

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 300/TT/2022**

**Coram:**

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

**Date of Order: 20.03.2023**

**In the matter of:**

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of 765 kV Line Bays and 240 MVAR Switchable Line Reactor at Raichur and Sholapur Sub-stations under "Line bays and reactor at POWERGRID Sub-station for Raichur – Sholapur transmission line for Synchronous interconnection between SR and WR" in Western Region.

**And in the matter of:**

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

**....Petitioner**

**Vs**

1. Madhya Pradesh Power Management Company Limited,  
Shakti Bhawan, Rampur, Jabalpur – 482 008.
2. Madhya Pradesh Power Transmission Company Limited  
Shakti Bhawan, Rampur  
Jabalpur- 482008.
3. Madhya Pradesh Audyogik Kendra,  
Vikas Nigam (Indore) Limited,  
3/54, Press Complex, Agra-Bombay Road,  
Indore – 452008.



4. Maharashtra State Electricity Distribution Company Limited,  
Hongkong Bank Building, 3rd Floor,  
M.G. Road, Fort, Mumbai – 400001.
5. Maharashtra State Electricity Transmission Company Limited  
Prakashganga, 6 Floor, Plot No. C-19, E Block  
Bandra Kurla Complex, Bandra (East) Mumbai-400051.
6. Gujarat Urja Vikas Nigam Limited,  
Sardar Patel Vidyut Bhawan,  
Race Course Road, Vadodara – 390007.
7. Electricity Department,  
Govt. of Goa, Vidyut Bhawan, Panaji,  
Near Mandvi Hotel, Goa – 403 001.
8. Electricity Department,  
Administration of Daman & Diu,  
Daman – 396210.
9. DNH Power Distribution Corporation Limited,  
Vidyut Bhawan, 66kV Road, Near Secretariat Amla,  
Silvassa – 396230.
10. Chattisgarh State Power Transmission Company Limited  
Office of the Executive Director (C & P)  
State Load Dispatch Building  
Dangania, Raipur- 492013.
11. Chhattisgarh State Power Distribution Company Limited,  
P.O.Sunder Nagar, Dangania, Raipur,  
Chhattisgarh – 492013.
12. Gujarat Power Corporation Limited,  
Block No. 8, Sixth Floor,  
Udhyog Bhavan, Sector 11,  
Gandhinagar – 382011.
13. Tamil Nadu Generation And Distribution Corporation Limited,  
(Formerly Tamil Nadu Electricity Board -TNEB),  
NPKRR Maaligai, 800, Anna Salai, Chennai – 600002.
14. Transmission Corporation of Andhra Pradesh Limited  
(ATRANSCO), Vidyut Soudha, Near Axis Bank, Eluru Road,  
Gunadala, Vijayawada-520004.



15. Kerala State Electricity Board (KSEB),  
Vaidyuthi Bhavanam, Pattom,  
Thiruvananthapuram – 695004.
16. Tamil Nadu Electricity Board (TNEB)  
NPKRR Maaligai, 800, Anna Salai  
Chennai – 600002.
17. Electricity Department  
Government of Pondicherry,  
Pondicherry – 605001.
18. Eastern Power Distribution Company of Andhra Pradesh Limited,  
P&T Colony, Seethammadhara,  
Vishakhapatnam, Andhra Pradesh.
19. Southern Power Distribution Company of Andhra Pradesh Limited,  
Srinivasasa Kalyana Mandapam Backside,  
Tiruchanoor Road, Kesavayana Gunta, Tirupati – 517 501, Chittoor District,  
Andhra Pradesh.
20. Southern Power Distribution Company of Telangana Limited,  
6-1-50, Corporate Office, Mint Compound,  
Hyderabad – 500063, Andhra Pradesh.
21. Northern Power Distribution Company of Telangana Limited,  
Opp. NIT Petrol Pump Chaitanyapuri, Kazipet,  
Warangal – 506004, Telangana.
22. Bangalore Electricity Supply Company Limited,  
Corporate Office, K.R.Circle,  
Bangalore – 560001, Karnataka.
23. Gulbarga Electricity Supply Company Limited,  
Station Main Road, Gulbarga, Karnataka.
24. Hubli Electricity Supply Company Limited,  
Navanagar, PB Road, Hubli, Karnataka.
25. MESCOM Corporate Office,  
Paradigm Plaza, AB Shetty Circle,  
Mangalore – 575001, Karnataka.
26. Chamundeswari Electricity Supply Corporation Limited,  
927, L J Avenue, Ground Floor, New Kantharaj URS Road,  
Saraswathipuram, Mysore – 570009, Karnataka.



27. Transmission Corporation of Telanga Limited  
Vidhyut Sudha, Khairatabad  
Hyderabad-500082.
28. Tamil Nadu Transimission Corporation Limited (TANTRANSCO)  
(Formlery Tamil Nadu Electricity Board-TNEB)  
5B Block 144,Anna Salai  
Chennai-600002.
29. Karnataka Power Transmission Corporation Limited (KPTCL)  
Kaveribhavan, Bangalore-560009.
30. Raichur Sholapur Transmission Company Private Limited,  
Patel Engineering Compound, Patel Estate Road, S V Road,  
Jogeshwari (West) Mumbai, Maharashtra – 400102. ....**Respondent(s)**

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

**For Respondents** : None

### **ORDER**

Power Grid Corporation of India Limited has filed the instant petition for truing up of transmission tariff of the period from COD to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “ the 2014 Tariff Regulations”) and determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the 765 kV Line Bays and 240 MVA Switchable Line Reactor at Raichur and Sholapur Sub-stations (hereinafter referred to as the “transmission asset”), under “Line bays and



reactor at POWERGRID sub-station for Raichur – Sholapur transmission line for Synchronous interconnection between SR and WR” in Western Region (hereinafter referred to as the “transmission project”).

