# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No. 27/TT/2020

Coram:

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

Date of Order: 27.07.2020

#### 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 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of Combined Asset of 765/400 kV Bilaspur Pooling Station (near Sipat) along with LILO of Sipat-Seoni Ckt-I with 3X80 MVAR Switchable Line Reactor, 3X80 MVAR Bus Reactor and 765/400 kV, 1000 MVA ICT 1 & 2 under "WRSSS-X Transmission Scheme" in Western Region.

#### And in the matter of:

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

....Petitioner

Vs

- Madhya Pradesh Power Management Company Ltd. Shakti Bhawan, Rampur Jabalpur - 482 008
- Madhya Pradesh Power Transmission Company Ltd. Shakti Bhawan, Rampur Jabalpur - 482 008
- Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd.
   3/54, Press Complex, Agra-Bombay Road, Indore-452 008
- 4. Maharashtra State Electricity Distribution Co. Ltd. Hongkong Bank Building, 3rd Floor



- M.G. Road, Fort, Mumbai 400001.
- Maharashtra State Electricity Transmission Co.Ltd.
   Prakashganga, 6th Floor, Plot No. C-19, E-Block,
   Bandra Kurla Complex, Bandra (East) Mumbai-400 051.
- Gujarat Urja Vikas Nigam Ltd.
   Sardar Patel Vidyut Bhawan,
   Race Course Road, Vadodara 390 007
- 7. Electricity Department Government of Goa, Vidyut Bhawan, Panaji, Near Mandvi Hotel, Goa - 403 001
- Electricity Department
   Administration of Daman & Diu
   Daman 396 210
- DNH Power Distribution Corporation Limited
   Vidyut Bhawan, 66kV Road, Near Secretariat Amli,
   Silvassa 396 230
- Chhattisgarh State Power Transmission Co. Ltd.
   Office of the Executive Director (C&P)
   State Load Dispacth Building,
   Dangania, Raipur 492 013
- Chhattisgarh State Power Distribution Co. Ltd.
   P.O. Sunder Nagar, Dangania, Raipur Chhattisgarh-492 013

...Respondents

For Petitioner : Shri Abhay Chaudhary, ED, PGCIL

Shri J. Mazumdar, Chief GM, PGCIL

Shri Akshay Kumar Verma, Senior GM, PGCIL

Shri S.S. Raju, Senior GM, PGCIL Smt Manju Gupta, Senior GM, PGCIL Shri V Srinivas, Senior GM, PGCIL Shri Zafrul Hasan, DGM, PGCIL Shri Amit Bhargava, GM, PGCIL

For Respondents: None

#### **ORDER**

The present petition has been filed by Power Grid Corporation of India Ltd. (hereinafter referred to as "the Petitioner") for truing-up of transmission tariff of



765/400 kV Bilaspur Pooling Station (near Sipat) along with LILO of Sipat-Seoni Ckt-I with 3X80 MVAR Switchable Line Reactor, 3X80 MVAR Bus Reactor and 765/400 kV, 1000 MVA ICT 1 & 2 (hereinafter referred to as "the transmission assets/ Combined Asset") under "WRSSS-X Transmission Scheme" in Western Region (hereinafter referred to as "transmission project") for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and tariff determination for 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations").

#### 2. The Petitioner has made the following prayers in this Petition:-

- "1) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 8 and 9 above.
- 2) Allow the addcap for 2014-19 tariff block as claimed as per Para 5.5 above.
- 3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 8 and 9 above for respective block.
- 4) 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.
- 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- 6) 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 respondents.
- 7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 9.6 above.
- 8) Allow the petitioner to claim the capital spares at the end of tariff block as per



actual.

9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

3. The Respondents are distribution licensees, who are procuring transmission services from the Petitioner, mainly beneficiaries of Western Region.

#### Background

- 4. The Investment Approval (IA) for the transmission project was accorded by the Board of Directors of the Petitioner vide Memorandum No. C/CP/WRSS-X dated 16.2.2009 at an estimated cost of ₹66496 lakh including IDC of ₹4696 lakh, based on 4<sup>th</sup> quarter, 2008 price level.
- 5. The scope of the project under "WRSSS-X Transmission Scheme" in Western Region" is as under:-

#### I. Transmission Lines:

LILO of Sipat- Seoni 765 kV S/C line at WR Pooling station near Sipat

#### II. Sub-stations:

Establishment of 765/400 kV, 2X1500 MVA WR Pooling station near Sipat.

- 6. The transmission project was scheduled to be put into commercial operation on or before 1.3.2012 as per the Investment Approval dated 16.2.2009. The instant assets were put into commercial operation on 1.4.2012.
- 7. The tariff of the aforesaid assets from COD to 31.3.2014 was determined vide order dated 31.1.2014 in Petition No. 58/TT/2012 under the 2009 Tariff



Regulations. The tariff allowed vide order dated 31.1.2014 in Petition No. 58/TT/2012 was trued up and tariff for 2014-19 period for Combined Asset was determined vide order dated 23.2.2016 in Petition No. 396/TT/2014.

- 8. The Petitioner has served the petition on the Respondents and has also published the notice in newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the notice published in the newspapers by the Petitioner. The hearing in this matter was held on 22.5.2020.
- 9. M.P. Power Management Company Limited (MPPMCL), Respondent No. 1 has filed its reply vide affidavit dated 3.2.2020 and has raised the issues of RoE and GST. The Petitioner vide affidavit dated 4.5.2020 has filed its rejoinder in response to the reply filed by MPPMCL. The issues raised by MPPMCL have been dealt with in the respective paragraphs of this order. Having heard the representatives of the Petitioner and pursued the material on record, we proceed to dispose of the petition.

