

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 44/TT/2021**

**Coram:**

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

**Date of Order: 13.12.2021**

**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 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of Combined Assets consisting of **Asset-1:** 765/400 kV, 1500 MVA (3x500) ICT-II along with 765 and 400 kV bays at Moga Sub-station (COD 01.06.2012), **Asset-2:** 765 kV Moga-Bhiwani line bays along with 240 MVAR Line Reactor at Moga Sub-station (COD 01.06.2012), **Asset-3:** 765 kV 240 MVAR (3x80) Bus Reactor-I along with associated bays at Moga Sub-station (COD 01.06.2012), **Asset-4:** 765 kV 240 MVAR (3x80) Bus Reactor-II along with associated bays at Moga Sub-station (COD 01.06.2012), **Asset-5:** 765/400 kV, 1500 MVA (3x500) ICT-I along with 765 and 400 kV bays at Moga Sub-station (COD 01.09.2012), **Asset-6:** combined assets of 1500 MVA 765/400/33 kV ICT-I, ICT-II, ICT-III and ICT-IV along with associated bays at Jhattikara 765/400 kV new Sub-station (COD 01.10.2012), **Asset-7:** Combined assets of 1500 MVA 765/400/33 kV ICT-I and ICT-II along with associated bays at Meerut Sub-station (COD 01.06.2013), **Asset-8:** Associated bays for LILO of both circuits of 400 kV D/C Bannouli-Mundka/Bawana at Jhattikara 765/400 kV New Sub-station (COD 01.10.2012), **Asset-9:** One no. 765 kV line bay for 765 kV Agra- Jhattikara line including 765 kV 240 MVAR switchable line reactor as bus reactor operation mode at 765/400 kV Jhattikara (New) Sub-station (COD 01.05.2013), **Asset-10:** Associated line bays for 765 kV S/C Agra –Jhattikara Transmission Line at Agra Sub-station (COD 01.05.2013), **Asset-11:** One No. 765 kV line bay for 765 kV Agra-Meerut line along with 765 kV 240 MVAR switchable line reactor under bus reactor operation mode at 765/400/220 kV Meerut Sub-station (COD 01.06.2013), **Asset-12:** Associated line bays for 765 kV S/C Agra – Meerut Transmission Line at Agra Sub-station (COD 01.06.2013), **Asset-13:** 765 kV 240 MVAR Bus Reactor along with associated bays at 765/400/220 kV at Meerut Sub-station (COD 01.02.2013), **Asset-14:** 765 kV 240 MVAR Bus Reactor along with associated bays at 765/400/220 kV at Jhattikara Sub- station (COD 01.10.2012), and **Asset-15:** Associated bays at



Jhattikara for 765 kV Jhattikara – Bhiwani Line (COD 01.10.2012), covered under “765 kV System for Central Part of Northern Grid- Part-II” in Northern Region.  
**And in the matter of:**

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

....Petitioner

**Vs.**

1. Haryana Power Purchase Centre,  
IInd Floor, Shakti Bhawan, Sector-6,  
Panchkula – 134 109
2. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan,  
Shimla – 171 004 (H.P)
3. Punjab State Power Corporation Limited,  
Thermal Shed Tia, Near 22 Phatak,  
Patiala-147001
4. Power Development Department,  
Janipura Grid Station,  
Jammu (Tawi) 180 007
5. Power Purchase Agreement Directorate,  
Uttar Pradesh Power Corporation Limited,  
10th Floor, Shakti Bhawan Extention,
6. Delhi Transco Limited,  
Shakti Sadan, Kotla Road (near ITO),  
New Delhi
7. Chandigarh Electricity Department,  
UT-Chandigarh, Div-11, Opposite, Transport Nagar,  
Industrial Area Phase-I, Sector-9,  
Chandigarh
8. Uttarakhand Power Corporation Limited,  
Urja Bhawan, Kanwali Road,  
Dehradun.
9. 132 KV, GSS RVPNL Sub-Station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur-302017 (Rajasthan)
10. Ajmer Vidyut Vitran Nigam Limited,



132 KV, GSS RVPNL Sub- Station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur-302017 (Rajasthan)

11. Jodhpur Vidyut Vitran Nigam Limited,  
132 KV, GSS RVPNL Sub- Station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur-302017 (Rajasthan)
12. Jaipur Vidyut Vitran Nigam Limited,  
132 KV, GSS RVPNL Sub- Station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur-302017 (Rajasthan)
13. Northern Central Railway,  
Allahabad
14. BSES Yamuna Power Limited (Delhi Discom),  
B Block, Shakti Kiran , Bldg.(Near Karkadooma Court),  
Karkadooma, 2nd Floor ,  
Delhi, 110092
15. BSES Rajdhani Power Limited (Delhi Discom),  
BSES Bhawan, Behind Nehru Place ,  
New Delhi-110019.
16. Tata Power Delhi Distribution Limited,  
33 kV Substation, Building,  
Hudson Lane, Kingsway Camp,  
North Delhi – 110009.
17. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi-110002

....Respondents

**For Petitioner:** Shri S.S. Raju, PGCIL  
Shri D.K. Biswal, PGCIL  
Shri A.K. Verma, PGCIL  
Shri Ved Prakash Rastogi, PGCIL

**For Respondent(s):** None

### **ORDER**

The Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for truing up of transmission tariff of the period

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from 1.4.2014 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 following transmission assets under “765 kV System for Central Part of Northern Grid- Part-II” in Northern Region (hereinafter referred to as “the transmission project”):

**Asset-1:** 765/400 kV, 1500 MVA (3x500) ICT-II along with 765 and 400 kV bays at Moga Sub-station.

**Asset-2:** 765 kV Moga-Bhiwani line bays along with 240 MVAR Line Reactor at Moga Sub-station.

**Asset-3:** 765 kV 240 MVAR (3x80) Bus Reactor-I along with associated bays at Moga Sub-station.

**Asset-4:** 765 kV 240 MVAR (3x80) Bus Reactor-II along with associated bays at Moga Sub-station.

**Asset-5:** 765/400 kV, 1500 MVA (3x500) ICT-I along with 765 and 400 kV bays at Moga Sub-station.

**Asset-6:** Combined assets of 1500 MVA 765/400/33 kV ICT-I, ICT-II, ICT-III and ICT-IV along with associated bays at Jhattikara 765/400 kV new Sub-station.

**Asset-7:** Combined assets of 1500 MVA 765/400/33 kV ICT-I and ICT-II along with associated bays at Meerut Sub-station.

**Asset-8:** Associated bays for LILO of both circuits of 400 kV D/C Bamnoul-Mundka/Bawana at Jhattikara 765/400 kV New Sub-station.

**Asset-9:** One number 765 kV line bay for 765 kV Agra- Jhattikara line including 765 kV 240 MVAR switchable line reactor as bus reactor operation mode at 765/400 kV Jhattikara (New) Sub-station.

