

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 310/TT/2020**

**Coram:**

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

**Date of Order: 19.03.2021**

**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 the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of **Asset-A1**: 765/400 kV, 1500 MVA ICT-1 along with associated bays at Jabalpur Pooling Sub-station (New), **Asset-A2**: 400 kV D/C (Quad) Jabalpur Pooling Sub-station (New)-Jabalpur (Existing) Sub-station Transmission Line along with associated bays, **Asset-A3**: 400 kV 125 MVAR Bus Reactor-1 with associated bays at Jabalpur 765/400 kV Pooling Sub-station, **Asset-A4**: 765 kV 3X80 MVAR Bus Reactor-2 with associated bays at Jabalpur 765/400 kV Pooling Sub-station, **Asset-B1**: 1500 MVA, 765/400 kV ICT-2 with one spare unit at Jabalpur 765/400 kV Pooling Sub-station, **Asset-B2**: 3X80 MVAR, 765 kV Line Reactor to be used as Bus Reactor at Jabalpur Pooling Sub-station for Dharamjaygarh ckt.-1, **Asset-B3**: 765 kV, 3X110 MVAR, Bus Reactor-1 at Dharamjaygarh Sub-station along with associated bays and LILO of 765 kV S/C Ranchi-WR Pooling Sub-station (near Sipat) Transmission Line at Dharamjaygarh Sub-station, **Asset-B4**: 765 kV, 3X110 MVAR Bus Reactor-2 at Dharamjaygarh Sub-station along with associated bays, **Asset-B5**: Circuit-1 of 765 kV D/C Jharsuguda Pooling Sub-station–Dharamjaygarh (near Korba) Line, **Asset-B6**: Circuit-2 of 765 kV D/C Jharsuguda Pooling Station-Dharamjaygarh (near Korba) Line, **Asset-C1**: 400 kV 125 MVAR (3 Ph) Bus Reactor-2 with associated bays at Jabalpur 765/400 kV Pooling Sub-station, **Asset-C2**: 765 kV 3X80 MVAR Bus Reactor-1 with associated bays at Jabalpur Pooling Sub-station, **Asset-C3**: 765 kV, 3x80 MVAR Line Reactor and associated 765 kV, 1 no. bay for Dharamjaygarh Ckt-2 (Interim Contingency as Bus Reactor) at 765/400 kV Jabalpur Pooling Sub-station and **Asset-D**: 765 kV D/C Dharamjaygarh-Jabalpur Pooling Sub-station Transmission Line and 2X330 MVAR Switchable Line Reactors with associated bays at Dharamjaygarh Sub-station and line bays at Dharamjaygarh Sub-station under “Transmission System for Phase-1 Generation projects in Orissa Part-B” in Western Region.

**And in the Matter of:**

Power Grid Corporation of India Ltd.,  
“Saudamini”, Plot No. 2,  
Sector 29, Gurgaon- 122001.

**Vs**

**....Petitioner**



1. Madhya Pradesh Power Management Company Ltd.,  
Shakti Bhawan, Rampur,  
Jabalpur - 482008.
2. Madhya Pradesh Power Transmission Company Ltd.,  
Shakti Bhawan, Rampur,  
Jabalpur - 482008.
3. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd.,  
3/54, Press Complex, Agra-Bombay Road,  
Indore-452008.
4. Maharashtra State Electricity Distribution Co. Ltd.,  
Hongkong Bank Building, 3<sup>rd</sup> Floor,  
M.G. Road, Fort, Mumbai-400001.
5. Maharashtra State Electricity Transmission Co. Ltd.,  
Prakashganga, 6<sup>th</sup> Floor, Plot No. C-19, E-Block,  
Bandra Kurla Complex, Bandra (East), Mumbai-400051.
6. Gujarat Urja Vikas Nigam Ltd.,  
Sardar Patel Vidyut Bhawan,  
Race Course Road, Vadodara - 390007.
7. Electricity Department,  
Government of Goa, Vidyut Bhawan,  
Panaji, Near Mandvi Hotel,  
Goa - 403001.
8. Electricity Department,  
Administration of Daman & Diu,  
Daman - 396210.
9. DNH Power Distribution Corporation Ltd.,  
Vidyut Bhawan, 66 kV Road,  
Near Secretariat, Amli,  
Silvassa - 396230.
10. Chhattisgarh State Power Transmission Co. Ltd.,  
Office of the Executive Director (C&P),  
State Load Despatch Building, Dangania,  
Raipur – 492013.
11. Chhattisgarh State Power Distribution Co. Ltd.,  
P.O. Sunder Nagar, Dangania,  
Raipur-492 013.

.....Respondents

**For Petitioner** : Shri S. S. Raju, PGCIL



Shri A. K. Verma, PGCIL  
Shri B. Dash, PGCIL

**For Respondents :** None

### **ORDER**

The instant petition is filed by the Petitioner, Power Grid Corporation of India Ltd., a deemed transmission licensee, for truing-up of the tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of tariff of 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 assets under “Transmission System for Phase-1 Generation projects in Orissa Part-B” in Western Region (hereinafter referred to as “the transmission project”):

**Asset-A1:** 765/400 kV, 1500 MVA ICT-1 along with associated bays at Jabalpur Pooling Sub-station (New),

**Asset-A2:** 400 kV D/C (Quad) Jabalpur Pooling Sub-station (New)-Jabalpur (Existing) Sub-station Transmission Line along with associated bays,

**Asset-A3:** 400 kV 125 MVAR Bus Reactor-1 with associated bays at Jabalpur 765/400 kV Pooling Sub-station,

**Asset-A4:** 765 kV 3X80 MVAR Bus Reactor-2 with associated bays at Jabalpur 765/400 kV Pooling Sub-station,

**Asset-B1:** 1500 MVA, 765/400 kV ICT-2 with one spare unit at Jabalpur 765/400 kV Pooling Sub-station,

**Asset-B2:** 3X80 MVAR, 765 kV Line Reactor to be used as Bus Reactor at Jabalpur Pooling Sub-station for Dharamjaygarh ckt.-1,

**Asset-B3:** 765 kV, 3X110 MVAR, Bus Reactor-1 at Dharamjaygarh Sub-station alongwith associated bays and LILO of 765 kV S/C Ranchi-WR Pooling Sub-station (near Sipat) Transmission Line at Dharamjaygarh Sub-station,



**Asset-B4:** 765 kV, 3X110 MVAR Bus Reactor-2 at Dharamjaygarh Sub-station along with associated bays,

**Asset-B5:** Circuit-1 of 765 kV D/C Jharsuguda Pooling Sub-station– Dharamjaygarh (near Korba) Line,

**Asset-B6:** Circuit-2 of 765 kV D/C Jharsuguda Pooling Station– Dharamjaygarh (near Korba) Line,

**Asset-C1:** 400 kV 125 MVAR (3 Ph) Bus Reactor -2 with associated bays at Jabalpur 765/400 kV Pooling Sub-station,

**Asset-C2:** 765 kV 3X80 MVAR Bus Reactor-1 with associated bays at Jabalpur Pooling Sub-station,

**Asset-C3:** 765 kV, 3x80 MVAR Line Reactor and associated 765 kV, 1 no. bay for Dharamjaygarh Ckt-2 (Interim Contingency as Bus Reactor) at 765/400 kV Jabalpur Pooling Sub-station; and

**Asset-D:** 765 kV D/C Dharamjaygarh-Jabalpur Pooling Sub-station Transmission Line and 2X330 MVAR Switchable Line Reactors with associated bays at Dharamjaygarh Sub-station and line bays at Dharamjaygarh Sub-station (hereinafter referred to as “the transmission assets/Combined Asset”).

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

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

*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 5 and 6 above.*

*3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 5 and 6 above for respective block.*

*4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*

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



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

7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 6.6 above.

8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.

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

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

### **Background**

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

(a) The Investment Approval (IA) and expenditure sanction for the transmission project was accorded by the Board of Directors of the Petitioner vide Memorandum Ref. C/CP/Orissa Phase-I IPPs (Part-B) dated 15.12.2010 at an estimated cost of ₹274319 lakh including IDC of ₹18092 lakh based on 3<sup>rd</sup> Quarter 2010 price level. Subsequently, the Revised Cost Estimate (RCE) of the project was accorded by the Board of Directors of the Petitioner company vide Memorandum Ref. C/CP/RCE-Orissa Phase-I IPPs (Part-B) dated 11.3.2016 at an Estimated Cost of ₹338471 lakh including IDC of ₹32182 lakh at October 2015 price level.

(b) The entire scope of the transmission project is covered in the instant petition. The details are as under:

#### **Transmission Line:**

765 kV D/C Dharamjaygarh-Jabalpur Pooling Station line.

765 kV D/C Jharsuguda Pooling Station-Dharamjaygarh line.

LILO of 765 kV S/C Ranchi-WR Pooling near Sipat line at Dharamjaygarh.

400 kV D/C (Quad) Jabalpur Pooling Station-Jabalpur line.



**Sub-stations:**

Jabalpur PS 765/400 kV new Sub-station.

Dharamjaygarh 765 kV new Sub-station.

- Extension of 400 kV Jabalpur Sub-station

(c) As per the investment approval (IA) dated 15.12.2010, the transmission project was scheduled to be put into commercial operation within 36 months from the date of IA. Accordingly, the scheduled date of commercial operation of the transmission assets under the scope of the transmission project was 15.12.2013. The details of commercial operation of the transmission assets along with the time over-run are as under:

<b>Asset nomenclature as per order dated 7.9.2017 in Petition No. 86/TT/2017</b>	<b>Asset nomenclature in the instant Petition</b>	<b>COD</b>	<b>Delay</b>
Asset-A1	Combined Asset-A	1.1.2014	Nil
Asset-A2		1.1.2014	Nil
Asset-A3		1.1.2014	Nil
Asset-A4		1.3.2014	2 months (Condoned)
<b>Asset nomenclature as per order dated 26.4.2016 in Petition No. 244/TT/2014</b>	<b>Asset nomenclature in the instant Petition</b>	<b>COD</b>	<b>Delay</b>
Asset-1	Asset-B1	1.4.2014	3 months 17 days (1 month 17 days condoned)
Asset-2	Asset-B2	1.4.2014	3 months 17 days (Condoned)
Asset-3	Asset-B3	1.4.2014	3 months 17 days (not Condoned)
Asset-4	Asset-B4	18.4.2014	4 months 4 days (not Condoned)
Asset-5a	Asset-B5	30.7.2014	7 months 16 days (Condoned)



Asset-5b	Asset-B6	31.7.2014	7 months 17 days (Condoned)
<b>Asset nomenclature as per order dated 28.4.2016 in Petition No. 409/TT/2014</b>	<b>Asset nomenclature in the instant Petition</b>	<b>COD</b>	<b>Delay</b>
Asset-1	Asset-C1	31.12.2014	12 months 16 days (9 months Condoned)
Asset-2	Asset-C2	6.5.2015	16 months 21 days (9 months condoned)
Asset-3	Asset-C3	1.12.2014	11 months 15 days (not Condoned)
<b>Asset nomenclature as per order dated 26.5.2016 in Petition No. 266/TT/2015</b>	<b>Asset nomenclature in the instant Petition</b>	<b>COD</b>	<b>Delay</b>
Asset	Asset-D	17.10.2015	21 months 17 days (condoned)

(d) The transmission tariff in respect of Assets-A1 and A2 (part of Combined Asset-A in this petition) was approved by the Commission from their respective COD to 31.3.2014 vide order dated 29.1.2016 in Petition No. 303/TT/2013. The transmission tariff for Assets-A3 and A4 (part of Combined Asset-A in this petition) was determined by the Commission vide order dated 18.3.2016 in Petition No. 48/TT/2014 as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”). Further, vide order dated 7.9.2017 in Petition No. 86/TT/2017, the transmission tariff for the 2009-14 period in respect of Assets-A1 to A4 (together known as the Combined Asset-A) was trued up and tariff for Combined Asset-A for the 2014-19 tariff period was determined.

(e) The transmission tariff of Assets-B1 to B6 from their respective COD to 31.3.2019 was approved by the Commission vide order dated 26.4.2016 in Petition No. 244/TT/2014.

(f) The Commission vide order dated 26.4.2016 in Petition No. 244/TT/2014 had directed the Petitioner to submit WRLDC certificates in case of Assets-B1, B2 and B3. The relevant portion of the said order dated 26.4.2016 is extracted hereunder:-

*“8. ....The petitioner has not submitted the RLDC certificate in case of Assets-I, II and III, though they were commissioned on 1.4.2014. As Assets-I, II and III were commissioned on 1.4.2014, 2014 Tariff Regulations are applicable in case of these assets. As such, it is mandatory for the petitioner to submit a certificate from the Regional Load Despatch Centre as provided under Regulation 5(2) of the 2014 Tariff Regulations. The date of commercial operation of Assets-I, II and III is provisionally approved as 1.4.2014 and the petitioner is directed to submit the certificate issued by Regional Load Despatch Centre as provided under Regulation 5(2) of the 2014 Tariff Regulations at the time of truing up.”*

(g) Pursuant to the directions of the Commission in order dated 26.4.2016, the Petitioner has submitted the WRLDC charging certificate of Assets-B1, B2 and B3. Accordingly, COD of Assets-B1, B2 and B3 is approved as 1.4.2014.

(h) The transmission tariff in respect of Assets-C1 to C3 from their respective COD to 31.3.2019 was approved by the Commission vide order dated 28.4.2016 in Petition No. 409/TT/2014.

(i) The transmission tariff of Asset-D from its COD to 31.3.2019 was determined vide order dated 26.5.2016 in Petition No. 266/TT/2015.

(j) The trued-up transmission tariff claimed by the Petitioner for the transmission assets for the 2014-19 tariff period is as under:

						(₹ in lakh)
Asset	Particular	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Combined Asset-A</b>	Annual Fixed Charges approved vide order dated 7.9.2017	3525.35	3962.91	4393.49	4547.78	4468.14
	AFC claimed by the Petitioner based on truing up in the instant petition	3532.17	3978.09	4454.74	4689.14	4672.05
<b>Asset-B1</b>	Annual Fixed Charges approved vide order dated 26.4.2016	1026.63	1163.11	1170.14	1169.86	1145.68





	AFC claimed by the Petitioner based on truing up in the instant petition	1026.68	1174.49	1178.55	1164.62	1141.89
<b>Asset-B2</b>	Annual Fixed Charges approved vide order dated 26.4.2016	411.38	447.53	465.01	466.71	459.27
	AFC claimed by the Petitioner based on truing up in the instant petition	414.15	457.85	496.74	517.01	513.30
<b>Asset-B3</b>	Annual Fixed Charges approved vide order dated 26.4.2016	2479.39	2924.10	3179.39	3287.06	3225.99
	AFC claimed by the Petitioner based on truing up in the instant petition	2481.90	2853.90	3021.38	3160.06	3169.87
<b>Asset-B4</b>	Annual Fixed Charges approved vide order dated 26.4.2016	385.74	456.59	498.79	506.42	498.31
	AFC claimed by the Petitioner based on truing up in the instant petition	386.40	460.47	502.63	508.57	502.22
<b>Asset-B5</b>	Annual Fixed Charges approved vide order dated 26.4.2016	29.04	Merged with Asset-B6 (for only one day in 2014-15, separate tariff has been claimed for Asset-B5)			
	AFC claimed by the Petitioner based on truing up in the instant petition	28.89				
<b>Combined Assets-B5 &amp; B6</b>	Annual Fixed Charges approved vide order dated 26.4.2016	8748.79	13472.05	13679.35	13616.08	13270.20
	AFC claimed by the Petitioner based on truing up in the instant petition	8756.68	13375.18	13359.25	13174.71	12915.70
<b>Asset-C1</b>	Annual Fixed Charges approved vide order dated 28.4.2016	47.56	199.58	207.68	208.40	206.79
	AFC claimed by the Petitioner based on truing up in the instant petition	47.24	194.08	204.64	211.97	210.37
<b>Asset-C2</b>	Annual Fixed Charges approved vide order dated 28.4.2016	-	451.65	563.17	568.81	558.65
	AFC claimed by the Petitioner based on truing up in the instant petition	-	477.97	635.48	650.75	642.67
<b>Asset-C3</b>	Annual Fixed Charges approved vide order dated 28.4.2016	118.67	404.30	460.85	469.17	462.31
	AFC claimed by the Petitioner based on truing up in the instant petition	140.18	472.22	546.82	571.16	566.33
<b>Asset-D</b>	Annual Fixed Charges approved vide order dated	-	13284.03	29897.06	30194.42	29637.48



	26.5.2016					
	AFC claimed by the Petitioner based on truing up in the instant petition	-	13310.88	30219.04	30694.43	30255.15

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or objections have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. General Notice dated 12.3.2020 directing the beneficiaries/ Respondents to file reply in the matter was also posted on the Commission's website. M.P. Power Management Company Limited (MPPMCL), Respondent No. 1, has filed its reply vide affidavit dated 27.5.2020 and has raised issues like grossing up of RoE, Initial Spares and effect of GST claimed by the Petitioner. The Petitioner vide affidavit dated 7.8.2020 has filed its rejoinder to MPPMCL's reply.

