CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 312/TT/2020

Coram:

Shri I. S. Jha, Member
Shri Arun Goyal, Member

Date of Order: 02.02.2021

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of the 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of **Asset-I**:400 kV D/C Lara STPS-I to Raigarh (Kotra) Pooling Station Transmission Line along with associated bays at Raigarh (Kotra) Pooling Station and **Asset-II**: 400 kV D/C (Quad) Lara STPS-I Champa Line along with associated bays at Champa Pooling Station under "Transmission System associated with Lara STPS-I (2x800 MW) Generation Project of NTPC" in Western Region.

And in the matter of:

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

Vs

1. Madhya Pradesh Power Management Company Ltd.,
   Shakti Bhawan, Rampur,
   Jabalpur-482008.

2. Madhya Pradesh Power Transmission Company Ltd.,
   Shakti Bhawan, Rampur,
   Jabalpur-482008.

3. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd.,
   3/54, Press Complex, Agra-Bombay Road,
   Indore-452008.

4. Maharashtra State Electricity Distribution Co. Ltd.,
   Hongkong Bank Building, 3rd Floor
   M.G. Road, Fort,

Mumbai-400001.

5. Maharashtra State Electricity Transmission Co. Ltd., Prakashganga, 6th Floor, Plot No. C-19, E-Block, Bandra Kurla Complex, Bandra (East) Mumbai-400051.

6. Gujarat Urja Vikas Nigam Ltd., Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara-390007.

7. Electricity Department, Governmentof Goa, Vidyut Bhawan, Panaji, NearMandvi Hotel, Goa-403001.

8. Electricity Department, Administration of Daman & Diu Daman-396210.

9. DNH Power Distribution Corporation Ltd., Vidyut Bhawan, 66 kV Road, Near Secretariat Amli, Silvassa-396230.

10. Chhattisgarh State Power Transmission Co. Ltd., State Load Despacth Building, Dangania, Raipur-492013.

11. Chhattisgarh State Power Distribution Co. Ltd., P.O. Sunder Nagar, Dangania, Raipur Chhattisgarh-492013.

12. NTPC Ltd., NTPC Bhawan, Core-7, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi-110003 **....Respondents**

For Petitioner : Shri S. S. Raju, PGCIL
Shri A. K. Verma, PGCIL

For Respondents : None

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd. (hereinafter referred to as "the Petitioner"), a deemed transmission licensee, for truing-up of tariff from COD to 31.3.2019 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of tariff for the period from 1.4.2019 to 31.3.2024 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following assets (hereinafter collectively referred to as "the Combined Asset") under "Transmission System associated with Lara STPS-I (2x800 MW) Generation Project of NTPC" in Western Region (hereinafter referred to as "the transmission project"):

Asset-I:400 kV D/C Lara STPS-I to Raigarh (Kotra) Pooling Station Transmission Line along with associated bays at Raigarh (Kotra) Pooling Station; and

Asset-II:400 kV D/C (Quad) Lara STPS-I-Champa Line along with associated bays at Champa Pooling Station.

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

"1) Additional RoE of 0.5% claimed for 2014-19 Tariff block for Asset-II.

2) Allow the addcap for 2014-19 and 2019-24 tariff block as claimed as per Para 5 and 7 above

3) Allow the initial spares as claimed under instant petition.

4) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 6 and 7 above.

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 Hon'ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 6 and 7 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 beneficiaries 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 file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 6.6 above.

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 beneficiaries, if GST on transmission is levied at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

Background

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

(a) The Investment Approval (IA) and expenditure sanction for the transmission project was accorded by the Board of Directors of the Petitioner Company vide Memorandum No. C/CP/Investment/Lara-I dated 24.6.2014 at an estimated cost of ₹40047.00 lakh including IDC of ₹2464.00 lakh (based on February, 2014 price level). The project was scheduled to be put into commercial operation within 34 months from the date of approval of Board of Directors i.e. 21.6.2014.

(b) The entire scope of work covered in the IA has been completed.

(c) As per Investment Approval, the scheduled COD of the assets under the transmission project was within 34 months from the date of Investment Approval. Hence, the scheduled COD was 21.4.2017. Against this, Asset-I and Asset-II were put into commercial operation on 5.5.2016 and 21.7.2017 respectively. Thus, there is no time over-run in case of Asset-1 while there is a time over-run of 3 months in case of Asset-II. The Commission vide order dated 20.7.2018 in Petition No. 125/TT/2017 condoned the time over-run of one month (out of three months) in case of Asset-II due to RoW issues.

(d) The tariff for Asset-I from its COD to 31.3.2019 was determined vide order dated 25.5.2016 in Petition No. 254/TT/2015 and for Asset-II from its COD to 31.3.2019 was determined vide order dated 20.7.2018 in Petition No. 125/TT/2017 as per the 2014 Tariff Regulations. transmissionThe Commission had approved the COD of the transmission assets under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations as prayed by the Petitioner in Petition No. 254/TT/2015 (Asset-I) and Petition No. 125/TT/2017 (Asset-II) and held that the transmission charges of the transmission assets from their COD to commissioning of the generating station will be borne by NTPC.

(e) The tariff allowed in case of Asset-I and Asset-II during the 2014-19 tariff period in orders dated 25.5.2016 and 20.7.2018 respectively is trued-up in the instant petition.

(f) The scope of the transmission project is as under:

<u>Transmission Line</u>

(i) Lara STPS-I Raigarh (Kotra) 400kV D/C Line : 18 km

(ii) Lara STPS-I Champa Pooling Station 400kV D/C (Quad) Line : 112 km

<u>Sub-station</u>

(i) Extension of 400 kV Raigarh (Kotra) (Powergrid) Sub-station – 400 kV Line Bays : 2 nos

(ii) Extension of 400 kV Champa (Powergrid) Sub-station – 400 kV Line Bays : 2 nos.

(g) The complete scope of the work as per Investment approval is covered in the instant petition.

(h) The Commission vide order dated 25.5.2016 in Petition No. 254/TT/2015 directed the Petitioner to submit the RLDC Certificate w.r.t. Asset-I at the time of truing up. Accordingly, the petitioner has submitted the RLDC charging certificate dated 26.5.2016 wherein it is stated that Asset-I was idle charged on 4.5.2016. Accordingly the COD of the Asset-I has been considered as 5.5.2016 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations.

(i) The trued-up tariff claimed by the Petitioner in the instant Petition, along with details of the tariff approved vide previous orders is as under:

(₹ in lakh)

Assets	**Particular**	**2016-17**	**2017-18**	**2018-19**
Asset-I	Annual Fixed Chargesapproved vide order dated 25.5.2016	722.75	931.39	957.28
	Claimed by the Petitioner based on true-up in the instant Petition	731.05	909.49	907.42
Asset-II	Annual Fixed Chargesapproved vide order dated 20.7.2018	0.00	3578.55	5498.50
	Claimed by the Petitioner based on true-up in the instant Petition	0.00	3347.50	4998.09

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

5. The Petitioner has served the petition on the Respondents and Public Notice regarding filing of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notices

published in the newspapers by the Petitioner. M.P.Power Management Company Ltd. (MPPMCL), i.e. Respondent No.1, has filed its reply vide affidavit dated 8.6.2020 and has raised issues like grossing up of Return on Equity, effects of GST and Initial Spares. The Petitioner vide affidavit dated 10.6.2020 has filed reply to the Technical Validation (TV) letter dated 18.5.2020 and vide affidavit dated 13.7.2020 has filed its rejoinder to the reply filed by MPPMCL. The Petitioner also, vide affidavit dated 17.8.2020, filed its reply to the queries raised in the Record of Proceedings (RoP) dated 4.8.2020. The issues raised by Respondents and the clarifications given by the Petitioner are considered in the relevant portions of this order.

6. This order is issued considering the submissions made by the Petitioner in the petition dated 17.1.2020, the Petitioner's affidavits dated 10.6.2020 and 17.8.2020, MPPMCL's reply and the Petitioner's rejoinder thereto.