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

- “1) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.*
- 2) 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 8.3 & 9.1 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 7 & 8 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 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 Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice”.*

### **Background**

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

(a) The Investment Approval (IA) for the instant transmission asset was accorded by the Board of Directors of the petitioner company vide letter dated 4.6.2012, at an estimated cost of ₹7574 lakh including IDC of ₹316 lakh (based on February, 2012 price level). The Board of Directors of the Petitioner's Company in its 304<sup>th</sup> meeting held on 4.8.2014 vide memorandum dated 11.9.2014 approved the Revised Cost Estimates (RCE) in at an estimated cost of ₹9323 lakh including IDC of ₹110 lakh (price level December, 2013).

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

#### **Sub-stations:**

(i) Extension of 765/400 kV Sub-station at Raichur to accommodate following:

-765 kV Line Bays :1  
- 240 MVAR 765 kV Switchable Line Reactor :1

(ii) Extension of 765/400 kV Sub-station at Sholapur to accommodate following:

- 765 kV Line Bays :1  
- - 240 MVAR 765 kV Switchable Line Reactor :1

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



(d) As per the IA dated 4.6.2012, the transmission asset were scheduled to be put into commercial operation within 21 months from the date of investment approval i.e. by 1.4.2014, against which the transmission asset was put into commercial operation on 1.7.2014. Therefore, there was time over-run of 3 months.

(e) The transmission tariff for the transmission asset was allowed by the Commission from their its COD to 31.3.2019 vide order dated 22.8.2017 in Petition No. 46/TT/2017.

4. The Respondents are distribution licensees, power departments, power utilities and transmission licensees, 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 notice of this application has also been published in the newspapers in accordance with Section 64 of the Electricity Act 2003 (hereinafter referred to as "the Act"). No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No. 1, has filed its reply vide affidavit dated 28.11.2022 has raised issues regarding effective tax rate and grossing up of Return on Equity (RoE) during 2014-19 and effects of GST. The Petitioner vide affidavit dated 9.12.2022 has filed rejoinder to MPPMCL's reply.

6. It is observed that MPPMCL has raised the issue of grossing up of RoE in various petitions. The contentions of MPPMCL regarding grossing up of RoE have been rejected by the Commission in order dated 25.4.2021 in Petition No.



348/TT/2019 and other petitions. Since, MPPMCL did not challenge the findings of the Commission in Petition No.348/TT/2019, the same has attained finality. In view of this, the pleas raised by MPPMCL with reference to grossing up of RoE are rejected. The submissions of MPPMCL on RoE, the Petitioner's response thereto and the Commission's finding thereon have not been reproduced here again to avoid repetition. Other issues of MPPMCL which are specific to the present petition and the clarifications given by the Petitioner are considered in the relevant portions of this order.

7. The hearing in this matter was held on 1.12.2022 and the order was reserved.
8. Having heard the representatives of the Petitioner and having perused the material on record, we proceed to dispose of the petition.
9. This order is issued considering the submissions made by the Petitioner in the petition, affidavit dated 11.8.2022, MPPMCL's reply vide affidavit dated 28.11.2022 and Petitioner's rejoinder vide affidavit dated 9.12.2022.

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

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

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	260.35	380.26	405.25	421.55	421.82
Interest on Loan	330.51	440.30	423.44	388.68	346.75
Return on Equity	292.16	429.23	457.90	476.61	478.17
Int. on Working Capital	34.33	48.04	49.53	50.20	49.96
O & M Expenses	253.50	348.88	360.48	372.44	384.80
<b>Total</b>	<b>1170.85</b>	<b>1646.71</b>	<b>1696.60</b>	<b>1709.48</b>	<b>1681.50</b>





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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	28.14	29.07	30.04	31.04	32.07
Maintenance Spares	50.65	52.33	54.07	55.87	57.72
Receivables	259.95	274.45	282.77	284.91	280.25
<b>Total of Working Capital</b>	<b>338.74</b>	<b>355.85</b>	<b>366.88</b>	<b>371.82</b>	<b>370.04</b>
Rate of Interest on working capital (in%)	13.50	13.50	13.50	13.50	13.50
<b>Interest of working Capital</b>	<b>34.33</b>	<b>48.04</b>	<b>49.53</b>	<b>50.20</b>	<b>49.96</b>

12. The COD of the transmission asset has already been approved as 1.7.2014 vide order dated 22.8.2017 in Petition No. 46/TT/2017.

#### **Capital Cost as on COD**

13. The Commission vide order dated 22.8.2017 in Petition No. 46/TT/2017 has approved the following capital cost as on COD and ACE for 2014-19 tariff period:

(₹ in lakh)						
FR apporportioned approved cost	RCE apporportioned approved cost	Cost up to COD	ACE			Total Cost as on 31.3.2019
			2014-15	2015-16	2016-17	
7573.00	9323.00	6138.11	953.99	336.94	499.33	7928.37

14. The Petitioner has claimed the following capital cost for the transmission asset and has submitted the Auditor's Certificate dated 20.1.2022 in support of the same, which are as follows:

(₹ in lakh)								
Approved cost as per FR	Approved cost as per RCE	Cost up to COD	ACE					Total Cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
7573.00	9323.00	6230.51	939.61	336.94	633.08	0.00	10.17	8150.31



### **Cost Over-run**

15. The Petitioner has claimed capital cost of ₹6230.51 lakh in respect of the transmission asset as on COD. The Petitioner has submitted that the total completion cost including ACE in respect of the transmission asset upto 31.3.2019 is ₹8150.31 lakh against FR approved cost of ₹7573.00 lakh and RCE approved cost of ₹9323.00 lakh. Therefore, there is cost over-run of ₹577.31 lakh with respect to FR approved cost. However, there is no cost over-run with respect to RCE.

16. We have considered the submissions of the Petitioner. The estimated completion cost including ACE is within the RCE approved cost and it is allowed.

### **Time Over-run**

17. As per the IA dated 4.6.2012, the transmission asset were scheduled to be commissioned within 21 months from the date of investment approval i.e. by 1.4.2014, against which the assets were put into commercial operation w.e.f. 1.7.2014. Therefore, there was time over-run of 3 months.

