clarifications given by the Petitioner have been discussed in the relevant paragraphs of the order.
- 6. The hearing in this matter was held virtually on 12.1.2023 and the order was reserved.
- 7. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 12.8.2022 and the Petitioner's affidavit dated 6.1.2023, MPPMCL's reply vide affidavit dated 28.11.2022 and the Petitioner's rejoinder vide affidavit dated 6.1.2023 thereto.
- 8. Having heard the representatives of the Petitioner and MPPMCL and perused the material on record, we proceed to dispose of the petition.

Date of Commercial Operation ("COD")

- 9. Regulation 5 of the 2019 Tariff Regulations provides as follows:
 - "5. Date of Commercial Operation: (1) The date of commercial operation of a generating station or unit thereof or a transmission system or element thereof and associated communication system shall be determined in accordance with the provisions of the Grid Code.
 - (2) In case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the interconnected generating station or the transmission system of other transmission licensee as per the agreed project implementation schedule is not ready for commercial operation, the transmission licensee may file petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof:

Provided that the transmission licensee seeking the approval of the date of commercial operation under this clause shall give prior notice of at least one month, to the generating company or the other transmission licensee and the long term customers of its transmission system, as the case may be, regarding the date of commercial operation:

Provided further that the transmission licensee seeking the approval of the date of commercial operation of the transmission system under this clause shall be required to submit the following documents along with the petition:

- (a) Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;
- (b) Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load;
- (c) Implementation Agreement, if any, executed by the parties:
- (d) Minutes of the coordination meetings or related correspondences regarding the monitoring of the progress of the generating station and transmission systems;
- (e) Notice issued by the transmission licensee as per the first proviso under this clause and the response:
- (f) Certificate of the CEO or MD of the company regarding the completion of the transmission system including associated communication system in all respects.
- (3) The date of commercial operation in case of integrated mine(s), shall mean the earliest of —
- a) the first date of the year succeeding the year in which 25% of the Peak Rated Capacity as per the Mining Plan is achieved; or
- b) the first date of the year succeeding the year in which the value of production estimated in accordance with Regulation 7A of these regulations, exceeds total expenditure in that year; or
- c) the date of two years from the date of commencement of production:

Provided that on earliest occurrence of any of the events under sub-clauses (a) to (c) of Clause (3) of this Regulation, the generating company shall declare the date of commercial operation of the integrated mine(s) under the relevant sub-clause with one week prior intimation to the beneficiaries of the end-use or associated generating station(s);

Provided further that in case the integrated mine(s) is ready for commercial operation



but is prevented from declaration of the date of commercial operation for reasons not attributable to the generating company or its suppliers or contractors or the Mine Developer and Operator, the Commission, on an application made by the generating company, may approve such other date as the date of commercial operation as may be considered appropriate after considering the relevant reasons that prevented the declaration of the date of commercial operation under any of the sub-clauses of Clause (3) of this Regulation;

Provided also that the generating company seeking the approval of the date of commercial operation under the preceding proviso shall give prior notice of one month to the beneficiaries of the end-use or associated generating station(s) of the integrated mine(s) regarding the date of commercial operation."

10. The Petitioner initially in the petition has claimed the COD of Asset-1 as 19.2.2022. However, the Petitioner, vide affidavit dated 6.1.2023, has bifurcated Asset-1 into Asset-1(a) and Asset-1(b). The details of Asset-1(a) and Asset-1(b) and the COD claimed are as follows:

Assets	Asset Name	COD claimed
Asset-1(a)	Augmentation of 500 MVA 400/220 kV ICT at Wardha Sub-station	19.2.2022
Asset-1(b)	400 kV and 200 kV bays associated with 500 MVA 400/220 kV ICT at Wardha Sub-station	2.11.2015 (re-capitalisation date)

- 11. In support of actual COD of Asset-1(a), the Petitioner has submitted CEA energisation certificate dated 7.2.2022, RLDC charging certificate dated 11.4.2022 and CMD certificate as required under the Grid Code.
- 12. As regards Asset-1(b), the Petitioner has submitted that 500 MVA 400/220 kV ICT along with associated bays was executed at Wardha Sub-station under WRSS-VI (Petition No. 109/TT/2012) and was declared under COD on 1.1.2012. The same ICT was shifted to Solapur Sub-station under "Transmission System for Solapur STPP (2x660 MW)" (Petition No. 415/TT/2014) and its COD was declared on 2.11.2015. The associated 400 kV and 220 kV bays of the ICT that were freed due to this shifting have been utilized for the execution of 500 MVA, 400/220 kV ICT at Wardha covered under the instant transmission project i.e., WRSS-XXIII as Asset-1(b).

- 13. The Petitioner has further submitted that in 34th Standing Committee Meeting (SCM) on Transmission Planning for Western Region held on 9.5.2012, based on MSETCL request, it was decided that the Petitioner would shift the 400/220 kV ICT-III at Wardha to Bhadrawati HVDC back-to-back station/ some other location. It was also agreed by the members that the applicable transmission charges would continue to be paid to the Petitioner during the shifting period of the ICT. The same was also ratified in 21st WRPC meeting held on 9.11.2012.
- 14. The representative of the Petitioner during the course of hearing dated 12.1.2023 has submitted that the Petitioner has inadvertently claimed tariff of Asset-1b from 19.2.2022 instead of 2.11.2015 as decided in the 34th Standing Committee meeting of Transmission Planning for Western Region held on 9.5.2022.
- 15. We have considered the submissions of the Petitioner. As stated above, taking into consideration the CEA energisation certificate, RLDC charging Certificate and CMD certificate as required under Grid Code, the COD of Asset-1(a) has been approved as 19.2.2022. Asset-1(a), which has been installed in Wardha Sub-station, consists of new 500 MVA ICT and it is a new asset and, accordingly, it has to be serviced from 19.2.2022.
- 16. However, Asset-1(b), is an existing asset i.e., 400 kV and 200 kV bays at Wardha Sub-station and the Commission has already approved its COD as 1.1.2012 under Western Region System Strengthening Scheme-VI and has granted the tariff vide order dated 17.8.2015 in Petition No. 109/TT/2012. Moreover, the Petitioner has de-capitalised Asset-1(b) in Petition No. 297/TT/2022.
- 17. The Commission vide order dated 29. 4.2023 in Petition No 297/TT/2022 has approved the de-capitalisation of 500 MVA ICT-III alongwith bays at Wardha Substation. The relevant extract of the order dated 29.4.2023 is as follows:

- "26. The ICT was taken out of service from Wardha on 20.11.2014, shifted to Solapur and was put into commercial operation at Solapur on 2.11.2015 and bays has been utilized under project WRSS XXIII.
- 27. We have considered the submissions of the Petitioner. Regulation 14(4) of the 2014 Tariff Regulations provides as under:
 - "(4) In case of de-capitalisation of assets of a generating company or the transmission licensee, as the case may be, the original cost of such asset as on the date of decapitalization shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place, duly taking into consideration the year in which it was capitalised."
- 28. As per the Regulation 14(4) of the 2014 Tariff Regulations, the ICT-III alongwith bays was decapitalized from 20.11.2014 and accordingly it is being removed from the gross block form the actual date of decapitalisaiton. The details of de-capitalisation and re-capitalisation of the said ICT-III alongwith bays is as follows:

Project WRSS VI Asset-C2 (*)	Transmission System for Solapur STPP (2x660 MW)	WRSS XXXIII
Decapitalisation: 500MVA,ICT III along with 400 kV and 220 kV bay at Wardha Sub-station	Recapitalisation: 500 MVA ICT III at Solapur Sub-station	Recapitalisation: 400 kV & 220 kV bays meant for ICT III at Wardha Sub-station
₹1440.03 lakh	₹1040.90 lakh	₹399.13 lakh
Covered under instant petition	Filed as revised Petition No. 288/TT/2022 linked with earlier Petition No. 167/TT/2020 and date of recapitalisation is 2.11.2015.	Filed under Petition No. 332/TT/2022. Date of utilisation: 19.2.2022.