7. The hearing in this matter was held on 28.7.2020 through video conference and the order was reserved.

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

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

9. The Petitioner has claimed the following trued-up transmission charges in respect of the transmission assets:

(₹ in lakh)

Asset-I				Asset-II	
Particulars	**2016-17 (Pro-rata for 331 days)**	**2017-18**	**2018-19**	**2017-18 (Pro-rata for 254 days)**	**2018-19**
Depreciation	180.05	237.21	241.52	967.88	1475.79
Interest on Loan	197.77	232.77	215.94	999.16	1423.83
Return on Equity	202.58	266.37	272.02	1119.64	1710.64
Interest on working capital	19.41	23.75	23.85	75.74	113.04
O & M Expenses	129.07	147.06	151.93	185.08	274.79
Total	**728.88**	**907.16**	**905.26**	**3347.50**	**4998.09**

10. The Petitioner has claimed the trued-up Interest on Working Capital (IWC) for the transmission assets as follows:

(₹ in lakh)

Asset-I				Asset-II	
Particulars	**2016-17 (Pro-rata for 331 days)**	**2017-18**	**2018-19**	**2017-18 (Pro-rata for 254 days)**	**2018-19**
O&M expenses	11.86	12.26	12.66	22.16	22.90
Maintenance Spares	21.35	22.06	22.79	39.89	41.22
Receivables	133.96	151.19	150.88	801.73	833.02
Total	**167.17**	**185.51**	**186.33**	**863.78**	**897.14**
Rate of Interest (%)	12.80	12.80	12.80	12.60	12.60
Interest on Working Capital	**21.40**	**23.75**	**23.85**	**108.84**	**113.04**

Capital Cost

11. The Commission vide order dated 25.5.2016 in Petition No. 254/TT/2015 and order dated 20.7.2018 in Petition No. 125/TT/2017 had admitted the capital cost of ₹3108.82 lakh and ₹25717.62 lakh for Assets-I and II respectively as on 31.3.2019 for determination of tariff for the 2014-19 period.

12. The Petitioner vide Auditor's Certificates dated 3.8.2019 and 31.7.2019 has submitted the capital cost upto COD and ACE upto 31.3.2020 for Assets-I and II.The details of approved apportioned capital cost, capital cost as on COD and ACE incurred upto 31.3.2019 as claimed by the Petitioner for Assets-I and II are as under:

(₹ in lakh)

Assets	Approved Apportioned Cost (FR)	Actual Capital Cost as on COD	Additional Capital Expenditure			Total Capital Cost as on 31.3 2019
			2016-17	2017-18	2018-19	
Asset-I	5063.62	3180.21	1270.41	110.22	56.56	4617.40
Asset-II	34983.33	26185.42	0.00	1029.35	1763.14	28977.91

Cost Over-run

13. The Petitioner has claimed capital cost of ₹3180.21 lakh and ₹26185.42 lakh for Assets-I and II respectively as on COD.

14. The total completion cost including ACE in respect of transmission assets is ₹33595.31 lakh and the approved FR cost is ₹40046.95 lakh. Therefore, there is no cost over-run with respect to the FR cost.

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

15. The Petitioner has claimed Interest During Construction (IDC) for the transmission assets and has submittted the Auditor's Certificates in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the IDC discharged.

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

17. In case of Asset-I, the Commission vide order dated 25.5.2016 in Petition No. 254/TT/2015, had allowed IDC of ₹83.50 lakh. The same is considered as part of the capital cost as on COD for true-up of the 2014-19 period. The Petitioner vide affidavits dated 10.6.2020 and 17.8.2020 has submitted that IDC dscharged upto COD was ₹10.06 lakh and accrual IDC was ₹74.33 lakh.

18. In case of Asset-II, there was time over-run of 3 months, out of which 1 month was condoned by the Commission vide order dated 20.7.2018 in Petition No. 125/TT/2017. Accordingly, IDC for 2 months has not been included in the capital cost as on COD.

19. Based on the information furnished by the Petitioner, IDC considered is summarized as under:

(₹ in lakh)

Assets	**IDC as per Auditor's Certificate**	**IDC Admissible**	**IDC disallowed**	**IDC Discharged as on COD**	**IDC Undischarged as on COD**	**IDC Discharged in 2016-17**	**IDC Discharged in 2017-18**
A	**B**	**C**	**D=B-C**	**E**	**F=C-E**	**G**	
Asset-I	83.50	83.50	0.00	10.06	73.44	73.44	0.00
Asset-II	1522.17	1279.19	242.98	369.81	909.38	0.00	909.38

20. The Petitioner has claimed an IEDC of ₹155.88 lakh and ₹885.70 lakh for Assets-I and II and has submitted Auditor's certificate in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the transmission assets. IEDC amounting to ₹48.07 lakh has been disallowed on account of time over-run for the period of two months for Asset-II not having been allowed vide order dated 20.7.2018 in Petition No. 125/TT/2017. Accordingly, IEDC of ₹155.88 lakh and ₹837.63 lakh respectively has been allowed for Assets-I and II.

Initial Spares

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

> *"(d) Transmission System*
> *Transmission line: 1.00%*
> *Transmission sub-station (Green Field): 4.00%*
> *Transmission sub-station (Brown Field): 6.00%*
> *Gas Insulated sub-station:5.00%*
> *Communication System: 3.5%"*

22. The details of Initial Spares claimed by the Petitioner as per Auditor's certificate is as under:

Assets	Plant & machinery cost up to cut-off date (excluding IDC and IEDC as per Auditor certificate) (A) (₹in lakh)	Ceiling Limit (C) (in %)	Initial Spares Claimed (B) (₹ in lakh)
Sub-station (Brown Field)			
Asset-I	1356.47	6.00	82.02
Asset-II	1359.67	6.00	58.75
Transmission Line			
Asset-I	2845.27	1.00	208.19
Asset-II	25397.22	1.00	237.14

23. MPPMCL in its reply has submitted that the claim of the Petitioner for Initial Spares beyond 1% of the plant and machinery cost should not be allowed. MPPMCL has further submitted that the plea taken by the Petitioner is without any substance, as the execution of the project started after careful survey and adequate provisions for such special conditions were expected to have been made while framing the estimate. Now, at the time of completion of the project, the reasons mentioned by the Petitioner are unacceptable. In response, the Petitioner has submitted that the transmission lines under the subject project are critical lines for evacuating power from NTPC Lara (2X800MW) project and comprise of comparatively heavier towers for twin and quad configuration of various tower mix.

These project lines are also comparatively shorter in length, having a lesser project cost. Hence, tonnage of spare towers as per the above said requirement has increased and in turn the spare cost has exceeded the permissible limit of 1% of Plant and Machinery cost which is beyond the control of the Petitioner.

24. We have considered the submissions of the Petitioner and MPPMCL. The Initial Spares are allowable subject to the ceiling specified in Regulation 13(d) of the 2014 Tariff Regulations. The Petitioner's claim of Initial Spares is within the ceiling limit specified in Regulation 13(d) of the 2014 Tariff Regulations in case of Asset-II and it is more than the limit in case of Asset-I. Accordingly, the intial spares in case of Asset-I is resctricted as shown in the table given below:

Assets	**Plant & machinery cost up to cut-off date (excluding IDC and IEDC as per auditor certificate) (₹in lakh)**	**Spares Claimed (₹in lakh)**	**Ceiling in percentage (%) (C)**	**Allowable Initial Spares Worked out D = [(A-B)*C /(100- C)] (₹in lakh)**	**Initial Spares Allowed as on COD (₹in lakh)**	**Excess Initial Spares Claimed F=B-E**
	A	**B**	**C**	**D**	**E**	**F**
Sub-station (Brown Field)						
Asset-I	1180.29	82.02	6.00	70.10	70.10	11.92
Asset-II	1359.67	58.75	6.00	83.04	58.75	0.00
Transmission Line						
Asset-I	2745.26	208.19	1.00	25.63	25.63	182.56
Asset-II	25397.22	237.14	1.00	254.14	237.14	0.00