6. This order is issued considering the submissions made in the Petition vide affidavit dated 9.1.2020, TV reply filed vide affidavits dated 10.6.2020 and 26.8.2020, the reply vide affidavit dated 27.5.2020 filed by MPPMCL and the Petitioner's rejoinder vide affidavit dated 7.8.2020.

7. The hearing in this matter was held on 10.8.2020 through video conference and the order was reserved in the matter. Having heard the representatives of the



Petitioner and having perused the material on record, we proceed to dispose of the petition.

### **Truing Up of Annual Fixed Charges of the 2014-19 Tariff Period**

8. The details of the trued-up transmission charges claimed by the Petitioner for the transmission assets for the 2014-19 tariff period are as under:

(₹ in lakh)

<b>Combined Asset-A</b>					
<b>Particular</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	926.60	1056.18	1196.86	1284.94	1300.21
Interest on Loan	854.99	971.99	1098.44	1113.33	1035.55
Return on equity	1107.35	1277.41	1456.84	1562.98	1588.17
Interest on Working Capital	96.72	107.31	118.63	124.51	124.76
O & M Expenses	547.05	565.20	583.97	603.38	623.36
<b>Total</b>	<b>3532.71</b>	<b>3978.09</b>	<b>4454.74</b>	<b>4689.14</b>	<b>4672.05</b>

(₹ in lakh)

<b>Asset-B1</b>					
<b>Particular</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	266.57	315.95	323.64	326.61	326.61
Interest on Loan	290.49	323.96	306.69	281.49	252.82
Return on equity	297.24	353.92	362.35	365.67	366.66
Interest on Working Capital	27.66	31.14	31.38	31.23	30.89
O & M Expenses	144.72	149.52	154.49	159.62	164.91
<b>Total</b>	<b>1026.68</b>	<b>1174.49</b>	<b>1178.55</b>	<b>1164.62</b>	<b>1141.89</b>

(₹ in lakh)

<b>Asset-B2</b>					
<b>Particular</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	101.61	116.75	130.89	139.80	141.32
Interest on Loan	105.89	113.58	118.69	116.53	106.08
Return on equity	110.25	127.25	143.02	153.00	155.12
Interest on Working Capital	11.98	13.05	14.02	14.57	14.58
O & M Expenses	84.42	87.22	90.12	93.11	96.20
<b>Total</b>	<b>414.15</b>	<b>457.85</b>	<b>496.74</b>	<b>517.01</b>	<b>513.30</b>

(₹ in lakh)

<b>Asset-B3</b>					
<b>Particular</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	619.59	729.37	785.43	841.24	858.04
Interest on Loan	700.26	798.88	825.20	826.05	782.55
Return on equity	839.30	985.67	1057.84	1127.28	1153.80
Interest on Working Capital	63.99	72.63	76.68	80.09	80.61
O & M Expenses	258.76	267.35	276.23	285.40	294.87
<b>Total</b>	<b>2481.90</b>	<b>2853.90</b>	<b>3021.38</b>	<b>3160.06</b>	<b>3169.87</b>



(₹ in lakh)

Asset-B4					
Particular	2014-15 (Pro rata for 348 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	93.18	114.84	128.99	133.22	133.61
Interest on Loan	96.98	114.26	121.46	115.13	104.50
Return on equity	104.52	131.04	147.91	152.73	153.58
Interest on Working Capital	11.23	13.11	14.15	14.38	14.33
O & M Expenses	80.49	87.22	90.12	93.11	96.20
<b>Total</b>	<b>386.40</b>	<b>460.47</b>	<b>502.63</b>	<b>508.57</b>	<b>502.22</b>

(₹ in lakh)

Asset-B5	
Particular	2014-15 (Pro-rata for 1 day)
Depreciation	8.81
Interest on Loan	8.73
Return on equity	9.93
Interest on Working Capital	0.67
O & M Expenses	0.75
<b>Total</b>	<b>28.89</b>

(₹ in lakh)

Combined Assets-B5 & B6					
Particular	2014-15 (Pro-rata for 244 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	2687.81	4151.27	4200.79	4235.75	4246.17
Interest on Loan	2504.88	3699.36	3561.96	3288.62	2981.67
Return on equity	3024.43	4694.24	4749.03	4788.81	4813.39
Interest on Working Capital	207.49	317.11	317.28	313.69	308.43
O & M Expenses	332.07	513.20	530.19	547.84	566.04
<b>Total</b>	<b>8756.68</b>	<b>13375.18</b>	<b>13359.25</b>	<b>13174.71</b>	<b>12915.70</b>

(₹ in lakh)

Asset-C1					
Particular	2014-15 (Pro rata for 91 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	9.45	39.25	42.91	45.77	45.77
Interest on Loan	10.68	42.24	42.70	41.58	37.61
Return on equity	10.54	43.96	48.03	51.25	51.38
Interest on Working Capital	1.54	6.33	6.63	6.86	6.90
O & M Expenses	15.03	62.30	64.37	66.51	68.71
<b>Total</b>	<b>47.24</b>	<b>194.08</b>	<b>204.64</b>	<b>211.97</b>	<b>210.37</b>



(₹ in lakh)

Asset-C2				
Particular	2015-16 (Pro rata for 331 days)	2016-17	2017-18	2018-19
Depreciation	118.74	166.39	176.27	177.78
Interest on Loan	134.10	175.54	166.44	151.62
Return on equity	133.01	186.29	197.35	199.58
Interest on Working Capital	13.24	17.14	17.58	17.49
O & M Expenses	78.88	90.12	93.11	96.20
<b>Total</b>	<b>477.97</b>	<b>635.48</b>	<b>650.75</b>	<b>642.67</b>

(₹ in lakh)

Asset-C3					
Particular	2014-15 (Pro rata for 121 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	34.33	120.00	145.15	156.28	157.80
Interest on Loan	36.67	121.07	137.76	134.88	123.28
Return on equity	37.16	130.56	158.65	171.11	173.28
Interest on Working Capital	4.03	13.37	15.14	15.78	15.77
O & M Expenses	27.99	87.22	90.12	93.11	96.20
<b>Total</b>	<b>140.18</b>	<b>472.22</b>	<b>546.82</b>	<b>571.16</b>	<b>566.33</b>

(₹ in lakh)

Asset-D				
Particular	2015-16 (Pro-rata for 167 days)	2016-17	2017-18	2018-19
Depreciation	4008.43	9215.40	9619.61	9718.44
Interest on Loan	4120.93	9118.35	8693.90	7992.07
Return on equity	4498.38	10336.85	10792.79	10936.54
Interest on Working Capital	311.21	706.45	718.03	709.06
O & M Expenses	371.93	841.99	870.10	899.04
<b>Total</b>	<b>13310.88</b>	<b>30219.04</b>	<b>30694.43</b>	<b>30255.15</b>

9. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner for the transmission assets for the period from 1.4.2014 to 31.3.2019 are as under:

(₹ in lakh)

Combined Asset-A					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	45.59	47.10	48.66	50.28	51.95
Maintenance Spares	82.06	84.78	87.60	90.51	93.50
Receivables	588.79	663.02	742.46	781.53	778.68
<b>Total</b>	<b>716.44</b>	<b>794.90</b>	<b>878.72</b>	<b>922.32</b>	<b>924.13</b>
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest	96.72	107.31	118.63	124.51	124.76



(₹ in lakh)

Asset-B1					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	12.06	12.46	12.87	13.30	13.74
Maintenance Spares	21.71	22.43	23.17	23.94	24.74
Receivables	171.11	195.75	196.43	194.10	190.31
<b>Total</b>	<b>204.88</b>	<b>230.64</b>	<b>232.47</b>	<b>231.34</b>	<b>228.79</b>
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest	27.66	31.14	31.38	31.23	30.89

(₹ in lakh)

Asset-B2					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	7.04	7.27	7.51	7.76	8.02
Maintenance Spares	12.66	13.08	13.52	13.97	14.43
Receivables	69.03	76.31	82.79	86.17	85.55
<b>Total</b>	<b>88.73</b>	<b>96.66</b>	<b>103.82</b>	<b>107.90</b>	<b>108.00</b>
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest	11.98	13.05	14.02	14.57	14.58

(₹ in lakh)

Asset-B3					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	21.56	22.28	23.02	23.78	24.57
Maintenance Spares	38.81	40.10	41.43	42.81	44.23
Receivables	413.65	475.65	503.56	526.68	528.31
<b>Total</b>	<b>474.02</b>	<b>538.03</b>	<b>568.01</b>	<b>593.27</b>	<b>597.11</b>
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest	63.99	72.63	76.68	80.09	80.61

(₹ in lakh)

Asset-B4					
Particular	2014-15 (Pro rata for 348 days)	2015-16	2016-17	2017-18	2018-19
O & M expenses	7.04	7.27	7.51	7.76	8.02
Maintenance Spares	12.66	13.08	13.52	13.97	14.43
Receivables	67.55	76.75	83.77	84.76	83.70
<b>Total</b>	<b>87.25</b>	<b>97.10</b>	<b>104.80</b>	<b>106.49</b>	<b>106.15</b>
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest	11.23	13.11	14.15	14.38	14.33

(₹ in lakh)

Asset-B5	
Particular	2014-15 (Pro-rata for 1 day)
O & M expenses	22.90
Maintenance Spares	41.21
Receivables	1757.86
<b>Total</b>	<b>1821.97</b>



Rate of Interest	13.50
Interest	0.67

(₹ in lakh)

Combined Assets-B5 & B6					
Particular	2014-15 (Pro rata for 244 days)	2015-16	2016-17	2017-18	2018-19
O & M expenses	41.40	42.77	44.18	45.65	47.17
Maintenance Spares	74.51	76.98	79.53	82.18	84.91
Receivables	2183.19	2229.20	2226.54	2195.79	2152.62
<b>Total</b>	<b>2299.10</b>	<b>2348.95</b>	<b>2350.25</b>	<b>2323.62</b>	<b>2284.70</b>
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest	207.49	317.11	317.28	313.69	308.43

(₹ in lakh)

Asset-C1					
Particular	2014-15 (Pro rata for 91 days)	2015-16	2016-17	2017-18	2018-19
O & M expenses	5.03	5.19	5.36	5.54	5.73
Maintenance Spares	9.05	9.35	9.66	9.98	10.31
Receivables	31.58	32.35	34.11	35.33	35.06
<b>Total</b>	<b>45.66</b>	<b>46.89</b>	<b>49.13</b>	<b>50.85</b>	<b>51.10</b>
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest	1.54	6.33	6.63	6.86	6.90

(₹ in lakh)

Asset-C2					
Particular	2015-16 (Pro rata for 331 days)	2016-17	2017-18	2018-19	
O & M expenses	7.27	7.51	7.76	8.02	
Maintenance Spares	13.08	13.52	13.97	14.43	
Receivables	88.09	105.91	108.46	107.11	
<b>Total</b>	<b>108.44</b>	<b>126.94</b>	<b>130.19</b>	<b>129.56</b>	
Rate of Interest	13.50	13.50	13.50	13.50	
Interest	13.24	17.14	17.58	17.49	

(₹ in lakh)

Asset-C3					
Particular	2014-15 (Pro rata for 121 days)	2015-16	2016-17	2017-18	2018-19
O & M expenses	7.04	7.27	7.51	7.76	8.02
Maintenance Spares	12.66	13.08	13.52	13.97	14.43
Receivables	70.48	78.71	91.14	95.19	94.39
<b>Total</b>	<b>90.18</b>	<b>99.06</b>	<b>112.17</b>	<b>116.92</b>	<b>116.84</b>
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest	4.03	13.37	15.14	15.78	15.77



(₹ in lakh)

<b>Asset-D</b>				
<b>Particular</b>	<b>2015-16 (Pro rata for 167 days)</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
O & M expenses	67.92	70.17	72.51	74.92
Maintenance Spares	122.26	126.30	130.52	134.86
Receivables	4862.05	5036.51	5115.74	5042.53
<b>Total</b>	<b>5052.23</b>	<b>5232.98</b>	<b>5318.77</b>	<b>5252.31</b>
Rate of Interest	13.50	13.50	13.50	13.50
Interest	311.21	706.45	718.03	709.06

### **Capital Cost**

10. The Commission vide order dated 7.9.2017 in Petition No. 86/TT/2017 approved the trued-up capital cost of ₹17536.25 lakh for Combined Asset-A as on 1.4.2014 and ₹25741.24 lakh as on 31.3.2019. The Commission vide order dated 26.4.2016 in Petition No. 244/TT/2014, approved the capital cost of ₹4203.14 lakh, ₹1721.50 lakh, ₹12184.49 lakh, ₹1721.18 lakh, ₹61541.69 lakh, ₹74649.19 lakh for Assets-B1, B2, B3, B4, B5 and B6 as on COD and ₹6206.24 lakh, ₹2298.13 lakh, ₹19999.06 lakh, ₹2576.42 lakh, ₹61557.62 lakh and ₹83757.55 lakh respectively for Assets-B1, B2, B3, B4, B5 and B6 as on 31.3.2019. The Commission vide order dated 28.4.2016 in Petition No. 409/TT/2014, approved capital cost of ₹713.59 lakh, ₹2018.83 lakh and ₹1540.95 lakh for Assets-C1, C2 and C3 as on COD and ₹838.14 lakh, ₹2839.10 lakh and ₹2264.20 lakh as on 31.3.2019 for Assets-C1, C2 and C3 respectively. Further, vide order dated 26.5.2016 in Petition No. 266/TT/2015, the Commission approved capital cost of ₹164364.80 lakh for Asset-D as on COD and ₹179839.42 lakh as on 31.3.2019 for Asset-D. The details of approved capital cost as on 31.3.2019 are as under:





(₹ in lakh)