**Asset-10:** Associated line bays for 765 kV S/C Agra –Jhattikara Transmission Line at Agra Sub-station

**Asset-11:** One number 765 kV line bay for 765 kV Agra-Meerut line along with 765 kV 240 MVAR switchable line reactor under bus reactor operation mode at 765/400/220 kV Meerut Sub-station

**Asset-12:** Associated line bays for 765 kV S/C Agra – Meerut Transmission Line at Agra Sub-station



**Asset-13:** 765 kV 240 MVAR Bus Reactor along with associated bays at 765/400/220 kV at Meerut Sub-station

**Asset-14:** 765 kV 240 MVAR Bus Reactor along with associated bays at 765/400/220 kV at Jhattikara Sub- station

**Asset-15:** Associated bays at Jhattikara for 765 kV Jhattikara – Bhiwani Line

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

*"1) Approve the Additional Capitalisation expenditure incurred during 2014-19 and 2019-24 tariff block, as per para 6.3 and 8.3.*

*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 7.1 and 8.4.*

*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.*

*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*

*5) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*

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

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

*8) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 8.11 above.*

*9) Allow the Petitioner to claim the capital spares at the end of tariff block as per actual, as mentioned at para 8.11 above.*

*10) 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 (I.A.) for the transmission project was accorded by the Board of Directors of the Petitioner company vide letter No. C/CP/765 kV dated 30.7.2009 at an estimated cost of ₹173636 lakh including IDC of ₹11662 lakh.

(b) The entire scope of work as per I.A. covered under the transmission project has been completed and is covered in the instant petition.

(c) The subject Asset-1, Asset-2, Asset-3, Asset-4 and Asset-5 have been combined and referred to as **Asset-A** and Asset-6, Asset-7, Asset-8, Asset-9, Asset-10, Asset-11, Asset-12, Asset-13, Asset-14 and Asset-15 have been combined and referred to as **Asset-B** (hereinafter collectively referred to as the “transmission assets”) during the 2014-19 tariff period. The details of the nomenclature of transmission assets and effective commercial operation date are as follows:

Asset nomenclature in CERC order dated 22.2.2016 in Petition No. 114/TT/2015		Asset nomenclature in the instant petition	Effective COD
<b>True-up of tariff for 2009-14</b>	<b>Determination of tariff for 2014-19</b>	Asset-A	1.7.2012
Asset-1 to Asset-4	Combined Asset		
Asset-5			

Asset nomenclature in CERC order dated 23.7.2017 in Petition No. 115/TT/2017		Asset nomenclature in the instant petition	Effective COD
<b>True-up of tariff for 2009-14</b>	<b>Determination of tariff for 2014-19</b>	Asset-B	4.1.2013
Asset-I	Combined Asset		
Asset-II			
Asset- III			
Asset-IV			
Asset-V			
Asset-VI			
Asset-VII			



Asset-VIII			
Asset-IX			
Asset-X			

(d) The transmission tariff of the instant transmission assets, forming part of Asset-A and Asset-B, from their respective CODs to 31.3.2014 was trued-up vide order dated 22.2.2016 in Petition No. 114/TT/2015 and vide order dated 23.7.2018 in Petition No. 115/TT/2017 respectively and in respective petitions, the transmission tariff for 2014-19 tariff period was also allowed for Asset-A and Asset-B.

(e) The Annual Fixed Charges (AFC) in respect of Asset-A and Asset-B allowed by the Commission vide order dated 22.2.2016 in Petition No. 114/TT/2015 and vide order dated 23.7.2018 in Petition No. 115/TT/2017 and the trued-up tariff claimed by the Petitioner for the same are as follows:

(₹ in lakh)

<b>Asset – A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
AFC allowed vide order dated 22.2.2016 in Petition No. 114/TT/2015	6977.70	7159.26	6997.41	6836.14	6676.86
AFC claimed by the Petitioner based on truing up in the instant petition	6917.52	7052.00	6997.49	6938.84	6802.72

(₹ in lakh)

<b>Asset – B</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
AFC allowed vide order dated 23.7.2018 in Petition No. 115/TT/2017	18079.09	17871.93	17908.48	17915.48	17554.08
AFC claimed by the Petitioner based on truing up in the instant petition	18086.80	17915.12	17831.90	17820.55	17625.33

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance



with Section 64 of the Electricity Act, 2003. No comments or objections have been received from the general public in response to the aforesaid notices published in the newspapers. None of the Respondents have filed their reply in the matter.

6. The hearing in this matter was held on 3.8.2021 through video conference and order was reserved.

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

8. This order is issued considering the submissions made by the Petitioner in the petition and the affidavit dated 1.7.2021.

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

9. The details of the transmission charges claimed by the Petitioner in respect of the transmission assets are as follows:

(₹ in lakh)

<b>Asset – A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	1884.31	1956.10	1963.40	1968.99	1969.72
Interest on Loan	2034.19	1961.80	1829.50	1689.91	1516.77
Return on Equity	2196.50	2307.10	2356.60	2410.35	2426.04
Interest on working capital	175.40	179.08	178.53	177.91	175.57
O & M Expenses	627.12	647.92	669.46	691.68	714.62
<b>Total</b>	<b>6917.52</b>	<b>7052.00</b>	<b>6997.49</b>	<b>6938.84</b>	<b>s6802.72</b>

(₹ in lakh)

<b>Asset – B</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	4718.38	4757.41	4836.23	4943.16	4978.40
Interest on Loan	5272.03	4921.02	4604.30	4295.79	3941.68
Return on Equity	5761.25	5841.46	5931.79	6053.94	6111.48
Interest on working capital	465.84	463.93	464.08	465.91	463.67
O & M Expenses	1869.30	1931.30	1995.50	2061.75	2130.10
<b>Total</b>	<b>18086.80</b>	<b>17915.12</b>	<b>17831.90</b>	<b>17820.55</b>	<b>17625.33</b>

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



(₹ in lakh)

Asset – A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses	52.26	53.99	55.79	57.64	59.55
Maintenance Spares	94.07	97.19	100.42	103.75	107.19
Receivables	1152.92	1175.33	1166.25	1156.47	1133.79
<b>Total</b>	<b>1299.25</b>	<b>1326.51</b>	<b>1322.46</b>	<b>1317.86</b>	<b>1300.53</b>
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest on Working Capital</b>	<b>175.40</b>	<b>179.08</b>	<b>178.53</b>	<b>177.91</b>	<b>175.57</b>

(₹ in lakh)

Asset – B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses	155.78	160.94	166.29	171.81	177.51
Maintenance Spares	280.40	289.70	299.33	309.26	319.52
Receivables	3014.47	2985.85	2971.98	2970.09	2937.56
<b>Total</b>	<b>3450.65</b>	<b>3436.49</b>	<b>3437.60</b>	<b>3451.16</b>	<b>3434.59</b>
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest on Working Capital</b>	<b>465.84</b>	<b>463.93</b>	<b>464.08</b>	<b>465.91</b>	<b>463.67</b>

### Capital Cost

11. As on 31.3.2014, the capital cost of ₹35693.57 lakh was allowed for Asset-A vide order dated 22.2.2016 in Petition No.114/TT/2015 and capital cost of ₹97161.95 lakh was allowed for Asset-B vide order dated 23.7.2018 in Petition No.115/TT/2017.

12. The Petitioner in the instant true-up petition has submitted the details of FR approved capital cost, capital cost as on 1.4.2014 and ACE incurred up to 31.3.2019 in respect of the Asset-A and Asset-B and the same is as follows:

(₹ in lakh)

Asset	AppORTIONED Cost	Capital Cost (as on 1.4.2014)	Actual ACE					Total Cost (as on 31.3.2019)
			2014-15	2015-16	2016-17	2017-18	2018-19	
A	48771.66	35693.57	3281.94	99.59	1574.89	243.79	70.75	40964.53
B	124864.36	97202.32	1446.54	322.65	2733.35	1399.23	3.05	103107.14
<b>Total</b>	<b>173636.02</b>	<b>132895.89</b>	<b>4728.48</b>	<b>422.24</b>	<b>4308.24</b>	<b>1643.02</b>	<b>73.80</b>	<b>144071.67</b>

### Cost Over-run

13. The completion cost including ACE in respect of Asset-A and Asset-B



is ₹40964.53 lakh and ₹103107.14 lakh and apportioned approved cost is ₹48771.66 lakh and ₹124864.36 lakh respectively. Hence, the completion cost in respect of the Asset-A and Asset-B is within the apportioned cost and, therefore, there is no cost over-run with regard to Assets-A and Asset-B.