#### Truing-up of Annual Fixed Charges for 2014-19 tariff period

10. The details of the transmission charges claimed by the Petitioner for the instant asset are as under:-

Combined Asset										
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19					
Depreciation	2351.67	2360.41	2364.87	2365.94	2367.02					
Interest on Loan	2430.84	2224.54	2009.87	1790.00	1574.77					
Return on Equity	2700.75	2723.20	2726.63	2728.47	2737.65					
Interest on working capital	207.16	204.29	200.73	196.97	193.53					
O & M Expenses	631.91	652.88	674.58	696.97	720.09					
Total	8322.33	8165.32	7976.68	7778.35	7593.06					

11. The details of the Interest on Working Capital (IWC) claimed by the Petitioner for the instant asset are as under:-

(₹ in lakh)

Combined Asset									
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19				
O & M Expenses	52.66	54.41	56.22	58.08	60.01				
Maintenance Spares	94.79	97.93	101.19	104.55	108.01				
Receivables	1387.06	1360.89	1329.45	1296.39	1265.51				
<b>Total Working Capital</b>	1534.51	1513.23	1486.86	1459.02	1433.53				
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50				
Interest on Working Capital	207.16	204.29	200.73	196.97	193.53				

## **Capital Cost**

12. The details of apportioned approved capital cost, capital cost as on 31.3.2014 and Additional Capital Expenditure incurred upto 31.3.2019, claimed by the Petitioner for the Combined Asset are as under:-

(₹ in lakh)

Approved Capital	Capital cost as on	Add	ditional C (c	Total completion cost as on			
Cost as per FR	31 3 2014	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	31.3.2019 (claimed)
66496.00	45783.66	177.89	162.53	0.00	62.29	0.00	46186.37

The Commission vide order dated 23.2.2016 in Petition No. 396/TT/2014 had allowed the capital cost of ₹45783.66 lakh for the instant asset as opening capital cost as on 1.4.2014.

13. The Petitioner, vide Auditor's Certificate dated 26.7.2019, has submitted the capital cost incurred upto 31.3.2014, Additional Capital Expenditure (ACE) incurred upto 31.3.2019 and projected ACE during the period 1.4.2019 to 31.3.2020. The Petitioner has claimed the same capital cost of ₹45783.66 lakh as approved by the Commission for Combined Asset as on 31.3.2014. The same has been considered

as the opening capital cost as on 1.4.2014 for truing up of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations.

#### Initial spares

- 14. The Commission in its order dated 23.2.2016 in Petition No. 396/TT/2014 had allowed the initial spares of ₹989.71 lakh pertaining to sub-station (including PLCC) corresponding to capital cost of ₹45988.15 lakh.
- 15. The Petitioner, vide Auditor's Certificate dated 26.7.2019 has submitted that the initial spares of ₹989.71 lakh have been claimed for sub-station (including PLCC), corresponding to the capital cost of ₹44395.40 lakh of sub-station, as on the cut-off date of 31.3.2015. We have worked out the admissible initial spares by considering actual capital cost upto cut-off date as per Auditor's Certificate in accordance with the 2009 Tariff Regulations.
- 16. The instant assets were put into commercial operation in the 2009-14 period. Therefore, Regulation 8(iv) of the 2009 Tariff Regulations which provides for the ceiling norms in respect of sub-station at 2.5%, is applicable for the instant asset. The details of the initial spares allowed for the Combined Asset are as under:-

Particulars	Capital Cost as on 31.3.2014 allowed in order dated 20.06.2016 in Petition No. 396/TT/201 4 (A) (₹ in lakh)	Add-cap claimed upto cut- off date per Auditor's Certificat e dated 26.7.2019 (B) (₹ in lakh)	Total project cost upto cut-off date (C) = A+B (₹ in lakh)	Initial spares claime d (₹ in lakh)	Initial spare s ceilin g limit (%)	Initial spares allowabl e (₹ in lakh)	Initial spares to be allowe d (₹ in lakh)	Excess initial spares disallowe d (₹ in lakh)
S S	44217.51	177.89	44395.4 0	989.71	2.50	1112.97	989.71	0.00

As the initial spares are within the limit as per the 2009 Tariff Regulations, the capital cost as on 31.3.2014 has been considered to work out the tariff.

# Interest During Construction (IDC) and Incidental Expenses During Construction (IEDC)

17. The time over-run of one month in case of the instant assets due to delay in land acquisition was condoned by the Commission in order dated 31.1.2014 in Petition No. 58/TT/2012 and accordingly, the IDC and IEDC had already been dealt with in the said order.

## **Additional Capital Expenditure (ACE)**

18. The admissibility of Additional Capital Expenditure after date of commercial operation is to be dealt with in accordance with the provisions of Regulation 14(1) and 14(3) of the 2014 Tariff Regulations. The Petitioner has claimed the following Additional Capital Expenditure for the Combined Asset covered in the instant petition and has submitted the Auditor's Certificate in support of the same:-

				(₹ in lakh)				
Additional Capital Expenditure (Claimed)								
2014-15	2015-16	2016-17	2017-18	2018-19				
177.89	162.53	0.00	62.29	0.00				

19. The Petitioner vide affidavit dated 4.12.2019 has submitted that the Additional Capital Expenditure for the instant assets is on account of undischarged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date. The Additional Capital Expenditure for the year 2014-15 for the instant assets has been claimed under Regulation 14(1)(i) of the 2014 Tariff Regulations (related to undischarged liabilities) and Additional Capital Expenditure for the year 2015-16 and 2017-18 (no ACE claimed for 2016-17 and

- 2018-19) for Combined Asset has been claimed under Regulation 14(3)(v) of the 2014 Tariff Regulations (related to liabilities after cut-off date).
- 20. The Petitioner has also submitted that ACE upto 31.3.2019 has been considered in the Auditor's certificate as per actuals whereas the ACE claimed for the period from 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 contract-wise details for balance and retention payments are as detailed below:-

(₹ in lakh)

			Financial Year			
Asset	Party	Package	2014- 15	2015- 16	2017- 18	
	Gammon India	Transmissio n Line Package	0.00	34.70	0.00	
	ABB	Sub-station Package	0.00	56.56	0.00	
	HYOSUNG	Transformer Package	1.23	46.58	0.00	
Combined Asset	L&T	Transformer Package	4.98	0.00	2.90	
	TBEA Shenyang Transformer Group Co. Ltd.	Transformer Package	131.37	0.00	0.00	
	Parmanent Agrotech	Civil Works	39.99	0.00	55.61	
	Sun Batteries BSP	Misc.	0.33	0.00	0.00	
	T V Sundram Iyengar and Sons Limited	Sub-station Package	0.00	24.69	3.78	
Total			177.89	162.53	62.29	

- 21. The cut-off date in case of the instant asset is 31.3.2015.
- 22. We have considered the submissions made by the Petitioner. It is observed that the actual audited ACE claimed by the Petitioner is on account of balance and retention payment for works executed within the cut-off date. The same has been considered for computation of total capital cost as on 31.3.2019. The Additional Capital Expenditure claimed for the period from 2014-15 to 2018-19 is allowed under Regulation 14(1)(i) and Regulation 14(3)(v) of the 2014 Tariff Regulations.