- 18. Accordingly, the Commission approved de-capitalisation of 500 MVA ICT-III along with 400 kV and 220 kV bays at Wardha Sub-station on 20.11.2014. The Petitioner has utilised the 400 kV and 220 kV bays at Wardha Sub-station after augmentation of 500 MVA 400/220 kV ICT at Wardha Sub-station on 19.2.2022. Accordingly, the COD of the Asset-1(b) is considered as 19.2.2022. Taking into consideration that the Petitioner has claimed separate tariff for Asset 1(a) and Asset-1(b) and the fact that the remaining useful life of the transmission assets is not the same, separate tariff is allowed for Asset-1(a) and Asset-1(b).
- 19. In support of actual COD of the Asset-2, Asset-3 and Asset-4, the Petitioner has submitted the CEA Energisation certificate, certificate of completion of trial

operation of transmission element(s)/ bays certifying the COD as 7.3.2022, 11.6.2022 and 2.8.2021. The details are as follows:

Assets	Date of Certificate of completion of trail operation	COD
Asset-2	15.7.2022	7.3.2022
Asset-3	7.7.2022	11.6.2022
Asset-4	16.8.2021	2.8.2021

- 20. Further, the Petitioner has submitted the self-declaration of COD vide letter dated 7.3.2022, 11.6.2022 and 5.8.2021 for Asset-2, Asset-3, Asset-4. The Petitioner has also submitted the CMD Certificate in accordance with Regulation 5(1) of the 2019 Tariff Regulations.
- 21. Taking into consideration certificate of CEA energisation certificate, trail operation certificate of RLDC, self-declaration of COD and CMD Certificate as required under the Grid Code, COD of the transmission assets is approved as 7.3.2022, 11.6.2022 and 2.8.2021 for Asset-2, Asset-3 and Asset-4 respectively.

Determination of Annual Fixed Charges for the 2019-24 Tariff Period

22. The Annual Fixed Charges (AFC) claimed by the Petitioner in respect of the transmission assets for 2019-24 tariff period are as follows:

Asset-1(a)					
Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24		
Depreciation	7.20	72.51	84.98		
Interest on Loan	5.58	53.66	58.60		
Return on Equity	7.59	76.08	89.10		
Interest on working capital	1.09	10.20	10.83		
O&M Expenses	21.57	199.00	205.50		
Total	43.03	411.45	449.01		

Asset-1(b)						
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Depreciation	21.07	21.07	21.07	21.07	21.07	
Interest on Loan	17.70	15.82	13.93	12.05	10.18	
Return on Equity	22.49	22.49	22.49	22.49	22.49	
Interest on working capital	3.30	3.36	3.42	3.48	3.54	
O&M Expenses	54.66	56.58	58.57	60.62	62.75	
Total	119.22	119.32	119.48	119.71	120.03	

(₹ in lakh)

Asset-2					
Particulars	2021-22 (Pro-rata for 25 days)	2022-23	2023-24		
Depreciation	8.07	135.44	152.78		
Interest on Loan	6.29	101.02	105.72		
Return on Equity	8.52	142.50	160.45		
Interest on working capital	0.95	14.82	15.65		
O&M Expenses	17.16	259.62	268.25		
Total	40.99	653.40	702.85		

(₹ in lakh)

Asset-3					
Particulars	2022-23 (Pro-rata for 294 days)	2023-24			
Depreciation	100.83	139.48			
Interest on Loan	77.33	99.86			
Return on Equity	105.36	145.55			
Interest on working capital	11.65	15.20			
O&M Expenses	209.11	268.25			
Total	504.29	668.34			

(₹ in lakh)

Asset-4					
Particulars	2021-22 (Pro-rata for 242 days)	2022-23	2023-24		
Depreciation	3.24	6.40	8.16		
Interest on Loan	2.53	4.90	6.02		
Return on Equity	3.45	7.04	9.11		
Interest on working capital	0.99	1.59	1.70		
O&M Expenses	22.84	35.66	36.91		
Total	33.05	55.59	61.90		

23. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission assets are as follows:

Asset-1(a)						
Particulars	2021-22 (Pro-rata for 41days)	2022-23	2023-24			
O&M Expenses	16.00	16.58	17.13			
Maintenance Spares	28.80	29.85	30.83			
Receivables	47.22	50.73	55.21			
Total	92.02	97.16	103.17			
Rate of Interest (in %)	10.50	10.50	10.50			
Interest on Working Capital	1.09	10.20	10.83			

(₹ in lakh)

Asset-1(b)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	4.56	4.72	4.88	5.05	5.23
Maintenance Spares	8.20	8.49	8.79	9.09	9.41
Receivables	14.66	14.71	14.73	14.76	14.76
Total	27.42	27.92	28.40	28.90	29.40
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	3.30	3.36	3.42	3.48	3.54

(₹ in lakh)

Asset-2							
Particulars	2021-22 (Pro-rata for 25 days)	2022-23	2023-24				
O&M Expenses	20.88	21.64	22.35				
Maintenance Spares	37.59	38.94	40.24				
Receivables	73.79	80.56	86.41				
Total	132.26	141.14	149.00				
Rate of Interest (in %)	10.50	10.50	10.50				
Interest on Working Capital	0.95	14.82	15.65				

Asset-3							
Particulars	2022-23 (Pro-rata for 294 days)	2023-24					
O&M Expenses	21.64	22.35					
Maintenance Spares	38.94	40.24					
Receivables	77.19	82.17					
Total	137.77	144.76					
Rate of Interest (in %)	10.50	10.50					
Interest on Working Capital	11.66	15.20					

Asset-4								
Particulars	2021-22 (Pro-rata for 242 days)	2022-23	2023-24					
O&M Expenses	2.87	2.97	3.08					
Maintenance Spares	5.17	5.35	5.54					
Receivables	6.15	6.85	7.61					
Total	14.19	15.17	16.23					
Rate of Interest (in %)	10.50	10.50	10.50					
Interest on Working Capital	0.99	1.59	1.70					

Capital Cost

- 24. 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 upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway.
 - (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
 - (I) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
 - (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
 - (n) Expenditure on account of change in law and force majeure events; and



- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (3) The Capital cost of an existing project shall include the following:
 - (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
 - (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
 - (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
 - (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."
- (4) The capital cost in case of existing or new hydro generating station shall also include:
 - (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
 - (a) The 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."
- The Petitioner vide Auditor's Certificate dated 20.5.2022 has claimed the following capital cost incurred as on COD for Asset-1(a), Asset-2, Asset-3 and Asset-4 and as on 1.4.2019 for Asset-1(b) and Additional Capital Expenditure (ACE) actual / projected to be incurred, in respect of the transmission assets:

Asset	Apportioned approved	Capital cost claimed as	Actual add-cap	Projec	ted ACE	Capital cost as on	
Asset	cost (FR)	on COD / 1.4.2019	2021-22	2022-23	2023-24	31.3.2019	
Asset-1(a)	2199.91	1195.53	6.14	297.11	165.20	1663.98	
Asset-1(b)	-	399.13	0.00	0.00	0.00	399.13	
Asset-2	3043.92	2121.60	172.16	470.43	166.73	2930.92	
Asset-3	3638.54	2114.00	0.00	431.31	75.66	2620.97	
Asset-4	352.45	87.97	8.80	56.45	17.09	170.31	

Cost Over-run

26. Against the apportioned approved cost of ₹9234.82 lakh as per FR, the estimated completion cost is ₹7785.31 lakh. Therefore, there is no cost over-run in any asset w.r.t. FR. However, there is cost variation and the Petitioner has submitted the following reasons of cost variation:

Asset-1: (decrease of ₹137 lakh)

- (i) Sub-station (decrease of ₹281 lakh):
 - (a) Preliminary works, land and civil works (increase of ₹5 lakh): The cost under this head has increased as per actual site conditions.
 - (b) Sub-station equipment's including initial spares (decrease of ₹286 lakh):

The variation in cost in sub-station equipment's is due to variation in awarded cost received through competitive bidding. For procurement, open competitive bidding route is followed by providing equal opportunity to all eligible firms, lowest possible market prices for required

product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, lowest bidder can be arrived at/ evaluated on overall basis only. Hence, item-wise unit prices in contracts and its variation over unit rate considered in FR estimates are beyond the control of the Petitioner.

(ii) Decrease in IDC (decrease of ₹70 lakh): Decrease in IDC is attributable to variation in rate of interest considered in FR vs Actuals, decrease in overall capital cost w.r.t. FR and deployment of funds based on actuals. IDC was calculated assuming that the loans will be available from domestic sources. In FR, interest rate on loan has been considered @9.75% of domestic loans subject to actuals. The actual IDC accrued upto DOCO has been considered in the Auditor Certificate.

(iii) Decrease in IEDC and contingency (decrease of ₹185 lakh):

In investment approval, 10.75% and 3% of equipment cost and Civil Works has been considered for IEDC and Contingency respectively, whereas actual IEDC has been considered in the Auditor Certificate.