### **Initial Spares**

14. The Petitioner has submitted that the Commission vide order dated 23.7.2018 in Petition No. 115/TT/2017 had restricted the initial spares of ₹10.13 lakhs in respect of Asset-7 (Asset-II in Petition No. 115/TT/2017) and ₹32.26 lakhs in respect of Asset-11 (Asset-VI in Petition No. 115/TT/2017) based on their individual capital cost. The Commission in the said order held that the allowed/ disallowed excess initial spares would be reviewed at the time of true-up of the 2014-19 tariff on submission of audited capital costs of the assets up to 31.3.2017.

15. The Petitioner has prayed to revise the Initial Spares allowed earlier for the instant assets in terms of the judgement dated 14.9.2019 in Appeal No. 74 of 2017 of the Appellate Tribunal for Electricity (APTEL).

16. Based on the judgment of the APTEL dated 14.9.2019 in Appeal No. 74 of 2017, the Petitioner vide affidavit dated 31.10.2019 has submitted revised project cost of transmission line and Sub-station of the Combined Asset for the purpose of computing initial spares for 2009-14 period. The re-calculated claim of initial spares submitted by the Petitioner based on total project cost is as follows:

(₹ in lakh)

<b>Description</b>	<b>Combined Asset-A and Asset-B</b>
Project Completion Cost (Inclusive of Land cost, civil building, PLCC, etc.)	143899.82
Ceiling Limit	2.5%
Initial Spares worked out	3623.35



Initial Spares Claimed	2589.23
Initial Spares allowed earlier	2546.84
Additional Spares to be claimed	<b>42.39</b>

17. Accordingly, the Petitioner has added back additional initial spares of ₹9.49 lakhs and ₹0.64 lakhs as restricted earlier in respect of Asset-7 to the capital cost allowed by the Commission as on 31.3.2014 and Additional Capital Expenditure for 2016-17 respectively. Similarly, for Asset-11, additional initial spares of ₹30.90 lakhs and ₹1.36 lakhs have been added back to the capital cost allowed by the Commission as on 31.3.2014 and Additional Capital Expenditure for 2016-17 respectively.

18. Asset-7 and Asset-11 were put into commercial operation during 2009-14 period. Therefore, the 2009 Tariff Regulations are applicable for the instant assets as regards norms of initial spares. Regulation 8(iv) of the 2009 Tariff Regulations specifies the norms for the Initial Spares for the transmission systems as under:

“(iv) *Transmission system*

(a) *Transmission line – 0.75%*

(b) *Transmission Sub-station – 2.5%*

(c) *Series Compensation devices and HVDC Station – 3.5%*

(d) *Gas Insulated Sub-station (GIS) – 3.5%*”

19. Based on the submissions made by the Petitioner, the Commission has re-worked the Initial Spares as follows:

(₹ in lakh)					
Project Capital Cost	Ceiling (in %)	Initial Spares worked out	Initial Spares Claimed	Initial Spares allowed earlier	Additional Spares allowed
119594.36	2.5	3001.17	2548.83	2546.84	42.39

20. As specified in the 2009 Tariff Regulations, Initial Spares are allowed as



Additional Capital Expenditure during 2014-15 for the Combined Asset as a percentage of the capital cost as on cut-off date as per judgment of the APTEL dated 14.9.2019 in Appeal No. 74 of 2017.

21. Accordingly, the deducted amount of ₹40.39 lakh is allowed as part of capital cost as on 1.4.2014 in Asset-B and ₹2.00 lakh during 2016-17 as part of Additional Capital Expenditure.

**Capital Cost as on 1.4.2014**

22. The opening capital cost considered as on 1.4.2014 for 2014-19 tariff period in respect of Asset-A and Asset-B is as follows:

Particulars	(₹ in lakh)	
	Asset – A	Asset – B
Allowed vide order dated 22.2.2016 in Petition No. 14/TT/2015	35693.57	-
Allowed vide order dated 23.7.2018 in Petition No. 115/TT/2017	-	97161.93
Initial Spares allowed	-	40.39
<b>Capital Cost as on 1.4.2014</b>	<b>35693.57</b>	<b>97202.32</b>

**Additional Capital Expenditure (ACE)**

23. The Petitioner has claimed ACE in respect of the Asset-A and Asset-B and submitted the Auditor’s Certificate dated 30.7.2019 in support of the same. Further, the Petitioner vide affidavit dated 1.7.2021 has submitted that on account of an inadvertent error, there was some mistake in the capital cost for 2016-17 for Asset-6 (under Asset-B in the instant petition) and has revised ACE in respect of Asset-6 and submitted the revised Auditor’s Certificate dated 26.11.2020 in support of its claim and the same is as follows:

(₹ in lakh)	
Asset	ACE



	2014-15	2015-16	2016-17	2017-18	2018-19
A	3281.94	99.59	1574.89	243.79	70.75
B	1446.54	322.65	2733.35	1399.23	3.05

24. The Petitioner has submitted that ACE for the 2014-19 period has been claimed under Regulations 14(1)(i) and 14(3)(v) of the 2014 Tariff Regulations. The ACE incurred is on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for work executed within the cut-off date. The same has been claimed under Regulations 14(3)(v) of the 2014 Tariff Regulations.

25. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner for 2014-19 period is allowed under Regulations 14(1)(i) and 14(3)(v) of the 2014 Tariff Regulations. The capital cost allowed as on 31.3.2019 after inclusion of ACE in respect of the Combined Asset is as follows:

(₹ in lakh)				
Asset	Particulars	Capital cost allowed as on COD	ACE 2014-19	Total Capital cost including ACE as on 31.3.2019
A	Allowed vide order dated 22.2.2016 in Petition No. 114/TT/2015	35693.57	4180.18	39873.75
	Claimed by the Petitioner in the instant petition	35693.57	5270.96	40964.53
	Approved after truing up in this order	35693.57	5270.96	40964.53
B	Allowed vide order dated 23.7.2018 in Petition No. 115/TT/2017	97161.95	6069.55	103231.55
	Claimed by the Petitioner in the instant petition	97202.32	5904.82	103107.14
	Approved after truing up in this order	97202.32	5904.82	103107.14

### **Debt-Equity Ratio**

26. The Petitioner has claimed debt-equity ratio of 70.00:30.00 as on 1.4.2014. The debt-equity ratio of 70.00:30.00 has been considered for capital cost as on



1.4.2014 and ACE during 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The same has been summarised as follows:

<b>Asset – A</b>				
<b>Funding</b>	<b>Amount (₹in lakh) as on 1.4.2014</b>	<b>(in %)</b>	<b>Amount (₹in lakh) as on 31.3.2019</b>	<b>(in %)</b>
Debt	24985.50	70.00	28675.18	70.00
Equity	10708.07	30.00	12289.35	30.00
<b>Total</b>	<b>35693.57</b>	<b>100.00</b>	<b>40964.53</b>	<b>100.00</b>