- 23. While truing up the tariff for the 2014-19 period, it has been observed that the Petitioner has introduced IT assets under IT Equipment and Software sub-head in the Gross Block at the beginning of 1.4.2014 without changing total value of opening Gross Block. While doing so, the Petitioner has not provided any justification for introducing IT Equipment and Software sub-head in the Gross Block at this stage. The instant assets were put into commercial operation during the 2009-14 period and the Petitioner did not include the IT assets under a separate sub-head in the Gross Block either at the time of determination of the tariff of 2009-14 period or at the time of truing up of tariff of 2009-14 period and determination of tariff of 2014-19 period and has suddenly claimed IT assets as a separate sub head in the Gross Block during truing up of tariff for the 2014-19 period in the instant petition. Based on the above facts and lack of acceptable justification to substantiate the approach of the Petitioner for including IT assets under a separate sub head in the Gross Block, we are not inclined to allow such inclusion of IT assets in the Gross Block as on 1.4.2014 and the same is disallowed.
- 24. The capital cost of ₹45783.66 lakh of the Combined Asset as on 31.3.2014 approved in order dated 23.2.2016 in Petition No.396/TT/2014 has been considered as opening capital cost as on 1.4.2014 for truing up of tariff in accordance with Regulation 8 of the 2014 Tariff Regulations. The details of the earlier approved capital cost as on 31.3.2014 along with the breakup of sub-heads in Gross Block, considered for tariff computation is as under:-

Particulars	Capital Expenditure as on 31.3.2014
Freehold Land	0.00
Leasehold Land	229.23
Building and Civil Works	4079.12

(₹ in lakh)

Particulars	Capital Expenditure as on 31.3.2014
Transmission Line	1336.92
Sub-Station Equipment	39973.38
PLCC	165.01
Total	45783.66

#### 25. The details of ACE allowed is as follows:-

(₹ in lakh)

Combined Asset	Capital cost	as on					Total capital cost including additional
	31.3.2014	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	capitalization as on 31.3.2019
Approved earlier vide order dated 23.2.2016 in Petition No. 396/TT/2014	45783.66	1552.21	0.00	0.00	0.00	0.00	47335.87
Claimed in the instant petition	45783.66	177.89	162.53	0.00	62.29	0.00	46186.37
Approved in this order	45783.66	177.89	162.53	0.00	62.29	0.00	46186.37

As the capital cost of ₹46186.37 lakh as on 31.3.2019 is substantially lower than the approved FR cost of ₹66496 lakh, the Petitioner was directed, vide RoP dated 22.5.2020, to submit detailed reasons for the reduction in capital cost as on 31.3.2019 with respect to the approved FR cost. In response, the Petitioner, vide affidavit dated 5.6.2020, has submitted that the main reason for decrease in capital cost as on 31.3.2019 with respect to the approved FR cost is the reduction in line length from 60 km to 7.949 km due to shifting of location of Bilaspur Pooling Station (near Sipat). Accordingly, the number of towers to be erected got reduced from 170 to 24 for LILO of 765 kV S/C Sipat-Seoni Ckt-II. Apart from above, substantial reduction in cost has been on account of decrease in awarded prices of sub-station equipment such as transformer and reactor. Further, the IDC and IEDC claimed on actual basis have been lesser than FR estimation. It is observed that

the cost estimates of the Petitioner in case of the instant asset are not realistic. We are of the view that the petitioner should adopt a prudent procedure to make cost estimates of different elements of the transmission projects more realistic.

## **Debt-Equity Ratio**

26. The Petitioner has considered debt-equity ratio as 70:30 as on 31.3.2014 and for ACE during 2014-19 period. The debt-equity ratio of 70:30 has been considered for capital cost as on 31.3.2014 and ACE during 2014-19 tariff period as provided under Regulation 19 of 2014 Tariff Regulation. The same has been summarised as under:-

	As on 3°	1.3.2014	As on 31.3.2019		
Combined Asset	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)	
Debt	32048.56	70.00	32330.45	70.00	
Equity	13735.10	30.00	13855.92	30.00	
Total	45783.66	100.00	46186.37	100.00	

## Interest on Loan (IoL)

- 27. IoL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The Petitioner has claimed IoL based on actual interest rates for each year during the 2014-19 period. The Petitioner has considered the weighted average rate of IoL on the basis of prevailing rates as on 1.4.2014 for respective loans. The Petitioner has submitted that the weighted average rate of IoL has been considered on the basis of rates prevailing as on 1.4.2014 and has prayed to consider floating rate of interest applicable during 2014-19 period, if any, during the truing up of tariff.
- 28. We have considered the submissions made by the Petitioner. It is observed that the SBI loan with respect to transmission assets in the instant petition have been deployed with floating interest rates. Accordingly, factoring in the impact of

floating rate of interest, the IoL has been worked out based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations.

- 29. loL 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 tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period.
- 30. The details of IoL allowed are as follows:-

(₹ in lakh)

Combined Asset									
Particular	2014-15	2015-16	2016-17	2017-18	2018-19				
Gross Normative Loan	32048.56	32173.09	32286.86	32286.86	32330.46				
Cumulative Repayments upto Previous Year	4338.77	6678.58	9027.13	11380.13	13734.22				
Net Loan-Opening	27709.79	25494.51	23259.73	20906.72	18596.24				
Additions due to Additional Capitalization	124.52	113.77	0.00	43.60	0.00				
Repayment during the year	2339.81	2348.55	2353.01	2354.09	2355.16				
Net Loan-Closing	25494.51	23259.73	20906.72	18596.24	16241.08				
Average Loan	26602.15	24377.12	22083.23	19751.48	17418.66				
Weighted Average Rate of Interest on Loan (%)	9.14	9.13	9.11	9.08	9.07				
Interest on Loan	2431.38	2226.14	2012.57	1793.77	1579.61				

31. Accordingly, loL approved earlier, claimed by the Petitioner in the instant petition and trued up loL is shown in the table below:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated 23.2.2016 in Petition No. 396/TT/2014	2473.39	2305.81	2084.65	1863.68	1643.28
Claimed by the Petitioner in the instant petition	2430.84	2224.54	2009.87	1790.00	1574.77
Allowed after truing up	2431.38	2226.14	2012.57	1793.77	1579.61

32. The difference in the IoL claimed by the Petitioner in the instant petition and the trued up IoL allowed in this order is due to lower rate of depreciation allowed on the IT assets, than claimed by the Petitioner, leading to lower repayment of loan during the 2014-19 tariff period.