Asset	RCE apportioned approved cost	Admitted capital cost as on 31.3.2014/ COD	ACE (Approved)					Total capital cost as on 31.3.19
			2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset-A	29398.57	17536.25	2531.27	3052.08	2621.64	0.00	0.00	25741.24
Asset-B1	6592.42	4203.14	1691.16	59.36	252.58	0.00	0.00	6206.24
Asset-B2	2998.15	1721.5	302.27	173.55	100.81	0.00	0.00	2298.13
Asset-B3	21475.58	12184.49	4142.29	1690.85	1981.43	0.00	0.00	19999.06
Asset-B4	2857.18	1721.18	281.94	395.27	178.03	0.00	0.00	2576.42
Asset-B5	72000.08	61541.69	15.93 (one day)	Merged with Asset-B6				61557.62
Combined Assets-B5&B6	86302.13	74649.19	4311.93	2260.73	2535.7	0.00	0.00	83757.55
Asset-C1	1241.13	713.59	18.41	80.96	25.18	0.00	0.00	838.14
Asset-C2	3040.68	2018.83	0.00	641.85	178.42	0.00	0.00	2839.10
Asset-C3	3140.82	1540.95	14.98	539.08	169.19	0.00	0.00	2264.20
Asset-D	181424.33	164364.80	0.00	4645.33	8266.88	2562.41	0.00	179839.42

11. The Petitioner vide Auditor's Certificates dated 3.8.2019 in respect of Combined Asset A, Asset- B1, B2, C1, C2 and C3, vide Auditor's Certificates dated 31.7.2019 in respect of Assets-B3 to B6 and vide Auditor's Certificates dated 20.8.2019 has submitted the capital cost incurred upto 1.4.2014/COD and Additional Capital Expenditure (ACE) up to 31.3.2019. The details of apportioned approved capital cost as per the RCE, capital cost as on COD/31.3.2014 and ACE up to 31.3.2019 as claimed by the Petitioner are as under:

(₹ in lakh)

Asset	Apportioned approved cost (RCE)	Actual cost as on 31.03.2014/ COD	Actual ACE					Total capital cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset-A	28800.57	17780.37	2291.35	3052.31	3040.32	550.69	157.16	26872.2
Asset-B1	6592.42	4226.89	1691.16	179.14	112.32	0.0	0.00	6209.51
Asset-B2	2998.15	1753.78	269.99	255.52	280.06	57.56	0.00	2616.91
Asset-B3	21475.58	12623.62	3782.87	677.15	1781.3	568.09	224.6	19657.63
Asset-B4	2857.18	1811.39	206.25	424.92	148.16	14.85	0.00	2605.57
Asset-B5	68429.08	61581.51	3901.88	686.23	1159.68	145.86	152.26	67627.42



Asset-B6	14302.05	13190.8	326.75	48.51	39.88	0.26	96.52	13702.72
Asset-C1	1241.13	755.64	18.41	26.25	108.71	0.00	0.00	909.01
Asset-C2	3638.68	2129.3	0.00	974.25	316.5	57.56	0.00	3477.61
Asset -C3	3140.82	1905.55	14.98	581.19	364.1	57.56	0.00	2923.38
Asset-D	184995.33	167128.91	0.00	2059.92	11521.18	3725.49	145.57	184581.07
<b>Total</b>	<b>338470.99</b>	<b>284887.76</b>	<b>12503.64</b>	<b>8965.39</b>	<b>18872.21</b>	<b>5177.92</b>	<b>776.11</b>	<b>331183.03</b>

12. It is observed that the completion cost including ACE in respect of the transmission assets is within the RCE approved apportioned capital cost as mentioned above.

### **Time Over-run**

13. As stated above, there is time over-run in respect of Assets-A4, B1, B2, B3, B4, B5, B6, C1, C2, C3 and D. The Commission vide its order dated 18.3.2016 in Petition No. 48/TT/2014 has condoned the entire time over-run in respect of Asset-A4. The Commission vide order dated 26.4.2016 in Petition No. 244/TT/2014, has partly condoned the time over-run in respect of Asset-B1 and condoned the entire time over-run in respect of Assets-B2, B5 and B6. The time over-run in respect of Assets-B3 and B4 was not condoned in order dated 26.4.2016 vide Petition No. 244/TT/2014. The Commission vide order dated 28.4.2016 in Petition No. 409/TT/2014, partly condoned the time over-run in respect of Asset-C1 and C2. The Commission vide order dated 26.5.2016 in Petition No.266/TT/2015 condoned the entire time over-run in respect of Asset-D.

14. The issue of time over-run of 11 months and 15 days in case of Asset-C3 (Asset-III in Petition No. 409/TT/2014) comprising of 765 kV, 3x80 MVA Line Reactor and associated 765 kV, 1 no. bay for Dharamjaygarh Ckt-2 (Interim Contingency as Bus Reactor) at 765/400 kV Jabalpur Pooling Sub-station was left open by the Commission in order dated 28.4.2016 in Petition No. 409/TT/2014 as the time over-



run was linked with associated transmission line i.e. 765 kV Dharamjaygarh-Jabalpur line, which is covered in Petition No 266/TT/2015. The relevant extract of the order is as follows:

*“21. The petitioner has submitted that the commissioning of Asset-III, i.e. 765 kV Dharamjaygarh-Jabalpur line got delayed due to non-approval of forest proposal as provided in Petition No. 266/TT/2015. Since, transmission line was getting delayed and high voltage problems were observed at Jabalpur Pooling Station, it was decided to charge the line reactors as bus reactor. Hence, the line reactors were commissioned as bus reactors as interim contingency arrangement. We are of the view that above mentioned 765 kV Dharamjaygarh-Jabalpur line is claimed by the petitioner in Petition No. 266/TT/2015, which is under process. Accordingly, final decision on time over-run in case of Asset-III will be taken after the decision of the Commission in Petition No. 266/TT/2015. The petitioner has the liberty to approach for review of time over-run.”*

15. The Petitioner has submitted that the time over-run in case of Asset-C3 was not decided in order dated 28.4.2016 in Petition No. 409/TT/2014 and was to be considered after deciding on the time over-run in case of Asset-D i.e. 765 kV Dharamjaygarh-Jabalpur Transmission Line. The Petitioner has submitted that as time over-run in case of Asset-D has been condoned vide order dated 26.5.2016 in Petition No. 266/TT/2015, the Commission may condone the entire time over run of 11 months 15 days in case of Asset-C3 as well.

16. It is observed that due to delay in 765 kV Dharamjaygarh-Jabalpur Transmission Line, the Petitioner has put Asset-C3 i.e. 3X80 MVAR line reactor for Dharamjaygarh Ckt-2 into commercial operation as bus reactor at 765/400 kV Jabalpur Pooling Station to improve its voltage profile as interim contingency arrangement as per the in-principle approval from CEA dated 27.2.2014. The scheduled COD of Asset-C3 was 15.12.2013 against which it was put into commercial operation on 1.12.2014. We observe that the delay is on account of uncontrollable factor of delay in 765 kV Dharamjaygarh-Jabalpur Transmission Line and therefore we condone the time over-run of 11 months 15 days..

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

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

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

19. Accordingly, based on the information furnished by the Petitioner, IDC allowed is summarized as under:-

(₹ in lakh)

Assets	IDC as per Auditor's Certificate	Disallowed on account of time over-run not condoned	IDC admissible	IDC discharged as on COD	IDC Un-discharged as on COD	IDC discharged during		
						2014-15	2015-16	2017-18
A	B	C	D=B-C	E	F=C-E	G	H	I
Asset-B1	433.58	21.60	411.98	411.98	0.00	-	-	-
Asset-B2	189.18	0.00	189.18	156.90	32.28	32.28	-	-
Asset-B3	812.29	170.83	641.46	421.88	219.58	219.58	-	-
Asset-B4	129.79	34.62	95.17	51.62	43.56	43.56	-	-
Asset-B5	5051.68	0.00	5051.68	5051.68	0.00	0.00	-	-
Asset-B6	790.99	0.00	790.98	691.75	99.23	99.23	-	-
Asset-C1	156.73	40.53	116.20	110.15	6.05	2.53	3.52	-
Asset-	264.99	56.76	208.23	169.73	38.50	-	38.50	-



C2								
Asset-C3	365.90	0.00	365.90	355.13	10.77	3.46	7.31	-
Asset-D	18432.56	0.00	18432.56	15668.45	2764.11	-	2585.41	178.70

20. Assets-A1 to A4 have been put under commercial operation during the 2009-14 tariff period and the Commission has already decided the issue of IEDC vide order dated 29.1.2016 in Petition No. 303/TT/2013 in respect of Assets-A1 and A2 and vide order dated 18.3.2016 in Petition No. 48/TT/2014 in respect of Assets-A3 and A4.

21. The Petitioner has claimed an IEDC of ₹43.07 lakh, ₹20.26 lakh, ₹76.38 lakh, ₹12.02 lakh, ₹948.49 lakh, ₹93.28 lakh, ₹21.18 lakh, ₹64.58 lakh, ₹48.51 lakh and ₹2171.09 lakh for Assets-B1, B2, B3, B4, B5, B6, C1, C2, C3 and D respectively and has submitted an Auditor's certificate in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the transmission assets.

22. We have considered the submissions of the Petitioner. It is observed that the time over-run in respect of some of the assets was not condoned while in some others, it was only partly condoned. Accordingly, IEDC has been adjusted in respect of those assets. IEDC allowed in respect of the transmission assets are as under:

Asset	IEDC as per the Auditor Certificates (₹ in lakh) (a)	IEDC disallowed on account of time over-run (₹ in lakh) (b)	IEDC allowed (₹ in lakh) (c=a-b)
Asset-B1	43.07	2.15	40.92
Asset-B2	20.26	0.00	20.26
Asset-B3	76.38	6.86	69.52
Asset-B4	12.02	1.23	10.79
Asset-B5	948.49	0.00	948.49
Asset-B6	93.28	0.00	93.28
Asset-C1	21.18	1.53	19.65
Asset-C2	64.58	53.71	10.87
Asset-C3	48.51	0.00	48.51
Asset-D	2171.09	0.00	2171.09



### Initial Spares

23. The Petitioner vide reply dated 26.8.2020 (with respect to queries raised in RoP of hearing dated 10.8.2020) has claimed the following Initial Spares for the transmission assets and prayed to revise the Initial Spares allowed earlier in light of the judgement of the Appellate Tribunal for Electricity (APTEL) dated 14.9.2019 in Appeal No.74 of 2017:-

Asset	COD	Parts	Estimated completion cost (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Ceiling limit (%) (C)	Initial Spares worked out $D = [(A-B)*C / (100-C)]$ (₹ in lakh)	Excess [B-D] (₹ in lakh)
Asset-A1	1.1.2014	Sub-station	15839.80	349.92	2.5	397.18	-47.26
Asset-A2	1.1.2014	Transmission Line	4373.49	28.84	0.75	32.83	-3.99
		Sub-station	2219.73	56.68	2.5	55.46	1.22
Asset-A3	1.1.2014	Sub-station	750.92	19.05	2.5	18.77	0.28
Asset-A4	1.3.2014	Sub-station	2984.13	74.95	2.5	74.59	0.36
<b>Total (COD of assets in 2009-14 tariff period)</b>		<b>Transmission Line</b>	<b>4373.49</b>	<b>28.84</b>	<b>0.75</b>	<b>32.83</b>	<b>-3.99</b>
		<b>Sub-station</b>	<b>21794.58</b>	<b>500.60</b>	<b>2.5</b>	<b>546.00</b>	<b>-45.40</b>
Asset-B1	1.4.2014	Sub-station	5582.50	94.61	4	228.66	-134.05
Asset-B2	1.4.2014	Sub-station	2316.23	29.42	4	95.28	-65.86
Asset-B3	1.4.2014	Sub-station	10497.82	328.29	4	423.73	-95.44
		Transmission Line	2322.00	0	1	23.45	-23.45
Asset-B4	18.4.2014	Sub-station	2249.60	0	4	93.73	-93.73
Asset-B5	30.7.2014	Sub-station	7520.22	0	4	313.34	-313.34
		Transmission Line	52516.07	582.51	1	524.58	57.93
Asset-B6	31.7.2014	Sub-station	13024.16	125.06	4	537.46	-412.40
Asset-C1	31.12.2014	Sub-station	731.10	28	4	29.30	-1.30
Asset-C2	6.5.2015	Sub-station	2957.49	104	4	118.90	-14.90
Asset-C3	1.12.2014	Sub-station	2508.97	88	4	100.87	-12.87
Asset-D	17.10.2015	Sub-station	6447.49	28.28	4	267.47	-239.19
		Transmission Line	153921.59	1459.21	1	1540.02	-80.81
<b>Total (COD of assets in 2014-19 tariff period)</b>		<b>Transmission Line</b>	<b>208759.66</b>	<b>2041.72</b>	<b>1</b>	<b>2088.06</b>	<b>-46.34</b>
		<b>Sub-station</b>	<b>53835.58</b>	<b>825.66</b>	<b>4</b>	<b>2208.75</b>	<b>-1383.09</b>

24. MPPMCL has submitted that the Petitioner has claimed tariff separately for Assets-A, B1 to B6, C1 to C3 and D in the instant petition. However, while claiming



the Initial Spares, the claim has been made jointly in respect of assets executed in 2009-14 and 2014-19 and that too for assets related to different transmission line and different Sub-station as one unit. MPPMCL has further submitted that the Petitioner has placed reliance on the APTEL's judgment in Appeal No.74/2017. However, it has never been held by APTEL that the Initial Spares shall be counted in totality for the tariff period as a whole. Further, the conditions stipulated in Appeal No.74/2017 do not apply to this case. MPPMCL has requested that the Initial Spares be calculated asset-wise and the excess amount may be disallowed while capitalizing the same.

25. In response, the Petitioner vide its rejoinder dated 7.8.2020 has submitted that the Initial Spares are within the specified limits considering the project as a whole. In compliance to the APTEL's judgment in Appeal 74 of 2017, Initial Spares have been calculated on overall project cost instead of individual cost and excess allowable spares of ₹15.14 lakh have been added in the capital cost up to 31.3.2014 mentioned in the Auditor's certificate of the subject assets. The Petitioner has submitted that the Commission has approved the Initial Spares within the specified limits considering the project as a whole in its order in Petition No. 11/TT/2020 and accordingly requested the Commission to allow the entire Initial Spares as claimed in the instant petition.

28. We have considered the submissions of the Petitioner and MPPMCL. APTEL vide its judgement dated 14.9.2019 in Appeal No. 74 of 2017, recognising the fact that the transmission projects are segregated into different assets or elements and executed in stages laid down the following two guidelines for allowing initial spares (a) for the purpose of prudence check the Initial Spares may be restricted to the cost of the individual asset initially, and (b) later at the time of truing-up allow Initial Spares as



per the ceiling limit on the overall project cost. The relevant portion of the judgement dated 14.9.2019 is extracted hereunder:

*“8.12 In view of these facts, it is relevant to note that the transmission projects due to their inherent nature are segregated into different assets or elements which are executed and commissioned progressively in stages. Keeping this in view, developer / licensee while planning estimates finalises, the requirement of spares on the basis of complete project which requires flexibility in deciding quantum of spares for different type of elements of a project along with commissioning of the particular asset so as to have better performance with high degree of reliability. The requirement of spares as such, may not be exactly in proportion to the cost of individual assets. In other words, a licensee might require large number of spares with a particular asset or assets Commissioned first based on technical requirement and lesser number of spares or nil spares in subsequent assets/ elements of similar nature. Admittedly, the break-up of initial spares for various assets may be percentage wise different subject to the overall initial spares requirement of the project within the overall limits / percentage provided in the Regulations.*

*8.13.....We do not agree with this methodology of restricting initial spares asset/element wise as adopted by the Central Commission. The Central Commission to have a prudence check on the initial spares, being restricted based on the individual asset wise cost initially, but subsequently ought to have allowed as per the ceiling limits on the overall project cost basis during the true-up.”*

29. The transmission project consists of 14 transmission assets and they were put into commercial operation in the 2009-14 and 2014-19 tariff periods. Assets-A1 to A4 were put into commercial operation in the 2009-14 tariff period and Assets-B1 to B6, C1 to C3 and D were put into commercial operation during the 2014-19 tariff period. As per the directions of APTEL, Initial Spares may be restricted to the cost of the individual asset initially and subsequently trued up as per the ceiling limits on the basis of the overall project cost. The “project cost” is defined in the 2009 and 2014 Tariff Regulations as the admitted capital expenditure incurred upto cut-off date. However, the norms for initial spares for different types of transmission elements are not the same in the 2009-14 and 2014-19 tariff period.