(iv) Recapitalization of cost of ICT bays from WRSS VI: (increase of ₹399 lakh)

The cost of ₹399.13 lakh pertaining to 400 kV and 220 kV ICT bays has been decapitalized from WRSS VI (Petition No.297/TT/2022) and has been recapitalized as Asset-1b under instant petition.

Asset-2: (decrease of ₹264 lakh)

- Sub-station (increase of ₹157 lakh): (i)
- Preliminary works, land and civil works (increase of ₹19 lakh): There is minor increase in cost of preliminary works as per actual site conditions.
- (b) Sub-station equipment's including initial spares (increase of ₹138 lakh): The cost of most of the sub-station equipment is within the projected cost as per DPR. The increase in the cost of sub-station equipment is due to higher cost of ICT received through competitive bidding as compared to the cost of ICT projected in DPR. The cost of ICT was projected as ₹1641 lakh in DPR. However, the cost of DPR received in competitive bidding was ₹1835 lakh resulting in the increase in the cost by ₹300 lakh. Open competitive bidding route is adopted for procurement providing equal opportunity to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions. As regards variation in cost of individual item in sub-station packages, the packages under subject scope of works comprise of a large number of items and the same are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, lowest bidder can be arrived at/ evaluated on overall basis only. Hence, item-wise unit prices in contracts and its variation over unit rate considered in FR estimates are beyond the control of the Petitioner.
- (c) Decrease in IDC (decrease of ₹109 lakh): Decrease in IDC is attributable to

variation in rate of interest considered in FR v/s Actuals, decrease in overall Capital cost w.r.t. FR and deployment of funds based on actuals. In FR, IDC was calculated assuming that the loans will be available from domestic sources. In FR, interest rate on loan has been considered @9.75% of domestic loans subject to actuals. The actual IDC accrued upto DOCO has been considered in the Auditor Certificate.

(d) Decrease in IEDC (decrease of ₹312 lakh):

In investment approval, 10.75% and 3% of equipment cost and Civil Works has been considered for IEDC and Contingency respectively, whereas based on the actual expenditure under the subject head, IEDC has been considered in the Auditor Certificate.

Asset-3:

(i) Sub-station (increase of ₹1004 lakh):

(a) Sub-station equipment's including spares (decrease of ₹286 lakh):

For procurement, open competitive bidding route is followed by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions. As regards variation in cost of individual item in sub-station packages, the packages under subject scope of works comprise of a large number of items and the same are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, lowest bidder can be arrived at/ evaluated on overall basis

- only. Hence, item-wise unit prices in contracts and its variation over unit rate considered in FR estimates are beyond the control of the Petitioner.
- (b) Decrease in IDC (decrease of ₹112 lakh): Decrease in IDC is attributable to variation in rate of interest considered in FR v/s Actuals, decrease in overall Capital cost w.r.t. FR and deployment of funds based on actuals. In FR, IDC was calculated assuming that the loans will be available from domestic sources. In FR, interest rate on loan has been considered @9.75% of domestic loans subject to actuals. The actual IDC accrued upto COD has been considered in the Auditor Certificate.

(c) Decrease in IEDC (decrease of ₹603 lakh):

In Investment approval, 10.75% and 3% of equipment cost and Civil Works has been considered for IEDC and Contingency respectively, whereas IEDC has been considered in the Auditor Certificate.

Asset-4: (decrease of ₹182 lakh)

- (i) Sub-station (increase of ₹22 lakh):
- (a) Preliminary works, land and civil works (decrease of ₹0.1 lakh): There is minor decrease in cost of preliminary works as per actual site conditions.
- (b) Sub-station equipment's including initial spares (increase of ₹22 lakh): For procurement, open competitive bidding route is followed by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items

under the said package. Further, lowest bidder can be arrived at/ evaluated on overall basis only. Hence, item-wise unit prices in contracts and its variation over unit rate considered in FR estimates are beyond the control of the Petitioner.

- (c) **Decrease in IDC (decrease of ₹3 lakh):** Decrease in IDC is attributable to variation in rate of interest considered in FR vs Actuals, decrease in overall capital cost w.r.t. FR and deployment of funds based on actuals. In FR, IDC was calculated assuming that the loans will be available from domestic sources. In FR, interest rate on loan has been considered @9.75% of domestic loans subject to actuals. The actual IDC accrued upto DOCO has been considered in the Auditor Certificate.
- (d) Decrease in IEDC (decrease of ₹201 lakh): In Investment Approval, 10.75% and 3% of equipment cost and Civil Works has been considered for IEDC and Contingency respectively, whereas actual IEDC has been considered in the Auditor Certificate.
- 27. We have considered the submissions of the Petitioner. As compared with FR cost, the estimated completion cost of Asset-1(a), Asset-2, Asset-3 and Asset-4 has been reduced by an amount of ₹535.93 lakh, ₹113 lakh, ₹1017.57 lakh and ₹182.14 lakh. The estimated completion cost is within FR cost, the cost variation is allowed.

Time Over-run

28. The transmission assets were scheduled to be put into commercial operation within 15 months and 8 months from the date of Investment Approval for Part-A and Part-B respectively. The date of Investment Approval was 5.5.2021. Hence, the scheduled COD was 5.8.2022 for Asset-1(a), Asset-2 and Asset-3 and 5.1.2022 for Asset-4, against which Asset-1(a), Asset-2, Asset-3, and Asset-4 were put under commercial operation on 19.2.2022, 7.3.2022, 11.6.2022 and 2.8.2021 for respectively. Therefore, there is no time over-run in case of the transmission assets.

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

- The Petitioner has claimed IDC in respect of the transmission assets and has submitted the Auditor's Certificate in support of the same. The Petitioner has submitted the computation of IDC along with year-wise details of the IDC discharged.
- 30. The loan amount as on COD has been mentioned in Form-6 and Form-9C. The loan details submitted in Form-9C for 2019-24 tariff period and IDC computation statement have been considered for the purpose of IDC calculation on cash basis and on accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged. However, in the statement showing IDC discharged up to COD, the Petitioner has indicated the floating rate of interest of the loans deployed. IDC on cash basis up to COD has been worked out on the basis of loan details given in the statement showing discharge of IDC and Form-9C for the transmission assets. The Petitioner is directed to submit information on actual interest rates at the time of truing-up.
- 31. Accordingly, based on the information furnished by the Petitioner, IDC considered, is as follows:

	IDC as per Auditor's	IDC	IDC	IDC Discharged	IDC Un-		scharge ring
Assets	Certificate	Admissible	disallowed	Discharged as on COD	discharged as on COD	2021-22	2022-23
	Α	В	C=A-B	D	E=B-D	F	G
Asset-1(a)	9.13	9.13	0.00	9.13	0.00	0.00	0.00
Asset-2	1.52	1.52	0.00	0.39	1.13	1.13	0.00
Asset-3	16.99	16.95	0.04	0.47	16.48	0.00	16.48

32. The Petitioner has claimed IEDC and has submitted Auditor's Certificate in support of the same. The Petitioner has also submitted that entire IEDC has been discharged as on COD in respect of the transmission assets. Accordingly, IEDC allowed is as follows:

		(₹ in lakh)
Assets	IEDC	IEDC
	Claimed	Allowed
Asset-1(a)	70.51	70.51
Asset-2	117.02	117.02
Asset-3	34.07	34.07
Asset-4	4.51	4.51

Initial Spares

- 33. Regulation 23(d) of the 2019 Tariff Regulations provides the following ceiling norms:
 - "(d) Transmission System
 - Transmission line- 1.00%
 - (ii) Transmission sub-station
 - Green Field- 4.00%
 - Brown Field- 6.00%
 - Series Compensation devices and HVDC Station- 4.00% (iii)
 - Gas Insulated Sub-station (GIS) (iv)
 - Green Field- 5.00%
 - Brown Field- 7.00%
 - Communication System- 3.50% (v)
 - Static Synchronous Compensator- 6.00%" (vi)
- 34. The Petitioner has claimed the following Initial Spares for the transmission assets and prayed to allow the Initial Spares in light of the judgement of the Appellate Tribunal for Electricity (APTEL) dated 14.9.2019 in Appeal No.74 of 2017. Initial Spares claimed by the Petitioner are as follows:

Assets	Particulars	Plant & Machinery cost up to cut-off date (₹ in lakh) (excluding IDC and IEDC)	Initial spares claimed (₹ in lakh)	Norm (in %)
Asset-1(a)	Sub-station (AIS)	1656.35	59.38	6
Asset-2	Sub-station (AIS)	2792.37	98.96	6
Asset-3	Sub-station (AIS)	2566.57	83.47	6
Asset-4	Sub-station (AIS)	145.80	12.17	6