## Return on Equity (RoE)

33. The Petitioner is entitled for RoE for the instant assets in terms of Regulation 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that they are 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

34. MPPMCL in its reply dated 3.2.2020 has raised the issue of effective rate considered for the calculation of RoE wherein, MPPMCL has submitted that the Petitioner has grossed up RoE on the basis of actual tax paid during 2016-17 and 2017-18 and has considered the applicable MAT rate, surcharge and cess for the purpose of grossing up of RoE for the year 2018-19. MPPMCL has further submitted that the Petitioner has neither submitted copies of assessment orders for 2014-15 and 2015-16 nor the audited accounts in respect of actual taxes paid for 2016-17 and 2017-18 along with the current petition, in the absence of which, it is not possible to scrutinize the claim of the Petitioner properly. The Petitioner, vide its rejoinder dated 4.5.2020, in response to the reply filed by MPPMCL has submitted that the Assessment Orders have been issued by the Income Tax

Department for 2014-15, 2015-16 and 2016-17 and the Income Tax Returns have been filed with the Income Tax Department for the years 2017-18 and 2018-19. Further, the Petitioner has stated that the assessment order for 2014-15 and 2015-16 has already been submitted in Petition No. 20/TT/2020 and has further submitted a copy of the assessment order of 2016-17 along with the rejoinder praying to allow RoE on the basis of effective tax rate arrived at.

35. We have considered the submissions of the Petitioner and MPPMCL. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates for the Petitioner and the same is given in the table below. The same MAT rates are considered for the purpose of grossing up of rate of RoE for truing up of the tariff for the 2014-19 period in terms of the provisions of the 2014 Tariff Regulations.

Year	MAT Rates (%)	Grossed up ROE (Base Rate/1-t) (%)
2014-15	20.961	19.610
2015-16	21.342	19.705
2016-17	21.342	19.705
2017-18	21.342	19.705
2018-19	21.549	19.758

36. Accordingly, RoE allowed for the instant assets is as follows:-.

Combined Asset									
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19				
Opening Equity	13735.10	13788.47	13837.22	13837.22	13855.91				
Addition due to Additional Capitalization	53.37	48.76	0.00	18.69	0.00				
Closing Equity	13788.47	13837.22	13837.22	13855.91	13855.91				
Average Equity	13761.78	13812.84	13837.22	13846.57	13855.91				
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50				
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549				
Rate of Return on Equity (Pre-tax)(%)	19.610	19.705	19.705	19.705	19.758				
Return on Equity (Pre-tax)	2698.69	2721.82	2726.62	2728.47	2737.58				

37. Accordingly, details of RoE approved in previous order, claimed by the Petitioner in the instant petition and trued up RoE is shown in the table below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated 23.2.2016 in Petition No. 396/TT/2014	2739.17	2784.83	2784.83	2784.83	2784.83
Claimed by the Petitioner in the instant petition	2700.75	2723.20	2726.63	2728.47	2737.65
Allowed after truing up	2698.69	2721.82	2726.62	2728.47	2737.58

38. The variation in RoE allowed earlier vide order dated 23.2.2016 in Petition No. 396/TT/2014 and as trued up in the instant order is on account of variation in the quantum of ACE and applicable MAT rate during the 2014-19 tariff period.

## **Depreciation**

- 39. The Petitioner has claimed depreciation considering gross block of ₹45783.66 lakh as on 31.3.2014 and Additional Capitalization of ₹402.71 lakh for Combined Asset. The Petitioner has also introduced IT assets in the Opening Gross Block as on 1.4.2014 for the first time since COD and has further claimed depreciation for the IT Assets @15% for 2014-19 tariff period. In this regard, vide ROP dated 22.5.2020, the Petitioner was directed to submit the computation of depreciation accumulated for IT Assets till 31.3.2014.
- 40. In response, the Petitioner, vide affidavit dated 5.6.2020, has submitted that during the truing up of the tariff for 2009-14 period in Petition No. 396/TT/2014, the capital cost of the IT equipment was considered as part of the sub-station cost inadvertently and, therefore, the depreciation for IT equipment was allowed at the depreciation rate defined for sub-station i.e. 5.28%. Further, in order to avoid revision of tariff of the 2009-14 block, the Petitioner has prayed to consider

depreciation of IT Equipment upto 31.3.2014 at 5.28% and has submitted the calculation of IT Equipment as under:-

(₹ in lakh)

	(*)
IT equipment cost as on 31.3.2014	Depreciation upto 31.3.2014 @5.28%
121.92	12.87

The Petitioner has further submitted that the 2014 Tariff Regulations and the 2019 Tariff Regulations provide for depreciation @15% for IT Equipment and the salvage value for IT Equipment as NIL.

41. We have considered submissions of the Petitioner. It has been observed that the instant assets were put into commercial operation during the 2009-14 period and the tariff from the COD to 31.3.2014 was allowed vide order dated 31.1.2014 in Petition No. 58/TT/2012. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 23.2.2016 in Petition No.396/TT/2014. It is observed that the Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said two petitions where tariff for the instant assets for the 2009-14 period was allowed and tariff of the 2009-14 was trued up and tariff for 2014-19 was determined, even though there was a clear provision in the 2009 and the 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations, the Petitioner has now, at the time of truing up of the tariff for the 2014-19 period, apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology in some of the other petitions too. 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. Accordingly, the depreciation @5.28% has been considered for IT Equipment as part of the sub-station upto 31.3.2019 while 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. Depreciation has been computed considering capital expenditure as on 31.3.2014 and ACE approved for 2014-19 tariff period. The Gross Block during the tariff period 2014-19 has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is at Annexure-I.