30. Regulation 3(29) of the 2009 Tariff Regulations defines the “original project cost” as follows:





*“(29) ‘original project cost’ means the capital expenditure incurred by the generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cut-off date as admitted by the Commission;”*

31. Regulation 3(43) of the 2014 Tariff Regulations defines the “original project cost” as follows:-

*“3. **Definitions and Interpretations.**—In these regulations, unless the context otherwise requires*

*(43) ‘Original Project Cost’ means the capital expenditure incurred by the generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cut-off date as admitted by the Commission;”*

32. Regulation 8 of the 2009 Tariff Regulations provides the following norms for the “initial spares”

*“8. Initial Spares.*

*Initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:*

- (i) Coal-based/lignite-fired thermal generating stations - 2.5%*
- (ii) Gas Turbine/Combined Cycle thermal generating stations - 4.0%*
- (ii) Hydro generating stations - 1.5%*
- (iii) Transmission system*
  - (a) Transmission line - 0.75%*
  - (b) Transmission Sub-station - 2.5%*
  - (c) Series Compensation devices and HVDC Station - 3.5%”*

33. Regulation 13(d) of the 2014 Tariff Regulations specifies the following norms for the “initial spares”.

*“13. Initial Spares: Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:*

- d) Transmission System*
  - Transmission line: 1.00%*
  - Transmission sub-station (Green Field): 4.00%*
  - Transmission sub-station (Brown Field): 6.00%*
  - GIS Sub-station: 5.00%*
  - Communication System: 3.5%”*

34. As the norms specified for initial spares for the transmission elements are different in the 2009 and 2014 Tariff Regulations, the initial spares allowable for the transmission assets put into commercial operation in the 2009-14 and 2014-19 are different and hence, they cannot be combined. Usually, the tariff allowed for the



assets put into commercial operation in 2009-14 tariff period is trued up at the end of the 2009-14 tariff period and the assets put into commercial operation in the 2014-19 tariff period is trued up at the end of the 2014-19 tariff period. Moreover, the “overall project cost” is arrived at only after the COD of all the assets covered in the transmission project and after the expiry of the “cut-off date” of the assets. As per the principles laid down by APTEL in judgement dated 14.9.2019, the initial spares are to be allowed as a percentage of the overall project cost. In the instant case, as stated above, some of the assets were put into commercial operation in the 2009-14 tariff periods and some in the 2014-19 tariff period and the “overall project cost” could be arrived at only on 31.3.2018, i.e. after the cut-off date of the last asset put into commercial operation, which was 17.10.2015 of Asset-D. Therefore, the Initial Spares are allowed on the basis of the cost of the individual assets in the 2014-19 tariff period and are allowed on the basis of the overall project cost in the 2019-24 period when the transmission assets are combined and the overall project cost is arrived at as per the judgement of APTEL. Accordingly, the details of Initial Spares allowed for the 2014-19 tariff period are as under:

Asset	Parts	Project cost up to cut-off date/ Plant & Machinery cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2009/2014 Tariff Regulations (%)	Initial Spares as per norms of 2009/2014 Tariff Regulations $D = [(A-B)*C / (100-C)]$ (₹ in lakh)	Initial Spares allowed (₹ in lakh)
		(A)	(B)	(C)	(D)	
Asset-A1	Sub-station	15839.80	349.92	2.50	397.18	349.92
Asset-A2	Transmission Line	4373.49	28.84	0.75	32.83	28.84
	Sub-station	2219.73	56.68	2.50	55.46	55.46
Asset-A3	Sub-station	750.92	19.05	2.50	18.77	18.77
Asset-A4	Sub-station	2984.13	74.95	2.50	74.59	74.59
Asset-B1	Sub-station	5582.50	94.61	4	228.66	94.61
Asset-B2	Sub-station	2316.23	29.42	4	95.28	29.42
Asset-B3	Sub-station	10497.82	328.29	4	423.73	328.29



	Transmission Line	2322.00	0.00	1	23.45	0.00
Asset-B4	Sub-station	2249.60	0.00	4	93.73	0.00
Asset-B5	Sub-station	7520.22	0.00	4	313.34	0.00
	Transmission Line	52516.07	582.51	1	524.58	524.58
Asset-B6	Sub-station	13024.16	125.06	4	537.46	125.06
Asset-C1	Sub-station	731.10	28.00	4	29.30	28.00
Asset-C2	Sub-station	2957.49	104.00	4	118.90	104.00
Asset-C3	Sub-station	2508.97	88.00	4	100.87	88.00
Asset-D	Sub-station	6447.49	28.28	4	267.47	28.28
	Transmission Line	153921.59	1459.21	1	1540.02	1459.21

### **Capital cost as on the COD**

35. Accordingly, the capital cost allowed as on 1.4.2014/COD is summarized as under:

(₹ in lakh)

Assets	Capital cost as on 1.4.2014/COD as per Auditor's Certificate	Less: IDC as on COD due to		Less: Disallowed IEDC	Less: Excess Initial Spares	Capital Cost as on 1.4.2014/ COD (on cash basis)
		IDC Disallowed	Un-discharged IDC			
Combined Asset-A	17536.25**	0.00	0.00	0.00	0.00	17536.25
Asset-B1	4226.89	21.60	0.00	2.15	0.00	4203.14
Asset-B2	1753.78	0.00	32.28	0.00	0.00	1721.50
Asset-B3	12623.62	170.83	219.58	6.86	0.00	12226.35
Asset-B4	1811.39	34.62	43.56	1.23	0.00	1731.99
Asset-B5	61581.51	0.00	0.00	0.00	57.93	61523.57
Asset-C1	755.64	40.53	6.05	1.53	0.00	707.53
Asset-C2	2129.30	56.76	38.50	53.71	0.00	1980.33
Asset-C3	1905.55	0.00	10.77	0.00	0.00	1894.78
Asset-D	167128.91	0.00	2764.11	0.00	0.00	164364.80

\*\* Commission vide order dated 7.9.2017 in petition no. 86/TT/2017 allowed capital cost of ₹17536.25 lakh as on 31.3.2014

36. COD of Asset-B5 is 30.7.2014 and is combined with Asset-B6 w.e.f. 31.7.2014 (COD of Asset-B6). The tariff for Asset-B5 is granted independently for only one day.

The capital cost as on COD considered for Asset-B6 is shown in table below:



(₹ in lakh)

Asset	Add: Capital cost as on COD considered for tariff computation of Asset-B5	Add: Additional Capitalization for one day i.e. from 30.7.2014 to 31.7.2014	Add: Capital cost as on COD as per Auditor Certificate of Asset-B6	Less: IDC discharged after COD	Total: Capital Cost as on COD of Asset-B6 (31.7.2014)
Asset-B6	61523.57	15.93	13190.80	99.23	74631.06

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

37. The Petitioner has claimed the following ACE (as per Form-7) for the transmission assets during 2014-19 tariff period:-

(₹ in lakh)

Asset	Additional Capital Expenditure (ACE)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-A	2526.55	3052.31	3040.32	550.69	157.16
Asset-B1	1691.16	179.14	112.32	0.0	0.00
Asset-B2	302.27	255.52	280.06	57.56	0.00
Asset-B3	4142.30	677.15	1781.3	568.09	224.6
Asset-B4	281.93	424.92	148.16	14.85	0.00
Asset-B5	15.93	0.00	0.00	0.00	0.00
Combined Assets-B5 and B6	4311.95	734.74	1199.57	146.12	248.77
Asset-C1	20.94	29.77	108.71	0.00	0.00
Asset-C2	0.00	1012.75	316.50	57.56	0.00
Asset-C3	18.44	588.50	364.10	57.56	0.00
Asset-D	0.00	4645.33	11699.88	3725.49	145.57

38. The Petitioner has submitted that ACE incurred for the transmission assets is on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date. ACE incurred after COD and up to the cut-off date has been claimed under Regulations 14(1)(i) (un-discharged liabilities) and 14(1)(ii) (work deferred for execution) and ACE incurred after cut-off date has been claimed under Regulation 14(3)(v) of the 2014 Tariff Regulations.



39. The Petitioner has also submitted that ACE up to 31.3.2019 has been considered in the Auditor's certificate as per actuals whereas ACE claimed for the period from 1.4.2019 to 31.3.2020 is on estimated basis and may vary due to final claim/reconciliation at the time of contract closing. The Petitioner has submitted contract-wise details along with LoA for balance and retention payments.

40. The cut-off date for Combined Asset-A, Assets-B1 to B6, C1 and C3 is 31.3.2017 and for Assets-C2 and D is 31.3.2018. It is observed that the total estimated completion cost including ACE from 2014-15 to 2018-19 period is within the approved apportioned capital cost. Therefore, the same has been considered for computation of the total capital cost as on 31.3.2019. The un-discharged IDC as on COD has been allowed as ACE in its respective year of discharge.

41. We have considered the submissions of the Petitioner. ACE claimed for the 2014-19 tariff period is allowed under Regulations 14(1) (i), 14(1) (ii) and 14(3) (v) of the 2014 Tariff Regulations. Accordingly, ACE allowed for the transmission assets is as under:

Asset	Additional Capital Expenditure (ACE)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-A	2526.55	3052.31	3040.32	550.69	157.16
Asset-B1	1691.16	179.14	112.32	-	-
Asset-B2	302.27	255.52	280.06	57.56	-
Asset-B3	4002.45	677.15	1781.30	568.09	224.60
Asset-B4	249.81	424.92	148.16	14.85	-
Asset-B5	15.93	Combined with Asset-B6			
Asset-B6	4311.95	734.74	1199.57	146.12	248.77
Asset-C1	20.94	29.77	108.71	-	-
Asset-C2	-	1012.75	316.50	57.56	-
Asset-C3	18.44	588.50	364.10	57.56	-
Asset-D	-	4645.33	11699.88	3725.49	145.57



### Capital Cost for the 2014-19 Tariff Period

42. Accordingly, the capital cost of the transmission assets considered as on 31.3.2019 for the tariff period 2014-19 is as under:

Asset	Apportioned approved Cost (RCE)	Capital Cost as on COD	Additional Capital Expenditure (ACE)					Capital Cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset-A	29398.57	17536.25	2526.55	3052.31	3040.32	550.69	157.16	26863.28
Asset-B1	6592.42	4203.14	1691.16	179.14	112.32	-	-	6185.76
Asset-B2	2998.15	1721.50	302.27	255.52	280.06	57.56	-	2616.91
Asset-B3	21475.58	12226.35	4002.45	677.15	1781.30	568.09	224.60	19479.94
Asset-B4	2857.18	1731.99	249.81	424.92	148.16	14.85	-	2569.73
Asset-B5	72000.08	61523.57	15.93	Combined with Asset-B6				61539.50
Combined Assets-B5 & B6	86302.13	74631.06	4311.95	734.74	1199.57	146.12	248.77	81272.21
Asset-C1	1241.13	707.53	20.94	29.77	108.71	-	-	866.95
Asset-C2	3040.68	1980.33	-	1012.75	316.50	57.56	-	3367.14
Asset-C3	3140.82	1894.78	18.44	588.50	364.10	57.56	-	2923.38
Asset-D	184995.33	164364.80	-	4645.33	11699.88	3725.49	145.57	184581.07

### Debt-Equity Ratio

43. The Petitioner has considered the debt-equity ratio of 70:30 as on COD and for ACE post COD. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during the 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of the debt-equity as on COD and 31.3.2019 considered for the purpose of tariff computation for the 2014-19 tariff period is as follows:-

Combined Asset-A	As on 1.4.2014		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	12275.38	70.00	18804.31	70.00
Equity	5260.87	30.00	8058.97	30.00
<b>Total</b>	<b>17536.25</b>	<b>100.00</b>	<b>26863.28</b>	<b>100.00</b>



Asset-B1	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	2942.20	70.00	4330.04	70.00
Equity	1260.94	30.00	1855.72	30.00
<b>Total</b>	<b>4203.14</b>	<b>100.00</b>	<b>6185.76</b>	<b>100.00</b>

Asset-B2	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	1205.05	70.00	1831.84	70.00
Equity	516.45	30.00	785.07	30.00
<b>Total</b>	<b>1721.50</b>	<b>100.00</b>	<b>2616.91</b>	<b>100.00</b>

Asset-B3	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	8558.45	70.00	13635.98	70.00
Equity	3667.90	30.00	5843.96	30.00
<b>Total</b>	<b>12226.35</b>	<b>100.00</b>	<b>19479.94</b>	<b>100.00</b>

Asset-B4	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	1212.39	70.00	1798.82	70.00
Equity	519.59	30.00	770.91	30.00
<b>Total</b>	<b>1731.99</b>	<b>100.00</b>	<b>2569.73</b>	<b>100.00</b>

Asset-B5	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	43066.51	70.00	43077.66	70.00
Equity	18457.06	30.00	18461.84	30.00
<b>Total</b>	<b>61523.57</b>	<b>100.00</b>	<b>61539.50</b>	<b>100.00</b>

Asset-B6	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	52241.74	70.00	56890.91	70.00
Equity	22389.32	30.00	24381.30	30.00
<b>Total</b>	<b>74631.06</b>	<b>100.00</b>	<b>81272.21</b>	<b>100.00</b>

Asset-C1	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	495.28	70.00	606.88	70.00
Equity	212.25	30.00	260.07	30.00
<b>Total</b>	<b>707.53</b>	<b>100.00</b>	<b>866.95</b>	<b>100.00</b>



Asset-C2	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	1386.23	70.00	2357.00	70.00
Equity	594.10	30.00	1010.14	30.00
<b>Total</b>	<b>1980.33</b>	<b>100.00</b>	<b>3367.14</b>	<b>100.00</b>

Asset-C3	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	1326.35	70.00	2046.37	70.00
Equity	568.43	30.00	877.01	30.00
<b>Total</b>	<b>1894.78</b>	<b>100.00</b>	<b>2923.38</b>	<b>100.00</b>

Asset-D	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	115055.36	70.00	129206.75	70.00
Equity	49309.44	30.00	55374.32	30.00
<b>Total</b>	<b>164364.80</b>	<b>100.00</b>	<b>184581.07</b>	<b>100.00</b>

### **Interest on Loan (IoL)**

44. The Petitioner has claimed IoL based on actual interest rates for each year during the 2014-19 period. The Petitioner has considered the weighted average rate of IoL on the basis of prevailing rates as on 1.4.2014 for respective loans. The Petitioner has submitted that the weighted average rate of IoL has been considered on the basis of rates prevailing as on 1.4.2014 and has prayed to consider floating rate of interest applicable during the 2014-19 period, if any, during the truing-up of tariff. IoL is allowed based on actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out as under:

- (i) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition.
- (ii) The repayment for the 2014-19 tariff period has been considered to be equal to the depreciation allowed for that period.