<b>Asset – B</b>				
<b>Funding</b>	<b>Amount (₹in lakh) as on 1.4.2014</b>	<b>(in %)</b>	<b>Amount (₹in lakh) as on 31.3.2019</b>	<b>(in %)</b>
Debt	68041.62	70.00	72175.04	70.00
Equity	29160.70	30.00	30932.11	30.00
<b>Total</b>	<b>97202.32</b>	<b>100.00</b>	<b>103107.14</b>	<b>100.00</b>

### **Depreciation**

27. The depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during the 2014-19 tariff period. The Gross Block during the 2014-19 tariff period with regard to the transmission asset has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD at Annexure-I and II for Asset-A and Asset-B respectively has been worked out after taking into account the depreciation rates of assets as specified in the 2014 Tariff Regulations and depreciation allowed during the 2014-19 period for the transmission asset as follows:

<b>(₹ in lakh)</b>					
<b>Asset – A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Gross Block	35693.57	38975.51	39075.10	40649.99	40893.78
Additional Capitalisation	3281.94	99.59	1574.89	243.79	70.75
Closing Gross Block	38975.51	39075.10	40649.99	40893.78	40964.53
Average Gross Block	37334.54	39025.31	39862.55	40771.89	40929.16



<b>Asset – A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Weighted average Rate of Depreciation (in %)	5.05	5.01	4.93	4.83	4.81
Balance useful life (at the beginning of the year) (Year)	24	23	22	21	20
Aggregate Depreciable Value	32352.14	33590.62	33716.10	33811.44	33823.96
<b>Depreciation during the year</b>	<b>1884.32</b>	<b>1956.10</b>	<b>1963.39</b>	<b>1968.98</b>	<b>1969.72</b>
Cumulative Aggregate Depreciation	4860.55	6816.64	8780.04	10749.02	12718.74
Remaining Aggregate Depreciable Value	27491.60	26773.98	24936.06	23062.42	21105.22

(₹ in lakh)

<b>Asset – B</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Gross Block	97202.32	98648.86	98971.51	101704.86	103104.09
Additional Capitalisation	1446.54	322.65	2733.35	1399.23	3.05
Closing Gross Block	98648.86	98971.51	101704.86	103104.09	103107.14
Average Gross Block	97925.59	98810.19	100338.19	102404.48	103105.62
Weighted average Rate of Depreciation (in %)	4.82	4.81	4.82	4.83	4.83
Balance useful life (at the beginning of the year) (Year)	22	21	20	19	18
Aggregate Depreciable Value	80889.08	81660.33	83010.64	84870.30	85501.33
<b>Depreciation during the year</b>	<b>4718.38</b>	<b>4757.41</b>	<b>4836.23</b>	<b>4943.16</b>	<b>4978.41</b>
Cumulative Aggregate Depreciation	10144.91	14902.32	19738.55	24681.71	29660.12
Remaining Aggregate Depreciable Value	70744.16	66758.00	63272.09	60188.59	55841.20

28. The details of the depreciation allowed in respect of the Asset-A vide order dated 22.2.2016 in Petition No. 114/TT/2015 and Asset-B vide order dated 23.7.2018 in Petition No. 115/TT/2017, as claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

<b>Asset – A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed vide order dated 22.2.2016 in Petition No. 114/TT/2015	1889.42	1963.87	1963.87	1963.87	1963.87
Claimed by the Petitioner in the instant petition	1884.31	1956.10	1963.40	1968.99	1969.72



Approved after true-up in this order	1884.32	1956.10	1963.39	1968.98	1969.72
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(₹ in lakh)

Asset – B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 23.7.2018 in Petition No. 115/TT/2017	4716.26	4755.28	4875.94	4989.51	4989.51
Claimed by the Petitioner in the instant petition	4718.38	4757.41	4836.23	4943.16	4978.40
Approved after true-up in this order	4718.38	4757.41	4836.23	4943.16	4978.41

### Interest on Loan (IoL)

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

The details of IoL allowed are as follows:

(₹ in lakh)

Asset – A					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	24985.50	27282.86	27352.57	28455.00	28625.65
Cumulative Repayments up to Previous Year	2976.23	4860.55	6816.64	8780.04	10749.02
Net Loan-Opening	22009.27	22422.31	20535.93	19674.96	17876.63
Addition due to ACE	2297.36	69.71	1102.42	170.65	49.53
Repayment during the year	1884.32	1956.10	1963.39	1968.98	1969.72
Net Loan-Closing	<b>22422.31</b>	<b>20535.93</b>	<b>19674.96</b>	<b>17876.63</b>	<b>15956.44</b>
Average Loan	22215.79	21479.12	20105.44	18775.79	16916.54
Weighted Average Rate of Interest on Loan (in %)	9.156	9.133	9.100	9.001	8.966
<b>Interest on Loan</b>	<b>2034.19</b>	<b>1961.79</b>	<b>1829.50</b>	<b>1689.92</b>	<b>1516.77</b>

(₹ in lakh)

Asset – B					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	68041.62	69054.22	69280.08	71193.43	72172.90
Cumulative Repayments	5426.53	10144.91	14902.32	19738.55	24681.71



up to Previous Year					
Net Loan-Opening	62615.09	58909.31	54377.76	51454.88	47491.18
Addition due to ACE	1012.60	225.86	1913.35	979.46	2.14
Repayment during the year	4718.38	4757.41	4836.23	4943.16	4978.41
Net Loan-Closing	<b>58909.31</b>	<b>54377.76</b>	<b>51454.88</b>	<b>47491.18</b>	<b>42514.91</b>
Average Loan	60762.20	56643.53	52916.32	49473.03	45003.05
Weighted Average Rate of Interest on Loan (in %)	8.676	8.688	8.701	8.683	8.759
<b>Interest on Loan</b>	<b>5272.02</b>	<b>4921.01</b>	<b>4604.28</b>	<b>4295.81</b>	<b>3941.69</b>

30. The details of IoL allowed in respect of Asset-A vide order dated 22.2.2016 in Petition No. 114/TT/2015 and Asset-B vide order dated 23.7.2018 in Petition No. 115/TT/2017, claimed by the Petitioner in the instant petition and true-up vide this order is as follows:

(₹ in lakh)

<b>Asset – A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed vide order dated 22.2.2016 in Petition No. 114/TT/2015	2061.59	2020.21	1839.78	1659.22	1479.86
Claimed by the Petitioner in the instant petition	2034.19	1961.80	1829.50	1689.91	1516.77
Approved after true-up in this order	2034.19	1961.79	1829.50	1689.92	1516.77

(₹ in lakh)

<b>Asset – B</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed vide order dated 23.7.2018 in Petition No. 115/TT/2017	5269.28	4911.76	4624.63	4323.06	3899.30
Claimed by the Petitioner in the instant petition	5272.03	4921.02	4604.30	4295.79	3941.68
Approved after true-up in this order	5272.02	4921.01	4604.28	4295.81	3941.69

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

31. The Petitioner has claimed RoE in respect of the Asset-A and Asset-B in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has



submitted that it is liable to pay income tax at MAT rates and has claimed the following effective tax rates for the 2014-19 tariff period:

<b>Year</b>	<b>Claimed effective tax (in %)</b>	<b>Grossed up RoE (in %) [(Base Rate)/(1-t)]</b>
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