42. The weighted average of depreciation (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:-

Combined Asset									
Particulars 2014-15 2015-16 2016-17 2017-18 20									
Opening Gross Block	45783.66	45961.55	46124.08	46124.08	46186.37				
Additional Capitalisation	177.89	162.53	0.00	62.29	0.00				
Closing Gross Block	45961.55	46124.08	46124.08	46186.37	46186.37				
Average Gross Block	45872.61	46042.82	46124.08	46155.23	46186.37				

Combined Asset								
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19			
Weighted average rate of Depreciation (WAROD) (%)	5.10	5.10	5.10	5.10	5.10			
Balance useful life of the asset at the beginning of the year	23	22	21	20	19			
Aggregated Depreciable Value	41297.54	41450.73	41523.86	41551.89	41579.93			
Combined Depreciation during the year	2339.81	2348.55	2353.01	2354.09	2355.16			
Remaining Aggregated Depreciable Value	36958.77	34772.15	32496.74	30171.76	27845.71			

43. The details of the depreciation approved earlier, claimed by the Petitioner and trued up in the instant order is shown in the table below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated 23.2.2016 in Petition No. 396/TT/2014	2373.10	2410.67	2410.67	2410.67	2410.67
As claimed by the Petitioner	2351.67	2360.41	2364.87	2365.94	2367.02
Allowed after truing up	2339.81	2348.55	2353.01	2354.09	2355.16

44. The variation in depreciation in comparison to that claimed by the Petitioner is on account of disallowance of inclusion of IT assets in Gross Block as on 31.3.2014 as laid out at para 24, 25 and 42 of the instant order which in turn has affected the computation of weighted average rate of depreciation considered for Gross Block.

## **Operation & Maintenance Expenses (O&M Expenses)**

45. The Petitioner has claimed O&M Expenses as per Regulation 29(4)(a) of the 2014 Tariff Regulations for the Combined Asset. The O&M Expenses claimed by the Petitioner are as follows:-

## **Sub-Station Bays**

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M for Sub-station					
bays (as per norms)					
765 kV	506.52	523.32	540.72	558.66	577.20
400 kV	120.60	124.60	128.74	133.02	137.42
Total O&M Expenses	627.12	647.92	669.46	691.68	714.62

## **HV and DC Lines**

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M for HV and DC Lines (as per norms)					
S/C (Bundle Conductor- 4 sub-c)	4.79	4.96	5.12	5.29	5.47
Total O&M Expenses	4.79	4.96	5.12	5.29	5.47

(₹ in lakh)

Combined Asset						
Particulars 2014-15 2015-16 2016-17 2017-18 2018-1						
Total O&M Expenses Claimed	631.91	652.88	674.58	696.97	720.09	

46. It is observed that the claim made by the Petitioner is within the norms specified in Regulation 29(4)(a) of the 2014 Tariff Regulations and the same is allowed for the 2014-19 period. The norms specified in Regulation 29(4)(a) of the 2014 Tariff Regulations with respect to the instant assets and the O&M Expenses allowed is given hereunder:-

## **Sub-Station Bays**

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Norm (₹ lakh/bay)					
765 kV Bay	84.42	87.22	90.12	93.11	96.20
400 kV Bay	60.30	62.30	64.37	66.51	68.71
Number of bays					
765 kV Bay	6	6	6	6	6
400 kV Bay	2	2	2	2	2
O&M Expenses for 765 kV Bay	506.52	523.32	540.72	558.66	577.20
O&M Expenses for 400 kV Bay	120.60	124.60	128.74	133.02	137.42
Total O&M Expenses	627.12	647.92	669.46	691.68	714.62

#### **AC and HVDC Lines**

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Norm (₹ lakh/km)					
S/C (Bundle Conductor- 4 sub-c)	0.606	0.627	0.647	0.669	0.691
Line Length in km.					
S/C (Bundle Conductor- 4 sub-c)	7.911	7.911	7.911	7.911	7.911
S/C (Bundle Conductor- 4 sub-c)	4.79	4.96	5.12	5.29	5.47
Total O&M Expenses	4.79	4.96	5.12	5.29	5.47

(₹ in lakh)

Combined Asset						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Total O&M Expenses Allowed	631.91	652.88	674.58	696.97	720.09	

47. There is no variation in the O&M Expenses approved vide earlier order dated 23.2.2016 in Petition No. 396/TT/2014 and the claim made by the Petitioner and trued up in the instant order.

## **Interest on Working Capital (IWC)**

48. The Petitioner is entitled to claim IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations. The components of the working capital and the Petitioner's entitlement to interest thereon are discussed hereunder:-

#### (i) Maintenance Spares:

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses as specified in Regulation 28.

#### (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 IWC

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

49. The IWC allowed for the Combined Asset is as under:-

(₹ in lakh)

					,
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	52.66	54.41	56.21	58.08	60.01
Maintenance Spares	94.79	97.93	101.19	104.55	108.01
Receivables	1384.77	1358.90	1327.88	1295.01	1264.30
Total	1532.22	1511.24	1485.28	1457.64	1432.32
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on working capital	206.85	204.02	200.51	196.78	193.36

50. The details of IWC approved in earlier order, claimed by the Petitioner and trued up IWC in the instant order is shown in the table below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated 23.2.2016 in Petition No. 396/TT/2014	209.51	208.73	204.84	200.99	197.19
Claimed by the Petitioner in the instant petition	207.16	204.29	200.73	196.97	193.53
Allowed after truing up	206.85	204.02	200.51	196.78	193.36

51. The trued up IWC has decreased in comparison to that approved earlier vide order dated 23.2.2016 in Petition No. 396/TT/2014 on account of decrease in receivables due to decrease in RoE on account of applicable MAT rate during the 2014-19 tariff period.

## Annual Transmission Charges allowed for 2014-19 tariff period

52. Accordingly, the annual transmission charges allowed for the Combined Asset after truing up for the 2014-19 tariff period are as under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2339.81	2348.55	2353.01	2354.09	2355.16
Interest on Loan	2431.38	2226.14	2012.57	1793.77	1579.61
Return on Equity	2698.69	2721.82	2726.62	2728.47	2737.58
Int. on Working Capital	206.85	204.02	200.51	196.78	193.36
Op. and Maintenance	631.91	652.88	674.58	696.97	720.09
Total	8308.64	8153.40	7967.30	7770.08	7585.80

53. Accordingly, the comparison between Annual Transmission Charges as approved earlier, as claimed by the Petitioner and as approved after truing up in the instant order is shown in the table below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated 23.2.2016 in Petition No. 396/TT/2014	8427.08	8362.92	8159.57	7957.14	7756.06
Claimed by the Petitioner in the instant petition	8322.33	8165.32	7976.68	7778.35	7593.06
Allowed after truing up	8308.64	8153.40	7967.30	7770.08	7585.80

54. The Annual Transmission Charges approved after truing up have reduced in comparison to that approved earlier vide order dated 23.2.2016 in Petition No. 396/TT/2014 mainly due to variation in RoE and IWC.