45. The details of trued up IoL allowed in respect of Combined Asset-A is as follows: -





(₹ in lakh)

<b>Combined Asset-A</b>					
<b>Particular</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Gross Normative Loan	12275.38	14043.97	16180.59	18308.82	18694.30
Cumulative Repayments up to Previous Year	196.04	1116.96	2166.63	3356.99	4635.42
Net Loan-Opening	12079.34	12927.02	14013.96	14951.83	14058.88
Additions	1768.59	2136.62	2128.22	385.48	110.01
Repayment during the year	920.92	1049.67	1190.36	1278.43	1293.71
Net Loan-Closing	12927.02	14013.96	14951.83	14058.88	12875.18
Average Loan	12503.18	13470.49	14482.90	14505.35	13467.03
Weighted Average Rate of Interest on Loan (%)	6.84	7.22	7.59	7.68	7.70
<b>Interest on Loan</b>	<b>854.75</b>	<b>972.18</b>	<b>1099.14</b>	<b>1114.53</b>	<b>1037.28</b>

46. Accordingly, IoL approved vide order dated 7.9.2017 in Petition No. 86/TT/2017, IoL claimed in the instant petition and trued-up IoL allowed in respect of the Combined Asset-A is shown in the table below:

(₹ in lakh)

<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Approved vide order dated 7.9.2017 in Petition No. 86/TT/2017	854.82	970.92	1079.43	1072.22	973.77
Claimed by the Petitioner in the instant petition	854.99	971.99	1098.44	1113.33	1035.55
Approved after true-up in this order	854.75	972.18	1099.14	1114.53	1037.28

47. The details of trued up IoL allowed in respect of Asset-B1 is as follows:-

(₹ in lakh)

<b>Asset-B1</b>					
<b>Particular</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Gross Normative Loan	2942.20	4126.01	4251.41	4330.04	4330.04
Cumulative Repayments up to Previous Year	0.00	266.57	582.52	906.16	1232.77
Net Loan-Opening	2942.20	3859.44	3668.89	3423.87	3097.26
Additions	1183.81	125.40	78.62	0.00	0.00
Repayment during the year	266.57	315.95	323.64	326.61	326.61
Net Loan-Closing	3859.44	3668.89	3423.87	3097.26	2770.66
Average Loan	3400.82	3764.17	3546.38	3260.57	2933.96
Weighted Average Rate of Interest on Loan (%)	8.54	8.61	8.65	8.63	8.62
<b>Interest on Loan</b>	<b>290.49</b>	<b>323.96</b>	<b>306.69</b>	<b>281.48</b>	<b>252.82</b>



48. Accordingly, IoL approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-B1 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	290.67	321.42	305.76	286.08	256.99
Claimed by the Petitioner in the instant petition	290.49	323.96	306.69	281.49	252.82
Approved after true-up in this order	290.49	323.96	306.69	281.48	252.82

49. The details of trued-up IoL allowed in respect of Asset-B2 is as follows:-

(₹ in lakh)					
Asset-B2					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1205.05	1416.64	1595.50	1791.54	1831.84
Cumulative Repayments up to Previous Year	0.00	98.87	212.48	340.22	476.87
Net Loan-Opening	1205.05	1317.76	1383.03	1451.33	1354.97
Additions	211.59	178.86	196.04	40.29	0.00
Repayment during the year	98.87	113.60	127.74	136.65	138.17
Net Loan-Closing	1317.76	1383.03	1451.33	1354.97	1216.79
Average Loan	1261.41	1350.39	1417.18	1403.15	1285.88
Weighted Average Rate of Interest on Loan (%)	8.40	8.44	8.42	8.37	8.34
<b>Interest on Loan</b>	<b>106.00</b>	<b>113.94</b>	<b>119.31</b>	<b>117.42</b>	<b>107.23</b>

50. Accordingly, the trued up IoL approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-B2 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	106.01	111.90	110.68	103.63	93.16
Claimed by the Petitioner in the instant petition	105.89	113.58	118.69	116.53	106.08
Approved after true-up in this order	106.00	113.94	119.31	117.42	107.23

51. The details of IoL allowed in respect of Asset-B3 is as follows:-



(₹ in lakh)

Asset-B3					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	8558.45	11360.16	11834.17	13081.09	13478.76
Cumulative Repayments up to Previous Year	0.00	615.44	1337.18	2114.98	2948.58
Net Loan-Opening	8558.45	10744.72	10497.00	10966.11	10530.17
Additions	2801.71	474.01	1246.92	397.66	157.22
Repayment during the year	615.44	721.74	777.80	833.61	850.40
Net Loan-Closing	10744.72	10497.00	10966.11	10530.17	9836.99
Average Loan	9651.59	10620.86	10731.55	10748.14	10183.58
Weighted Average Rate of Interest on Loan (%)	7.24	7.48	7.65	7.65	7.66
<b>Interest on Loan</b>	<b>698.99</b>	<b>794.34</b>	<b>821.15</b>	<b>822.58</b>	<b>779.66</b>

52. Accordingly, IoL approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-B3 is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	700.69	821.37	874.64	870.20	800.73
Claimed by the Petitioner in the instant petition	700.26	798.88	825.20	826.05	782.55
Approved after true-up in this order	698.99	794.34	821.15	822.58	779.66

53. The details of trued-up IoL allowed in respect of Asset-B4 is as follows:-

(₹ in lakh)

Asset-B4					
Particular	2014-15 (Pro-rata for 348 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1212.39	1387.27	1684.71	1788.42	1798.82
Cumulative Repayments up to Previous Year	0.00	92.27	205.29	332.47	463.87
Net Loan-Opening	1212.39	1295.00	1479.42	1455.96	1334.95
Additions	174.87	297.44	103.71	10.40	0.00
Repayment during the year	92.27	113.03	127.17	131.40	131.79
Net Loan-Closing	1295.00	1479.42	1455.96	1334.95	1203.16
Average Loan	1253.70	1387.21	1467.69	1395.45	1269.06
Weighted Average Rate of Interest on Loan (%)	8.09	8.16	8.21	8.20	8.19
<b>Interest on Loan</b>	<b>96.74</b>	<b>113.19</b>	<b>120.54</b>	<b>114.36</b>	<b>103.87</b>



54. Accordingly, IoL approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-B4 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 348 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	97.06	113.37	120.61	115.28	104.16
Claimed by the Petitioner in the instant petition	96.98	114.26	121.46	115.13	104.50
Approved after true-up in this order	96.74	113.19	120.54	114.36	103.87

55. The details of trued up IoL allowed in respect of Asset-B5 is as follows:-

(₹ in lakh)

Asset-B5	
Particular	2014-15 (Pro-rata for 1 day)
Gross Normative Loan	43066.51
Cumulative Repayments up to Previous Year	0.00
Net Loan-Opening	43066.51
Additions	11.15
Repayment during the year	5.91
Net Loan-Closing	43071.75
Average Loan	43069.13
Weighted Average Rate of Interest on Loan (%)	7.39
<b>Interest on Loan</b>	<b>8.72</b>

56. Accordingly, IoL approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-B5 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 1 day)
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	8.73
Claimed by the Petitioner in the instant petition	8.73
Approved after true-up in this order	8.72



57. The details of trued up IoL allowed in respect of Combined Assets-B5 and B6 are as follows:-

(₹ in lakh)

Combined Assets-B5 and B6					
Particular	2014-15 (Pro-rata for 244 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	52241.74	55260.11	55774.43	56614.13	56716.42
Cumulative Repayments up to Previous Year	5.91	2690.77	6837.61	11033.98	15265.31
Net Loan-Opening	52235.84	52569.34	48936.82	45580.15	41451.12
Additions	3018.37	514.32	839.70	102.29	174.48
Repayment during the year	2684.86	4146.84	4196.37	4231.33	4241.75
Net Loan-Closing	52569.34	48936.82	45580.15	41451.12	37383.85
Average Loan	52402.59	50753.08	47258.49	43515.63	39417.48
Weighted Average Rate of Interest on Loan (%)	7.14	7.28	7.53	7.55	7.56
<b>Interest on Loan</b>	<b>2502.74</b>	<b>3696.36</b>	<b>3559.20</b>	<b>3286.16</b>	<b>2979.56</b>

58. Accordingly, IoL approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, IoL claimed in the instant petition and trued-up IoL allowed in respect of Combined Assets-B5 and B6 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 244 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2015	2503.37	3740.01	3659.98	3439.69	3082.82
Claimed by the Petitioner in the instant petition	2504.88	3699.36	3561.96	3288.62	2981.67
Approved after true-up in this order	2502.74	3696.36	3559.20	3286.16	2979.56

59. The details of trued-up IoL allowed in respect of Asset-C1 is as follows:-

(₹ in lakh)

Asset-C1					
Particular	2014-15 (Pro-rata for 91 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	495.28	509.94	530.78	606.88	606.88
Cumulative Repayments up to Previous Year	0.00	9.45	48.70	91.61	137.38

Net Loan-Opening	495.28	500.49	482.08	515.27	469.50
Additions	14.66	20.84	76.10	0.00	0.00
Repayment during the year	9.45	39.25	42.91	45.77	45.77
Net Loan-Closing	500.49	482.08	515.27	469.50	423.72
Average Loan	497.88	491.28	498.68	492.39	446.61
Weighted Average Rate of Interest on Loan (%)	8.60	8.60	8.56	8.45	8.42
Interest on Loan	<b>10.67</b>	<b>42.23</b>	<b>42.70</b>	<b>41.58</b>	<b>37.61</b>

60. Accordingly, IoL Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-C1 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15 (Pro-rata for 91 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	10.87	44.61	44.46	41.56	37.71
Claimed by the Petitioner in the instant petition	10.68	42.24	42.70	41.58	37.61
Approved after true-up in this order	10.67	42.23	42.70	41.58	37.61

61. The details of trued-up IoL allowed in respect of Asset-C2 is as follows:-

(₹ in lakh)				
<b>Asset-C2</b>				
Particular	2015-16 (Pro-rata for 331 days)	2016-17	2017-18	2018-19
Gross Normative Loan	1386.23	2095.16	2316.71	2357.00
Cumulative Repayments up to Previous Year	0.00	118.74	285.13	461.40
Net Loan-Opening	1386.23	1976.42	2031.58	1895.61
Additions	708.93	221.55	40.29	0.00
Repayment during the year	118.74	166.39	176.27	177.78
Adjustment of cumulative repayment pertaining to the de-capitalised asset	0.00	0.00	0.00	0.00
Net Loan-Closing	1976.42	2031.58	1895.61	1717.83
Average Loan	1681.33	2004.00	1963.59	1806.72
Weighted Average Rate of Interest on Loan (%)	8.82	8.76	8.48	8.39
<b>Interest on Loan</b>	<b>134.10</b>	<b>175.54</b>	<b>166.44</b>	<b>151.62</b>



62. Accordingly, IoL approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-C2 is shown in the table below:

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 331 days)	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	123.92	150.57	143.04	129.92
Claimed by the Petitioner in the instant petition	134.10	175.54	166.44	151.62
Approved after True-up in this order	134.10	175.54	166.44	151.62

63. The details of trued up IoL allowed in respect of Asset-C3 is as follows:-

(₹ in lakh)

Asset-C3					
Particular	2014-15 (Pro-rata for 121 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1326.35	1339.26	1751.21	2006.08	2046.37
Cumulative Repayments upto Previous Year	0.00	33.33	149.88	291.58	444.42
Net Loan-Opening	1326.35	1305.93	1601.33	1714.50	1601.95
Additions	12.91	411.95	254.87	40.29	0.00
Repayment during the year	33.33	116.55	141.70	152.83	154.35
Net Loan-Closing	1305.93	1601.33	1714.50	1601.95	1447.60
Average Loan	1316.14	1453.63	1657.91	1658.23	1524.78
Weighted Average Rate of Interest on Loan (%)	8.408	8.344	8.340	8.182	8.155
<b>Interest on Loan</b>	<b>36.68</b>	<b>121.30</b>	<b>138.27</b>	<b>135.67</b>	<b>124.34</b>

64. Accordingly, IoL approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-C3 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 121 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	29.83	101.46	114.21	109.82	99.92
Claimed by the Petitioner in the instant petition	36.67	121.07	137.76	134.88	123.28



Approved after true-up in this order	36.68	121.30	138.27	135.67	124.34
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65. The details of trued up IoL allowed in respect of Asset-D is as follows:-

(₹ in lakh)

<b>Asset-D</b>				
<b>Particular</b>	<b>2015-16 (Pro-rata for 121 days)</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Gross Normative Loan	115055.36	118307.09	126497.01	129104.85
Cumulative Repayments up to Previous Year	0.00	4007.63	13221.27	22839.10
Net Loan-Opening	115055.36	114299.46	113275.74	106265.75
Additions	3251.73	8189.92	2607.84	101.90
Repayment during the year	4007.63	9213.63	9617.83	9716.66
Net Loan-Closing	114299.46	113275.74	106265.75	96650.99
Average Loan	114677.41	113787.60	109770.75	101458.37
Weighted Average Rate of Interest on Loan (%)	7.88	8.01	7.92	7.88
<b>Interest on Loan</b>	<b>4120.96</b>	<b>9118.50</b>	<b>8694.21</b>	<b>7992.47</b>

66. Accordingly, IoL approved vide order dated 26.5.2016 in Petition No. 266/TT/2015, IoL claimed in the instant petition and trued-up IoL allowed in respect of Asset-D is shown in the table below:

(₹ in lakh)

<b>Particulars</b>	<b>2015-16 (Pro-rata for 121 days)</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Approved vide order dated 26.5.2016 in Petition No. 266/TT/2015	4119.46	9048.55	8710.19	7995.27
Claimed by the Petitioner in the instant petition	4120.93	9118.35	8693.90	7992.07
Approved after true-up in this order	4120.96	9118.50	8694.21	7992.47

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

67. The Petitioner is entitled to Return on Equity for the transmission assets in terms of Regulations 24 and 25 of the 2014, Tariff Regulations. The Petitioner has submitted that they are liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 tariff period: -





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

68. MPPMCL has submitted that the Petitioner has grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 and has not placed on record the assessment orders for 2016-17 and 2017-18. For 2018-19, it has grossed up the RoE and has not claimed the effective tax rate based on actual taxes paid for 2018-19. MPPMCL has submitted that the Petitioner has neither submitted copy of assessment order for the 2014-15 and 2015-16 nor the audited accounts in respect of actual taxes paid for 2016-17 and 2017-18 has been enclosed in the instant petition. MPPMCL has further submitted that the in absence of these essential documents, it is not possible to scrutinize the claim of the Petitioner in a proper way.

69. In response, the Petitioner vide its rejoinder dated 20.7.2020 has submitted that the Income Tax assessment of the Petitioner has been completed and assessment orders have been issued by the Income Tax Department in case of 2014-15, 2015-16 and 2016-17 and the Income Tax returns have been filed with the Income Tax Department for the years 2017-18 and 2018-19. It was further submitted by the Petitioner that on the basis of the effective tax rate and Grossed up RoE tried-up accordingly for the 2014-19 tariff period has already been mentioned in the instant petition for prudence check. The Petitioner has further submitted that the assessment order for the 2014-15 and 2015-16 have already been submitted in Technical Validation reply in Petition No. 20/TT/2020 and has also placed on record a copy of the assessment order for the year 2016-17 along with the rejoinder.