<u>Capital Cost as on COD</u>

25. Accordingly, the capital cost allowed as on COD is summarized hereunder:

(₹in lakh)

Assets	**Capital Cost as on COD as per Auditor Certificate**	**Less: IDC as on COD due to**		**Disallowed IEDC**	**Excess Initial Spares**	**Capital Cost considered as on COD (on cash basis)**
		Computational difference	**Undischarged**			
	A	**B**	**C**	**D**	**E**	**F=A-B-C-D-E**
Asset-I	3180.21	0.00	73.44	0.00	194.48	2912.29
Asset-II	26185.42	242.98	909.38	48.07	0.00	24984.99

Additional Capital Expenditure (ACE)

26. The Petitioner has claimed the following ACE for the assets covered in the instant petition and submitted Auditor's Certificates in support of the same:

(₹ in lakh)

Asset	Additional Capital Expenditure		
	2016-17	2017-18	2018-19
Asset-I	1270.41	110.22	56.56
Asset-II	0.00	1029.35	1763.14

27. The Petitioner has submitted that ACE incurred for the transmission assets is on account of unexecuted/ balance and retention payments due to undischarged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date. ACE claimed during the years 2016-17, 2017-18 and 2018-19 for Asset-I and ACE claimed during the years 2017-18 and 2018-19 for Asset-II have been claimed under Regulation 14(1)(i) (undischarged liabilities) and Regulation 14(1)(ii) (unexecuted works) of the 2014 Tariff Regulations and is within the cut-off date. The Petitioner vide affidavit dated 10.6.2020 has submitted the liability flow statement.

28. The Petitioner has further submitted that in respect of Asset-II, the Commission vide order dated 20.7.2018 in Petition No. 125/TT/2017 disallowed IDC and IEDC to the tune of ₹275.81 lakh on account of time over-run and reduced it from the capital cost as on the date of commercial operation. Subsequently, an amount of ₹393.25 lakh was recovered as Liquidated Damages (LD) from the contractor. The Petitioner has submitted that LD recovered to the extent of disallowed IDC and IEDC is added back as ACE as mentioned in footnote of the Auditor's Certificate submitted by the Petitioner. In response to the Commission's query vide RoP dated 28.7.2020, the Petitioner vide affidavit dated 17.8.2020 has

submitted that total LD imposed was ₹393.25 lakh and LD to the extent of disallowed IDC and IEDC of ₹275.81 lakh has been added back in ACE for the year 2018-19.

29. We have considered the submissions made by the Petitioner. It is observed that LD recovered is more than IDC and IEDC disallowed on account of time over-run. Hence, there is net deduction of ₹117.41 lakh from the capital cost for the year 2018-19. APTEL in judgement dated 27.4.2011 in Appeal No. 72/2010 has laid down the following principles for dealing with the issue of time over-run in execution of projects.

> *"7.4. The delay in execution of a generating project could occur due to following reasons:*
>
> > *i) due to factors entirely attributable to the generating company, e.g., imprudence in selecting the contractors/suppliers and in executing contractual agreements including terms and conditions of the contracts, delay in award of contracts, delay in providing inputs like making land available to the contractors, delay in paymentsto contractors/suppliers as per the terms of contract, mismanagement of finances, slackness in project management like improper co-ordination between the various contractors, etc.*
> > *ii) due to factors beyond the control of the generating company e.g. delay caused due to force majeure like natural calamity or any other reasons which clearly establish, beyond any doubt, that there has been no imprudence on the part of the generating company in executing the project.*
> > *iii) situation not covered by (i) & (ii) above.*
>
> *In our opinion in the first case the entire cost due to time over run has to be borne by the generating company. However, the Liquidated Damages (LDs) and insurance proceeds on account of delay, if any, received by the generating company could be retained by the generating company. In the second case the generating company could be given benefit of the additional cost incurred due to time over-run. However, the consumers should get full benefit of the LDs recovered from the contractors/suppliers of the generating company and the insurance proceeds, if any, to reduce the capital cost. In the third case the additional cost due to time overrun including the LDs and insurance proceeds could be shared between the generating company and the consumer. It would also be prudent to consider the delay with respect to some benchmarks rather than depending on the provisions of the contract between the generating company and its contractors/suppliers. If the time schedule is taken as per the terms of the contract, this may result in imprudent time schedule not in accordance with good industry practices."*

30. As per the above directions of APTEL, when the time over-run is attributable to the project developer (in the instant case, PGCIL), or its contractors, the cost of the time over-run, i.e. IDC and IEDC have to be borne by the project developer and LD, if any, recovered can be retained by the Petitioner. In the instant case, the time over-run in case of Asset-II was partly condoned. Accordingly, IDC and IEDC for the period of time over-run not condoned in case of Asset-II, i.e. two months was not capitalised and the LD recovered by the Petitioner can be retained by the Petitioner. The capital cost of the said asset is allowed in accordance with the observations of APTEL as per said judgement dated 27.4.2011 in Appeal No. 72/2010. IDC and IEDC disallowed in case of the said asset is deducted from the capital cost as on their respective dates of commercial operation and the additional capital expenditure incurred by the Petitioner after the COD is added to the capital cost. Therefore, the Petitioner is allowed to retain the LD to the extent of IDC and IEDC disallowed and allowed to adjust ACE on this account.

31. The capital cost allowed as on 31.3.2019 after including ACE in respect of the transmisson assets are as under:

(₹ in lakh)

Asset-I	**Capital cost as on COD on cash basis**	**ACE**			**Total Capital cost including ACE as on 31.3.2019**
		2016-17	**2017-18**	**2018-19**	
Allowed in order dated 25.5.2016 in Petition No. 254/TT/2015	3108.82	1176.60	481.73	0.00	4767.15
Claimed by the Petitioner in the instant petition	3180.21	1270.41	110.22	56.56	4617.40
Allowed after true-up in this order	2912.29	1343.85**	110.22	56.56	4422.92

**Includes IDC discharged

(₹ in lakh)

Asset-II	Capital cost as on COD on cash basis	ACE		Total Capital cost including ACE as on 31.3.2019
		2017-18	2018-19	
Allowed in order dated 20.7.2018 in Petition No. 125/TT/2017	25717.62	4998.69	260.00	30976.31
Claimed by the Petitioner in the instant petition	26185.42	1029.35	1763.14	28977.91
Allowed after true-up in this order	24984.99	1938.73**	1921.54^	28845.26

**Includes IDC discharged
^ Inclused LD adjustment

Debt-Equity Ratio

32. The Petitioner has considered Debt-Equity ratio of 70:30 as on COD and for ACE post-COD. Debt-Equity ratio of 70:30 has been considered as provided under Regulation 19 of the 2014 Tariff Regulations. The same has been summarised as under:

Asset-I	Amount as on COD (₹ in lakh)	(%)	Amount as on 31.3.2019 (₹ in lakh)	(%)
Debt	2038.60	70.00	3096.06	70.00
Equity	873.69	30.00	1326.86	30.00
Total	**2912.29**	**100.00**	**4422.92**	**100.00**
Asset-II	**Amountas on COD (₹ in lakh)**	**(%)**	**Amount as on 31.3.2019 (₹ in lakh)**	**(%)**
Debt	17489.49	70.00	20191.69	70.00
Equity	7495.50	30.00	8653.57	30.00
Total	**24984.99**	**100.00**	**28845.26**	**100.00**

Interest on Loan (IoL)

33. The Petitioner has claimed the Weighted Average Rate of IoL (WAROI) based on actual interest rates for each year during the 2014-19 period. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2014 for

respective loans. Accordingly, IoL is calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out as under:

(i) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition.

(ii) The repayment for the 2014-19 tariff periodhas been considered to be equal to the depreciation allowed for that period.