## **Determination of Annual Fixed Charges for 2019-24 tariff period**

55. The transmission tariff claimed by the Petitioner for 2019-24 tariff period is as follows:-

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	2367.16	2350.39	2350.39	2350.39	2350.39
Interest on Loan	1362.09	1149.24	935.77	723.32	510.80



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Return on Equity	2738.94	2740.23	2740.23	2740.23	2740.23
Interest on Working Capital	176.46	176.12	175.79	175.64	175.17
Operation and Maintenance	1817.28	1880.29	1946.63	2016.47	2086.71
Total	8461.93	8296.27	8148.81	8006.05	7863.30

56. 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	151.44	156.69	162.22	168.04	173.89
Maintenance Spares	272.59	282.04	291.99	302.47	313.01
Receivables	1040.40	1022.83	1004.65	987.05	966.80
Total	1464.43	1461.56	1458.86	1457.56	1453.70
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	176.46	176.12	175.79	175.64	175.17

## **Capital Cost**

- 57. Regulation 19(3) and 19(5) of the 2019 Tariff Regulations provide as follows:-
  - "19. Capital Cost
  - (3) The Capital cost of an existing project shall include the following:
    - (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
    - (b) Additional Capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
    - (c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;
    - (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
    - (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
    - (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
  - (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."
- 58. The Petitioner has claimed capital cost of the Combined Asset as ₹46186.37 lakh as on 31.3.2019.
- 59. The admitted trued up capital cost of ₹46186.37 lakh as on 31.3.2019 has been considered as the opening capital cost as on 1.4.2019 for determination of tariff for 2019-24 tariff period in accordance with Regulation 19 of the 2019 Tariff Regulations.

#### Additional Capital Expenditure (ACE)

- 60. Regulation 24 and 25 of the 2019 Tariff Regulations provide as under: -
  - "24. Additional Capitalization within the original scope and upto the cut-off date
  - (1) The Additional Capital Expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
  - (a) Undischarged liabilities recognized to be payable at a future date;
  - (b) Works deferred for execution;
  - (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;



- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
- (e) Change in law or compliance of any existing law; and
- (f) Force Majeure events:

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

- (2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.
- 25. Additional Capitalisation within the original scope and after the cut-off date:
- (1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:
  - (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
  - (b) Change in law or compliance of any existing law;
  - (c) Deferred works relating to ash pond or ash handling system in the original scope of work;
  - (d) Liability for works executed prior to the cut-off date;
  - (e) Force Majeure events;
  - (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and
  - (g) Raising of ash dyke as a part of ash disposal system.
  - (2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:
  - (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
  - (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
  - (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
  - (d) The replacement of such asset or equipment has otherwise been allowed by the Commission."
- 61. The Petitioner has claimed projected ACE for 2019-24 period and submitted Auditor's certificates in support of the same. The projected ACE during 2019-20 as per Auditor's Certificates is ₹43.50 lakh.



62. The Petitioner, vide affidavit dated 4.12.2019, 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 contract-wise details for balance and retention payments are as detailed below:-

(₹ in lakh)PartyPackage2019-20ABBSub-station Package10.50L&TTransformer Package33.00Total43.50

- 63. The Petitioner, vide affidavit dated 4.5.2020, has further submitted the justification for claiming the Additional Capital Expenditure during 2019-24 tariff period stating that the payments were withheld against repair/ replenishment of parts of mandatory spares which got damaged during transit.
- 64. We have considered the submissions made by the Petitioner. It is observed that the projected Additional Capital Expenditure falls after the cut-off date in the instant petition and that the same claimed by the Petitioner is on account of balance and retention payment for works executed within the cut-off date. The same has been considered for computation of total capital cost as on 31.3.2024. The Additional Capital Expenditure claimed for the period 2019-20 to 2023-24 is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations which would be subject to true up.
- 65. The ACE allowed subject to true up is summarized below:-

Particulars	Regulation	2019-20
ACE to the extent of Balance & Retention Payments for works executed before cut- off date	Regulation 25(1)(d) of the 2019 Tariff Regulations	43.50

## Capital cost for the 2019-24 tariff period

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

(₹ in lakh)

Capital Cost allowed as on 1.4.2019	ACE allowed for the year 2019-20	Total Estimated Completion Cost up to 31.3.2024
46186.37	43.50	46229.87

67. The estimated projected completion cost of the Combined Asset including additional capital expenditure is ₹46229.87 lakh which is within the FR approved capital cost of ₹66496 lakh. Therefore, there is no cost over-run.

#### **Debt-Equity Ratio**

68. Clause (3), (4) and (5) of Regulation 18 of the 2019 Tariff Regulations provide as under:-

"18. Debt-Equity Ratio: (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."

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

	Capital Cost as on 1.4.2019 (in ₹ lakh)	(%)	Total Cost as on 31.3.2024 (in ₹ lakh)	(%)
Debt	32330.45	70.00	32360.91	70.00
Equity	13855.92	30.00	13868.96	30.00
Total	46186.37	100.00	46229.87	100.00

## Return on Equity (RoE)

- 70. Regulation 30 of the 2019 Tariff Regulations provides 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."

71. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, the MAT rate applicable during the 2019-20 has been considered for the purpose of ROE, which shall be trued up with actual tax rate in accordance with Clause (3) of Regulation 31 of the 2019 Tariff Regulations. However, in the instant petition, the Petitioner has claimed the ROE on the basis of MAT rate of 21.55% whereas the Petitioner in Petition No. 244/TT/2019 has claimed the ROE based on the MAT rate of 17.472% on account of Taxation Laws (Amendment) ordinance, 2019 published in the Gazette dated 20.9.2019. Accordingly, based on the submissions made by the Petitioner in Petition No. 244/TT/2019, the ROE has been allowed for the instant transmission assets considering the applicable MAT rate of 17.472% as under:-

(₹ in lakh)

					1 /
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	13855.91	13868.96	13868.96	13868.96	13868.96
Addition due to Additional Capitalization	13.05	0.00	0.00	0.00	0.00
Closing Equity	13868.96	13868.96	13868.96	13868.96	13868.96
Average Equity	13862.44	13868.96	13868.96	13868.96	13868.96
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax) (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	2603.64	2604.87	2604.87	2604.87	2604.87

#### Interest on Loan (IoL)

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

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

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

- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing".
- 73. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period may be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up or next revision of tariff. By considering above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. The details of IoL worked out and allowed for the Combined Asset are as follows:-