- 35. MPPMCL has submitted that the Petitioner has claimed initial spares of 8.54% of cost for Asset-4. Hence, the same shall be restricted to the limit as mentioned in Regulation, after computation by applying prudence check, of admissible completion cost. In response, the Petitioner has submitted that the initial spares are calculated on total project cost are within the specified limit as per Regulation 23 of the 2019 Tariff Regulations and as per APTEL order dated 14.9.2019 in Appeal No. 74 of 2017.
- 36. We have considered the submissions of the Petitioner and MPPMCL. As per the APTEL's judgment dated 14.9.2019 in Appeal No. 74 of 2017, the Initial Spares are to be allowed as per the ceiling limits on overall project cost. The APTEL in judgement dated 14.9.2019 in Appeal No. 74 of 2017 held as follows:
 - "8.13......We do not agree with this methodology of restricting initial spares asset/element wise as adopted by the Central Commission. The Central Commission to have a prudence check on the initial spares, being restricted based on the individual asset wise cost initially, but subsequently ought to have allowed as per the ceiling limits on the overall project cost basis during the true-up."
- 37. Accordingly, Initial Spares are allowed as percentage of the project cost as a whole. The assets covered under the transmission project have been put into commercial operation in 2019-24 tariff period. The transmission project as per I.A. was completed during 2019-24 tariff period and the overall project cost of the transmission assets will be arrived only when all the transmission assets will be combined during 2024-29 tariff period. Therefore, the Initial Spares are allowed based on the cost of the individual transmission assets in 2019-24 tariff period and the Initial Spares will be considered on the basis of the overall project cost in 2024-29 tariff period. Initial spares allowed are as follows:

Assets	Particulars	Plant & Machinery cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial spares claimed (₹ in lakh)	Allowable initial spares (₹ in lakh)	Ceiling (in %)	Initial spares allowed (₹ in lakh)	Excess initial spares (₹ in lakh)
Asset-1a	Sub-station (AIS)	1656.35	59.38	101.93	6	59.38	0.00
Asset-2	Sub-station (AIS)	2792.37	98.96	171.92	6	98.96	0.00
Asset-3	Sub-station (AIS)	2566.57	83.47	158.50	6	83.47	0.00
Asset-4	Sub-station (AIS)	145.80	12.17	8.53	6	8.53	3.64

Capital Cost allowed as on COD

38. Accordingly, capital cost allowed in respect of the transmission assets as on COD is as follows:

(₹ in lakh)

	Capital cost	Less: IDC	,			
Assets	claimed in Auditor's Certificate as on COD/ 1.4.2019 (A)	IDC disallowed due to computational difference (B)	IDC undischarged as on COD (C)	Less: Excess initial spares disallowed (D)	Capital cost as on COD / 1.4.2019 (C) = (A-B-C-D)	
Asset-1a	1195.53	0.00	0.00	0.00	1195.53	
Asset-1b	399.13	0.00	0.00	0.00	399.13	
Asset-2	2121.60	0.00	1.13	0.00	2120.47	
Asset-3	2114.00	0.04	16.48	0.00	2097.48	
Asset-4	87.97	0.00	0.00	3.64	84.33	

Additional Capital Expenditure ("ACE")

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

"24. Additional Capitalization within the original scope and up to the cut-off date:

- (1) The Additional Capital Expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
 - (a) Undischarged liabilities recognized to be payable at a future date;
 - (b) Works deferred for execution;
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;



- (e) Change in law or compliance of any existing law; and
- (f) Force Majeure events:

Provided that in case of any replacement of the assets, the additional 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
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission."
- 40. The Petitioner has claimed actual / projected ACE for 2019-24 tariff period on account of balance and retention payments for works executed within the cut-off date and claimed under Regulation 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations.

The actual / projected ACE claimed by the Petitioner are as follows:



Asset	Actual add-cap	Projected ACE	
	2021-22	2022-23	2023-24
Asset- 1(a)	6.14	297.11	165.20
Asset-1b	0.00	0.00	0.00
Asset-2	172.16	470.43	166.73
Asset-3	0.00	431.31	75.66
Asset-4	8.80	56.45	17.09

41. The Petitioner vide affidavit dated 6.1.2023 has submitted the liability flow statement. The details are as follows:

(₹ in lakh)

Asset-1(a)								
Head wise/ Berty wise	Particulars	Liability [Discharge	Work d	Work deferred for execution			
Head wise/ Party wise	Particulars	2022-23	2023-24	2021-22	2022-23	2023-24		
BHEL (TR07) (Supply)	Sub-station	3.28	87.98	0.00	179.40	33.81		
BHEL (TR07) (Service)	Sub-station	0.63	16.98	0.00	34.63	6.53		
Bajaj (Supply)	Sub-station	0.59	2.64	4.80	32.32	1.01		
Bajaj (Supply)	IT Equipment	0.52	0.05	1.18	7.55	0.85		
Bajaj (Service)	Sub-station	0.11	0.49	0.03	5.97	0.19		
Bajaj (Service)	Sub-station	0.43	1.91	0.13	23.37	0.73		
Bajaj (Service)	IT Equipment	0.02	0.00	0.00	0.30	0.03		
Construction of store and other infrastructure works	Civil	0.00	0.00	0.00	8.00	12.00		
Total		5.58	110.05	6.14	291.54	55.15		

(₹ in lakh)

Asset-2								
Hood wise/ Barty wise	Particulars	Liability [Discharge	Work d	Work deferred for execution			
Head wise/ Party wise	Particulars	2022-23	2023-24	2021-22	2022-23	2023-24		
Toshibha (TR-26) (Supply)	Sub-station	9.45	21.44	105.90	24.84	1.42		
Toshibha (TR-26) (Service)	Sub-station	16.58	37.62	0.00	43.60	2.49		
Bajaj (Supply)	Sub-station	55.45	47.18	63.05	145.81	3.13		
Bajaj (Supply)	IT Equipment	1.04	0.20	3.21	9.20	2.36		
Bajaj (Service)	Sub-station	9.75	8.30	0.00	25.65	0.55		
Bajaj (Service)	Sub-station	32.88	27.99	0.00	86.48	1.86		
Bajaj (Service)	IT Equipment	0.17	0.02	0.00	1.54	0.18		
Construction of store and other infrastructure works	Civil	0.00	0.00	0.00	8.00	12.00		
Total		125.32	142.75	172.16	345.12	23.99		

Asset-3						
Head wise/ Party wise	Particulars	Liability Discharge		Work deferred for execution		
Head wise/ Party wise	Particulars	2022-23	2023-24	2021-22	2022-23	2023-24
Toshibha T&D	Sub-station	79.29	0.00	0.00	45.14	0.00
Bajaj Electricals MP	Sub-station	0.00	65.36	0.00	283.43	0.00
Bajaj Electricals MP	IT Equipment	0.00	4.30	0.00	9.44	0.00
Civil Work	Civil	0.00	6.00	0.00	14.00	0.00
Total		79.29	75.66	0.00	352.01	0.00

	Asset-4					
Hood wise/ Party wise	Liability Discharge		Work deferred for execution			
Head wise/ Party wise	Particulars	2022-23	2023-24	2021-22	2022-23	2023-24
Bajaj Electricals MP	Sub-station	36.45	17.09	8.80	0.00	0.00
Civil Work	Civil	0.00	0.00	0.00	20.00	0.00
Total		36.45	17.09	8.80	20.00	0.00

- 42. MPPMCL has submitted that the Petitioner has claimed ACE under the head Balance/Retention payment without providing proper details and justification. Therefore, the claims of the Petitioner may only be allowed in true-up on submission of actual ACE. In response, the Petitioner has submitted that ACE claimed for 2019-24 period is within cut-off date and is as per Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. The Petitioner has further submitted that the element wise break-up is submitted in the petition and the package wise details of the cost claimed has been submitted vide affidavit dated 6.1.2023.
- 43. We have considered the submissions of the Petitioner and MPPMCL. ACE claimed is on account of balance and retention payments and it is allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. The projected ACE allowed is subject to truing up an it is as follows:

(₹ in lakh)

Asset-1(a)					
Particulars –		Actual / Proposed ACE			
Faiticulais	2020-21	2021-22	2022-23		
Proposed ACE allowed under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations	6.14	297.11	165.20		
Add: IDC Discharge	0.00	0.00	0.00		
Total	6.14	297.11	165.20		