34. IoL allowed is as follows:

(₹ in lakh)

	Asset-I			**Asset-II**	
Particulars	**2016-17 (Pro-rata for 331 days)**	**2017-18**	**2018-19**	**2017-18 (Pro-rata for 254 days)**	**2018-19**
Gross Normative Loan	2038.60	2979.30	3056.46	17489.49	18846.61
Cumulative Repayments upto Previous Year	0.00	167.98	391.85	0.00	950.68
Net Loan-Opening	2038.60	2811.33	2664.61	17489.49	17895.92
Addition due to Additional Capitalization	940.70	77.16	39.59	1357.11	1345.08
Repayment during the year	167.98	223.88	228.18	950.68	1468.75
Net Loan-Closing	2811.33	2664.61	2476.02	17895.92	17772.25
Average Loan	2424.97	2737.97	2570.32	17692.71	17834.09
Weighted Average Rate of Interest on Loan (%)	8.536	8.152	8.074	7.989	7.970
Interest on Loan	**187.71**	**223.19**	**207.53**	**983.62**	**1421.36**

35. IoL approved vide orders dated 25.5.2016 in Petition No. 254/TT/2015 and dated 20.7.2018 in Petition No. 125/TT/2017, as claimed by the Petitioner in the instant petition and as trued-up vide this order is shown in the table as under:

(₹ in lakh)

Assets	**Particulars**	**2016-17**	**2017-18**	**2018-19**
Asset-I	Allowed in order dated 25.5.2016 in Petition No. 254/TT/2015	201.70	255.86	249.37
	Claimed by the Petitioner in the instant petition	197.77	232.77	215.94
	Allowed after true-up in this order	187.71	223.19	207.53

Asset-II	Allowed in order dated 20.7.2018 in Petition No. 125/TT/2017	0.00	1085.67	1600.29
	Claimed by the Petitioner in the instant petition	0.00	999.16	1423.83
	Allowed after true-up in this order	0.00	983.62	1421.36

Return on Equity (RoE)

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

Year	Claimed effective tax (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757

37. The Petitioner has claimed additional RoE of 0.50% for Asset-II. The Commission vide order dated 20.7.2018 in Petition No. 125/TT/2017 had allowed additional RoE for Asset-II.

38. MPPMCL in its reply has submitted that the Petitioner has claimed grossed up RoE on the basis of actual taxes paid during the years 2016-17 and 2017-18 and for the year 2018-19, RoE has been grossed up on the basis of applicable MAT rate, surcharge and cess and not on the basis of actual taxes paid for the year 2018-19. MPPMCL has submitted that the Petitioner has not placed on record the assessment order for the years 2014-15, 2015-16, 2016-17 and 2017-18 and that the Petitioner has also not enclosed the audited accounts in respect of actual taxes paid for 2016-17 and 2017-18. In response, the Petitioner has submitted that

the assessment orders for years 2014-15, 2015-16 and 2016-17 have been issued by the Income Tax Department and Income Tax returns for years 2017-18 and 2018-19 have been filed. The Petitioner has further submitted that the assessment order for the years 2014-15 and 2015-16 was submitted in reply to Technical Validation (TV) letter in Petition No. 20/TT/2020 and a copy of the assessment order for the year 2016-17 has been filed in the instant petition alongwith the rejoinder.

39. We have considered the submissions of the Petitioner and MPPMCL. As regards MPPMCL's contention, it is observed that the Petitioner has submitted the assessment orders issued by the Income Tax Department for the years 2014-15, 2015-16 and 2016-17 and the Income Tax returns filed by the Petitioner for years 2017-18 and 2018-19. The Petitioner has submitted the documents pointed out by MPPMCL. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petiitioner based on the notified MAT rates. The relevant portion of the order dated 27.4.2020 is as under:

> "26. *We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term transmission customers/ DICs as the case may be on year to year basis. 27.*

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

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

Year	***Notified MAT rates (inclusive of surcharge & cess)***	***Effective tax (in %)***
2014-15	*20.961*	*20.961*
2015-16	*21.342*	*21.342*
2016-17	*21.342*	*21.342*
2017-18	*21.342*	*21.342*
2018-19	*21.549*	*21.549*

"

40. The same MAT rates as considered in order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations as under:

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

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

41. Accordingly, RoE allowed for the transmission assets are as under:

(₹ in lakh)

Asset-I				Asset-II	
Particulars	**2016-17 (Pro-rata for 331 days)**	**2017-18**	**2018-19**	**2017-18 (Pro-rata for 254 days)**	**2018-19**
Opening Equity	873.69	1276.84	1309.90	7495.50	8077.11
Addition due to Additional Capitalization	403.15	33.06	16.97	581.61	576.46
Closing Equity	1276.84	1309.90	1326.86	8077.11	8653.57
Average Equity	1075.26	1293.37	1318.38	7786.30	8365.34
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	16.000	16.000
Tax Rate applicable (%)	21.342	21.342	21.549	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.705	19.758	20.341	20.395
Return on Equity (Pre-tax)	**192.14**	**254.86**	**260.49**	**1102.16**	**1706.11**

42. The details of RoE allowed vide orders dated 25.5.2016 in Petition No. 254/TT/2015 and dated 20.7.2018 in Petition No. 125/TT/2017, as claimed by the Petitioner in the instant petition and as trued-up in the instant order is shown in the table as under:

(₹ in lakh)

Assets	Particulars	2016-17	2017-18	2018-19
Asset-I	Allowed in order dated 25.5.2016 in Petition No. 254/TT/2015	198.20	267.58	281.82
	Claimed by the Petitioner in the instant petition	202.58	266.37	272.02
	Allowed after true-up in this order	192.14	254.86	260.49
Asset-II	Allowed in order dated 20.7.2018 in Petition No. 125/TT/2017	0.00	1192.47	1873.27
	Claimed by the Petitioner in the instant petition	0.00	1119.64	1710.64
	Allowed after true-up in this order	0.00	1102.16	1706.11

Depreciation

43. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed in order dated 25.5.2016 in Petition No. 254/TT/2015 and order dated 20.7.2018 in Petition No. 125/TT/2017. The

Petitioner has neither given any justification for claiming higher depreciation than that allowed earlier nor made any specific prayer for allowing higher depreciation in this petition. It is observed that vide order dated 25.5.2016 in Petition No. 254/TT/2015 and vide order dated 20.7.2018 in Petition No. 125/TT/2017, the depreciation for IT equipment was allowed @5.28%. The Petitioner now at the time of truing-up of the tariff of the 2014-19 period has segregated the IT equipment cost from the Sub-station cost and has considered depreciation rate for IT Equipment @15% and the salvage value for IT Equipment is NIL as per the 2014 Tariff Regulations. A similar issue had come up in some earlier petitions filed by the Petitioner. In this regard, the Commission in order dated 9.5.2020 in Petition No. 19/TT/2020 held as under:

> *"31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012and 9.5.2013in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014- 19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations(the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a*part of the capital expenditure to "IT Equipment".*The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the substation upto 31.3.2019while truing up the capital expenditure for the 2014-19*

period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations."