32. The Commission vide 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:

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

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

<b>Year</b>	<b>MAT Rate (in %)</b>	<b>Grossed up RoE (in %) [(Base Rate)/(1-t)]</b>
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

34. Accordingly, RoE allowed in respect of the Assets-A and B is as follows:



(₹ in lakh)

Asset – A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	10708.07	11692.65	11722.53	12194.99	12268.13
Addition due to ACE	984.58	29.88	472.47	73.14	21.22
Closing Equity	<b>11692.65</b>	<b>11722.53</b>	<b>12194.99</b>	<b>12268.13</b>	<b>12289.35</b>
Average Equity	11200.36	11707.59	11958.76	12231.56	12278.74
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	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
<b>Return on Equity (Pre-tax)</b>	<b>2196.39</b>	<b>2306.98</b>	<b>2356.47</b>	<b>2410.23</b>	<b>2426.03</b>

(₹ in lakh)

Asset – B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	29160.70	29594.64	29691.43	30511.43	30931.20
Addition due to ACE	433.94	96.79	820.00	419.77	0.91
Closing Equity	<b>29594.64</b>	<b>29691.43</b>	<b>30511.43</b>	<b>30931.20</b>	<b>30932.11</b>
Average Equity	29377.67	29643.03	30101.43	30721.31	30931.65
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	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
<b>Return on Equity (Pre-tax)</b>	<b>5760.96</b>	<b>5841.16</b>	<b>5931.49</b>	<b>6053.63</b>	<b>6111.48</b>

35. The details of RoE allowed in respect of the Asset-A vide order dated 22.2.2016 in Petition No. 114/TT/2015 and Asset-B vide order dated 23.7.2018 in Petition No. 115/TT/2017, as claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Asset – A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 22.2.2016 in Petition No. 114/TT/2015	2222.81	2345.77	2345.77	2345.77	2345.77
Claimed by the Petitioner in the instant petition	2196.50	2307.10	2356.60	2410.35	2426.04
Approved after true-up in this order	2196.39	2306.98	2356.47	2410.23	2426.03



(₹ in lakh)

<b>Asset – B</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed vide order dated 23.7.2018 in Petition No. 115/TT/2017	5758.59	5810.63	5946.61	6073.11	6073.11
Claimed by the Petitioner in the instant petition	5761.25	5841.46	5931.79	6053.94	6111.48
Approved after true-up in this order	5760.96	5841.16	5931.49	6053.63	6111.48

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

36. The details of the O&M Expenses claimed by the Petitioner for Asset-A and Asset-B and allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of tariff are as follows:

<b>Asset – A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Sub-station Bays:</b>					
Moga: Bhiwani Bay	1	1	1	1	1
Moga: Bus Reactor I Bay	1	1	1	1	1
Moga: ICT-II Bay	1	1	1	1	1
Moga: Bus Reactor II Bay	1	1	1	1	1
Moga: ICT-II Bay	1	1	1	1	1
Moga: Switchable Line Reactor Bay for Bhiwani	1	1	1	1	1
Moga: ICT-I Bay	1	1	1	1	1
Moga: ICT-I Bay	1	1	1	1	1
<b>Norm (₹lakh/bay)</b>					
765 kV	84.42	87.22	90.12	93.11	96.20



400 kV	60.30	62.30	64.37	66.51	68.71
<b>Total Sub-station O&amp;M Expenses</b>	<b>627.12</b>	<b>647.92</b>	<b>669.46</b>	<b>691.68</b>	<b>714.62</b>
<b>Total O&amp;M Expenses</b>	<b>627.12</b>	<b>647.92</b>	<b>669.46</b>	<b>691.68</b>	<b>714.62</b>

<b>Asset – B</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Sub-station Bays:</b>					
Agra: Agra-Meerut Bay	1	1	1	1	1
Jhattikara: Jhattikara -Mundka Bay	1	1	1	1	1
Agra: Agra Jhattikara Bay	1	1	1	1	1
Jhattikara: Jhattikara -Bawana Bay	1	1	1	1	1
Jhattikara: Jhattikara -Bamnauli I Bay	1	1	1	1	1
Jhattikara: Jhattikara -Bamnauli II Bay	1	1	1	1	1
Jhattikara: Jhattikara -Bus Reactor Bay	1	1	1	1	1
Jhattikara: Jhattikara -Bhiwani Bay	1	1	1	1	1
Jhattikara: Jhattikara -ICT-I ICT-II ICT-III ICT-IV Bays	4	4	4	4	4
Jhattikara: Jhattikara -ICT-I ICT-II ICT-III ICT-IV Bays	4	4	4	4	4
Jhattikara: Jhattikara -Switchable Line Reactor Bay	1	1	1	1	1
Jhattikara: Jhattikara- 765 kV Line	1	1	1	1	1
Meerut: Meerut-Bus Reactor	1	1	1	1	1
Meerut: Meerut-Switchable Line Reactor Bay	1	1	1	1	1
Meerut: Meerut-765/400/33 KV ICT-I & II at Meerut	2	2	2	2	2
Meerut: Meerut-765/400/33 KV ICT-I & II at Meerut	2	2	2	2	2
<b>Norm (₹lakh/bay)</b>					
765 kV	84.42	87.22	90.12	93.11	96.20
400 kV	60.30	62.30	64.37	66.51	68.71



<b>Total Sub-station O&amp;M Expenses</b>	<b>1869.30</b>	<b>1931.30</b>	<b>1995.50</b>	<b>2061.75</b>	<b>2130.10</b>
<b>Total O&amp;M Expenses</b>	<b>1869.30</b>	<b>1931.30</b>	<b>1995.50</b>	<b>2061.75</b>	<b>2130.10</b>

37. The details of the O&M Expenses allowed in respect of Asset-A vide order dated 22.2.2016 in Petition No. 114/TT/2015 and Asset-B vide order dated 23.7.2018 in Petition No. 115/TT/2017, as claimed in the instant petition and true-up O&M Expenses allowed in the instant order are as follows:

(₹ in lakh)

<b>Asset – A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed vide order dated 22.2.2016 in Petition No.114/TT/2015	627.12	647.92	669.46	691.68	714.62
Claimed by the Petitioner in the instant petition	627.12	647.92	669.46	691.68	714.62
Approved after true-up in this order	627.12	647.92	669.46	691.68	714.62

(₹ in lakh)

<b>Asset – B</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed vide order dated 23.7.2018 in Petition No. 115/TT/2017	1869.30	1931.30	1995.50	2061.75	2130.10
Claimed by the Petitioner in the instant petition	1869.30	1931.30	1995.50	2061.75	2130.10
Approved after true-up in this order	1869.30	1931.30	1995.50	2061.75	2130.10

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

38. The Petitioner has claimed IWC in respect of Asset-A and Asset-B as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under:

**i. Maintenance spares:**

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

**ii. O & M Expenses:**

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



allowed O&M Expenses.