70. We have considered the submissions of the Petitioner and MPPMCL. As regards the MPPMCL's contentions that the grossed up rate of RoE for the period 2016-17 and 2017-18 is not based on the MAT rates approved by the Income Tax Authorities, it is observed that the effective rate of tax considered for 2014-15, 2015-16 and 2016-17 are based on Assessment orders issued by Income Tax Authorities and the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed for the purpose of grossing up the RoE rate of respective years. In view of the clarification given by the Petitioner, we are of the view that there is no merit in the contentions advanced by MPPMCL. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has already arrived at the effective tax rate for the Petitioner based on the notified MAT rates. The relevant portion of the order dated 27.4.2020 is as under:-

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

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

<b>Year</b>	<b>Notified MAT rates (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
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71. 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 rate of RoE for trueing-up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Accordingly, the grossed up RoE rate is as follows:

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

72. The details of trued-up RoE allowed for the Combined Asset-A is as follows:-

(₹ in lakh)

Combined Asset-A					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Net Opening Equity	5260.87	6018.83	6934.52	7846.61	8011.82
Increase in Equity due to addition during the year	757.96	915.69	912.10	165.21	47.15
Closing Equity	6018.83	6934.52	7846.61	8011.82	8058.97
Average Equity	5639.85	6476.67	7390.57	7929.22	8035.40
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Applicable RoE Rate (%)	19.610	19.705	19.705	19.705	19.758
<b>Return on Equity for the year</b>	<b>1105.97</b>	<b>1276.23</b>	<b>1456.31</b>	<b>1562.45</b>	<b>1587.63</b>

73. Accordingly, RoE approved vide order dated 7.9.2017 in Petition No. 86/TT/2017, claimed by the Petitioner in the instant petition and trued-up RoE allowed in respect of the Combined Asset-A is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.9.2017 in Petition No. 86/TT/2017	1106.11	1270.35	1437.24	1514.36	1514.36
Claimed by the Petitioner in the instant petition	1107.35	1277.41	1456.84	1562.98	1588.17



Approved after True-up in this order	1105.97	1276.23	1456.31	1562.45	1587.63
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74. The details of trued-up RoE allowed for Asset-B1 is as follows:-

(₹ in lakh)

Asset-B1					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Net Opening Equity	1260.94	1768.29	1822.03	1855.72	1855.72
Increase in Equity due to addition during the year	507.35	53.74	33.70	0.00	0.00
Closing Equity	1768.29	1822.03	1855.72	1855.72	1855.72
Average Equity	1514.61	1795.16	1838.88	1855.72	1855.72
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Applicable RE Rate (%)	19.610	19.705	19.705	19.705	19.758
<b>Return on Equity for the year</b>	<b>297.02</b>	<b>353.74</b>	<b>362.35</b>	<b>365.67</b>	<b>366.65</b>

75. Accordingly, RoE approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, RoE claimed by the Petitioner in the instant petition and trued-up RoE allowed in respect of Asset-B1 is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 26.4.2016 in Petition No. 244/TT/2014	297.02	348.51	357.68	365.11	365.11
Claimed by the Petitioner in the instant petition	297.24	353.92	362.35	365.67	366.66
Approved after true-up in this order	297.02	353.74	362.35	365.67	366.65

76. The details of trued up RoE allowed for Asset-B2 is as follows:-

(₹ in lakh)

Asset-B2					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Net Opening Equity	516.45	607.13	683.79	767.80	785.07
Increase in Equity due to addition during the year	90.68	76.66	84.02	17.27	0.00
Closing Equity	607.13	683.79	767.80	785.07	785.07
Average Equity	561.79	645.46	725.79	776.44	785.07
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Applicable RoE Rate (%)	19.610	19.705	19.705	19.705	19.758
<b>Return on Equity for the year</b>	<b>110.17</b>	<b>127.19</b>	<b>143.02</b>	<b>153.00</b>	<b>155.11</b>



77. Accordingly, RoE approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, RoE claimed by the Petitioner in the instant petition and trued-up RoE allowed in respect of Asset-B2 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 26.4.2016 in Petition No. 244/TT/2014	110.17	124.16	132.23	135.20	135.20
Claimed by the Petitioner in the instant petition	110.25	127.25	143.02	153.00	155.12
Approved after True-up in this order	110.17	127.19	143.02	153.00	155.11

78. The details of RoE allowed for Asset-B3 is as follows:-

(₹ in lakh)					
Asset-B3					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Net Opening Equity	3667.90	4868.63	5071.77	5606.15	5776.58
Increase in Equity due to addition during the year	1200.73	203.14	534.38	170.43	67.38
Closing Equity	4868.63	5071.77	5606.15	5776.58	5843.96
Average Equity	4268.26	4970.20	5338.96	5691.37	5810.27
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Applicable ROE Rate (%)	19.610	19.705	19.705	19.705	19.758
<b>Return on Equity for the year</b>	<b>837.01</b>	<b>979.38</b>	<b>1052.04</b>	<b>1121.48</b>	<b>1147.99</b>

79. Accordingly, RoE approved vide order dated 26.4.2016 in Petition No. 244/TT/2015, claimed by the Petitioner in the instant petition and trued-up RoE allowed in respect of Asset-B3 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	838.66	1010.24	1118.26	1176.54	1176.54
Claimed by the Petitioner in the instant petition	839.30	985.67	1057.84	1127.28	1153.80
Approved after True-up in this order	837.01	979.38	1052.04	1121.48	1147.99



80. The details of trued-up RoE allowed for Asset-B4 is as follows:-

(₹ in lakh)

<b>Asset-B4</b>					
<b>Particular</b>	<b>2014-15 (Pro-rata for 348 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Net Opening Equity	519.59	594.53	722.00	766.45	770.91
Increase in Equity due to addition during the year	74.93	127.48	44.45	4.46	0.00
Closing Equity	594.53	722.00	766.45	770.91	770.91
Average Equity	557.06	658.26	744.23	768.68	770.91
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Applicable ROE Rate (%)	19.610	19.705	19.705	19.705	19.758
<b>Return on Equity for the year</b>	<b>104.15</b>	<b>129.71</b>	<b>146.65</b>	<b>151.47</b>	<b>152.32</b>

81. Accordingly, RoE approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and trued-up RoE allowed in respect of Asset-B4 is shown in the table below:

(₹ in lakh)

<b>Particulars</b>	<b>2014-15 (Pro-rata for 348 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	104.45	129.47	146.33	151.57	151.57
Claimed by the Petitioner in the instant petition	104.52	131.04	147.91	152.73	153.58
Approved after true-up in this order	104.15	129.71	146.65	151.47	152.32

82. The details of trued-up RoE allowed for Asset-B5 is as follows:-

(₹ in lakh)

<b>Asset-B5</b>	
<b>Particular</b>	<b>2014-15 (Pro-rata for 1 day)</b>
Net Opening Equity	18457.06
Increase in Equity due to addition during the year	4.78
Closing Equity	18461.84
Average Equity	18459.45
Return on Equity (Base Rate) (%)	15.500
Tax Rate applicable (%)	20.961
Applicable RE Rate (%)	19.610



<b>Return on Equity for the year</b>	<b>9.92</b>
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83. Accordingly, RoE approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and trued-up RoE allowed in respect of Asset-B5 is shown in the table below:

<b>Particulars</b>	<b>(₹ in lakh)</b>
	<b>2014-15 (Pro-rata for 1 day)</b>
Allowed earlier in order dated 26.4.2016 in Petition No. 244/TT/2014	9.92
Claimed by the Petitioner in the instant petition	9.93
Approved after true-up in this order	9.92

84. The details of trued-up RoE allowed for the Combined Assets-B5 and B6 is as follows:-

<b>Combined Assets-B5 and B6</b>					
<b>Particular</b>	<b>(₹ in lakh)</b>				
	<b>2014-15 (Pro-rata for 244 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Net Opening Equity	22389.32	23682.90	23903.32	24263.19	24307.02
Increase in Equity due to addition during the year	1293.58	220.42	359.87	43.83	74.29
Closing Equity	23682.90	23903.32	24263.19	24307.02	24381.30
Average Equity	23036.11	23793.11	24083.25	24285.10	24344.16
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Applicable ROE Rate (%)	19.610	19.705	19.705	19.705	19.758
<b>Return on Equity for the year</b>	<b>3019.84</b>	<b>4688.43</b>	<b>4745.61</b>	<b>4785.38</b>	<b>4809.92</b>

85. Accordingly, RoE approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and trued-up RoE allowed in respect of Combined Assets-B5 and B 6 is shown in the table below:

<b>Particulars</b>	<b>(₹ in lakh)</b>				
	<b>2014-15 (Pro-rata for 244 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed earlier in order dated 26.4.2016 in Petition No. 244/TT/2014	3020.55	4711.78	4852.87	4927.46	4927.46



Claimed by the Petitioner in the instant petition	3024.43	4694.24	4749.03	4788.81	4813.39
Approved after true-up in this order	3019.84	4688.43	4745.61	4785.38	4809.92

86. The details of trued-up RoE allowed for Asset-C1 is as follows:-

(₹ in lakh)

Asset-C1					
Particular	2014-15 (Pro-rata for 91 days)	2015-16	2016-17	2017-18	2018-19
Net Opening Equity	212.25	218.53	227.46	260.07	260.07
Increase in Equity due to addition during the year	6.28	8.93	32.61	0.00	0.00
Closing Equity	218.53	227.46	260.07	260.07	260.07
Average Equity	215.39	223.00	243.77	260.07	260.07
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Applicable ROE Rate (%)	19.610	19.705	19.705	19.705	19.758
<b>Return on Equity for the year</b>	<b>10.53</b>	<b>43.94</b>	<b>48.03</b>	<b>51.25</b>	<b>51.38</b>

87. Accordingly, RoE approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, claimed by the Petitioner in the instant petition and trued-up RoE allowed in respect of Asset-C1 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 91 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 28.4.2016 in Petition No. 409/TT/2014	10.60	45.43	48.55	49.29	49.29
Claimed by the Petitioner in the instant petition	10.54	43.96	48.03	51.25	51.38
Approved after true-up in this order	10.53	43.94	48.03	51.25	51.38

88. The details of trued-up RoE allowed for Asset-C2 is as follows:-

(₹ in lakh)

Asset-C2				
Particular	2015-16 (Pro-rata for 331 days)	2016-17	2017-18	2018-19
Net Opening Equity	594.10	897.92	992.87	1010.14
Increase in Equity due to addition	303.82	94.95	17.27	0.00





during the year				
Closing Equity	897.92	992.87	1010.14	1010.14
Average Equity	746.01	945.39	1001.50	1010.14
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	21.342	21.342	21.342	21.549
Applicable ROE Rate (%)	19.705	19.705	19.705	19.758
<b>Return on Equity for the year</b>	<b>132.94</b>	<b>186.29</b>	<b>197.35</b>	<b>199.58</b>

89. Accordingly, RoE approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, claimed by the Petitioner in the instant petition and trued-up RoE allowed in respect of Asset-C2 is shown in the table below:

Particulars	(₹ in lakh)			
	2015-16 (Pro-rata for 331 days)	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	124.48	161.78	167.02	167.02
Claimed by the Petitioner in the instant petition	133.01	186.29	197.35	199.58
Approved after true-up in this order	132.94	186.29	197.35	199.58

90. The details of trued up RoE allowed for Asset-C3 is as follows:-

Particular	Asset-C3				
	2014-15 (Pro-rata for 121 days)	2015-16	2016-17	2017-18	2018-19
Net Opening Equity	568.43	573.96	750.51	859.74	877.01
Increase in Equity due to addition during the year	5.53	176.55	109.23	17.27	0.00
Closing Equity	573.96	750.51	859.74	877.01	877.01
Average Equity	571.20	662.24	805.13	868.37	877.01
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Applicable ROE Rate (%)	19.610	19.705	19.705	19.705	19.758
<b>Return on Equity for the year</b>	<b>37.13</b>	<b>130.49</b>	<b>158.65</b>	<b>171.11</b>	<b>173.28</b>

91. Accordingly, RoE approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, claimed by the Petitioner in the instant petition and trued-up RoE allowed in respect of Asset-C3 is shown in the table below:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	30.20	107.39	128.23	133.20	133.20
Claimed by the Petitioner in the instant petition	37.16	130.56	158.65	171.11	173.28
Approved after true-up in this order	37.13	130.49	158.65	171.11	173.28

92. The details of trued-up RoE allowed for Asset-D is as follows:-

(₹ in lakh)

Asset-D				
Particular	2015-16	2016-17	2017-18	2018-19
Net Opening Equity	49309.44	50703.04	54213.00	55330.65
Increase in Equity due to addition during the year	1393.60	3509.96	1117.65	43.67
Closing Equity	50703.04	54213.00	55330.65	55374.32
Average Equity	50006.24	52458.02	54771.82	55352.48
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	21.342	21.342	21.342	21.549
Applicable RoE Rate (%)	19.705	19.705	19.705	19.758
<b>Return on Equity for the year</b>	<b>4496.10</b>	<b>10336.85</b>	<b>10792.79</b>	<b>10936.54</b>

93. Accordingly, RoE approved vide order dated 26.4.2016 in Petition No. 266/TT/2015, claimed by the Petitioner in the instant petition and trued-up RoE allowed in respect of Asset-D is shown in the table below:

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 167 days)	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 266/TT/2015	4474.42	10186.04	10504.58	10579.95
Claimed by the Petitioner in the instant petition	4498.38	10336.85	10792.79	10936.54
Approved after true-up in this order	4496.10	10336.85	10792.79	10936.54

### Depreciation

94. Assets-A1 to A4 achieved COD during the 2009-14 tariff period and the tariff from the date of commercial operation to 31.3.2014 was allowed vide order dated 29.1.2016 in Petition No. 303/TT/2013 in respect of Assets-A1 and A2 and vide order



dated 18.3.2016 in Petition No. 48/TT/2014 in respect of Assets-A3 and A4. Further, the tariff of the 2009-14 period was trued-up and tariff for the 2014-19 tariff period was allowed vide order dated 7.9.2017 in Petition No. 86/TT/2017. Assets-B1 to B6, C1 to C3 and D were put into commercial operation during the 2014-19 period and the tariff from the date of commercial operation to 31.3.2019 was allowed vide order dated 26.4.2016 in Petition No. 244/TT/2014, vide order dated 28.4.2016 in Petition No. 409/TT/2014 and vide order dated 26.5.2016 in Petition No.266/TT/2015. In Petition Nos. 86/TT/2017, 244/TT/2014, 409/TT/2014 and 266/TT/2015 for tariff determination of the transmission assets for the 2014-19 tariff period, the Petitioner had claimed the cost of IT equipment as part of the sub-station cost and therefore depreciation for IT equipment was allowed @5.28% of the corresponding capital cost. The Petitioner now at the time of truing-up for the 2014-19 tariff period has segregated the IT equipment cost from sub-station cost and has considered depreciation rate for IT equipment @ 15% and the salvage value as NIL as per the 2014 Tariff Regulations.

95. Similar issue had come up in Petition No. 19/TT/2020 wherein the Commission vide order dated 9.5.2020 held as under:

*“31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012 and 9.5.2013 in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards “IT Equipment” in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014- 19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations(the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to “IT Equipment”. The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the*

*first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the substation upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations."*

96. In line with the above order, IT Equipment has been considered as part of the sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period and depreciation is allowed @ 5.28% as part of the sub-station. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 of the 2019 Tariff Regulations. The Gross Block during the tariff period 2014-19 has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is given in Annexure-I. The WAROD has been worked out after taking into account the depreciation rate as prescribed in the 2014, Tariff Regulations.