Asset-2					
Particulars -		Actual / Proposed ACE			
Fai liculai S	2020-21	2021-22	2022-23		
Proposed ACE allowed under Regulations 24(1)(a) and 24(1)(b)					
of the 2019 Tariff Regulations					
Add: IDC Discharge					
Total	6.14	297.11	165.20		

Asset-3					
Dantiardana		Actual / Proposed ACE			
Particulars	2020-21	2021-22	2022-23		
Proposed ACE allowed under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations					
Add: IDC Discharge					
Total	6.14	297.11	165.20		

(₹ in lakh)

Asset-4					
Particulars -		Actual / Proposed ACE			
Faiticulais	2020-21	2021-22	2022-23		
Proposed ACE allowed under Regulations 24(1)(a) and 24(1)(b)					
of the 2019 Tariff Regulations					
Add: IDC Discharge					
Total	6.14	297.11	165.20		

Capital Cost as on 31.3.2024

44. Accordingly, the capital cost allowed in respect of the transmission assets as on 31.3.2024 is as follows:

(₹ in lakh)

	Capital Cost	Actua	I / Projected	ACE	Total Capital Cost
Asset	claimed as on COD	2020-21	2021-22	2022-23	as on 31.3 2024
Asset-1(a)	1195.53	6.14	297.11	165.20	1663.98
Asset-1(b)	399.13	0.00	0.00	0.00	399.13
Asset-2	2120.47	173.29	470.43	166.73	2930.92
Asset-3	2097.48	0.00	447.79	75.66	2620.93
Asset-4	84.33	8.80	56.45	17.09	166.67

Debt-Equity Ratio

- 45. Regulations 18 of the 2019 Tariff Regulations provides as follows:
 - "18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- 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 ii. rupees on the date of each investment:
- any grant obtained for the execution of the project shall not be iii. considered as a part of capital structure for the purpose of debt: equity ratio.



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

- (2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.
- (3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

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

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

- (4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.
- (5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.
- (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."
- The details of debt-equity considered for the purpose of computation of tariff for 2019-24 period in respect of the transmission assets is as follows:

		Asset-1(a)		
Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	836.87	70.00	1164.79	70.00



Total	1195.53	100.00	1663.98	100.00
Equity	358.66	30.00	499.19	30.00

		Asset-1(b)		
Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	279.39	70.00	279.39	70.00
Equity	119.74	30.00	119.74	30.00
Total	399.13	100.00	399.13	100.00

		Asset-2		
Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	1484.33	70.00	2051.64	70.00
Equity	636.14	30.00	879.28	30.00
Total	2120.47	100.00	2930.92	100.00

	Asset-3						
Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)			
Debt	1468.23	70.00	1834.65	70.00			
Equity	629.24	30.00	786.28	30.00			
Total	2097.48	100.00	2620.93	100.00			

Asset-4					
Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)	
Debt	59.03	70.00	116.67	70.00	
Equity	25.30	30.00	50.00	30.00	
Total	84.33	100.00	166.67	100.00	

Depreciation

- 47. Regulation 33 of the 2019 Tariff Regulations provides as follows:
 - "33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

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



- (2) The value base for the purpose of depreciation shall be the capital cost of the Asset-admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the Asset-for part of the year, depreciation shall be charged on pro rata basis."
- (3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

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

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

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

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

- (4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the Asset-of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the 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 upto 31.3.2019 from the gross depreciable value of the assets.
- (7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.
- (8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful services.
- (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."
- 48. 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 considering 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 allowed in respect of the transmission assets for the 2019-24 tariff period is as follows:

	Asset-1(a)					
	Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24		
Α	Opening Gross Block	1195.53	1201.67	1498.78		
В	Addition during the year 2019-24 due to projected ACE	6.14	297.11	165.20		
С	Closing Gross Block (A+B)	1201.67	1498.78	1663.98		
D	Average Gross Block (A+C)/2	1198.60	1350.23	1581.38		
Е	Average Gross Block (90% depreciable assets)	1189.97	1336.82	1563.32		
F	Average Gross Block (100% depreciable assets)	8.63	13.41	18.07		
G	Depreciable value (excluding IT equipment and software) (E*90%)	1070.97	1203.13	1406.98		

	Asset-1(a)					
	Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24		
Н	Depreciable value of IT equipment and software (F*100%)	8.63	13.41	18.07		
I	Total Depreciable Value (G+H)	1079.60	1216.54	1425.05		
J	Weighted average rate of Depreciation (WAROD) (in %)	5.35	5.37	5.37		
K	Lapsed useful life at the beginning of the year (Year)	0.00	0.00	1.00		
L	Balance useful life at the beginning of the year (Year)	25.00	25.00	24.00		
M	Depreciation during the year (D*J)	7.20	72.52	84.98		
N	Cumulative Depreciation at the end of the year	7.20	79.72	164.70		
0	Remaining Aggregate Depreciable Value at the end of the year	1072.40	1136.82	1260.35		

	Asset-1(b)			
	Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24
Α	Opening Gross Block	399.13	399.13	399.13
В	Addition during the year 2019- 24 due to projected ACE	0.00	0.00	0.00
С	Closing Gross Block (A+B)	399.13	399.13	399.13
D	Average Gross Block (A+C)/2	399.13	399.13	399.13
Е	Average Gross Block (90% depreciable assets)	399.13	399.13	399.13
F	Average Gross Block(100% depreciable assets)	0.00	0.00	0.00
G	Depreciable value (excluding IT equipment and software) (E*90%)	359.22	359.22	359.22
Н	Depreciable value of IT equipment and software (F*100%)	0.00	0.00	0.00
ı	Total Depreciable Value (G+H)	359.22	359.22	359.22
J	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28
K	Lapsed useful life at the beginning of the year (Year)	2.00	2.00	3.00
L	Balance useful life at the beginning of the year (Year)	23.00	23.00	22.00
M	Depreciation during the year (D*J)	2.37	21.07	21.07
N	Cumulative Depreciation at the end of the year	84.41	105.48	126.56
0	Remaining Aggregate Depreciable Value at the end of the year	274.81	253.74	232.66

	Accet 2				
	Asset-2				
	Particulars	2021-22 (Pro-rata for 25 days)	2022-23	2023-24	
Α	Opening Gross Block	2120.47	2293.76	2764.19	
В	Addition during the year 2019-24 due to projected ACE	173.29	470.43	166.73	
С	Closing Gross Block (A+B)	2293.76	2764.19	2930.92	
D	Average Gross Block (A+C)/2	2207.12	2528.98	2847.56	
Е	Average Gross Block (90% depreciable assets)	2194.22	2508.50	2819.73	
F	Average Gross Block (100% depreciable assets)	12.89	20.48	27.83	
G	Depreciable value (excluding IT equipment and software) (E*90%)	1974.80	2257.65	2537.75	
Н	Depreciable value of IT equipment and software (F*100%)	12.89	20.48	27.83	
	Total Depreciable Value (G+H)	1987.69	2278.13	2565.58	
J	Weighted average rate of Depreciation (WAROD) (in %)	5.34	5.36	5.37	
K	Lapsed useful life at the beginning of the year (Year)	0.00	0.00	1.00	
L	Balance useful life at the beginning of the year (Year)	25.00	25.00	24.00	
M	Depreciation during the year (D*J)	8.07	135.44	152.78	
N	Cumulative Depreciation at the end of the year	8.07	143.51	296.29	
0	Remaining Aggregate Depreciable Value at the end of the year	1979.63	2134.61	2269.29	

	Asset-3				
	Particulars	2022-23 (Pro-rata for 294 days)	2023-24		
Α	Opening Gross Block	2097.48	2545.27		
В	Addition during the year 2019-24 due to projected ACE	447.79	75.66		
С	Closing Gross Block (A+B)	2545.27	2620.93		
D	Average Gross Block (A+C)/2	2321.37	2583.10		
Е	Average Gross Block (90% depreciable assets)	2293.23	2548.00		
F	Average Gross Block (100% depreciable assets)	28.14	35.10		
G	Depreciable value (excluding IT equipment and software) (E*90%)	2063.91	2293.20		
Н	Depreciable value of IT equipment and software (F*100%)	28.14	35.10		
I	Total Depreciable Value (G+H)	2092.05	2328.30		