**iii. Receivables:**

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

**iv. Rate of interest on working capital:**

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

39. The trued-up IWC allowed in respect of the Asset-A and Asset-B is as follows:

(₹ in lakh)

<b>Asset – A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Working Capital for O&M Expenses (O&M expenses for One month)	52.26	53.99	55.79	57.64	59.55
Working Capital for Maintenance Spares (15% of O&M expenses)	94.07	97.19	100.42	103.75	107.19
Working Capital for Receivables (Equivalent to Two months of annual fixedcost / annual transmission charges)	1152.90	1175.31	1166.23	1156.45	1133.78
<b>Total Working Capital</b>	<b>1299.23</b>	<b>1326.49</b>	<b>1322.43</b>	<b>1317.85</b>	<b>1300.53</b>
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of workingCapital</b>	<b>175.40</b>	<b>179.08</b>	<b>178.53</b>	<b>177.91</b>	<b>175.57</b>

(₹ in lakh)

<b>Asset – B</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Working Capital for O&M Expenses (O&M expenses for Onemonth)	155.78	160.94	166.29	171.81	177.51
Working Capital for Maintenance Spares (15% of O&M expenses)	280.40	289.70	299.33	309.26	319.52
Working Capital for Receivables (Equivalent to Two months of annual fixedcost / annual transmission charges)	3014.42	2985.80	2971.93	2970.04	2937.56
<b>Total Working Capital</b>	<b>3450.59</b>	<b>3436.44</b>	<b>3437.54</b>	<b>3451.12</b>	<b>3434.58</b>
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of workingCapital</b>	<b>465.83</b>	<b>463.92</b>	<b>464.07</b>	<b>465.90</b>	<b>463.67</b>

40. The details of IWC allowed in respect of Asset-A vide order dated 22.2.2016



in Petition No. 114/TT/2015 and Asset-B vide order dated 23.7.2018 in Petition No. 115/TT/2017, trued-up IWC claimed by the Petitioner and trued-up IWC allowed in the instant order are as follows:

(₹ in lakh)

<b>Asset – A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed vide order dated 22.2.2016 in Petition No.114/TT/2015	176.75	181.49	178.53	175.60	172.74
Claimed by the Petitioner in the instant petition	175.40	179.08	178.53	177.91	175.57
Approved after true-up in this order	175.40	179.08	178.53	177.91	175.57

(₹ in lakh)

<b>Asset – B</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed vide order dated 23.7.2018 in Petition No.115/TT/2017	465.66	462.95	465.80	468.04	462.07
Claimed by the Petitioner in the instant petition	465.84	463.93	464.08	465.91	463.67
Approved after true-up in this order	465.83	463.92	464.07	465.90	463.67

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

41. The trued-up annual fixed charges allowed in respect of the Assets-A and Asset-B for 2014-19 tariff period are as follows:

(₹ in lakh)

<b>Asset – A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	1884.32	1956.10	1963.39	1968.98	1969.72
Interest on Loan	2034.19	1961.79	1829.50	1689.92	1516.77
Return on Equity	2196.39	2306.98	2356.47	2410.23	2426.03
Interest on Working Capital	175.40	179.08	178.53	177.91	175.57
Operation and Maintenance	627.12	647.92	669.46	691.68	714.62
<b>Total</b>	<b>6917.41</b>	<b>7051.87</b>	<b>6997.35</b>	<b>6938.72</b>	<b>6802.71</b>

(₹ in lakh)

<b>Asset – B</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>



Depreciation	4718.38	4757.41	4836.23	4943.16	4978.41
Interest on Loan	5272.02	4921.01	4604.28	4295.81	3941.69
Return on Equity	5760.96	5841.16	5931.49	6053.63	6111.48
Interest on Working Capital	465.83	463.92	464.07	465.90	463.67
Operation and Maintenance	1869.30	1931.30	1995.50	2061.75	2130.10
<b>Total</b>	<b>18086.50</b>	<b>17914.80</b>	<b>17831.56</b>	<b>17820.25</b>	<b>17625.35</b>

42. Accordingly, the Annual Transmission Charges allowed for Asset-A vide order dated 22.2.2016 in Petition No. 114/TT/2015 and Asset-B vide order dated 23.7.2018 in Petition No. 115/TT/2017, AFC claimed by the Petitioner in the instant petition and true-up AFC allowed in the instant order are as follows:

(₹ in lakh)

<b>Asset – A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed vide order dated 22.2.2016 in Petition No. 114/TT/2015	6977.69	7159.26	6997.41	6836.14	6676.86
Claimed by the Petitioner in the instant petition	6917.52	7052.00	6997.49	6938.84	6802.72
Approved after true-up in this order	6917.41	7051.87	6997.35	6938.72	6802.71

(₹ in lakh)

<b>Asset – B</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed vide order dated 23.7.2018 in Petition No. 115/TT/2017	18079.09	17871.92	17908.48	17915.47	17554.09
Claimed by the Petitioner in the instant petition	18086.80	17915.12	17831.90	17820.55	17625.33
Approved after true-up in this order	18086.50	17914.80	17831.56	17820.25	17625.35

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

43. The Petitioner has claimed the following transmission charges in respect of the Combined Asset for 2019-24 tariff period:

(₹ 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>
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Depreciation	7005.10	7014.30	7014.30	7014.30	6975.74
Interest on Loan	4873.28	4267.44	3655.76	3044.11	2428.40
Return on Equity	8127.89	8137.92	8137.92	8137.92	8137.92
Interest on Working Capital	615.62	618.87	621.18	624.09	625.33
Operation and Maintenance	7223.01	7473.96	7738.23	8016.45	8296.20
<b>Total</b>	<b>27844.90</b>	<b>27512.49</b>	<b>27167.39</b>	<b>26836.87</b>	<b>26463.59</b>

44. The Petitioner has claimed the following IWC in respect of the Combined Asset for 2019-24 tariff period:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	601.92	622.83	644.85	668.04	691.35
Maintenance Spares	1083.45	1121.09	1160.73	1202.47	1244.43
Receivables	3423.55	3391.95	3349.40	3308.66	3253.72
<b>Total</b>	<b>5108.92</b>	<b>5135.87</b>	<b>5154.98</b>	<b>5179.17</b>	<b>5189.50</b>
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>615.62</b>	<b>618.87</b>	<b>621.18</b>	<b>624.09</b>	<b>625.33</b>

### Capital Cost

45. 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 ash disposal and utilization including handling and transportation facility;
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”

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

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

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

- (a) The asset forming part of the project, but not in use, as declared in the



tariff petition;

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

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

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

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

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

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

46. The Petitioner vide affidavit dated 1.7.2021 has claimed capital cost of ₹144071.66 lakh as on 31.3.2019 in respect of the Combined Asset against the overall approved capital cost of ₹173636.00 lakh. Accordingly, the admitted capital cost of ₹144071.67 lakh as on 31.3.2019 as trued-up in the above paragraphs is considered as the capital cost as on 1.4.2019 for determination of tariff for the 2019-24 tariff period.

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

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

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



any court of law; (e) Change in law or compliance of any existing law; and (f) Force Majeure events: Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization. (2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.”

“25. Additional Capitalisation within the original scope and after the cut-off date: (1) The ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cutoff date may be admitted by the Commission, subject to prudence check: a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law; b) Change in law or compliance of any existing law; c) Deferred works relating to ash pond or ash handling system in the original scope of work; d) Liability for works executed prior to the cut-off date; e) Force Majeure events; f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and g) Raising of ash dyke as a part of ash disposal system.”

48. The Petitioner has claimed projected ACE for 2019-24 period on account of undischarged liability towards final payments/ withheld payments due to contractual exigencies for works executed within the cut-off date.