18. The Commission vide order dated 22.8.2017 in Petition No. 46/TT/2017 had decided that the time over-run of 3 months was solely attributable to RSTCL and directed the Petitioner to move a separate application by making RSTCL as a party for claiming IDC and IEDC from RSTCL for the said three months which shall be decided in accordance with law. The relevant extract of the order is as follows:

*“18. The instant assets were scheduled to achieve COD on 1.4.2014. Even though the assets were ready, they could not be put into commercial operation as the corresponding transmission line namely Raichur-Solapur Transmission Line II being executed by RSTCL was not ready for commercial operation as on 1.4.2014. After completion of Raichur-Solapur Transmission Line II, the line bays and reactors at the sub-station of PGCIL and the transmission line of RSTCL were declared under*



*commercial operation on 1.7.2014. Therefore, the delay in commercial operation by 3 months was solely attributable to RSTCL and therefore, the charges for the period cannot be recovered through POC charges. Accordingly, IDC and IEDC for 3 months have not been allowed in this petition. Since, RSTCL is not a party to the petition, the petitioner is directed to move a separate application by making RSTCL as a party for claiming IDC and IEDC from RSTCL for the said three months which shall be decided in accordance with law.”*

19. As per the direction of the Commission, the Petitioner filed separate Petition No. 196/MP/2019 for recovery of IDC and IEDC amount of ₹78.02 lakh from RSTCL. The Commission vide order dated 21.11.2022 in Petition No. 196/MP/2019 allowed the Petitioner to recovery IDC and IDEC from RSTCPL. The relevant extract of the order dated 21.11.2022 is as follows:

*“11. The Commission was not inclined to fasten any liability on RSTCPL without hearing it. Therefore, the Commission did not approve the IDC and IEDC for the period of time over-run and directed the Petitioner to file a fresh petition impleading RSTCPL. The Petitioner has impleaded RSTCPL as a Respondent in the instant petition and accordingly notices were issued to RSTCPL. However, RSTCPL has neither filed any reply nor has made any appearance. RSTCPL has chosen not to file any response in spite of sufficient opportunity. As observed above in the order, the Commission has already held that the time over-run of three months from 1.4.2014 and 1.7.2014 is attributable to RSTCPL and therefore it is liable to bear the IDC and IEDC. As RSTCPL has not filed any reply in the matter, we do not find any reason to change our earlier view that RSTCPL is responsible for the time over-run. Accordingly, in continuance of our earlier order, we find and hold that RSTCPL is liable to bear the IDC and IEDC for the period of time over-run of three months from 1.4.2017 to 1.7.2017 and it will not be recovered through PoC charges. The Petitioner is at liberty to recover the IDC and IEDC of ₹78.02 lakh from RSTCPL.*

20. As per the said order, RSTCPL is liable to bear the IDC and IEDC for the period of time over-run of three months from 1.4.2017 to 1.7.2017 and the same will not be recovered through PoC charges. The Petitioner is at liberty to recover the IDC and IEDC of ₹78.02 lakh from RSTCPL.



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

21. The Commission vide order dated 22.8.2017 in Petition No. 46/TT/2017 has allowed the IDC upto SCOD and IDC for 3 months of time over-run is disallowed.

The details are as follows:

(₹ in lakh)

<b>IDC as per Auditor's Certificate</b>	<b>IDC entitled up to SCOD</b>	<b>Undischarged entitled IDC as on actual COD</b>	<b>IDC on cash basis considered for tariff as on actual COD</b>	<b>IDC for time over run period disallowed</b>
<b>A</b>	<b>B</b>	<b>C</b>	<b>D=B-C</b>	<b>E=A-B</b>
166.47	96.62	14.38	82.24	69.85

22. The Petitioner has claimed IDC in respect of transmission asset and has submitted the Auditor's Certificate dated 20.1.2022 in support of the same. The Petitioner has submitted the computation of IDC along with year-wise details of the IDC discharged.

23. We have considered the submission of the Petitioner. The IDC allowed vide order dated 22.8.2017 in Petition No. 46/TT/2017 has been considered for truing up of 2014-19 tariff period.

24. The Commission vide order dated 22.8.2017 in Petition No. 46/TT/2017 has allowed the IEDC upto SCOD and IEDC for 3 months of time over-run is disallowed. Accordingly, IEDC of ₹59.16 lakh (₹67.33 lakh-₹ 8.17 lakh) is allowed and IEDC of ₹8.17 lakh is disallowed.

25. The Petitioner has claimed IEDC of ₹67.33 lakh and has submitted Auditor's Certificate in support of the same. The Petitioner has also submitted that entire IEDC



has been discharged as on COD in respect of the transmission asset.

26. We have examined the Auditors Certificate submitted by the Petitioner in support of its claims. As stated above, the IEDC of ₹59.16 lakh allowed vide order dated 22.8.2017 in Petition No. 46/TT/2017 has been considered for trueing up of 2014-19 tariff period.

27. The IDC and IEDC for the period of time over-run of three months from 1.4.2017 to 1.7.2017 shall be borne by RSTCPL as per order dated 21.11.2022 in Petition No. 196/MP/2019.