44. In line with the above decision in order dated 9.5.2020 in Petition No. 19/TT/2020, depreciation has been considered for IT Equipment @5.28% as part of the Sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. However, for the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 of the 2019 Tariff Regulations. The Gross Block during the 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is at Annexure-I(a) and (b). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during tariff period 2014-19 is as under:

(₹ in lakh)

	Asset-I			**Asset-II**	
Particulars	**2016-17 (Pro-rata for 331 days)**	**2017-18**	**2018-19**	**2017-18 (Pro-rata for 254 days)**	**2018-19**
Opening Gross Block	2912.29	4256.14	4366.36	24984.99	26923.72
Additional Capitalisation	1343.85	110.22	56.56	1938.73	1921.54
Closing Gross Block	4256.14	4366.36	4422.92	26923.72	28845.26
Average Gross Block	3584.22	4311.25	4394.64	25954.35	27884.49
Weighted average rate of Depreciation (WAROD) (%)	5.17	5.19	5.19	5.26	5.27
Balance useful life of the asset at the beginning of the year	30.00	30.00	29.00	34.00	34.00
Aggregated Depreciable Value	3225.79	3880.13	3955.18	23358.92	25096.04
Combined Depreciation during the year	**167.98**	**223.88**	**228.18**	**950.68**	**1468.75**
Remaining Aggregated Depreciable Value	3057.82	3488.27	3335.14	22408.23	22676.60

45. The details of depreciation allowed vide orders dated 25.5.2016 in Petition No. 254/TT/2015 and dated 20.7.2018 in Petition No. 125/TT/2017, as claimed by the Petitioner in the instant petition and as trued up in the instant order is shown in the table as under:

(₹ in lakh)

Assets	Particulars	2016-17	2017-18	2018-19
Asset-I	Allowed in order dated 25.5.2016 in Petition No. 254/TT/2015	173.45	235.31	247.85
	Claimed by the Petitioner in the instant petition	180.05	237.21	241.52
	Allowed after true-up in this order	167.98	223.88	228.18
Asset-II	Allowed in order dated 20.7.2018 in Petition No. 125/TT/2017	0.00	1034.74	1626.60
	Claimed by the Petitioner in the instant petition	0.00	967.88	1475.79
	Allowed after true-up in this order	0.00	950.68	1468.75

<u>Operation & Maintenance Expenses (O&M Expenses)</u>

46. The details of the O&M Expenses claimed by the Petitioner and allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations are the same and are as under:

(₹ in lakh)

Asset-I			
Particulars	**2016-17 (Pro-rata for 331 days)**	**2017-18**	**2018-19**
Sub-station Bays			
400 kV Raigarh: Lara STPS (NTPC) – Bay 1&2	2	2	2
Norm (₹lakh/bay)			
400 kV Sub-station Bays (AIS)	64.37	66.51	68.71
Total Sub-station O&M Expenses	**128.74**	**133.02**	**137.42**
AC & HVDC Lines			
400 kV D/C Twin conductor - Lara STPS (NTPC) – ITO Raigarh Pooling Station	17.999	17.999	17.999
Norm (₹lakh/km)			
400 kV D/C Twin conductor	0.755	0.78	0.806
Total Transmission Line	**13.59**	**14.04**	**14.51**
Total O&M Expenses	**129.07**	**147.06**	**151.93**

(₹ in lakh)

Asset-II		
Particulars	**2017-18 (Pro-rata for 254 days)**	**2018-19**
Sub-station Bays		
400 kV Champa Lara STPS-I	2	2
Norm (₹lakh/bay)		
400 kV Sub-station Bays (AIS)	66.51	68.71
Total Sub-station O&M Expenses	**133.02**	**137.42**
AC & HVDC Lines		
400 kV D/C Bundled with 4 or moresub-conductor - Lara STPS -Champa Pooling Station	113.527	113.527
Norm (₹lakh/km)		
400 kV D/C Bundled with 4 or more sub-conductor	1.171	1.21
Total Transmission Line	132.94	137.37
Total O&M Expenses	**185.08**	**274.79**

47. The O&M Expenses allowed vide orders dated 25.5.2016 in Petition No. 254/TT/2015 and dated 20.7.2018 in Petition No. 125/TT/2017, as claimed by the Petitioner in the instant petition and as trued-up in the instant order is shown in the table as under:

(₹ in lakh)

Assets	Particulars	2016-17	2017-18	2018-19
Asset-I	Allowed in order dated 25.5.2016 in Petition No. 254/TT/2015	129.07	147.06	151.93
	Claimed by the Petitioner in the instant petition	129.07	147.06	151.93
	Allowed after true-up in this order	129.07	147.06	151.93
Asset-II	Allowed in order dated 20.7.2018 in Petition No. 125/TT/2017	0.00	185.08	274.79
	Claimed by the Petitioner in the instant petition	0.00	185.08	274.79
	Allowed after true-up in this order	0.00	185.08	274.79

Interest on Working Capital (IWC)

48. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under:

i. Maintenance spares:

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

ii. O & M Expenses:

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

iii. Receivables:

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

iv. Rate of interest on working capital:

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

49. The trued-up IWC allowed for the transmission assets is as under:

(₹ in lakh)

	Asset-I			Asset-II	
Particulars	**2016-17 (Pro-rata for 331 days)**	**2017-18**	**2018-19**	**2017-18 (Pro-rata for 254 days)**	**2018-19**
O & M Expenses	11.86	12.25	12.66	22.16	22.90
Maintenance Spares	21.35	22.06	22.79	39.89	41.22
Receivables	127.84	145.33	145.21	789.45	830.62
Total	**161.05**	**179.64**	**180.66**	**851.50**	**894.74**
Rate of Interest on working capital(%)	12.80	12.80	12.80	12.60	12.60
Interest of working Capital	**18.69**	**22.99**	**23.12**	**74.66**	**112.74**

50. The details of IWC allowed vide orders dated 25.5.2016 in Petition No. 254/TT/2015 and dated 20.7.2018 in Petition No. 125/TT/2017, as claimed by the

Petitioner in the instant petition and as trued up in the instant order is shown in the table as under:

(₹ in lakh)

Assets	Particulars	2016-17	2017-18	2018-19
Asset-I	Allowed in order dated 25.5.2016 in Petition No. 254/TT/2015	20.33	25.59	26.32
	Claimed by the Petitioner in the instant petition	19.41	23.75	23.85
	Allowed after true-up in this order	18.69	22.99	23.12
Asset-II	Allowed in order dated 20.7.2018 in Petition No. 125/TT/2017	0.00	80.59	123.55
	Claimed by the Petitioner in the instant petition	0.00	75.74	113.04
	Allowed after true-up in this order	0.00	74.66	112.74

Approved Annual Fixed Charges for the 2014-19 Tariff Period

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

(₹ in lakh)

	Asset-I			Asset-II	
Particulars	**2016-17 (Pro-rata for 331 days)**	**2017-18**	**2018-19**	**2017-18 (Pro-rata for 254 days)**	**2018-19**
Depreciation	167.98	223.88	228.18	950.68	1468.75
Interest on Loan	187.71	223.19	207.53	983.62	1421.36
Return on Equity	192.14	254.86	260.49	1102.16	1706.11
Int. on Working Capital	18.69	22.99	23.12	74.66	112.74
Op. and Maintenance	129.07	147.06	151.93	185.08	274.79
Total	**695.59**	**871.97**	**871.25**	**3296.20**	**4983.75**

52. The annual fixed charges approved vide orders dated 25.5.2016 in Petition No. 254/TT/2015 and dated 20.7.2018 in Petition No. 125/TT/2017, as claimed by the Petitioner in the instant petition and as trued-up in the instant order are shown in the table as under:

(₹ in lakh)

Assets	Particulars	2016-17	2017-18	2018-19
Asset-I	Allowed in order dated 25.5.2016 in Petition No. 254/TT/2015	722.75	931.39	957.28

	Claimed by the Petitioner in the instant petition	728.88	907.16	905.26
	Allowed after true-up in this order	695.59	871.97	871.25
Asset-II	Allowed in order dated 20.7.2018 in Petition No. 125/TT/2017	0.00	3578.55	5498.50
	Claimed by the Petitioner in the instant petition	0.00	3347.50	4998.09
	Allowed after true-up in this order	0.00	3296.20	4983.75

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

53. The Petitioner has submitted the tariff forms for the Combined Asset as a single asset. Accordingly, as per proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations, single tariff for the Combined Asset has been worked out for the 2019-24 tariff period.