49. We have considered the submissions of the Petitioner. ACE claimed on account of undischarged liability towards final payments/ withheld payments due to contractual exigencies is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations. ACE allowed, subject to true-up, is summarized as follows:

(₹ in lakh)			
Assets	Particulars	Regulation	ACE (2019-20)
Combined Asset	Undischarged liability towards final payments/ withheld payments due to contractual exigencies for works executed within the cut-off date	Regulation 25(1)(d) of the 2019 Tariff Regulations	355.97

### **Debt-Equity Ratio**

50. 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 modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.”



51. The details of debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period in respect of the Combined Asset are as follows:

Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Total Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	100850.21	70.00	101099.39	70.00
Equity	43221.46	30.00	43328.25	30.00
<b>Total</b>	<b>144071.67</b>	<b>100.00</b>	<b>144427.64</b>	<b>100.00</b>

### Depreciation

52. Regulations 33 of the 2019 Tariff Regulations provides as follows:

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

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

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

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

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

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

*Provided also that the capital cost of the assets of the hydro generating*



*station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:*

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

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

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

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

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

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

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

53. The IT equipment has been considered as a part of the Gross Block and depreciated using WAROD. WAROD at Annexure-III has been worked out after taking into account the depreciation rates of IT and non-IT assets as specified in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e., IT asset has been considered as 100% depreciable. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed in respect of



the Combined Asset is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	144071.67	144427.64	144427.64	144427.64	144427.64
Addition during the year 2019-24 due to projected ACE	355.97	0.00	0.00	0.00	0.00
Closing Gross Block	<b>144427.64</b>	<b>144427.64</b>	<b>144427.64</b>	<b>144427.64</b>	<b>144427.64</b>
Average Gross Block	144249.66	144427.64	144427.64	144427.64	144427.64
Weighted average rate of Depreciation (WAROD) (in %)	4.86	4.86	4.86	4.86	4.83
Lapsed useful life at the beginning of the year (Year)	6	7	8	9	10
Balance useful life at the beginning of the year (Year)	19	18	17	16	15
Aggregated Depreciable Value	119524.76	119673.76	119673.76	119673.76	119673.76
<b>Combined Depreciation during the year</b>	<b>7005.10</b>	<b>7014.30</b>	<b>7014.30</b>	<b>7014.30</b>	<b>6975.72</b>
Aggregate Cumulative Depreciation at the end of the year	49383.96	56398.26	63412.55	70426.85	77402.57
Remaining Aggregate Depreciable Value at the end of the year	70140.80	63275.50	56261.20	49246.91	42271.19

### Interest on Loan (IoL)

54. 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.*

(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”.*

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	100850.21	101099.39	101099.39	101099.39	101099.39
Cumulative Repayments up to Previous Year	42378.86	49383.96	56398.26	63412.55	70426.85
Net Loan-Opening	<b>58471.35</b>	<b>51715.43</b>	<b>44701.14</b>	<b>37686.84</b>	<b>30672.54</b>
Addition due to ACE	249.18	0.00	0.00	0.00	0.00
Repayment during the year	7005.10	7014.30	7014.30	7014.30	6975.72
Net Loan-Closing	51715.43	44701.14	37686.84	30672.54	23696.83
Average Loan	55093.39	48208.28	41193.99	34179.69	27184.68
Weighted Average Rate of Interest on Loan (in %)	8.845	8.852	8.875	8.906	8.933
<b>Interest on Loan</b>	<b>4873.27</b>	<b>4267.43</b>	<b>3655.77</b>	<b>3044.12</b>	<b>2428.41</b>

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

56. Regulations 30 and 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 due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;*

*Provided further that:*

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

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

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

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

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

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

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

(2) Rate of return on equity shall be rounded off to three decimal places and



shall be computed as per the formula given below:

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

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."

57. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. 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. RoE allowed in respect of the Combined 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
Opening Equity	43221.46	43328.25	43328.25	43328.25	43328.25
Addition due to ACE	106.79	0.00	0.00	0.00	0.00
Closing Equity	<b>43328.25</b>	<b>43328.25</b>	<b>43328.25</b>	<b>43328.25</b>	<b>43328.25</b>
Average Equity	43274.85	43328.25	43328.25	43328.25	43328.25
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	17.470	17.470	17.470	17.470	17.470
Rate of Return on Equity (Pre-tax)	18.780	18.780	18.780	18.780	18.780
<b>Return on Equity (Pre-tax)</b>	<b>8127.88</b>	<b>8137.91</b>	<b>8137.91</b>	<b>8137.91</b>	<b>8137.91</b>

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

58. Regulations 35(3)(a) and 35(4) of the 2019 Tariff Regulations provide as follows:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹Lakh per bay)</i>					
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
<i>Norms for Transformers (₹Lakh per MVA)</i>					
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
<i>Norms for AC and HVDC lines (₹Lakh per km)</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 (Rs Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme.
- v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as



on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

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

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

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

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

59. The O&M Expenses claimed by the Petitioner and allowed in respect of the Combined Asset are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Sub-station Bays:</b>					
Agra: Agra-Meerut Bay	1	1	1	1	1
Jhattikara: Jhattikara -Mundka Bay	1	1	1	1	1
Agra: Agra- Jhattikara Bay	1	1	1	1	1
Jhattikara: Jhattikara-Bawana Bay	1	1	1	1	1
Jhattikara: Jhattikara-Bamnauli I Bay	1	1	1	1	1
Jhattikara: Jhattikara-Bamnauli II Bay	1	1	1	1	1
Jhattikara: Jhattikara-Bus Reactor Bay	1	1	1	1	1
Jhattikara: Jhattikara-765 kV Bhiwani Bay	1	1	1	1	1
Jhattikara: Jhattikara -ICT-I, ICT-II, ICT-III, ICT- IV Bays	4	4	4	4	4



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Jhattikara: Jhattikara -ICT-I ICT-II ICT-III ICT- IV Bays	4	4	4	4	4
Jhattikara: Jhattikara -Switchable Line Reactor Bays	1	1	1	1	1
Jhattikara: Jhattikara -765 kV Line	1	1	1	1	1
Meerut: Meerut Bus Reactor	1	1	1	1	1
Meerut: Meerut Agar Bay at Meerut S/S	1	1	1	1	1
Meerut: Meerut Switchable Line Reactor Bays	1	1	1	1	1
Meerut: Meerut-765/400/33 kV ICT-I & II at Meerut	2	2	2	2	2
Meerut: Meerut-765/400/33 kV ICT-I & II at Meerut	2	2	2	2	2
Moga: Bhiwani Bay	1	1	1	1	1
Moga: Bus Reactor I Bay	1	1	1	1	1
Moga: ICT-II Bay	1	1	1	1	1
Moga: Bus Reactor II Bay	1	1	1	1	1
Moga: ICT-II Bay	1	1	1	1	1
Moga: Switchable Line Reactor Bay for Bhiwani	1	1	1	1	1
Moga: ICT-I Bay	1	1	1	1	1
Moga: ICT-I Bay	1	1	1	1	1
<b>Norm (₹lakh/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
<b>Total Sub-station O&amp;M Expenses</b>	<b>1331.01</b>	<b>1377.96</b>	<b>1426.23</b>	<b>1476.45</b>	<b>1528.20</b>
<b>Transformer:</b>					
Jhattikara: Jhattikara – ICT I	1500	1500	1500	1500	1500
Jhattikara: Jhattikara – ICT II	1500	1500	1500	1500	1500
Jhattikara: Jhattikara – ICT III	1500	1500	1500	1500	1500
Jhattikara: Jhattikara – ICT IV	1500	1500	1500	1500	1500