	Asset-3					
	Particulars	2022-23 (Pro-rata for 294 days)	2023-24			
J	Weighted average rate of Depreciation (WAROD) (in %)	5.39	5.40			
K	Lapsed useful life at the beginning of the year (Year)	0.00	0.00			
L	Balance useful life at the beginning of the year (Year)	25.00	25.00			
M	Depreciation during the year (D*J)	100.82	139.47			
N	Cumulative Depreciation at the end of the year	100.82	240.29			
0	Remaining Aggregate Depreciable Value at the end of the year	1991.23	2088.01			

	Asset-4					
	Particulars	2021-22 (Pro-rata for 242 days)	2022-23	2023-24		
Α	Opening Gross Block	84.33	93.13	149.58		
В	Addition during the year 2019- 24 due to projected ACE	8.80	56.45	17.09		
С	Closing Gross Block (A+B)	93.13	149.58	166.67		
D	Average Gross Block (A+C)/2	88.73	121.35	158.12		
Е	Average Gross Block (90% depreciable assets)	88.73	121.35	158.12		
F	Average Gross Block (100% depreciable assets)	0.00	0.00	0.00		
G	Depreciable value (excluding IT equipment and software) (E*90%)	79.86	109.22	142.31		
Н	Depreciable value of IT equipment and software (F*100%)	0.00	0.00	0.00		
I	Total Depreciable Value (G+H)	79.86	109.22	142.31		
J	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.12	5.03		
K	Lapsed useful life at the beginning of the year (Year)	0.00	0.00	1.00		
L	Balance useful life at the beginning of the year (Year)	25.00	25.00	24.00		
М	Depreciation during the year (D*J)	3.11	6.21	7.96		
N	Cumulative Depreciation at the end of the year	3.11	9.32	17.28		
0	Remaining Aggregate Depreciable Value at the end of the year	76.75	99.90	125.03		

Interest on Loan ("loL")

49. 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 decapitalization of asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.
- (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.
- (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

- (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".
- 50. The weighted average rate of interest of loL has been considered on the basis of the rates prevailing as on COD for respective loans. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period 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 transmission assets is as follows:

(₹ in lakh)

	Asset-1(a)				
	Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24	
Α	Gross Normative Loan	836.87	841.17	1049.15	
В	Cumulative Repayments up to Previous Year	0.00	7.20	79.72	
С	Net Loan-Opening (A-B)	836.87	833.97	969.43	
D	Addition due to ACE	4.30	207.98	115.64	
Е	Repayment during the year	7.20	72.52	84.98	
F	Net Loan-Closing (C+D-E)	833.97	969.43	1000.08	
G	Average Loan (C+F)/2	835.42	901.70	984.75	
Н	Weighted Average Rate of Interest on Loan (in %)	5.95	5.95	5.95	
	Interest on Loan (G*H)	5.58	53.65	58.59	

(₹ in lakh)

		Asset-1(b)		(X III IGKII)
	Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24
Α	Gross Normative Loan	279.39	279.39	279.39
В	Cumulative Repayments up to Previous Year	82.04	84.41	105.48
С	Net Loan-Opening (A-B)	197.35	194.98	173.91
D	Addition due to ACE	0.00	0.00	0.00
Е	Repayment during the year	2.37	21.07	21.07
F	Net Loan-Closing (C+D-E)	194.98	173.91	152.84
G	Àverage Loan (C+F)/2	196.17	184.45	163.37
Н	Weighted Average Rate of Interest on Loan (in %)	8.999%	9.011%	9.030%
I	Interest on Loan (G*H)	1.98	16.62	14.75

	Asset-2				
	Particulars	2021-22 (Pro-rata for 25 days)	2022-23	2023-24	
Α	Gross Normative Loan	1484.33	1605.63	1934.93	
В	Cumulative Repayments up to Previous Year	0.00	8.07	143.51	
С	Net Loan-Opening (A-B)	1484.33	1597.56	1791.42	

	Asset-2				
	Particulars	2021-22 (Pro-rata for 25 days)	2022-23	2023-24	
D	Addition due to ACE	121.30	329.30	116.71	
Е	Repayment during the year	8.07	135.44	152.78	
F	Net Loan-Closing (C+D-E)	1597.56	1791.42	1755.35	
G	Average Loan (C+F)/2	1540.95	1694.49	1773.39	
Н	Weighted Average Rate of Interest on Loan (in %)	5.96	5.96	5.96	
I	Interest on Loan (G*H)	6.29	101.02	105.72	

	1/2			
	Asset-3			
	Particulars	2022-23 (Pro-rata for 294 days)	2023-24	
Α	Gross Normative Loan			
В	Cumulative Repayments up to Previous Year	1468.23	1781.69	
С	Net Loan-Opening (A-B)	0.00	100.82	
D	Addition due to ACE	1468.23	1680.87	
Е	Repayment during the year	313.45	52.96	
F	Net Loan-Closing (C+D-E)	1680.87	1594.36	
G	Average Loan (C+F)/2	1574.55	1637.61	
Н	Weighted Average Rate of Interest on Loan (in %)	6.10	6.10	
I	Interest on Loan (G*H)	77.32	99.86	

(₹ in lakh)

	Asset-4				
	Particulars	2021-22 (Pro-rata for 242 days)	2022-23	2023-24	
Α	Gross Normative Loan	59.03	65.19	104.71	
В	Cumulative Repayments up to Previous Year	0.00	3.11	9.32	
С	Net Loan-Opening (A-B)	59.03	62.08	95.39	
D	Addition due to ACE	6.16	39.52	11.96	
Е	Repayment during the year	3.11	6.21	7.96	
F	Net Loan-Closing (C+D-E)	62.08	95.39	99.39	
G	Average Loan (C+F)/2	60.56	78.74	97.39	
Н	Weighted Average Rate of Interest on Loan (in %)	6.05	6.05	6.05	
I	Interest on Loan (G*H)	2.43	4.76	5.89	

Return on Equity ("RoE")

- 51. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide as follows:
 - "30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.





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

Provided that return on equity in respect of Additional Capitalization after cutoff 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 rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.



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

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

Where "t" is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

Illustration-

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

Rate of return on equity = 15.50/(1-0.2155) = 19.758%

- (ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:
 - (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is ₹1,000 crore;
 - (b) Estimated Advance Tax for the year on above is ₹240 crore;
 - (c) Effective Tax Rate for the year 2019-20 = ₹240 Crore/₹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."
- 52. The Petitioner has submitted that MAT rate is applicable to it. MAT rate applicable in the year 2019-20 has been considered for the purpose of RoE which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the transmission assets is as follows:

	(Circulation)				
	Asset-1a				
	Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24	
Α	Opening Equity	358.66	360.50	449.63	
В	Addition due to ACE	1.84	89.13	49.56	
С	Closing Equity (A+B)	360.50	449.63	499.19	
D	Average Equity (A+C)/2	359.58	405.07	474.41	
Е	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	
F	Tax Rate applicable (in %)	17.472	17.472	17.472	
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	
Н	Return on Equity (Pre-tax) (D*G)	7.59	76.08	89.10	

(₹ in lakh)

	Asset-1b				
	Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24	
Α	Opening Equity	119.74	119.74	119.74	
В	Addition due to ACE	0.00	0.00	0.00	
С	Closing Equity (A+B)	119.74	119.74	119.74	
D	Average Equity (A+C)/2	119.74	119.74	119.74	
Е	Return on Equity (Base Rate) (in %)	15.500%	15.500%	15.500%	
F	Tax Rate applicable (in %)	17.472%	17.472%	17.472%	
G	Rate of Return on Equity (Pre-tax)	18.782%	18.782%	18.782%	
Н	Return on Equity (Pre-tax) (D*G)	2.53	22.49	22.49	

(₹ in lakh)

	Asset-2				
	Particulars	2021-22 (Pro-rata for 25 days)	2022-23	2023-24	
Α	Opening Equity	636.14	688.13	829.26	
В	Addition due to ACE	51.99	141.13	50.02	
С	Closing Equity (A+B)	688.13	829.26	879.28	
D	Average Equity (A+C)/2	662.13	758.69	854.27	
Е	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	
F	Tax Rate applicable (in %)	17.472	17.472	17.472	
G	Rate of Return on Equity (Pretax)	18.782	18.782	18.782	
Н	Return on Equity (Pre-tax) (D*G)	8.52	142.50	160.45	

Asset-3			
	Particulars	2022-23 (Pro-rata for 294 days)	2023-24
Α	Opening Equity	629.24	763.58
В	Addition due to ACE	134.34	22.70
С	Closing Equity (A+B)	763.58	786.28