54. The Petitioner has claimed the following transmission charges for the Combined Asset for the 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1804.26	1834.71	1834.71	1834.71	1828.82
Interest on Loan	1599.13	1483.69	1337.87	1191.87	1042.48
Return on Equity	1925.46	1957.96	1957.96	1957.96	1957.96
Interest on Working Capital	93.60	93.49	91.76	90.04	87.98
Operation and Maintenance	308.87	319.17	329.87	340.99	352.39
Total	**5731.32**	**5689.02**	**5552.17**	**5415.57**	**5269.63**

55. The Petitioner has claimed the following IWC for the Combined Asset for the 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	25.74	26.60	27.49	28.42	29.37
Maintenance Spares	46.33	47.88	49.48	51.15	52.86
Receivables	704.67	701.39	684.51	667.67	647.91
Total	**776.74**	**775.87**	**761.48**	**747.24**	**730.14**
Rate of Interest	12.05	12.05	12.05	12.05	12.05

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	25.74	26.60	27.49	28.42	29.37
Interest on Working Capital	**93.60**	**93.49**	**91.76**	**90.04**	**87.98**

Effective Date of Commercial Operation (E-COD)

56. The Petitioner has claimed E-COD of the Combined Asset as 21.5.2017. Based on the trued-up admitted capital cost and actual COD of all the assets, the E-COD has been worked out as under:

Computation of Effective COD						
Asset	**Actual COD**	**Admitted Capital Cost as on 31.3.2019 (₹in lakh)**	**Weight of the cost (%)**	**No. of Days from last COD**	**Weighted Days**	**Effective COD (Latest COD – Total weighted Days)**
Asset-I	5.5.2016	4422.92	13.29%	442.00	58.76	23.5.2017
Asset-II	21.7.2017	28845.26	86.71%	0.00	0.00	
Total		**33268.18**	**100.00**			

57. The E-COD is used to determine the lapsed life of the project as a whole, which works out as one (1) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (WAL)

58. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of Weighted Average Life. The Combined Asset may have multiple elements such as land, building, transmission line, Sub-station and PLCC and each element may have different span of life. Therefore, the concept of Weighted Average Life (WAL) has been used as the useful life of the project as a whole.

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

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

Admitted Capital Cost as on 31.3.2019				
Particulars	**Combined Asset Cost (₹in lakh) (1)**	**Life in Years (2)**	**Weighted Cost (3)=(1) x (2)**	**Weighted Avg. Life of Asset (in years) (4)=(3)/(1)**
Leasehold Land	0.00	25.00	0.00	
Building & Other Civil Works	705.21	25.00	17630.25	
Transmission Line	29115.90	35.00	1019056.50	
Sub-Station Equipment	2680.74	25.00	67018.50	
PLCC	703.15	15.00	10547.25	
IT Equipment and Software	63.18	6.67	421.18	
Total	**33268.18**		**1114673.68**	**33.51 years, rounded off to 34 years**

60. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed, the Effective COD of the assets is 23.5.2017 and the lapsed life of the project as a whole, works out as one (1) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from Effective COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 33 years.

Capital Cost

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

> *"**19 Capital Cost:** (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence*

check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.

(2) The Capital Cost of a new project shall include the following:

(a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
(c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
(d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
(e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;
(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
(h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
(i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
(j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
(k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
(l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
(m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
(n) Expenditure on account of change in law and force majeure events; and
(o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

(3) The Capital cost of an existing project shall include the following:

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
(c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and

(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."

(4) The capital cost in case of existing or new hydro generating station shall also include:

(a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and

(b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen VidyutikaranYojana (RGGVY) and Deendayal Upadhyaya Gram JyotiYojana (DDUGJY) project in the affected area.

(5) The following shall be excluded from the capital cost of the existing and new projects:

(a) The assets forming part of the project, but not in use, as declared in the tariff petition;

(b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

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

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

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

62. The Petitioner has claimed capital cost of ₹4617.40 lakh and ₹28977.91 lakh for Assets-I and II respectively. Against the overall apportioned approved capital cost (as per FR) of ₹40046.95 lakh, the estimated completion cost including ACE is

₹34748.83 lakh. The individual capital cost of each asset is also within the respective FR apportioned capital cost.

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

(₹ in lakh)

Element	Asset-I	Asset-II
Free hold Land	0.00	0.00
Leasehold Land	0.00	0.00
Building & Other Civil Works	294.13	411.08
Transmission Line	2699.26	26416.64
Sub-Station Equipment	1221.74	1459.00
PLCC	176.18	526.97
IT Equipment and Software	31.61	31.57
Total	**4422.92**	**28845.26**

(₹ in lakh)

Particulars	Capital Cost for combined asset as on 1.4.2019
Freehold Land	0.00
Leasehold Land	0.00
Building & Other Civil Works	705.21
Transmission Line	29115.90
Sub-Station Equipment	2680.74
PLCC	703.15
IT Equipment and Software	63.18
TOTAL	**33268.18**

64. The trued-up capital cost of ₹33268.18 lakh for Combined Asset is considered as admitted capital cost as on 1.4.2019 for working out tariff for the 2019-24 tariff period.

Additional Capital Expenditure (ACE)

65. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as under:-

"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 thecutoff 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."

66. The Petitioner has claimed projected ACE for 2019-24 period. The Petitioner has submitted that ACE claimed for the period 1.4.2019 to 31.3.2020 is on estimated basis and may vary due to final claim/ reconciliation at the time of contract closing. The details of the projected ACE in respect of the transmission assets are as follows:

(₹ in lakh)

Assets	Projected ACE 2019-24
	2019-20
Asset-I	100.00
Asset-II	1053.52
Total	**1153.52**

67. It is observed that the projected ACE claimed for 2019-24 period falls after cut-off date for Asset-I and is within the cut-off date for Asset-II in the instant petition. The ACE allowed is summarized below which is subject to true-up:

(₹ in lakh)

Particulars	Regulation	Combined Asset
		2019-20
ACE to the extent of crop/treecompensation projected to paid to the concerned farmers.	Regulation 25 (1)(a) of the 2019 Tariff Regulations	100.00
ACE to the extent of Balance & Retention Payments & work deferred for execution before cut-off date	Regulation 24 (1)(a) of the 2019 Tariff Regulations	1053.53
Total		**1153.52**

<u>Capital cost for the 2019-24 tariff period</u>

68. The capital cost of the Combined Asset, considered for the 2019-24 tariff period, subject to truing-up, is as under:

(₹ in lakh)

Capital Cost allowed as on 1.4.2019	ACE allowed for the year 2019-20	Total Estimated Completion Cost up to 31.3.2024
33268.18	1153.52	34421.70

Debt-Equity Ratio

69. Regulation 18 of the 2019 Tariff Regulations provide as under:

> *"**18. Debt-Equity Ratio:** (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:*
>
> *Provided that:*
>
> *i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:*
>
> *ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*
>
> *iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.*
>
> ***Explanation.-**The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.*
>
> *(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.*
>
> *(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:*
>
> *Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30%shall not be taken into account for tariff computation;*
>
> *Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.*
>
> *(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the*

Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as 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."

70. The details of the debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period for Combined Asset is as under:

Particulars	**Capital Cost as on 1.4.2019 (₹ in lakh)**	**(%)**	**Total Capital Cost as on 31.3.2024 (₹ in lakh)**	**(%)**
Debt	23287.74	70.00	24095.21	70.00
Equity	9980.43	30.00	10326.48	30.00
Total	**33268.18**	**100.00**	**34421.70**	**100.00**

<u>Return on Equity (RoE)</u>

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

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

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

Provided that return on equity in respect of Additional Capitalization after cut-off date beyond the original scope excluding Additional Capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

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

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

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

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

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

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

31. Tax on Return on Equity:*(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.*

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

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

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

Illustration-

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

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

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

> *(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;*
> *(d) Rate of return on equity = 15.50/ (1-0.24) = 20.395%.*
>
> *(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."*

72. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, the MAT rate applicable during 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 for the Combined Asset is as under:

(₹ in lakh)

Combined Asset					
Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Opening Equity	9980.43	10326.48	10326.48	10326.48	10326.48
Addition due to Additional Capitalization	346.06	0.00	0.00	0.00	0.00
Closing Equity	10326.48	10326.48	10326.48	10326.48	10326.48
Average Equity	10153.46	10326.48	10326.48	10326.48	10326.48
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	**1907.02**	**1939.52**	**1939.52**	**1939.52**	**1939.52**