### **Initial Spares**

28. 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

- (i) Transmission line: 1.00%
- (ii) Transmission sub-station (Green Field): 4.00%
- (iii) Transmission sub-station (Brown Field): 6.00%
- (iv) Series Compensation devices and HVDC Station: 4.00%
- (v) Gas Insulated Sub-station (GIS): 5.00%
- (vi) Communication System: 3.5%

29. The Petitioner has claimed the following Initial Spares:

<b>Particulars</b>	<b>Plant &amp; Machinery Cost up to cut-off date (₹ in lakh) (excluding IDC and IEDC)</b>	<b>Initial Spares claimed (₹ in lakh)</b>	<b>Ceiling limit (in %)</b>
Sub-station	7625.50	306.70	6.00

30. We have considered the submissions of the Petitioner. The initial spares claimed by the Petitioner are within ceiling limit of 6% as per Regulation 13(d) of the



2014 Tariff Regulations and the allowable initial spares are as follows:

(₹ in lakh)					
Particulars	Plant & Machinery cost up to cut-off date (excluding IDC and IEDC)	Initial Spares claimed	Allowable Initial Spares	Ceiling limit (in %)	Initial Spares allowed
Sub-station	7625.50	306.70	467.16	6.00	306.70

### **Capital Cost allowed as on COD**

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

(₹ in lakh)				
Capital Cost as on COD as per Auditor's Certificate	Less: IDC as on COD due to		IEDC disallowed due to time over-run not condoned	Capital Cost as on COD (on cash basis)
	IDC disallowed due to time over-run	Un-discharged IDC		
6230.51	69.85	14.38	8.17	6138.11

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

32. The Petitioner has claimed the following ACE for the asset covered in the instant petition and is claimed under Regulation 14(1)(i) and (ii) of the 2014 Tariff Regulations and has submitted the Auditor's Certificates in support of the same, which are as follows:

(₹ in lakh)				
<b>ACE 2014-2019</b>				
<b>(as per auditor's certificate)</b>				
2014-15	2015-16	2016-17	2017-18	2018-19
939.61	336.94	633.08	0.00	10.17

33. Further, the Petitioner vide affidavit dated 11.8.2022 has submitted the liability flow statement. The details are as follows:



(₹ in lakh)

Vendor Name	Particulars	Discharge				
		2014-15	2015-16	2016-17	2017-18	2018-19
L&T	PLCC	4.60	6.80	3.30	0.00	0.00
L&T	Sub-station	46.20	72.20	186.00	0.00	0.00
L&T	Civil	38.20	8.40	34.00	0.00	0.00
L&T	Sub-station	14.40	3.20	12.30	0.00	0.00
L&T	Sub-station	60.24	0.00	0.00	0.00	0.00
TBEA	Sub-station	589.20	55.46	7.93	0.00	0.00
Siemens	Sub-station	0.00	0.00	0.00	0.00	0.00
Siemens	Sub-station	0.00	0.00	0.00	0.00	10.17
Alstom T&B	Sub-station	0.00	0.00	155.80	0.00	0.00
TBEA	Sub-station	0.00	7.90	209.20	0.00	0.00
TBEA	Sub-station	18.00	2.80	8.30	0.00	0.00
TBEA	Civil	17.70	0.00	10.30	0.00	0.00
TBEA	Sub-station	9.40	0.00	0.00	0.00	0.00
<b>Total (A)</b>		<b>797.94</b>	<b>156.76</b>	<b>627.13</b>	<b>0.00</b>	<b>10.17</b>
Vendor Name	Particulars	Work deferred for execution				
		2014-15	2015-16	2016-17	2017-18	2018-19
L&T	PLCC	0.00	0.00	0.00	0.00	0.00
L&T	Sub-station	81.52	116.83	0.00	0.00	0.00
L&T	Civil	0.00	0.00	0.00	0.00	0.00
L&T	Sub-station	0.00	0.00	0.00	0.00	0.00
L&T	Sub-station	0.00	0.00	0.00	0.00	0.00
TBEA	Sub-station	0.00	0.00	0.00	0.00	0.00
Siemens	Sub-station	0.00	0.00	0.00	0.00	0.00
Siemens	Sub-station	0.00	0.00	0.00	0.00	0.00
Alstom T&B	Sub-station	0.00	0.00	0.00	0.00	0.00
TBEA	Sub-station	0.00	20.00	0.00	0.00	0.00
TBEA	Sub-station	60.09	18.00	5.90	0.00	0.00
TBEA	Civil	0.00	16.53	0.00	0.00	0.00
TBEA	Sub-station	0.00	8.77	0.00	0.00	0.00
<b>Total (B)</b>		<b>141.61</b>	<b>180.13</b>	<b>5.90</b>	<b>0.00</b>	<b>0.00</b>
<b>Total ACE (A+B)</b>		<b>939.55</b>	<b>336.89</b>	<b>633.03</b>	<b>0.00</b>	<b>10.17</b>

34. We have considered the submissions made by the Petitioner. The undischarged IDC as on COD has been allowed as ACE during the year of discharge. The COD of the assets is 1.7.2014, the cut-off date transmission system works out to be three years from the date of COD. Accordingly the cut-off date works out to be 1.7.2017. The ACE claimed by the Petitioner for 2014-15, 2015-16 and 2016-17 is within cut-off date and the same has been allowed under Regulation



14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations which pertain to balance and retention payments.

35. The Petitioner has claimed an amount of ₹ 10.17 lakh in 2018-19 towards balance and retention payments towards under Regulation 14(1)(i) of the Tariff Regulations. It is observed that ACE claimed by the Petitioner is towards undischarged amount for work executed prior to cut-off date. Therefore, the ACE claimed by the Petitioner is allowed.

36. The ACE allowed in respect of the transmission asset in 2014-19 tariff period is as follows:

Particulars	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE allowed under Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations	939.55	336.89	633.03	0.00	10.17
Add: IDC discharge	14.38	0.00	0.00	0.00	0.00
<b>Total</b>	<b>953.93</b>	<b>336.89</b>	<b>633.03</b>	<b>0.00</b>	<b>10.17</b>

(₹ in lakh)

### **Capital Cost as on 31.3.2024**

37. Accordingly, capital cost allowed in respect of the transmission asset as on 31.3.2019 is as follows:

Capital Cost as on COD	ACE allowed					Capital Cost as on 31.03.2019
	2014-15	2015-16	2016-17	2017-18	2018-19	
6138.11	953.93	336.89	633.03	0.00	10.17	8072.13

(₹ in lakh)

### **Debt-Equity Ratio**

38. The Petitioner has claimed debt-equity ratio of 70:30 as on COD and for ACE post COD. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during 2014-19 tariff period as provided under Regulation 19 of the





2014 Tariff Regulations. The details of debt-equity ratio in respect of the transmission assets as on COD and 31.3.2019 are as follows:

Asset	Capital Cost as on COD (₹ in lakh)	(in%)	Capital cost as on 31.3.2019 (₹ in lakh)	(in%)
Debt	4296.68	70.00	5650.49	70.00
Equity	1841.43	30.00	2421.64	30.00
<b>Total</b>	<b>6138.11</b>	<b>100.00</b>	<b>8072.13</b>	<b>100.00</b>

### Depreciation

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

(₹ in lakh)						
	Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	6138.11	7092.04	7428.93	8061.96	8061.96
B	ACE	953.93	336.89	633.03	0.00	10.17
C	Closing Gross Block (A+B)	7092.04	7428.93	8061.96	8061.96	8072.13
D	Average Gross Block (A+C)/2	6615.07	7260.48	7745.44	8061.96	8067.04
E	Weighted average rate of Depreciation (WAROD) (in%)	5.24	5.23	5.23	5.23	5.23
F	Balance useful life at the beginning of the year (Year)	25.00	25.00	24.00	23.00	22.00
G	Lapsed life at the beginning of the year (Year)	0.00	0.00	1.00	2.00	3.00
H	Aggregated Depreciable Value (D*90%)	5953.57	6534.43	6970.90	7255.76	7260.34
I	<b>Combined Depreciation during the year (D*E)</b>	<b>260.28</b>	<b>380.07</b>	<b>405.06</b>	<b>421.36</b>	<b>421.62</b>
J	Cumulative Depreciation at the end of the year	260.28	640.35	1045.40	1466.76	1888.38
K	Remaining Aggregated Depreciable Value	5693.29	5894.09	5925.49	5789.00	5371.95

40. The details of depreciation approved vide order dated 22.8.2017 in Petition No.



46/TT/2017, depreciation claimed in the instant petition and trued-up depreciation allowed in the instant order in respect of the transmission asset are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.8.2017 in Petition No. 46/TT/2017	260.35	380.26	401.39	413.82	413.82
Claimed by the Petitioner in the instant petition	260.35	380.26	405.25	421.55	421.82
Allowed after true-up in this order	260.28	380.07	405.06	421.36	421.62

### Interest on Loan (IoL)

41. The Petitioner has claimed the weighted average interest rate of based on its actual loan portfolio and actual rate of interest on loan. Accordingly, IoL is calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of IoL allowed are as follows:

(₹ in lakh)						
	Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	4296.68	4964.43	5200.25	5643.37	5643.37
B	Cumulative Repayments upto Previous Year	0.00	260.28	640.35	1045.40	1466.76
C	Net Loan-Opening (A-B)	4296.68	4704.15	4559.90	4597.97	4176.61
D	Addition due to Additional Capitalization	667.75	235.82	443.12	0.00	7.12
E	Repayment during the year	260.28	380.07	405.06	421.36	421.62
F	Net Loan-Closing (C+D-E)	4704.15	4559.90	4597.97	4176.61	3762.11
G	Average Loan (C+F)/2	4500.41	4632.03	4578.94	4387.29	3969.36
H	Weighted Average Rate of Interest on Loan (in%)	9.78	9.51	9.25	8.86	8.74
I	<b>Interest on Loan (G*H)</b>	<b>330.52</b>	<b>440.31</b>	<b>423.47</b>	<b>388.72</b>	<b>346.80</b>

42. The details of IoL approved vide order dated 22.8.2017 in Petition No. 46/TT/2017, IoL claimed in the instant petition and trued-up IoL allowed in the instant order in respect of the transmission asset are as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.8.2017 in Petition No. 46/TT/2017	332.03	448.47	437.28	414.05	373.53
Claimed by the Petitioner in the instant petition	330.51	440.30	423.44	388.68	346.75
Allowed after true-up in this order	330.52	440.31	423.47	388.72	346.80

### Return on Equity (RoE)

43. The Petitioner has claimed RoE for the transmission asset in terms of Regulations 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 the 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	19.625
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

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

Year	Notified MAT rates (inclusive of surcharge & cess)	Effective tax (in %)	Grossed-up RoE [Base Rate]/(1-t) (%)
2014-15	20.961	20.961	19.611
2015-16	21.342	21.342	19.706
2016-17	21.342	21.342	19.706
2017-18	21.342	21.342	19.706
2018-19	21.549	21.549	19.758

45. The MAT rates considered in order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of the 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, which is as follows :

Year	MAT Rate (in%)	Base Rate (%)	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

46. Accordingly, the RoE allowed for the transmission asset is as follows:

		(₹ in lakh)				
	Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	1841.43	2127.61	2228.68	2418.59	2418.59
B	Addition due to Additional Capitalization	286.18	101.07	189.91	0.00	3.05
C	Closing Equity (A+B)	2127.61	2228.68	2418.59	2418.59	2421.64
D	Average Equity (A+C)/2	1984.52	2178.14	2323.63	2418.59	2420.11
E	Return on Equity (Base Rate) (in%)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in%)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>292.14</b>	<b>429.20</b>	<b>457.87</b>	<b>476.58</b>	<b>478.17</b>

47. The details of RoE approved vide order dated 22.8.2017 in Petition No. 46/TT/2017, RoE claimed in the instant petition and trued-up RoE allowed in the instant order for the transmission asset are as follows:

		(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Approved vide order dated 22.8.2017 in Petition No. 46/TT/2017	292.14	427.14	451.74	466.43	466.43	
Claimed by the Petitioner in the instant petition	292.16	429.23	457.90	476.61	478.17	
Allowed after true-up in this order	292.14	429.20	457.87	476.58	478.17	

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

48. The details of the O&M Expenses claimed by the Petitioner for the transmission asset and allowed as per Regulation 29(4)(a) of the 2014 Tariff



Regulations are as follows:

Particulars	(₹ in lakh)				
	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
<b>Sub-station Bays</b>					
765 kV: Raichur-II Bay and Switchable Line Reactor	2	2	2	2	2
765 kV: Sholapur-II Bay and Switchable Line Reactor	2	2	2	2	2
<b>Total</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
<b>Norms</b>					
765kV	84.42	87.22	90.12	93.11	96.20
<b>Total Sub-station Bays O&amp;M Expenses</b>	<b>337.68</b>	<b>348.88</b>	<b>360.48</b>	<b>372.44</b>	<b>384.80</b>
<b>Total O&amp;M Expenses</b>	<b>253.49</b>	<b>348.88</b>	<b>360.48</b>	<b>372.44</b>	<b>384.80</b>

49. The details of O&M Expenses approved vide order dated 22.8.2017 in Petition No. 46/TT/2017, O&M Expenses claimed in the instant petition and true-up O&M Expenses allowed in the instant order in respect of the transmission asset are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.8.2017 in Petition No. 46/TT/2017	253.26	348.88	360.48	372.44	384.80
Claimed by the Petitioner in the instant petition	253.50	348.88	360.48	372.44	384.80
Allowed after true-up in this order	253.49	348.88	360.48	372.44	384.80

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

50. The Interest on Working Capital (IWC) has been allowed as per Regulation 28(1)(c) of the 2014 Tariff Regulations as follows:-

#### **i. Working capital for Maintenance Spares :**

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



ii. **Working capital for O & M Expenses :**

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

iii. **Working capital for 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 interest on working capital is being considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

51. The trued-up IWC allowed for the transmission assets are as follows:

(₹ in lakh)						
	Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O & M Expenses (O&M expenses for 1 month)	28.14	29.07	30.04	31.04	32.07
B	Working Capital for Maintenance Spares (15% of O&M expenses)	50.65	52.33	54.07	55.87	57.72
C	Working Capital for Receivables (Equivalent to 2 months of annual fixed cost / annual transmission charges)	259.93	274.42	282.73	284.88	280.22
<b>D</b>	<b>Total of Working Capital (A+B+C)</b>	<b>338.72</b>	<b>355.82</b>	<b>366.85</b>	<b>371.78</b>	<b>370.01</b>
E	Rate of Interest on working capital (in%)	13.50	13.50	13.50	13.50	13.50
<b>F</b>	<b>Interest of working Capital (D*E)</b>	<b>34.33</b>	<b>48.04</b>	<b>49.52</b>	<b>50.19</b>	<b>49.95</b>

52. The details of IWC approved vide order dated 22.8.2017 in Petition No. 46/TT/2017, IWC claimed in the instant petition and trued-up IWC allowed in the instant order in respect of the transmission asset are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.8.2017 in Petition No. 46/TT/2017	34.35	48.18	49.62	50.37	50.12
Claimed by the Petitioner in the instant petition	34.33	48.04	49.53	50.20	49.96
Allowed after true-up in this order	34.33	48.04	49.52	50.19	49.95



### **Approved Annual Fixed Charges for the 2014-19 Tariff Period**

53. The trued-up annual fixed charges has been allowed for the transmission asset for 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	260.28	380.07	405.06	421.36	421.62
Interest on Loan	330.52	440.31	423.47	388.72	346.80
Return on Equity	292.14	429.20	457.87	476.58	478.17
O & M Expenses	253.49	348.88	360.48	372.44	384.80
Int. on Working Capital	34.33	48.04	49.52	50.19	49.95
<b>Total</b>	<b>1170.76</b>	<b>1646.50</b>	<b>1696.40</b>	<b>1709.29</b>	<b>1681.34</b>

54. The details of AFC approved vide order dated 22.8.2017 in Petition No. 46/TT/2017, AFC claimed in the instant petition and trued-up AFC allowed in the instant order in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.8.2017 in Petition No. 46/TT/2017	1172.13	1652.93	1700.50	1717.11	1688.70
Claimed by the Petitioner in the instant petition	1170.85	1646.71	1696.60	1709.48	1681.50
Allowed after true-up in this order	1170.76	1646.50	1696.40	1709.29	1681.34

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

55. The Petitioner has claimed the following transmission charges for the transmission asset for 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	429.73	429.73	429.73	429.73	429.67
Interest on Loan	311.89	273.75	236.41	199.03	161.18
Return on Equity	454.83	454.83	454.83	454.83	454.83
Interest on Working Capital	25.84	25.60	25.32	25.05	24.73



Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Operation and Maintenance Expenses	180.04	186.40	192.92	199.72	206.72
<b>Total</b>	<b>1402.33</b>	<b>1370.31</b>	<b>1339.21</b>	<b>1308.36</b>	<b>1277.13</b>

56. The Petitioner has claimed the following Interest on Working Capital for the transmission asset for the 2019-24 tariff period:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	15.00	15.53	16.08	16.64	17.23
Maintenance Spares	27.01	27.96	28.94	29.96	31.01
Receivables	172.42	168.94	165.11	161.31	157.02
<b>Total</b>	<b>214.43</b>	<b>212.43</b>	<b>210.13</b>	<b>207.91</b>	<b>205.26</b>
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>25.84</b>	<b>25.60</b>	<b>25.32</b>	<b>25.05</b>	<b>24.73</b>

### Capital Cost

57. Regulation 19 of the 2019 Tariff Regulations provides as follows:

**“19 Capital Cost:** (1) *The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.*

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

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the Asset-before the date of commercial operation;*





- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) Expenditure on account of change in law and force majeure events; and*
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

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

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly tried up by excluding liability, if any, as on 1.4.2019;*
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
- (c) Capital expenditure on account of 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 up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”*

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

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
- (b) cost of the developer’s 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*



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

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

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

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

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

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

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

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

58. The trued-up capital cost for transmission asset as on 31.3.2019 has been considered as capital cost as on 1.4.2019. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, sub-station and PLCC) as admitted by the Commission as on 31.3.2019 for the transmission assets are as follows:

(₹ in lakh)	
Particulars	Capital cost as on 31.3.2019
Free hold Land	0.00
Building & Other Civil Works	258.51
Transmission Line	0.00
Sub-Station Equipment	7668.34
PLCC	66.67
Leasehold Land	0.00
IT Equipment and Software	78.61
<b>Total</b>	<b>8072.13</b>

59. The trued-up capital cost of ₹8072.13 lakh for transmission asset has been



considered as admitted capital cost as on 1.4.2019 for working out tariff for 2019-24 tariff period.