	Asset-3				
	Particulars	2022-23 (Pro-rata for 294 days)	2023-24		
D	Average Equity (A+C)/2	696.41	774.93		
Е	Return on Equity (Base Rate) (in %)	15.500	15.500		
F	Tax Rate applicable (in %)	17.472	17.472		
G	Rate of Return on Equity (Pre-tax)	18.782	18.782		
Н	Return on Equity (Pre-tax) (D*G)	105.36	145.55		

	Asset-4			
	Particulars	2021-22 (Pro-rata for 242 days)	2022-23	2023-24
Α	Opening Equity	25.30	27.94	44.87
В	Addition due to ACE	2.64	16.94	5.13
С	Closing Equity (A+B)	27.94	44.87	50.00
D	Average Equity (A+C)/2	26.62	36.41	47.44
Е	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782
Н	Return on Equity (Pre-tax) (D*G)	3.31	6.84	8.91

Operation & Maintenance Expenses ("O&M Expenses")

53. The O&M Expenses claimed by the Petitioner for the transmission assets is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-1 (a): 500 MVA ICT at Wardha Sub-station	-	-	21.57	199.00	205.50
Asset-1(b): 1 number of 400 kV bay and 1 number of 220 kV Bay at Wardha Sub-station	54.66	56.58	58.57	60.62	62.75
Asset-2: 500 MVA ICT at Seoni and 1 number of 400 kV bay and 1 number of 220 kV Bay at Seoni Sub-station	-	-	17.16	259.62	268.25
Asset-3: 500 MVA ICT at Morena Substation and 1 no of 400 kV bay and 1 number of 220 kV Bay at Morena Sub-station	-	-	-	209.12	268.25
Asset-4: 1 number of 400 kV SLR bay at Bina Sub-station	-	-	22.84	35.66	36.91

54. Regulation 35(3)(a) of the 2019 Tariff Regulations provide as follows:



"35 (3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the combined 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		0.500	0.500	0.545	0.504
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 (₹ La	kn per km)	Г			T
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 ((₹ 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 ((₹ Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme ((₹ Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme ((₹ Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
±800 kV, Bishwanath-Agra HVDC bipole scheme ((₹ Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

Provided that the O&M expenses for the GIS bays shall be allowed as worked out by multiplying 0.70 of the O&M expenses of the normative O&M expenses for bays;

Provided further that:

- 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;
- the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme iii. (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;
- the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 V. 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
- the O&M expenses of Static Synchronous Compensator and Static Var vi. 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.
- 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."



55. O&M Expenses claimed by the Petitioner are within the norms specified under the 2019 Tariff Regulations. O&M Expenses approved in respect of the transmission assets for 2019-24 tariff period are as follows:

(₹ in lakh)

Asset-1(a)				
Particulars	2021-22 (Pro-rata for 41 days)		2023-24	
Transformer (in MVA)				
400 kV: Wardha: ICT	500	500	500	
Norms (₹ lakh/MVA)				
400 kV	0.384	0.398	0.411	
Total of Transformer	192.00	199.00	205.50	
Total of O&M Expenses allowed	21.57	199.00	205.50	

(₹ in lakh)

Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24
Sub-station Bays			
400 kV: Wardha: ICT Bays	1	1	1
220 kV: Wardha: ICT Bays	1	1	1
Norms			
400 kV		35.66	36.91
220 kV		24.96	25.84
Total Sub-station Bays	6.58	60.62	62.75
Total O&M Expenses allowed	6.58	60.62	62.75

As	sset-2		
Particulars	2021-22 (Pro-rata for 25 days)	2022-23	2023-24
Sub-station Bays			
400 kV: Seoni: ICT Bays	1	1	1
220 kV: Seoni: ICT Bay	1	1	1
Norms			
400 kV	34.45	35.66	36.91
220 kV	24.12	24.96	25.84
Total Sub-station Bays	58.57	60.62	62.75
Transformer (in MVA)			
400 kV: Seoni: ICT	500	500	500
Norms (₹ lakh/MVA)			
400 kV	0.384	0.398	0.411
Total of Transformer	192.00	199.00	205.50
Total of O&M expenses allowed	17.16	259.62	268.25

Asset-3					
	2022-23				
Particulars	(Pro-rata for 294 days)	2023-24			
Sub-station Bays					
400 kV: ICT - 3 Bay at Morena Sub-station	1	1			
220 kV: ICT - 3 Bay at Morena Sub-station	1	1			
Norms					
400 kV	35.66	36.91			
220 kV	24.96	25.84			
Total Sub-station Bays	60.62	62.75			
Transformer (in MVA)					
400 kV: ICT-3 at Morena Sub-station	500	500			
Norms (₹ lakh/MVA)					
400 kV	0.398	0.411			
Total of Transformer	199.00	205.50			
Total of O&M expenses	209.12	268.25			

(₹ in lakh)

Asset-4					
Particulars	2021-22 (Pro-rata for 242 days)	2022-23	2023-24		
Sub-station Bays					
400 kV: SLR bay at Bina Sub-station	1	1	1		
Norms					
400 kV	34.45	35.66	36.91		
Total Sub-station Bays	34.45	35.66	36.91		
Total of O&M expenses	22.84	35.66	36.91		

Interest on Working Capital ("IWC")

- 56. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations provide as follows:
 - "34. Interest on Working Capital: (1) The working capital shall cover:

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

- (i) Receivables equivalent to 45 days of annual fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
- (iii) Operation and maintenance expenses, including security expenses for one month."



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

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

- (4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."
- "3. **Definition** In these regulations, unless the context otherwise requires:-
- (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;"
- 57. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points. The Petitioner has considered the rate of IWC as 10.50% as on COD for Asset-1a, Asset-2, Asset-3 and Asset-4 and rate of IWC as 12.05% as on 1.4.2019 for Asset-1b. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered as 12.05% for Asset-1b and for Asset-1a, Asset-2, Asset-3 and Asset-4, the rate of IWC considered is 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-24. The components of the working capital and interest allowed thereon is as follows:

(₹ in lakh) Asset-1a 2021-22 **Particulars** 2022-23 2023-24 (Pro-rata for 41 days) Working O&M Capital **Expenses** 16.00 16.58 17.13 (O&M expenses for one month) Working Capital for Maintenance Spares 28.80 29.85 30.83 (15% of O&M expenses) Working Capital for Receivables (Equivalent to 45 days of annual 47.22 50.73 55.21 fixed cost /annual transmission charges) **Total Working Capital (A+B+C)** 92.02 97.16 103.16 Rate of Interest for working capital 10.50 10.50 10.50

	(in %)			
F	Interest of working capital (D*E)	1.09	10.20	10.83

	Asse	t-1b		
	Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24
Α	Working Capital for O&M Expenses (O&M expenses for one month)	4.88	5.05	5.23
В	Working Capital for Maintenance Spares (15% of O&M expenses)	8.79	9.09	9.41
С	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	15.14	15.27	15.27
D	Total Working Capital (A+B+C)	28.81	29.42	29.91
Е	Rate of Interest for working capital (in %)	10.500%	10.500%	10.500%
F	Interest of working capital (D*E)	0.34	3.09	3.14

(₹ in lakh)

	Asset-2					
	Particulars	2021-22 (Pro-rata for 25 days)	2022-23	2023-24		
Α	Working Capital for O&M Expenses (O&M expenses for one month)	20.88	21.64	22.35		
В	Working Capital for Maintenance Spares (15% of O&M expenses)	37.59	38.94	40.24		
С	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	73.78	80.56	86.42		
D	Total Working Capital (A+B+C)	132.24	141.13	149.01		
Е	Rate of Interest for working capital (in %)	10.50	10.50	10.50		
F	Interest of working capital (D*E)	0.95	14.82	15.65		

	Asset-3						
	Particulars	2022-23 (Pro-rata for 294 days)	2023-24				
А	Working Capital for O&M Expenses (O&M expenses for one month)	21.64	22.35				
В	Working Capital for Maintenance Spares (15% of O&M expenses)	38.94	40.24				
С	Working Capital for Receivables (Equivalent to 45	77.18	82.17				

	days of annual fixed cost /annual transmission charges)		
D	Total Working Capital (A+B+C)	137.76	144.76
Е	Rate of Interest for working capital (in %)	10.50	10.50
F	Interest of working capital (D*E)	11.65	15.20

	Asset-4				
	Particulars	2021-22 (Pro-rata for 242 days)	2022-23	2023-24	
Α	Working Capital for O&M Expenses (O&M expenses for one month)	2.87	2.97	3.08	
В	Working Capital for Maintenance Spares (15% of O&M expenses)	5.17	5.35	5.54	
С	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	6.08	6.79	7.55	
D	Total Working Capital (A+B+C)	14.11	15.11	16.16	
Е	Rate of Interest for working capital (in %)	10.50	10.50	10.50	
F	Interest of working capital (D*E)	0.98	1.59	1.70	