Interest on Loan (IoL)

73. Regulation 32 of the 2019 Tariff Regulations provides as under:

> *"**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 ofde-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

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

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

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

(₹ in lakh)

Combined Asset					
Particular	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Gross Normative Loan	23287.74	24095.21	24095.21	24095.21	24095.21
Cumulative Repayments upto Previous Year	3039.47	4826.33	6643.64	8460.95	10278.25

Net Loan-Opening	20248.27	19268.88	17451.57	15634.26	13816.95
Addition due to Additional Capitalization	807.46	0.00	0.00	0.00	0.00
Repayment during the year	1786.86	1817.31	1817.31	1817.31	1817.31
Net Loan-Closing	19268.88	17451.57	15634.26	13816.95	11999.65
Average Loan	19758.58	18360.23	16542.92	14725.61	12908.30
Weighted Average Rate of Interest on Loan (%)	8.029	8.020	8.028	8.036	8.020
Interest on Loan	**1586.50**	**1472.48**	**1328.03**	**1183.42**	**1035.20**

Depreciation

75. Regulations 33of the 2019 Tariff Regulations provide as under:

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

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

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

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

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

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

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

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

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

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

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

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

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

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

(₹ in lakh)

Combined Asset					
Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Opening Gross Block	33268.18	34421.70	34421.70	34421.70	34421.70
Addition during the year 2019-24 due to projected Additional Capitalisation	1153.52	0.00	0.00	0.00	0.00
Closing Gross Block	34421.70	34421.70	34421.70	34421.70	34421.70
Average Gross Block	33844.94	34421.70	34421.70	34421.70	34421.70
Weighted average rate of Depreciation (WAROD) (%)	5.28	5.28	5.28	5.28	5.28
Balance useful life at the beginning	33.00	32.00	31.00	30.00	29.00
Aggregated Depreciable Value	30466.76	30985.85	30985.85	30985.85	30985.85
Combined Depreciation during the year	**1786.86**	**1817.31**	**1817.31**	**1817.31**	**1817.31**
Remaining Aggregate Depreciable Value	25640.43	24342.21	22524.90	20707.59	18890.28

Operation & Maintenance Expenses (O&M Expenses)

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

*"**35. Operation and Maintenance Expenses:***

…

(3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:

Particulars	***2019-20***	***2020-21***	***2021-22***	***2022-23***	***2023-24***
Norms for sub-station Bays (Rs 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 (Rs Lakh per MVA)					
765 kV	*0.491*	*0.508*	*0.526*	*0.545*	*0.564*
400 kV	*0.358*	*0.371*	*0.384*	*0.398*	*0.411*
220 kV	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
132 kV and below	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
Norms for AC and HVDC lines (Rs Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*
Single Circuit (Bundled conductor with four sub-conductors)	*0.755*	*0.781*	*0.809*	*0.837*	*0.867*
Single Circuit (Twin & Triple Conductor)	*0.503*	*0.521*	*0.539*	*0.558*	*0.578*
Single Circuit (Single Conductor)	*0.252*	*0.260*	*0.270*	*0.279*	*0.289*
Double Circuit (Bundled conductor	*1.322*	*1.368*	*1.416*	*1.466*	*1.517*

with four or more sub-conductors)					
Double Circuit (Twin & Triple Conductor)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*
Double Circuit (Single Conductor)	*0.377*	*0.391*	*0.404*	*0.419*	*0.433*
Multi Circuit (Bundled Conductor with four or more sub-conductor)	*2.319*	*2.401*	*2.485*	*2.572*	*2.662*
Multi Circuit (Twin & Triple Conductor)	*1.544*	*1.598*	*1.654*	*1.713*	*1.773*
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	*834*	*864*	*894*	*925*	*958*
Gazuwaka HVDC Back-to-Back station (Rs. Lakh per 500 MW)	*1,666*	*1,725*	*1,785*	*1,848*	*1,913*
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	*2,252*	*2,331*	*2,413*	*2,498*	*2,586*
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	*2,468*	*2,555*	*2,645*	*2,738*	*2,834*
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	*1,696*	*1,756*	*1,817*	*1,881*	*1,947*
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh)(3000 MW)	*2,563*	*2,653*	*2,746*	*2,842*	*2,942*

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

Provided further that:

i. *the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*

ii. *the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*

iii. *the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW)shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*

iv. *the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;*

v. *the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW)shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*

vi. *the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static*

Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

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

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

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

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

78. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 @2% of its original project cost in the instant petition and the Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station has been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The relevant portions of the order dated 24.1.2021 in Petition No.126/TT/2020 are extracted hereunder:

"103. Thus, although PLCC equipment is a communication system, it has been considered as a part of sub-station, as it is used both for protection and communication. Therefore, we are of the considered view that rightly, it was not considered for separate O&M Expenses while framing norms of O&M for 2019-24 tariff period. While specifying norms for bays and transformers, O&M Expenses for

PLCC have been included within norms for O&M Expenses for sub-station. Norms of O&M Expenses @2% of the capital cost in terms of Regulation 35(4) of the 2019 Tariff Regulations have been specified for communication system such as PMU, RMU, OPGW etc. and not for PLCC equipment.

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105. In our view, granting of O&M Expenses for PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations under the communication system head would tantamount to granting O&M Expenses twice for PLCC equipment as PLCC equipment has already been considered as part of the sub-station. Therefore, the Petitioner's prayer for grant of O&M Expenses for the PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations is rejected.

106. The principle adopted in this petition that PLCC is part of sub-station and accordingly no separate O&M Expenses is admissible for PLCC equipment in the 2019-24 tariff period under Regulation 35(4) of the 2019 Tariff Regulations shall be applicable in case of all petitions where similar claim is made by the Petitioner. As already mentioned, the Commission, however, on the basis of the claim made by the Petitioner has inadvertently allowed O&M Expenses for PLCC equipment @2% of its original project cost, which is applicable for other "communication system", for 2019-24 period in 31 petitions given in Annexure-3 of this order. Therefore, the decision in this order shall also be applicable to all the petitions given in Annexure-3. Therefore, PGCIL is directed to bring this decision to the notice of all the stakeholders in the 31 petitions given in Annexure-3 and also make revised claim of O&M Expenses for PLCC as part of the sub-station at the time of truing up of the tariff allowed for 2019-24 period in respective petitions."

Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.

79. We have considered the submissions of the Petitioner. The O&M Expenses are allowed for the Combined Asset in accordance with Regulation 35(3)(a) of the 2019 Tariff Regulations as under:-

(₹ in lakh)

Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Sub-station Bays					
400 kVRaigarh: Lara STPS (NTPC) – Bay 1&2	2	2	2	2	2
400 kVChampa Lara STPS-I	2	2	2	2	2
Norm (₹lakh/bay)					
400 kV Sub-station Bays (AIS)	32.15	33.28	34.45	35.66	36.91
Total Sub-station O&M	128.60	133.12	137.80	142.64	147.64
AC & HVDC Lines					
400kV D/C Twin conductor - Lara STPS (NTPC) – ITO Raigarh Pooling Station	17.999	17.999	17.999	17.999	17.999

400kV D/C Bundled with 4 or moresub-conductor - Lara STPS - Champa Pooling Station	113.527	113.527	113.527	113.527	113.527
Norm (₹lakh/km)					
400kV D/C Twin conductor	0.881	0.912	0.944	0.977	1.011
400kV D/C Bundled with 4 or moresub-conductor	1.322	1.368	1.416	1.466	1.517
Total Transmission Line	165.94	171.72	177.75	184.02	190.42
Total O&M Expenses	**294.54**	**304.84**	**315.55**	**326.66**	**338.06**

<u>Interest on Working Capital (IWC)</u>

80. Regulations 34(1)(c), 34(3) and 34(4) and 3(7) of the 2019 Tariff Regulations provides as under:

"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;"*

81. The Petitioner has submitted that it has computed the IWC for the 2019-24 tariff period considering the SBI Base Rate plus 350 basis points as on 1.4.2019.