97. The trued-up depreciation allowed for the Combined Asset-A is as under:-

(₹ in lakh)

<b>Combined Asset-A</b>					
<b>Particular</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Gross Block	17536.25	20062.80	23115.11	26155.43	26706.12
Additional Capitalisation	2526.55	3052.31	3040.32	550.69	157.16
Closing Gross Block	20062.80	23115.11	26155.43	26706.12	26863.28
Average Gross Block	18799.53	21588.96	24635.27	26430.78	26784.70
Balance useful life (at the beginning of the year)	25	24	23	22	21
Rate of Depreciation (%)	4.90	4.86	4.83	4.84	4.83
Aggregate Depreciable	15829.35	18298.78	21033.95	22649.91	22968.44



Value					
<b>Depreciation during the year</b>	<b>920.92</b>	<b>1049.67</b>	<b>1190.36</b>	<b>1278.43</b>	<b>1293.71</b>
Aggregate Cumulative Depreciation	1116.96	2166.63	3356.99	4635.42	5929.13
Remaining Aggregate Depreciable Value	14712.40	16132.15	17676.97	18014.49	17039.31

98. Accordingly, the depreciation approved vide order dated 7.9.2017 in Petition No. 86/TT/2017, claimed by the Petitioner in the instant petition and trued-up depreciation allowed in respect of Combined Asset-A is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.9.2017 in Petition No. 86/TT/2017	920.81	1049.46	1175.60	1236.49	1236.49
Claimed by the Petitioner in the instant petition	926.60	1056.18	1196.86	1284.94	1300.21
Approved after True-up in this order	920.92	1049.67	1190.36	1278.43	1293.71

99. The trued-up depreciation allowed for Asset-B1 is as under:-

(₹ in lakh)					
<b>Asset-B1</b>					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	4203.14	5894.30	6073.44	6185.76	6185.76
Additional Capitalisation	1691.16	179.14	112.32	0.00	0.00
Closing Gross Block	5894.30	6073.44	6185.76	6185.76	6185.76
Average Gross Block	5048.72	5983.87	6129.60	6185.76	6185.76
Balance useful life (at the beginning of the year)	25	24	23	22	21
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Aggregate Depreciable Value	4543.85	5385.48	5516.64	5567.18	5567.18
<b>Depreciation during the year</b>	<b>266.57</b>	<b>315.95</b>	<b>323.64</b>	<b>326.61</b>	<b>326.61</b>
Aggregate Cumulative Depreciation	266.57	582.52	906.16	1232.77	1559.38
Remaining Aggregate Depreciable Value	4277.28	4802.96	4610.48	4334.41	4007.80

100. Accordingly, the depreciation approved vide order dated 26.4.2016 in Petition No. 244/TT/2016, claimed by the Petitioner in the instant petition and trued-up depreciation allowed in respect of Asset-B1 is shown in the table below:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 26.4.2016 in Petition No.244/TT/2014	266.57	312.79	321.02	327.69	327.69
Claimed by the Petitioner in the instant petition	266.57	315.95	323.64	326.61	326.61
Approved after True-up in this order	266.57	315.95	323.64	326.61	326.61

101. The trued-up depreciation allowed for Asset-B2 is as under:-

(₹ in lakh)

Asset-B2					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	1721.50	2023.77	2279.29	2559.35	2616.91
Additional Capitalisation	302.27	255.52	280.06	57.56	0.00
Closing Gross Block	2023.77	2279.29	2559.35	2616.91	2616.91
Average Gross Block	1872.63	2151.53	2419.32	2588.13	2616.91
Balance useful life (at the beginning of the year)	25	24	23	22	21
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Aggregate Depreciable Value	1685.37	1936.37	2177.39	2329.31	2355.22
<b>Depreciation during the year</b>	<b>98.87</b>	<b>113.60</b>	<b>127.74</b>	<b>136.65</b>	<b>138.17</b>
Aggregate Cumulative Depreciation	98.87	212.48	340.22	476.87	615.04
Remaining Aggregate Depreciable Value	1586.49	1723.90	1837.17	1852.45	1740.18

102. Accordingly, the depreciation approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and trued-up depreciation allowed in respect of Asset-B2 is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 26.4.2016 in Petition No. 244/TT/2014	98.88	111.44	118.68	121.34	121.34
Claimed by the Petitioner in the instant petition	101.61	116.75	130.89	139.80	141.32
Approved after True-up in this order	98.87	113.60	127.74	136.65	138.17

103. The trued-up depreciation allowed for Asset-B3 is as under:-



(₹ in lakh)

Asset-B3					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	12226.35	16228.80	16905.95	18687.25	19255.34
Additional Capitalisation	4002.45	677.15	1781.30	568.09	224.60
Closing Gross Block	16228.80	16905.95	18687.25	19255.34	19479.94
Average Gross Block	14227.57	16567.37	17796.60	18971.29	19367.64
Balance useful life (at the beginning of the year)	26	25	24	23	22
Rate of Depreciation (%)	4.33	4.36	4.37	4.39	4.39
Aggregate Depreciable Value	11320.57	13406.90	14513.20	15570.42	15927.13
<b>Depreciation during the year</b>	<b>615.44</b>	<b>721.74</b>	<b>777.80</b>	<b>833.61</b>	<b>850.40</b>
Aggregate Cumulative Depreciation	615.44	1337.18	2114.98	2948.58	3798.99
Remaining Aggregate Depreciable Value	10705.13	12069.72	12398.22	12621.84	12128.14

104. Accordingly, the depreciation approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and trued-up depreciation allowed in respect of Asset-B3 is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 26.4.2016 in Petition No. 244/TT/2014	617.35	750.93	830.02	871.96	871.96
Claimed by the Petitioner in the instant petition	619.59	729.37	785.43	841.24	858.04
Approved after true-up in this order	615.44	721.74	777.80	833.61	850.40

105. The trued-up depreciation allowed for Asset-B4 is as under:-

(₹ in lakh)

Asset-B4					
Particular	2014-15 (Pro-rata for 348 days)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	1731.99	1981.80	2406.72	2554.88	2569.73
Additional Capitalisation	249.81	424.92	148.16	14.85	0.00
Closing Gross Block	1981.80	2406.72	2554.88	2569.73	2569.73
Average Gross Block	1856.89	2194.26	2480.80	2562.30	2569.73
Balance useful life (at the beginning of the year)	25	24	23	22	21
Rate of Depreciation (%)	5.21	5.15	5.13	5.13	5.13
Aggregate Depreciable Value	1671.20	1974.83	2232.72	2306.07	2312.75
<b>Depreciation during the year</b>	<b>92.27</b>	<b>113.03</b>	<b>127.17</b>	<b>131.40</b>	<b>131.79</b>
Aggregate Cumulative	92.27	205.29	332.47	463.87	595.66



Depreciation					
Remaining Aggregate Depreciable Value	1578.94	1769.54	1900.25	1842.20	1717.09

106. Accordingly, the depreciation approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and trued-up depreciation allowed in respect of Asset-B4 is shown in the table below:

Particulars	(₹ in lakh)				
	2014-15 (Pro-rata for 348 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 26.4.2016 in Petition No. 244/TT/2014	92.53	113.51	127.66	132.14	132.14
Claimed by the Petitioner in the instant petition	93.18	114.84	128.99	133.22	133.61
Approved after true-up in this order	92.27	113.03	127.17	131.40	131.79

107. The trued-up depreciation allowed for Asset-B5 is as under:-

Particular	(₹ in lakh)
	2014-15 (Pro-rata for 1 day)
Opening Gross Block	61523.57
Additional Capitalisation	15.93
Closing Gross Block	61539.50
Average Gross Block	61531.54
Balance useful life (at the beginning of the year)	34
Rate of Depreciation (%)	5.22
Aggregate Depreciable Value	55378.38
<b>Depreciation during the year</b>	<b>5.91</b>
Aggregate Cumulative Depreciation	5.91
Remaining Aggregate Depreciable Value	55372.48

108. Accordingly, the depreciation approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and trued-up depreciation allowed in respect of Asset-B5 are shown in the table below:





Particulars	(₹ in lakh)
	2014-15 (Pro-rata for 1 day)
Allowed earlier in order dated 26.4.2016 in Petition No. 244/TT/2015	8.80
Claimed by the Petitioner in the instant petition	8.81
Approved after true-up in this order	5.91

109. The trued-up depreciation allowed for the Combined Assets-B5 and B6 is as under:-

(₹ in lakh)					
Combined Assets-B5 & B6					
Particular	2014-15 (Pro-rata for 244 days)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	74631.06	78943.01	79677.75	80877.32	81023.44
Additional Capitalisation	4311.95	734.74	1199.57	146.12	248.77
Closing Gross Block	78943.01	79677.75	80877.32	81023.44	81272.21
Average Gross Block	76787.04	79310.38	80277.54	80950.38	81147.83
Balance useful life (at the beginning of the year)	34	33	32	31	30
Rate of Depreciation (%)	5.23	5.23	5.23	5.23	5.23
Aggregate Depreciable Value	69108.33	71379.34	72249.78	72855.34	73033.04
<b>Depreciation during the year</b>	<b>2684.86</b>	<b>4146.84</b>	<b>4196.37</b>	<b>4231.33</b>	<b>4241.75</b>
Aggregate Cumulative Depreciation	2690.77	6837.61	11033.98	15265.31	19507.06
Remaining Aggregate Depreciable Value	66417.56	64541.73	61215.80	57590.04	53525.98

110. Accordingly, the depreciation approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and trued-up depreciation allowed in respect of Combined Assets-B5 and B6 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15 (Pro-rata for 244 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 26.4.2016 in Petition	2685.49	4187.77	4311.83	4377.47	4377.47



No. 244/TT/2014					
Claimed by the Petitioner in the instant petition	2687.81	4151.27	4200.79	4235.75	4246.17
Approved after True-up in this order	2684.86	4146.84	4196.37	4231.33	4241.75

111. The trued-up depreciation allowed for Asset-C1 is as under:-

(₹ in lakh)

Asset-C1					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	707.53	728.47	758.24	866.95	866.95
Additional Capitalisation	20.94	29.77	108.71	0.00	0.00
Closing Gross Block	728.47	758.24	866.95	866.95	866.95
Average Gross Block	718.00	743.36	812.60	866.95	866.95
Balance useful life (at the beginning of the year)	25	25	24	23	22
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Aggregate Depreciable Value	646.20	669.02	731.34	780.26	780.26
<b>Depreciation during the year</b>	<b>9.45</b>	<b>39.25</b>	<b>42.91</b>	<b>45.77</b>	<b>45.77</b>
Aggregate Cumulative Depreciation	9.45	48.70	91.61	137.38	183.16
Remaining Aggregate Depreciable Value	636.75	620.32	639.73	642.87	597.10

112. Accordingly, the depreciation approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, claimed by the Petitioner in the instant petition and trued-up depreciation allowed in respect of Asset-C1 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 91 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 28.4.2016 in Petition No. 409/TT/2014	9.51	40.79	43.59	44.25	44.25
Claimed by the Petitioner in the instant petition	9.45	39.25	42.91	45.77	45.77
Approved after True-up in this order	9.45	39.25	42.91	45.77	45.77

113. The trued-up depreciation allowed for Asset-C2 is as under:-

(₹ in lakh)

Asset-C2				
Particular	2015-16 (Pro-rata for 331 days)	2016-17	2017-18	2018-19
Opening Gross Block	1980.33	2993.08	3309.58	3367.14



Additional Capitalisation	1012.75	316.50	57.56	0.00
Closing Gross Block	2993.08	3309.58	3367.14	3367.14
Average Gross Block	2486.71	3151.33	3338.36	3367.14
Balance useful life (at the beginning of the year)	25	24	23	22
Rate of Depreciation (%)	5.28	5.28	5.28	5.28
Aggregate Depreciable Value	2238.03	2836.20	3004.52	3030.43
<b>Depreciation during the year</b>	<b>118.74</b>	<b>166.39</b>	<b>176.27</b>	<b>177.78</b>
Aggregate Cumulative Depreciation	118.74	285.13	461.40	639.18
Remaining Aggregate Depreciable Value	2119.29	2551.06	2543.13	2391.24

114. Accordingly, the depreciation approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, claimed by the Petitioner in the instant petition and trued-up depreciation allowed in respect of Asset-C2 is shown in the table below:

Particulars	(₹ in lakh)			
	2015-16 (Pro-rata for 331 days)	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	111.73	145.19	149.90	149.90
Claimed by the Petitioner in the instant petition	118.74	166.39	176.27	177.78
Approved after true-up in this order	118.74	166.39	176.27	177.78

115. The trued-up depreciation allowed for Asset-C3 is as under:-

Particular	Asset-C3				
	2014-15 (Pro-rata for 121 days)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	1894.78	1913.22	2501.72	2865.82	2923.38
Additional Capitalisation	18.44	588.50	364.10	57.56	0.00
Closing Gross Block	1913.22	2501.72	2865.82	2923.38	2923.38
Average Gross Block	1904.00	2207.47	2683.77	2894.60	2923.38
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Aggregate Depreciable Value	1713.60	1986.72	2415.39	2605.14	2631.04
Balance useful life (at the beginning of the year)	25	25	24	23	22
<b>Depreciation during the year</b>	<b>33.33</b>	<b>116.55</b>	<b>141.70</b>	<b>152.83</b>	<b>154.35</b>
Aggregate Cumulative Depreciation	33.33	149.88	291.58	444.42	598.77
Remaining Aggregate	1680.27	1836.84	2123.81	2160.72	2032.27



Depreciable Value					
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116. Accordingly, the depreciation approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, claimed by the Petitioner in the instant petition and trued-up depreciation allowed in respect of Asset-C3 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 121 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	27.10	96.38	115.08	119.55	119.55
Claimed by the Petitioner in the instant petition	34.33	120.00	145.15	156.28	157.80
Approved after True-up in this order	<b>33.33</b>	<b>116.55</b>	<b>141.70</b>	<b>152.83</b>	<b>154.35</b>

117. The trued-up depreciation allowed for Asset-D is as under:-

(₹ in lakh)

Asset-D				
Particular	2015-16 (Pro-rata for 167 days)	2016-17	2017-18	2018-19
Opening Gross Block	164364.80	169010.13	180710.01	184435.50
Additional Capitalisation	4645.33	11699.88	3725.49	145.57
Closing Gross Block	169010.13	180710.01	184435.50	184581.07
Average Gross Block	166687.47	174860.07	182572.76	184508.29
Balance useful life (at the beginning of the year)	35	35	34	33
Rate of Depreciation (%)	5.27	5.27	5.27	5.27
Aggregate Depreciable Value	150018.72	157374.06	164315.48	166057.46
<b>Depreciation during the year</b>	<b>4007.63</b>	<b>9213.63</b>	<b>9617.83</b>	<b>9716.66</b>
Aggregate Cumulative Depreciation	4007.63	13221.27	22839.10	32555.76
Remaining Aggregate Depreciable Value	146011.09	144152.80	141476.38	133501.69

118. Accordingly, the depreciation approved vide order dated 26.5.2016 in Petition No. 266/TT/2015, claimed by the Petitioner in the instant petition and trued-up depreciation allowed in respect of Asset-D is shown in the table below:

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 167 days)	2016-17	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 266/TT/2015	4007.63	9121.27	9402.77	9468.05
Claimed by the Petitioner in the instant petition	4008.43	9215.40	9619.61	9718.44
Approved after true-up in this order	4007.63	9213.63	9617.83	9716.66

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

119. The details of the O&M Expenses allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for Combined Asset-A for the 2014-19 tariff period are as under:-

(₹ in lakh)

Combined Asset-A					
Particulars	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19
<b>Sub-station Bays</b>					
765 kV Bay (AIS) at Jabalpur Pooling Station and Jabalpur Sub-station	2	2	2	2	2
Norm (₹ lakh/bay)	84.42	87.22	90.12	93.11	96.20
<b>765 kV Sub-station O&amp;M</b>	<b>168.84</b>	<b>174.44</b>	<b>180.24</b>	<b>186.22</b>	<b>192.40</b>
400 kV Bay (AIS) at Jabalpur Pooling Station	6	6	6	6	6
Norm (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
<b>400 kV Sub-station O&amp;M</b>	<b>361.80</b>	<b>373.80</b>	<b>386.22</b>	<b>399.06</b>	<b>412.26</b>
<b>Total Sub-station O&amp;M</b>	<b>530.64</b>	<b>548.24</b>	<b>566.46</b>	<b>585.28</b>	<b>604.66</b>
<b>Transmission Line</b>					
400kV Jabalpur-Jabalpur PS D/C line (km)	15.456	15.456	15.456	15.456	15.456
Norm (₹ lakh/km)	1.062	1.097	1.133	1.171	1.21
<b>Total transmission Line O&amp;M</b>	<b>16.41</b>	<b>16.96</b>	<b>17.51</b>	<b>18.10</b>	<b>18.70</b>
<b>Total O&amp;M Expenses</b>	<b>547.05</b>	<b>565.20</b>	<b>583.97</b>	<b>603.38</b>	<b>623.36</b>