60. The Petitioner has not claimed any ACE in 2019-24 period.

### **Capital Cost considered for the 2019-24 tariff period**

61. Accordingly, the capital cost of the transmission asset considered for the 2019-24 tariff period subject to truing-up is as follows:

(₹ in lakh)		
Capital Cost as on 1.4.2019	Projected ACE	Capital Cost as on 31.3.2024
	2019-24	
8072.13	0.00	8072.13

### **Debt-Equity Ratio**

62. Regulations 18 of the 2019 Tariff Regulations provides as follows:-

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

*Provided that:*

- 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.”

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

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

Particulars	Amount as on 1.4.2019 (₹ in lakh)	(in%)	Amount as on 31.3.2024 (₹ in lakh)	(in%)
Debt	5650.49	70.00	5650.49	70.00
Equity	2421.64	30.00	2421.64	30.00
<b>Total</b>	<b>8072.13</b>	<b>100.00</b>	<b>8072.13</b>	<b>100.00</b>

### **Depreciation**

64. Regulation 33 of the 2019 Tariff Regulations provide as follows:-

**“33. Depreciation:** (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a



*generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:*

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

65. We have considered the submissions of the Petitioner. WAROD at Annexure-II has been worked out after taking into account the depreciation rates of assets as prescribed in the 2019 Tariff Regulations. 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 transmission asset



for the 2019-24 period is as follows:

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	8072.13	8072.13	8072.13	8072.13	8072.13
B	Addition during the year 2019-24 due to projected Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	8072.13	8072.13	8072.13	8072.13	8072.13
D	Average Gross Block (A+C)/2	8072.13	8072.13	8072.13	8072.13	8072.13
E	Weighted average rate of Depreciation (WAROD) (in%)	5.32	5.32	5.32	5.32	5.32
F	Elapsed useful life at the beginning of the year	4.00	5.00	6.00	7.00	8.00
G	Balance useful life at the beginning of the year	21.00	20.00	19.00	18.00	17.00
H	Depreciable value (D*90%)	7272.77	7272.77	7272.77	7272.77	7272.77
I	<b>Combined Depreciation during the year (D*E)</b>	<b>429.53</b>	<b>429.53</b>	<b>429.53</b>	<b>429.53</b>	<b>429.47</b>
J	Cumulative Depreciation at the end of the year	2317.92	2747.45	3176.99	3606.52	4035.99
K	Remaining Aggregate Depreciable Value at the end of the year	4954.86	4525.32	4095.79	3666.26	3236.78

### Interest on Loan (IoL)

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

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

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

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

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



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

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

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

(5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.

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

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

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

(₹ in lakh)

	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	5650.49	5650.49	5650.49	5650.49	5650.49
B	Cumulative Repayments upto Previous Year	1888.38	2317.92	2747.45	3176.99	3606.52
C	Net Loan-Opening (A-B)	3762.11	3332.57	2903.04	2473.50	2043.97
D	Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
E	Repayment during the year	429.53	429.53	429.53	429.53	429.47





F	Net Loan-Closing (C+D-E)	3332.57	2903.04	2473.50	2043.97	1614.50
G	Average Loan (C+F)/2	3547.34	3117.80	2688.27	2258.74	1829.23
H	Weighted Average Rate of Interest on Loan (in%)	8.79	8.78	8.80	8.82	8.82
I	<b>Interest on Loan (G*H)</b>	<b>311.97</b>	<b>273.84</b>	<b>236.51</b>	<b>199.15</b>	<b>161.32</b>

### **Return on Equity(RoE)**

68. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide as follows:-

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

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

*Provided that return on equity in respect of Additional Capitalization after cut-off date beyond the original scope excluding Additional Capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%;*

*Provided further that:*

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

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

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

- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;*
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the*



ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

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

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

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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:

$$\text{Rate of return on equity} = 15.50 / (1 - 0.2155) = 19.758\%$$

(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.”

69. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. We have considered the submissions of the Petitioner. The MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed for the transmission asset under Regulation 30 of the 2019 Tariff Regulations is as follows:

(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	2421.64	2421.64	2421.64	2421.64	2421.64
B	Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
C	Closing Equity (A+B)	2421.64	2421.64	2421.64	2421.64	2421.64
D	Average Equity (A+C)/2	2421.64	2421.64	2421.64	2421.64	2421.64
E	Return on Equity (Base Rate) (in%)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in%)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
H	<b>Return on Equity (Pre-tax) (D*G)</b>	<b>454.83</b>	<b>454.83</b>	<b>454.83</b>	<b>454.83</b>	<b>454.83</b>

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

70. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as follows:

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



<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>Norms for sub-station Bays (₹ lakh per bay)</b>					
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
<b>Norms for Transformers (₹ lakh per MVA)</b>					
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
<b>Norms for AC and HVDC lines (₹ lakh per km)</b>					
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
<b>Norms for HVDC stations</b>					
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



<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)</i>	2,563	2,653	2,746	2,842	2,942

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

*Provided further that:*

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
  - ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
  - iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
  - iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;*
  - v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*
  - vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*
- (b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.*
- (c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:*



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

71. The O&M Expenses claimed by the Petitioner and allowed for the transmission asset are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Sub-station Bays</b>					
765 kV: Raichur-II Bay and Switchable Line Reactor	2	2	2	2	2
765 kV: Sholapur-II Bay and Switchable Line Reactor	2	2	2	2	2
<b>Total</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
<b>Norms</b>					
765 kV	45.01	46.60	48.23	49.93	51.68
<b>Total Sub-station Bays O&amp;M Expenses</b>	<b>180.04</b>	<b>186.40</b>	<b>192.92</b>	<b>199.72</b>	<b>206.72</b>
<b>Total O&amp;M Expenses</b>	<b>180.04</b>	<b>186.40</b>	<b>192.92</b>	<b>199.72</b>	<b>206.72</b>