The Petitioner has considered the rate of IWC as 12.05%.IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20 and 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-24. The components of the working capital and interest allowed thereon is as under:

(₹ in lakh)

Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
O & M Expenses	24.54	25.40	26.30	27.22	28.17
Maintenance Spares	44.18	45.73	47.33	49.00	50.71
Receivables	696.78	692.89	676.20	659.55	640.70
Total	765.51	764.02	749.83	735.77	719.58
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest of working capital	92.24	85.95	84.36	82.77	80.95

Annual Fixed Charges for the 2019-24 Tariff Period

82. The annual fixed charges allowed for the Combined Asset for the 2019-24 tariff period are as under:

(₹ in lakh)

Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Depreciation	1786.86	1817.31	1817.31	1817.31	1817.31
Interest on Loan	1586.50	1472.48	1328.03	1183.42	1035.20
Return on Equity	1907.02	1939.52	1939.52	1939.52	1939.52
Interest on Working Capital	92.24	85.95	84.36	82.77	80.95
Operation and Maintenance	294.54	304.84	315.55	326.66	338.06
Total	**5667.16**	**5620.10**	**5484.76**	**5349.68**	**5211.04**

Filing Fee and Publication Expenses

83. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 70(1) of the 2019 Tariff Regulations. 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

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

Goods and Services Tax

85. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if GST on transmission service is withdrawn from negative list in future.

86. MPPMCL has submitted that the demand of the Petitioner is premature. In response, the Petitioner has submitted that if GST is levied in future on Charges of Transmission of Electricity at any rate and any point of time, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged & billed separately by the Petitioner. Further, the Petitioner has submitted that the additional taxes, if any, are to be paid by the Petitioner on account of demand from Govt./ Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

87. We have considered the submissions of the Petitioner and MPPMCL and are of the opinion that GST is not levied on transmission service at present and the Petitioner’s prayer is premature.

Security Expenses

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

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

Capital Spares

90. 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

91. The Commission in order dated 25.5.2017 in Petition No. 254/TT/2017 held that the transmission charges of Asset-I will be borne by NTPC till the COD of its first unit in case of Asset-1. The relevant extract of the order dated 25.5.2017 in Petition No. 254/TT/2017 is hereunder:

> *"42 NTPC in its reply submitted that for the execution of the ATS of Lara STPP Stage-I (2X800 MW) NTPC and PGCIL have signed an indemnification agreement. The agreement provides that:*
>
> > *"NTPC has agreed to bear transmission charges as determined by CERC for Lara-I-Raigarh (Kotra) 400kV D/C line and its associated bays from August, 2015 or actual date of commissioning of said line and bays, whichever is later, till commissioning of 1st generating unit. "*
>
> *43. NTPC has agreed to bear transmission charges for line to be used for drawl of start-up power. It is observed that NTPC is agreed to pay the transmission charges for drawl of start up power till the commissioning of the generating unit.*
>
> *44. The transmission charges for the instant assets shall be borne by NTPC till the commissioning of the generating station. Once the generating station is commissioned, the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of the 2014 Tariff Regulations."*

92. Similarily, in the order dated 20.7.2018 in Petition No. 125/TT/2017, the Commission held that the transmission charges of Asset-II shall be borne by NTPC from its COD to the starting date of LTA of the generating station. The relevant extract of order dated 20.7.2018 in Petition No.125/TT/2017 is hereunder:

> "*62. The instant assets are dedicated line of NTPC and hence NTPC shall bear the transmission charges from the date of COD of the asset i.e. 21.7.2017 to the date of start of LTA of the generating project as per Regulation 8(8) of Central Electricity*

Regulatory Commission (Grant of Connectivity, Long term Access, Medium term Open Access and related matters) Regulations 2009. Thereafter, it will be included in the PoC computation and the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time.

93. Accordingly, the transmission tariff allowed for Asset-I in this order shall be borne by NTPC from its COD upto the date of commissioning of generating station by NTPC in line with order dated 25.5.2016 in Petition No. 254/TT/2015. Similarly, the transmission tariff allowed for Asset-II in this order shall be borne by NTPC from its COD to the date of start of LTA of the generation project in line with order dated 20.7.2018 in Petition No. 125/TT/2017. Thereafter, the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

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

(₹ in lakh)

Asset-I				Asset-II	
Particulars	**2016-17 (Pro-rata for 331 days)**	**2017-18**	**2018-19**	**2017-18 (Pro-rata for 254 days)**	**2018-19**
AFC	695.59	871.97	871.25	3296.20	4983.75

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

(₹ in lakh)

Combined Asset	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	5667.16	5620.10	5484.76	5349.68	5211.04

95. This order disposes of Petition No. 312/TT/2020.

Sd/	**Sd/**
(Arun Goyal)	**(I. S. Jha)**
Member	**Member**

Asset-I

Annexure –I

2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations		
Capital Expenditure as on COD		2016-17	2017-18	2018-19			2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Building	225.39	58.52	10.22	0.00	294.13	3.34	8.51	9.65	9.82
Transmission Line	1625.31	960.95	56.44	56.56	2699.26	5.28	111.19	138.04	141.03
Sub Station	1030.71	147.47	43.56	0.00	1221.74	5.28	58.31	63.36	64.51
PLCC	0.00	176.18	0.00	0.00	176.18	6.33	5.58	11.15	11.15
IT Equipment and software	30.88	0.73	0.00	0.00	31.61	5.28	1.65	1.67	1.67
Total	**2912.29**	**1343.85**	**110.22**	**56.56**	**4422.92**		**185.23**	**223.88**	**228.18**
					Average Gross Block (₹in lakh)		3584.22	4311.25	4394.64
					Weighted Average Rate of Depreciation (in %)		5.17	5.19	5.19

Asset-II

2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations	
Capital Expenditure as on COD		**2017-18**	**2018-19**			**2017-18 (₹ in lakh)**	**2018-19 (₹ in lakh)**
Building	359.96	47.38	3.74	411.08	3.34	12.81	13.67
Transmission Line	23068.76	1660.52	1687.36	26416.64	5.28	1261.87	1350.25
Sub Station	1227.37	218.86	12.77	1459.00	5.28	70.58	76.70
PLCC	298.74	10.87	217.36	526.97	6.33	19.25	26.48
IT Equipment and software	30.16	1.10	0.31	31.57	5.28	1.62	1.66
Total	**24984.99**	**1938.73**	**1921.54**	28845.26		1366.14	**1468.75**
				Average Gross Block (₹in lakh)		25954.35	27884.49
				Weighted Average Rate of Depreciation (in %)		5.26	5.27

Annexure - II

Asset	2019-24	Combined admitted Capital Cost as on 1.4.2019 (₹in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
	Capital Expenditure as on 1.4.2019		**2019-20**			**2019-20 (₹ in lakh)**	**2020-21 (₹ in lakh)**	**2021-22 (₹ in lakh)**	**2022-23 (₹ in lakh)**	**2023-24 (₹ in lakh)**
Combined Asset	Building	705.21	0.00	705.21	3.34	23.55	23.55	23.55	23.55	23.55
	Transmission Line	29115.90	1153.52	30269.42	5.28	1567.77	1598.23	1598.23	1598.23	1598.23
	Sub Station	2680.74	0.00	2680.74	5.28	141.54	141.54	141.54	141.54	141.54
	PLCC	703.15	0.00	703.15	6.33	44.51	44.51	44.51	44.51	44.51
	IT Equipment and software	63.18	0.00	63.18	15.00	9.48	9.48	9.48	9.48	9.48
	Total	33268.18	**1153.52**	**34421.70**		**1786.86**	**1817.31**	**1817.31**	**1817.31**	**1817.31**
				Average Gross Block (₹ in lakh)		33844.94	34421.70	34421.70	34421.70	34421.70
				Weighted Average Rate of Depreciation (in %)		5.28	5.28	5.28	5.28	5.28