Annual Fixed Charges for 2019-24 Tariff Period

58. The transmission charges allowed in respect of the transmission assets for 2019-24 tariff period are as follows:

(₹ in lakh)

Asset-1(a)				
Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24	
Depreciation	7.20	72.52	84.98	
Interest on Loan	5.58	53.65	58.59	
Return on Equity	7.59	76.08	89.10	
Operation and Maintenance Expense	21.57	199.00	205.50	
Interest on Working Capital	1.09	10.20	10.83	
Total	43.03	411.45	449.00	

Asset-1(b)			
Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24
Depreciation	2.37	21.07	21.07
Interest on Loan	1.98	16.62	14.75
Return on Equity	2.53	22.49	22.49

Asset-1(b)			
Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24
Operation and Maintenance Expense	6.58	60.62	62.75
Interest on Working Capital	0.34	3.09	3.14
Total	13.80	123.89	124.21

Asset-2			
Particulars	2021-22 (Pro-rata for 25 days)	2022-23	2023-24
Depreciation	8.07	135.44	152.78
Interest on Loan	6.29	101.02	105.72
Return on Equity	8.52	142.50	160.45
Operation and Maintenance Expense	17.16	259.62	268.25
Interest on Working Capital	0.95	14.82	15.65
Total	40.99	653.40	702.85

(₹ in lakh)

<u>/\times</u>				
Asset-3				
Particulars	2022-23 (Pro-rata for 294 days)	2023-24		
Depreciation	100.82	139.47		
Interest on Loan	77.32	99.86		
Return on Equity	105.36	145.55		
Operation and Maintenance Expense	209.12	268.25		
Interest on Working Capital	11.65	15.20		
Total	504.27	668.33		

(₹ in lakh)

Asset-4			
Particulars	2021-22 (Pro-rata for 242 days)	2022-23	2023-24
Depreciation	3.11	6.21	7.96
Interest on Loan	2.43	4.76	5.89
Return on Equity	3.31	6.84	8.91
Operation and Maintenance Expense	22.84	35.66	36.91
Interest on Working Capital	0.98	1.59	1.70
Total	32.67	55.06	61.37

Filing Fee and Publication Expenses

59. 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

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

Goods and Services Tax

- 61. The Petitioner has submitted that if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/Statutory Authorities, the same may be allowed to be recovered from the beneficiaries.
- MPPMCL has submitted that the Petitioner's prayer for GST is premature and, hence, the same shall not be considered. In response to which the Petitioner has reiterated its submissions.
- 63. 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 pre-mature.

Security Expenses

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

65. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for 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.

Capital Spares

66. 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

- 67. The Petitioner has prayed that the transmission charges for 2019-24 period may be recovered on monthly basis in accordance with Regulation 57 of the 2019 Tariff Regulations and will be shared by the beneficiaries and long term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from to time.
- 68. 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. However, with effect from 1.11.2020, sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (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.

- 69. To summarise,
 - a) AFC allowed in respect of the transmission assets for 2019-24 tariff period in the instant order are as follows:

(₹ in lakh)

			12	
Asset 1(a)				
Particulars 2021-22 (Pro-rata for 41 days)		2022-23	2023-24	
Total	43.03	411.45	449.00	

(₹ in lakh)

Asset 1(b)			
Particulars	2021-22 (Pro-rata for 41 days)	2022-23	2023-24
Total	11.68	124.08	124.40

(₹ in lakh)

			(*
Asset 2			
Particulars	2021-22 (Pro-rata for 25 days)	2022-23	2023-24
Total	40.99	653.40	702.85

(₹ in lakh)

		(\ III Iakii)	
Asset-3			
Particulars	2022-23 (Pro-rata for 294 days)	2023-24	
Total	504.27	668.33	

(₹ in lakh)

			(* ***********************************						
Asset 4									
Particulars	2021-22 (Pro-rata for 242 days)	2022-23	2023-24						
Total	32.67	55.06	61.37						

- 70. Annexure given hereinafter form part of the order.
- 71. This order disposes of Petition No. 332/TT/2022 in terms of the above discussions and findings.

(P. K. Singh) Member

sd/-(Arun Goyal) Member

sd/-(I. S. Jha) Member

Allication										
				Asset- 1	а					
2019-24	Admitted Capital	ACE			Admitted Capital Cost as	Rate of	Annual Depreciation as per Regulations			
Capital Expenditure as on COD	Cost as on COD (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)	on 31.3.2024 (₹ in lakh)	Depreciati on (in %)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)	
Building	0.00	0.00	8.00	12.00	20.00	3.34	0.00	0.13	0.47	
Sub-Station	1187.49	4.96	280.73	152.27	1625.45	5.28	62.83	70.37	81.80	
IT Equipment and software	8.04	1.18	8.38	0.93	18.53	15.00	1.29	2.01	2.71	
Total	1195.53	6.14	297.11	165.20	1663.98		64.12	72.52	84.98	
					Average Gr (₹ in lakh)	oss Block	1198.60	1350.23	1581.38	
			Weighted A of Deprecia	verage Rate tion (in %)	5.35	5.37	5.37			

Asset -1b										
2019-24	Admitted ACE Capital (₹ in lakh)		Admitted Capital	Rate of	А	nnual Depre	ciation as pe	er Regulation	าร	
Capital Expenditure as on 1.4.2019	Cost as on 1.4.2019 (₹ in lakh)	2019-24	Cost as on 31.3.2024	on	Depreci ation (in %)	2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Sub Station	399.13	0.00	399.13	5.28	21.07	21.07	21.07	21.07	21.07	
Total	399.13	0.00	399.13		21.07	21.07	21.07	21.07	21.07	
·		Average Gr Block (₹ in lakh)	ross	399.13	399.13	399.13	399.13	399.13		
			Weighted A Rate of Dep (in %)	•	5.28	5.28	5.28	5.28	5.28	

				Asset-	2					
2019-24 Admitted Capital		ACE			Admitted Capital Cost as	Rate of	Annual Depreciation as per Regulations			
Capital Expenditure as on COD	Cost as on COD (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)	on 31.3.2024 (₹ in lakh)	on Depreciati 1.3.2024 on (in %)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)	
Building	0.00	0.00	8.00	12.00	20.00	3.34	0.00	0.13	0.47	
Sub-Station	2109.19	170.07	450.48	151.98	2881.72	5.28	115.85	132.24	148.14	
IT Equipment and software	11.28	3.22	11.95	2.75	29.20	15.00	1.93	3.07	4.17	
Total	2120.47	173.29	470.43	166.73	2930.92		117.79	135.44	152.78	
					Average Gr (₹ in lakh)	oss Block	2207.12	2528.98	2847.56	
					Weighted A of Deprecia	verage Rate	5.34	5.36	5.37	

			Ass	et- 3				
2019-24 Admitted Capital	Capital	ACI	E	Admitted Capital Cost as	Rate of	Annual Depreciation as per Regulations		
Capital Expenditure as on COD	Cost as on COD (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)	on 31.3.2024 (₹ in lakh)	Depreciati on (in %)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)	
Building	0.00	14.00	6.00	20.00	3.34	0.23	0.57	
Sub-Station	2074.15	424.17	65.36	2563.68	5.28	120.71	133.64	
IT Equipment and software	23.33	9.62	4.30	37.25	15.00	4.22	5.26	
Total	2097.48	447.79	75.66	2620.93		125.17	139.47	
		Average Gr (₹ in lakh)	oss Block	2321.37	2583.10			
					verage Rate tion (in %)	5.39	5.40	

Asset- 4										
2019-24 Admitted Capital	ACE			Admitted Capital Cost as	Rate of	Annual Depreciation as per Regulations				
Capital Expenditure as on COD	Cost as on COD (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)	on 31.3.2024 (₹ in lakh)	Depreciati on (in %)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)	
Building	0.00	0.00	20.00	0.00	20.00	3.34	0.00	0.33	0.67	
Sub-Station	84.33	8.80	36.45	17.09	146.67	5.28	4.68	5.88	7.29	
Total	84.33	8.80	56.45	17.09	166.67		4.68	6.21	7.96	
					Average Gross Block (₹ in lakh)		88.73	121.35	158.12	
					Weighted Average Rate of Depreciation (in %)		5.28	5.12	5.03	