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Meerut: Meerut ICT I	1500	1500	1500	1500	1500
Meerut: Meerut ICT II	1500	1500	1500	1500	1500
Moga: (3X500) ICT-I at Moga Sub-station	1500	1500	1500	1500	1500
Moga:1500 MVA (3X500) ICT-II at Moga Sub-station	1500	1500	1500	1500	1500
<b>Norm (₹lakh/MVA capacity)</b>					
765 kV ICT	0.49	0.51	0.53	0.55	0.56
<b>Total Transformer</b>	<b>5892.00</b>	<b>6096.00</b>	<b>6312.00</b>	<b>6540.00</b>	<b>6768.00</b>
<b>Total O&amp;M Expenses</b>	<b>7223.01</b>	<b>7473.96</b>	<b>7738.23</b>	<b>8016.45</b>	<b>8296.20</b>

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

60. Regulations 34(1)(c), 34(3) and 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:”

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O & M Expenses (O&M expenses for One month)	601.92	622.83	644.85	668.04	691.35
Working Capital for Maintenance Spares (15% of O&M expenses)	1083.45	1121.09	1160.73	1202.47	1244.43
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost/ annual transmission charges)	3423.55	3386.81	3339.42	3298.63	3243.70
<b>Total Working Capital</b>	<b>5108.92</b>	<b>5130.74</b>	<b>5145.01</b>	<b>5169.13</b>	<b>5179.48</b>
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
<b>Interest of working capital</b>	<b>615.62</b>	<b>577.21</b>	<b>540.23</b>	<b>542.76</b>	<b>543.85</b>

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

62. The transmission charges allowed in respect of the Combined Asset for 2019-24 tariff period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	7005.10	7014.30	7014.30	7014.30	6975.72
Interest on Loan	4873.27	4267.43	3655.77	3044.12	2428.41
Return on Equity	8127.88	8137.91	8137.91	8137.91	8137.91



Interest on Working Capital	615.62	577.21	540.23	542.76	543.85
Operation and Maintenance	7223.01	7473.96	7738.23	8016.45	8296.20
<b>Total</b>	<b>27844.89</b>	<b>27470.80</b>	<b>27086.44</b>	<b>26755.53</b>	<b>26382.08</b>

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

63. 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.

64. 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.

### **License Fee and RLDC Fees and Charges**

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

### **Goods and Services Tax**

66. 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 Govt. / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

67. We have considered the submissions of the Petitioner. Since GST is



not levied on transmission service at present, we are of the view that Petitioners' prayer is premature.

### **Security Expenses**

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

69. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses 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**

70. 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**

71. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. However, with effect from 1.11.2020, the 2010 Sharing Regulations has been repealed and sharing is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

72. To summarise:

- a) The trued-up Annual Fixed Charges approved in respect of the Asset-A and Asset-B for 2014-19 tariff period are as follows:

(₹ in lakh)					
Asset	2014-15	2015-16	2016-17	2017-18	2018-19
A	6917.41	7051.87	6997.35	6938.72	6802.71
B	18086.50	17914.80	17831.56	17820.25	17625.35

- b) The Annual Fixed Charges allowed in respect of the Combined Asset for 2019-24 tariff period in this order are as follows:

(₹ in lakh)					
Combined Asset	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	27844.89	27470.80	27086.44	26755.53	26382.08

73. The Annexure-I, Annexure-II and Annexure-III given hereinafter shall form



part of the order.

74. This order disposes of Petition No. 44/TT/2021 in terms of the above discussions and findings.

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

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

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

**sd/-  
(P.K. Pujari)  
Chairperson**



<b>Petition No.:</b>	<b>44/TT/2021</b>
<b>Period</b>	<b>2014-19 Tariff</b>

**Asset – A**

**Annexure – I**

2014-19 Capital Expenditure as on COD	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 Depreciation (%)	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)
Land	1075.44	2306.91	<b>3382.35</b>	0.00	-	-	-	-	-
Building	674.90	91.30	<b>766.20</b>	3.34	23.95	25.47	25.59	25.59	25.59
Sub Station	33790.90	2871.59	<b>36662.49</b>	5.28	1852.05	1922.28	1929.46	1935.05	1935.78
PLCC	22.01	1.16	<b>23.17</b>	6.33	1.43	1.47	1.47	1.47	1.47
IT Equipment and software	130.32	0.00	<b>130.32</b>	15.00	6.88	6.88	6.88	6.88	6.88
<b>TOTAL</b>	<b>35693.57</b>	<b>5270.96</b>	<b>40964.53</b>		<b>1884.32</b>	<b>1956.10</b>	<b>1963.39</b>	<b>1968.98</b>	<b>1969.72</b>
<b>Average Gross Block (₹ in lakh)</b>					37334.54	39025.31	39862.55	40771.89	40929.16
<b>Weighted Average Rate of Depreciation (%)</b>					5.05	5.01	4.93	4.83	4.81



<b>Petition No.:</b>	<b>44/TT/2021</b>
<b>Period</b>	<b>2014-19 Tariff</b>

**Asset – B**

**Annexure – II**

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)  2014-19	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
					2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Free Hold Land	8048.84	55.30	<b>8104.14</b>	0.00	-	-	-	-	-
Building	1277.24	884.60	<b>2161.84</b>	3.34	53.45	64.25	65.11	69.03	72.15
Sub Station	87147.37	4928.99	<b>92076.36</b>	5.28	4622.43	4650.25	4727.45	4829.76	4861.63
PLCC	373.76	30.41	<b>404.17</b>	6.33	23.75	24.03	24.64	25.32	25.58
IT Equipment and software	355.11	5.52	<b>360.63</b>	15.00	18.75	18.88	19.03	19.04	19.04
<b>TOTAL</b>	<b>97202.32</b>	<b>5904.82</b>	<b>103107.14</b>		<b>4718.38</b>	<b>4757.41</b>	<b>4836.23</b>	<b>4943.16</b>	<b>4978.41</b>
<b>Average Gross Block (₹ in lakh)</b>					97925.59	98810.19	100338.19	102404.48	103105.62
<b>Weighted Average Rate of Depreciation (%)</b>					4.82	4.81	4.82	4.83	4.83



<b>Petition No.:</b>	<b>44/TT/2021</b>
<b>Period</b>	<b>2019-24 Tariff</b>

**Combined Asset**

**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 Depreciation (%)	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)
Free Hold Land	11486.49	25.97	<b>11512.46</b>	0.00	-	-	-	-	-
Building	2928.04	0.00	<b>2928.04</b>	3.34	97.80	97.80	97.80	97.80	97.80
Sub Station	128738.85	320.00	<b>129058.85</b>	5.28	6805.86	6814.31	6814.31	6814.31	6814.31
PLCC	427.34	0.00	<b>427.34</b>	6.33	27.05	27.05	27.05	27.05	27.05
IT Equipment and software	490.95	10.00	<b>500.95</b>	15.00	74.39	75.14	75.14	75.14	36.56
<b>TOTAL</b>	<b>144071.67</b>	<b>355.97</b>	<b>144427.64</b>		<b>7005.10</b>	<b>7014.30</b>	<b>7014.30</b>	<b>7014.30</b>	<b>6975.72</b>
<b>Average Gross Block(₹ in lakh)</b>					144249.66	144427.64	144427.64	144427.64	144427.64
<b>Weighted Average Rate of Depreciation (%)</b>					4.86	4.86	4.86	4.86	4.83