(₹ in lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative	32330.46	32360.91	32360.91	32360.91	32360.91
Loan	32330.40	32300.91	32300.91	32300.91	32300.91
Cumulative					
Repayments upto	16089.38	18457.22	20825.89	23194.56	25563.23
Previous Year					
Net Loan-Opening	16241.08	13903.69	11535.02	9166.35	6797.68
Additions due to					
Additional	30.45	0.00	0.00	0.00	0.00
Capitalization					
Repayment during	2267.04	2260 67	2260.67	2260.67	2260.67
the year	2367.84	2368.67	2368.67	2368.67	2368.67
Net Loan-Closing	13903.69	11535.02	9166.35	6797.68	4429.01
Average Loan	15072.38	12719.35	10350.68	7982.01	5613.34
Weighted Average					
Rate of Interest on	9.073	9.071	9.068	9.077	9.091
Loan (%)					
Interest on Loan	1367.45	1153.73	938.59	724.49	510.31

#### **Depreciation**

- 74. Regulation 33(1), (2) and (5) of 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 element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

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

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



75. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). The weighted average rate of depreciation (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 per cent 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 instant asset is as follows:-

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	46186.37	46229.87	46229.87	46229.87	46229.87
Addition during the year 2019-					
24 due to projected Additional	43.50	0.00	0.00	0.00	0.00
Capitalisation					
Closing Gross Block	46229.87	46229.87	46229.87	46229.87	46229.87
Average Gross Block	46208.12	46229.87	46229.87	46229.87	46229.87
Weighted average rate of	5.12	5.12	5.12	5.12	5.12
Depreciation (WAROD) (%)	5.12	5.12	5.12	5.12	5.12
Balance useful life at the	18	17	16	15	14
beginning of the year	10	17	10	13	14
Aggregated Depreciable Value	41599.50	41619.08	41619.08	41619.08	41619.08
Combined Depreciation during the year	2367.84	2368.67	2368.67	2368.67	2368.67
Remaining Aggregate Depreciable Value	25510.12	23161.85	20793.18	18424.51	16055.84

#### **Operation & Maintenance Expenses (O&M Expenses)**

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

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

Particulars	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84

Particulars	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)	•		I.	I.	
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

#### Provided further that:

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

ii.the O&M expenses norms for HVDC bi-pole line shall be considered as



Double Circuit quad AC line;

- iii.the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW)shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv.the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v.the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW)shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi.the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three 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."
- 77. The O&M Expenses claimed by the Petitioner for the instant assets are as follows:-

## **Sub-Station Bays**

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M for Sub-station					
bays (as per norms)					
765 kV	270.06	279.60	289.38	299.58	310.08
400 kV	64.30	66.56	68.90	71.32	73.82
Total O&M Expenses	334.36	346.16	358.28	370.90	383.90



#### **Transformer**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M for Transformer					
(as per norms)					
765 kV	1473.00	1524.00	1578.00	1635.00	1692.00
Total O&M Expenses	1473.00	1524.00	1578.00	1635.00	1692.00

#### **HV and DC Lines**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M for HV and DC					
Lines (as per norms)					
S/C (Bundle Conductor-	5.97	6.18	6.40	6.62	6.86
4 sub-c)					
Total O&M Expenses	5.97	6.18	6.40	6.62	6.86

#### **PLCC**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M for PLCC (as per					
norms)					
PLCC	3.95	3.95	3.95	3.95	3.95
Total O&M Expenses	3.95	3.95	3.95	3.95	3.95

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Total O&M Expenses Claimed	1817.28	1880.28	1946.63	2016.47	2086.70

78. It is observed that the claim made by the Petitioner is within the norms specified in Regulation 35(3) and (4) of the 2019 Tariff Regulations and the same is allowed for the 2019-24 period. The norms specified in Regulation 35(3) and (4) of the 2019 Tariff Regulations with respect to the instant assets and the O&M Expenses allowed is given hereunder:-

## **Sub-Station Bays**

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norm (₹ lakh/bay)					
765 kV Bay	45.01	46.60	48.23	49.93	51.68
400 kV Bay	32.15	33.28	34.45	35.66	36.91
Number of bays					
765 kV Bay	6	6	6	6	6
400 kV Bay	2	2	2	2	2



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expense for 765 kV Bay	270.06	279.60	289.38	299.58	310.08
O&M Expense for 400 kV Bay	64.30	66.56	68.90	71.32	73.82
Total O&M Expenses	334.36	346.16	358.28	370.90	383.90

## **Transformer**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norm (₹ lakh/MVA)					
765 kV Transformer	0.49	0.51	0.53	0.55	0.56
MVA Rating	1500	1500	1500	1500	1500
No. of Transformers	2	2	2	2	2
O&M Expense for 765 kV Transformer	1473.00	1524.00	1578.00	1635.00	1692.00
Total O&M Expenses	1473.00	1524.00	1578.00	1635.00	1692.00

## **AC and HVDC Lines**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norm (₹ lakh/km)					
S/C (Bundle Conductor- 4 sub-c)	0.755	0.781	0.809	0.837	0.867
Line Length in km.					
S/C (Bundle Conductor- 4 sub-c)	7.911	7.911	7.911	7.911	7.911
S/C (Bundle Conductor- 4 sub-c)	5.97	6.18	6.40	6.62	6.86
Total O&M Expenses	5.97	6.18	6.40	6.62	6.86

# **PLCC**

(₹ in lakh)

					( III Iani
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norm (% of Original					
Project Cost)					
PLCC	2.00	2.00	2.00	2.00	2.00
Original Project Cost					
PLCC	197.28	197.28	197.28	197.28	197.28
Total O&M Expenses	3.95	3.95	3.95	3.95	3.95

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Total O&M Expenses Allowed	1817.28	1880.28	1946.63	2016.47	2086.70



## **Interest on Working Capital (IWC)**

- 79. Clause (1)(c), (3) and (4) of Regulation 34 and Clause (7) of Regulation 3 of the 2019 Tariff Regulations provide as follows:
  - "34. Interest on Working Capital: (1) The working capital shall cover:
  - (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
  - (i) Receivables equivalent to 45 days of annual fixed cost;
  - (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
  - (iii) Operation and maintenance expenses, including security expenses for one month."
  - "(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

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

- (4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."
- "3. Definition In these regulations, unless the context otherwise requires:-
- (7) 'Bank Rate' means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;"
- 80. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the bank rate as on 1.4.2019. The rate of IWC considered is 12.05%.
- 81. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05%. The components of the working capital and interest thereon have been worked out as follows:-