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

72. Regulation 34(1)(c), Regulation 34(3) and Regulation 34 (4) and Regulation 3(7) of the 2019 Tariff Regulations provide as follows:

**“34. Interest on Working Capital:** (1) *The working capital shall cover:*

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

*(i) Receivables equivalent to 45 days of annual fixed cost;*

*(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*

*(iii) Operation and maintenance expenses, including security expenses for one month.”*

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

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



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

“3. **Definition** - In these regulations, unless the context otherwise requires:-

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

73. The Petitioner has submitted that it has computed the IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) considered is 12.05%(SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25%(SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21, 10.50%(SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-24 onwards. The components of the working capital and interest allowed thereon are as follows:

(₹ in lakh)						
	<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
A	Working Capital for O&M Expenses (O&M expenses for 1 month)	15.00	15.53	16.08	16.64	17.23
B	Working Capital for Maintenance Spares (15% of O&M expenses)	27.01	27.96	28.94	29.96	31.01
C	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	172.40	168.72	164.69	160.89	156.62
<b>D</b>	<b>Total of Working Capital</b>	<b>214.41</b>	<b>212.21</b>	<b>209.70</b>	<b>207.50</b>	<b>204.86</b>
E	Rate of Interest for Working Capital (in %)	12.05	11.25	10.50	10.50	10.50
<b>F</b>	<b>Interest of working capital</b>	<b>25.84</b>	<b>23.87</b>	<b>22.02</b>	<b>21.79</b>	<b>21.51</b>



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

74. The transmission charges allowed for 2019-24 tariff period are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	429.53	429.53	429.53	429.53	429.47
Interest on Loan	311.97	273.84	236.51	199.15	161.32
Return on Equity	454.83	454.83	454.83	454.83	454.83
Operation and Maintenance Expenses	180.04	186.40	192.92	199.72	206.72
Interest on Working Capital	25.84	23.87	22.02	21.79	21.51
<b>Total</b>	<b>1402.21</b>	<b>1368.47</b>	<b>1335.81</b>	<b>1305.02</b>	<b>1273.85</b>

### **Filing Fee and Publication Expenses**

75. 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**

76. 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 Regulation 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

### **Goods and Services Tax**

77. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are





to be paid by the Petitioner on account of demand from Government/ Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

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

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

### **Security Expenses**

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

81. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission vide order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.



### **Capital Spares**

82. 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**

83. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the 2010 Sharing Regulations and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the 2020 Sharing Regulations. The COD of the transmission asset is approved as 1.7.2014. Therefore, the transmission charges from 1.7.2014 to 31.10.2020 shall be governed by the 2010 Sharing Regulations and from 1.11.2020 shall be governed by the 2020 Sharing Regulations as provided in Regulation 43 of the 2014 Tariff Regulations and Regulation 57 of the 2019 Tariff Regulations respectively.

84. To summarise,

- (a) The trued-up Annual Fixed Charges approved for the transmission asset for 2014-19 tariff period are as follows:

(₹ in lakh)				
2014-15 (Pro-rata for 274 days)	2015-16	2016-17	2017-18	2018-19
1170.76	1646.50	1696.40	1709.29	1681.34

- (b) The Annual Fixed Charges allowed for the transmission asset for the 2019-24 tariff period in this order are as follows:



(₹ in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
1402.21	1368.47	1335.81	1305.02	1273.85

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

86. This order disposes of Petition No. 300/TT/2022 in terms of the above discussions and findings.

**sd/-**  
**(P. K. Singh)**  
**Member**

**sd/-**  
**(Arun Goyal)**  
**Member**

**sd/-**  
**(I. S. Jha)**  
**Member**



## Annexure-I

2014-19 Capital Expenditure as on 1.4.2014	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreci ation (in %)	Annual Depreciation as per Regulations				
		2014-19			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
Building	133.07	125.44	258.51	3.34	5.38	6.74	7.89	8.63	8.63
Transmission Line	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00
Sub Station	5874.76	1793.57	7668.34	5.28	333.76	365.38	388.90	404.35	404.62
PLCC	51.85	14.82	66.67	6.33	3.43	3.80	4.12	4.22	4.22
IT Equipment and software	78.43	0.18	78.61	5.28	4.15	4.15	4.15	4.15	4.15
<b>Total</b>	<b>6138.11</b>	<b>1934.02</b>	<b>8072.13</b>		<b>346.72</b>	<b>380.07</b>	<b>405.06</b>	<b>421.36</b>	<b>421.62</b>
<b>Average Gross Block (₹ in lakh)</b>					6615.07	7260.48	7745.44	8061.96	8067.04
<b>Weighted Average Rate of Depreciation (in %)</b>					5.24	5.23	5.23	5.23	5.23



## Annexure-II

2019-24 Capital Expenditure as on 1.4.2019	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreci ation (in %)	Annual Depreciation as per Regulations				
		2019-24			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
Building	258.51	0.00	258.51	3.34	8.63	8.63	8.63	8.63	8.63
Transmission Line	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00
Sub Station	7668.34	0.00	7668.34	5.28	404.89	404.89	404.89	404.89	404.89
PLCC	66.67	0.00	66.67	6.33	4.22	4.22	4.22	4.22	4.22
Leasehold Land	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00
IT Equipment and software	78.61	0.00	78.61	15.00	11.79	11.79	11.79	11.79	11.73
<b>Total</b>	<b>8072.13</b>	<b>0.00</b>	<b>8072.13</b>		<b>429.53</b>	<b>429.53</b>	<b>429.53</b>	<b>429.53</b>	<b>429.47</b>
<b>Average Gross Block (₹ in lakh)</b>					8072.13	8072.13	8072.13	8072.13	8072.13
<b>Weighted Average Rate of Depreciation (in %)</b>					5.32	5.32	5.32	5.32	5.32