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	151.44	156.69	162.22	168.04	173.89
Maintenance Spares	272.59	282.04	291.99	302.47	313.01
Receivables	1024.27	1008.74	990.35	972.54	952.13
Total	1448.30	1447.47	1444.56	1443.05	1439.02
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on working capital	174.52	174.42	174.07	173.89	173.40

## **Annual Fixed Charges for the 2019-24 Tariff Period**

82. The transmission charges allowed for the Combined Asset for the 2019-24 tariff period are summarised below:-

(₹ in lakh)

					<u> </u>
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	2367.84	2368.67	2368.67	2368.67	2368.67
Interest on Loan	1367.45	1153.73	938.59	724.49	510.31
Return on Equity	2603.64	2604.87	2604.87	2604.87	2604.87
Interest on Working Capital	174.52	174.42	174.07	173.89	173.40
Operation and Maintenance	1817.28	1880.28	1946.63	2016.47	2086.70
Total	8330.73	8181.97	8032.83	7888.38	7743.96

#### 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 Clause (1) of Regulation 70 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 Clause (1) of Regulation 70 of the 2019 Tariff Regulations.

## Licence Fee and RLDC Fees and Charges

84. The Petitioner has requested to allow the Petitioner to bill and recover License fee and RLDC fees and charges, separately from the Respondents. The

Petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (4) and (3), respectively, of Regulation 70 of the 2019 Tariff Regulations.

#### **Goods and Services Tax**

85. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if at any time GST on transmission is withdrawn from negative list in future. MPPMCL in its reply dated 3.2.2020 has raised the issue of GST recovery stating that the demand of the Petitioner is premature and need not be considered at this juncture. The Petitioner, vide its rejoinder dated 4.5.2020, in response to the reply filed by MPPMCL has submitted that the transmission charges claimed are exclusive of GST and if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondents to the Petitioner and the same shall be charged and billed separately by the Petitioner. In addition, the Petitioner has also submitted that any additional taxes to be paid by the Petitioner on account of demand from Government/ statutory authorities, may be allowed to be recovered directly from the beneficiaries. We have considered the submission of MPPMCL and the Petitioner. GST is not levied on transmission service at present and we are of the view that the Petitioner's prayer is premature.

#### **Security Expenses**

86. The Petitioner has submitted that security expenses for the instant 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 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

87. We have considered the submissions of the Petitioner. We are of the view that Petitioner should claim security expenses for all the transmission assets in one petition. 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 Petition No. 260/MP/2020 in accordance with the appropriate provisions of the 2019 Tariff Regulations.

#### **Capital Spares**

88. 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**

89. The billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of

2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

# <u>Trued-up Annual Fixed Charges for 2014-19 period and Annual Fixed Charges for 2019-24 tariff period</u>

90. To summarise, the trued-up Annual Fixed Charges allowed for the 2014-19 tariff period are as follows:

	2014-15	2015-16	2016-17	2017-18	2018-19
Trued up Annual Fixed Charges(₹ in lakh)	8308.64	8153.40	7967.30	7770.08	7585.80

The Annual Fixed Charges allowed for the 2019-24 tariff period subject to true up are as follows:

	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges (₹ in lakh)	8330.73	8181.97	8032.83	7888.38	7743.96

91. This order disposes of Petition No. 27/TT/2020.

sd/-	sd/-	sd/-
(Arun Goyal)	(I.S. Jha)	(P. K. Pujari)
Member	Member	Chairperson

## Annexure - I

2014-19	Admitted Capital Cost as on	Additi	onal Cap	italizati	on (₹ in	lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation	Annual Depreciation as per Regulations			ons	
Capital Expenditure as on 1.4.2014	1.4.2014 (₹ in lakh)	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Leasehold Land	229.23	0.00	0.00	0.00	0.00	0.00	229.23	3.34%	7.66	7.66	7.66	7.66	7.66
Building	4079.12	42.92	0.00	0.00	58.51	0.00	4180.55	3.34%	136.96	137.68	137.68	138.65	139.63
Transmission Line	1336.92	0.00	2.43	0.00	0.00	0.00	1339.35	5.28%	70.59	70.65	70.72	70.72	70.72
Sub Station	39851.46	134.97	127.83	0.00	3.78	0.00	40118.04	5.28%	2107.72	2114.66	2118.03	2118.13	2118.23
PLCC	165.01	0.00	32.27	0.00	0.00	0.00	197.28	6.33%	10.45	11.47	12.49	12.49	12.49
IT Equipment and Software	121.92	0.00	0.00	0.00	0.00	0.00	121.92	5.28%	6.44	6.44	6.44	6.44	6.44
TOTAL	45783.66	177.89	162.53	0.00	62.29	0.00	46186.37		2339.81	2348.55	2353.01	2354.09	2355.16
								ross Block lakh)	45872.61	46042.82	46124.08	46155.23	46186.37
								erage Rate of n (₹ in lakh)	5.10%	5.10%	5.10%	5.10%	5.10%

## Annexure - II

2019-24	Combined Admitted Capital Cost as on	Additional Capitalization (₹ in lakh)	Capitalization Admitted Capital Annual Depreciation as per Regulation			Annual Depreciation as		er Regulatior	ns
Capital Expenditure as on 1.4.2019	1.4.2019 (₹ in lakh)	2019-20	(₹ in lakh)	20p. 03iation	2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Freehold Land	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Leasehold Land	229.23	0.00	229.23	3.34%	7.66	7.66	7.66	7.66	7.66
Building	4180.55	33.00	4213.55	3.34%	140.18	140.73	140.73	140.73	140.73
Transmission Line	1339.35	0.00	1339.35	5.28%	70.72	70.72	70.72	70.72	70.72
Sub Station	40118.04	10.50	40128.54	5.28%	2118.51	2118.79	2118.79	2118.79	2118.79
PLCC	197.28	0.00	197.28	6.33%	12.49	12.49	12.49	12.49	12.49
IT Equipment and Software	121.92	0.00	121.92	15.00%	18.29	18.29	18.29	18.29	18.29
TOTAL	46186.37	43.50	46229.87		2367.84	2368.67	2368.67	2368.67	2368.67
			Average Gross Bl	ock (₹ in lakh)	46208.12	46229.87	46229.87	46229.87	46229.87
			Weighted Avera Depreciation		5.12%	5.12%	5.12%	5.12%	5.12%