120. Accordingly, the O&M Expenses approved vide order dated 7.9.2017 in Petition No. 86/TT/2017, claimed by the Petitioner in the instant petition and trued-up O&M Expenses allowed in respect of Combined Asset-A is shown in the table below:



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.9.2017 in Petition No. 86/TT/2017	547.05	565.20	583.97	603.38	623.36
Claimed by the Petitioner in the instant petition	547.05	565.20	583.97	603.38	623.36
Approved after true-up in this order	547.05	565.20	583.97	603.38	623.36

121. The details of the O&M Expenses allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for Asset-B1 for the 2014-19 tariff period are as under:-

(₹ in lakh)					
Asset-B1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Sub-station Bays</b>					
765 kV Bay (AIS) at Jabalpur Pooling Station	1	1	1	1	1
Norm (₹ lakh/bay)	84.42	87.22	90.12	93.11	96.20
<b>Total Sub-station O&amp;M Expenses</b>	<b>84.42</b>	<b>87.22</b>	<b>90.12</b>	<b>93.11</b>	<b>96.20</b>
400 kV Bay (AIS) at Jabalpur Pooling Station	1	1	1	1	1
Norm (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
<b>Total Sub-station O&amp;M Expenses</b>	<b>60.30</b>	62.30	64.37	66.51	68.71
<b>Total O&amp;M Expenses</b>	<b>144.72</b>	<b>149.52</b>	<b>154.49</b>	<b>159.62</b>	<b>164.91</b>

122. Accordingly, the O&M Expenses approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and true-up O&M Expenses allowed in respect of Asset-B1 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	144.72	149.52	154.49	159.62	164.91
Claimed by the Petitioner in the instant petition	144.72	149.52	154.49	159.62	164.91
Approved after true-up in this order	144.72	149.52	154.49	159.62	164.91

123. The details of the O&M Expenses allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for Asset-B2 for the 2014-19 tariff period are as under:-



(₹ in lakh)

Asset-B2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Sub-station Bays</b>					
765 kV Bay (AIS) at Jabalpur Pooling Station	1	1	1	1	1
Norm (₹ lakh/bay)	84.42	87.22	90.12	93.11	96.20
<b>Total Sub-station O&amp;M</b>	<b>84.42</b>	<b>87.22</b>	<b>90.12</b>	<b>93.11</b>	<b>96.20</b>
<b>Total O&amp;M Expenses</b>	<b>84.42</b>	<b>87.22</b>	<b>90.12</b>	<b>93.11</b>	<b>96.20</b>

124. Accordingly, the O&M Expenses approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and true-up O&M Expenses allowed in respect of Asset-B2 are shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 267 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 26.4.2016 in Petition No. 244/TT/2014	84.42	87.22	90.12	93.11	96.20
Claimed by the Petitioner in the instant petition	84.42	87.22	90.12	93.11	96.20
Approved after true-up in this order	84.42	87.22	90.12	93.11	96.20

125. The details of the O&M Expenses allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for Asset-B3 for the 2014-19 tariff period are as under:-

(₹ in lakh)

Asset-B3					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Sub-station Bays</b>					
765 kV Bay (AIS) at Korba, Bilashpur, Ranchi	3	3	3	3	3
Norm (₹ lakh/bay)	84.42	87.22	90.12	93.11	96.20
<b>Total Sub-station O&amp;M</b>	<b>253.26</b>	<b>261.66</b>	<b>270.36</b>	<b>279.33</b>	<b>288.60</b>
<b>Transmission Line</b>					
LILO of 765kV S/C Ranchi-WR Pooling (km)	9.077	9.077	9.077	9.077	9.077
Norm (₹ lakh/km)	0.6060	0.627	0.647	0.669	0.691
<b>Total transmission Line O&amp;M</b>	<b>5.50</b>	<b>5.69</b>	<b>5.87</b>	<b>6.07</b>	<b>6.27</b>
<b>Total O&amp;M Expenses</b>	<b>258.76</b>	<b>267.35</b>	<b>276.23</b>	<b>285.40</b>	<b>294.87</b>



126. Accordingly, the O&M Expenses approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and true-up O&M Expenses allowed in respect of Asset-B3 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	258.76	267.35	276.23	285.40	294.87
Claimed by the Petitioner in the instant petition	258.76	267.35	276.23	285.40	294.87
Approved after true-up in this order	258.76	267.35	276.23	285.40	294.87

127. The details of the O&M Expenses allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for Asset-B4 for the 2014-19 tariff period are as under:-

(₹ in lakh)					
Asset-B4					
Particulars	2014-15 (Pro-rata for 348 days)	2015-16	2016-17	2017-18	2018-19
<b>Sub-station Bays</b>					
400 kV Bay (AIS) at Dharamjaygarh S/s	1	1	1	1	1
Norm (₹ lakh/bay)	84.42	87.22	90.12	93.11	96.20
<b>Total Sub-station O&amp;M</b>	<b>84.42</b>	<b>87.22</b>	<b>90.12</b>	<b>93.11</b>	<b>96.20</b>
<b>Total O&amp;M Expenses</b>	<b>80.49</b>	<b>87.22</b>	<b>90.12</b>	<b>93.11</b>	<b>96.20</b>

128. Accordingly, the O&M Expenses approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and true-up O&M Expenses allowed in respect of Asset-B4 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15 (Pro-rata for 348 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 26.4.2016 in Petition No. 244/TT/2014	80.49	87.22	90.12	93.11	96.20
Claimed by the Petitioner in the instant petition	80.49	87.22	90.12	93.11	96.20
Approved after true-up in this order	80.49	87.22	90.12	93.11	96.20





129. The details of the O&M Expenses allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for Asset-B5 for the 2014-19 tariff period are as under:-

(₹ in lakh)	
<b>Asset-B5</b>	
Particulars	2014-15 (Pro-rata for 1 day)
<b>Sub-station Bays</b>	
400 kV Bay (AIS) at Boisar S/s	2
Norm (₹ lakh/bay)	84.42
<b>Total Sub-station O&amp;M</b>	<b>168.84</b>
<b>Transmission Line</b>	
Ckt-1 of 765 kV D/C Jharsuguda-Dharamjaygarh Sub-station	149.789
Norm (₹ lakh/km)- S/C with 6 conductors	0.71
<b>Total Transmission Line O&amp;M</b>	<b>105.90</b>
<b>Total O&amp;M Expenses</b>	<b>0.75</b>

130. Accordingly, the O&M Expenses approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and true-up O&M Expenses allowed in respect of Asset-B5 is shown in the table below:

(₹ in lakh)	
Particulars	2014-15 (Pro-rata for 1 day)
Allowed earlier in order dated 26.4.2016 in Petition No. 244/TT/2014	0.90
Claimed by the Petitioner in the instant petition	0.75
Approved after True-up in this order	0.75

131. The details of the O&M Expenses allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for Combined Assets-B5&B6 for the 2014-19 tariff period are as under:-

(₹ in lakh)					
<b>Combined Assets-B5 &amp; B6</b>					
Particulars	2014-15 (Pro-rata for 244 days)	2015-16	2016-17	2017-18	2018-19
<b>Sub-station Bays</b>					
765 kV Bay (AIS) at Dharamjaygarh	4	4	4	4	4
Norm (₹ lakh/bay)	84.42	87.22	90.12	93.11	96.20
<b>Total Sub-station O&amp;M</b>	<b>337.68</b>	<b>348.88</b>	<b>360.48</b>	<b>372.44</b>	<b>384.80</b>
<b>Transmission Line</b>					
765 kV D/C Jharsuguda-	149.789	149.789	149.789	149.789	149.789



Dharamjaygarh Sub-station					
Norm (₹ lakh/km)- D/C with 6 conductors	1.062	1.097	1.133	1.171	1.21
<b>Total Transmission Line O&amp;M</b>	<b>159.08</b>	<b>164.32</b>	<b>169.71</b>	<b>175.40</b>	<b>181.24</b>
<b>Total O&amp;M Expenses</b>	<b>332.08</b>	<b>513.20</b>	<b>530.19</b>	<b>547.84</b>	<b>566.04</b>

132. Accordingly, the O&M Expenses approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and true-up O&M Expenses allowed in respect of Combined Assets-B5 & B6 is shown in the table below:

Particulars	(₹ in lakh)				
	2014-15 (Pro-rata for 244 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 26.4.2016 in Petition No. 244/TT/2014	332.08	513.20	530.19	547.84	566.04
Claimed by the Petitioner in the instant petition	332.07	513.20	530.19	547.84	566.04
Approved after True-up in this order	332.08	513.20	530.19	547.84	566.04

133. The details of the O&M Expenses allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for Asset-C1 for the 2014-19 tariff period are as under:-

(₹ in lakh)					
Asset-C1					
Particulars	2014-15 (Pro-rata for 91 days)	2015-16	2016-17	2017-18	2018-19
<b>Sub-station Bays</b>					
400 kV Bay (AIS) at Jabalpur Pooling Station	1	1	1	1	1
Norm (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
<b>Total Sub-station O&amp;M</b>	<b>60.30</b>	<b>62.30</b>	<b>64.37</b>	<b>66.51</b>	<b>68.71</b>
<b>Total O&amp;M Expenses</b>	<b>15.03</b>	<b>62.30</b>	<b>64.37</b>	<b>66.51</b>	<b>68.71</b>

134. Accordingly, the O&M Expenses approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, claimed by the Petitioner in the instant petition and true-up O&M Expenses allowed in respect of Asset-C1 is shown in the table below:



(₹ in lakh)					
Particulars	2014-15 (Pro-rata for 91 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	15.03	62.30	64.37	66.51	68.71
Claimed by the Petitioner in the instant petition	15.03	62.30	64.37	66.51	68.71
Approved after True-up in this order	15.03	62.30	64.37	66.51	68.71

135. The details of the O&M Expenses allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for Asset-C2 for the 2014-19 tariff period are as under:-

(₹ in lakh)				
Asset-C2				
Particulars	2015-16 (Pro-rata for 331 days)	2016-17	2017-18	2018-19
<b>Sub-station Bays</b>				
765 kV Bay (AIS) at Jabalpur Pooling Station	1	1	1	1
Norm (₹ lakh/bay)	87.22	90.12	93.11	96.20
<b>Total Sub-station O&amp;M</b>	<b>87.22</b>	<b>90.12</b>	<b>93.11</b>	<b>96.20</b>
<b>Total O&amp;M Expenses</b>	<b>78.88</b>	<b>90.12</b>	<b>93.11</b>	<b>96.20</b>

136. Accordingly, the O&M Expenses approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, claimed by the Petitioner in the instant petition and true-up O&M Expenses allowed in respect of Asset-C2 is shown in the table below:

(₹ in lakh)				
Particulars	2015-16 (Pro-rata for 91 days)	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	78.88	90.12	93.11	96.20
Claimed by the Petitioner in the instant petition	78.88	90.12	93.11	96.20
Approved after True-up in this order	78.88	90.12	93.11	96.20

137. The details of the O&M Expenses allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for Asset-C3 for the 2014-19 tariff period are as under:-

(₹ in lakh)

Asset-C3					
Particulars	2014-15 (Pro-rata for 121 days)	2015-16	2016-17	2017-18	2018-19
<b>Sub-station Bays</b>					
765 kV Bay (AIS) at Jabalpur Pooling Station	1	1	1	1	1
Norm (₹lakh/bay)	84.42	87.22	90.12	93.11	96.20
<b>Total Sub-station O&amp;M</b>	<b>84.42</b>	<b>87.22</b>	<b>90.12</b>	<b>93.11</b>	<b>96.20</b>
<b>Total O&amp;M Expenses</b>	<b>27.99</b>	<b>87.22</b>	<b>90.12</b>	<b>93.11</b>	<b>96.20</b>

138. Accordingly, the O&M Expenses approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, claimed by the Petitioner in the instant petition and true-up O&M Expenses allowed in respect of Combined Asset-C3 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 121 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	27.99	87.22	90.12	93.11	96.20
Claimed by the Petitioner in the instant petition	27.99	87.22	90.12	93.11	96.20
Approved after True-up in this order	27.99	87.22	90.12	93.11	96.20

139. The details of the O&M Expenses allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for Asset-D for the 2014-19 tariff period are as under:-

(₹ in lakh)

Asset-D					
Particulars	2015-16 (Pro-rata for 167 days)	2016-17	2017-18	2018-19	
<b>Sub-station Bays</b>					
765 kV Bay (AIS) at Jabalpur Pooling Station	4	4	4	4	
Norm (₹ lakh/bay)	87.22	90.12	93.11	96.20	
<b>Total Sub-station O&amp;M</b>	<b>348.88</b>	<b>360.48</b>	<b>372.44</b>	<b>384.80</b>	
<b>Transmission Line</b>					
765kV D/C Dharamjaygarh- Jabalpur Pooling Station Line	424.99	424.99	424.99	424.99	
Norm (₹ lakh/km)- D/C with 4 conductors	1.097	1.133	1.171	1.21	



<b>O&amp;M Transmission Line</b>	<b>466.21</b>	<b>481.51</b>	<b>497.66</b>	<b>514.24</b>
<b>Total O&amp;M Expenses</b>	<b>371.91</b>	<b>841.99</b>	<b>870.10</b>	<b>899.04</b>

140. Accordingly, the O&M Expenses approved vide order dated 26.5.2016 in Petition No. 266/TT/2015, claimed by the Petitioner in the instant petition and true-up O&M Expenses allowed in respect of Asset-D is shown in the table below:

Particulars	(₹ in lakh)			
	2015-16 (Pro-rata for 167 days)	2016-17	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 266/TT/2015	371.91	841.99	870.10	899.04
Claimed by the Petitioner in the instant petition	371.91	841.99	870.10	899.04
Approved after true-up in this order	371.91	841.99	870.10	899.04

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

141. IWC in respect of the transmission assets has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations. The Petitioner is entitled to claim IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under. The components of the working capital and the Petitioner's entitlement to interest thereon are discussed hereunder:

**i. Maintenance spares:**

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

**ii. O & M Expenses:**

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

**iii. Receivables:**

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

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

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

142. The trued-up IWC allowed for the Combined Asset-A is as under:-

(₹ in lakh)

<b>Combined Asset-A</b>					
<b>Particular</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
O & M Expenses	45.59	47.10	48.66	50.28	51.95
Maintenance Spares	82.06	84.78	87.60	90.51	93.50
Receivables	587.54	661.74	741.38	780.53	777.77
Total Working Capital	715.19	793.61	877.64	921.32	923.22
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest on working capital</b>	<b>96.55</b>	<b>107.14</b>	<b>118.48</b>	<b>124.38</b>	<b>124.63</b>

143. Accordingly, IWC approved vide order dated 7.9.2017 in Petition No. 86/TT/2017, claimed by the Petitioner in the instant petition and trued-up IWC allowed in respect of Combined Asset-A is shown in the table below:

(₹ in lakh)

<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Approved vide order dated 7.9.2017 in Petition No. 86/TT/2017	96.55	106.97	117.25	121.33	120.17
Claimed by the Petitioner in the instant petition	96.72	107.31	118.63	124.51	124.76
Approved after true-up in this order	96.55	107.14	118.48	124.38	124.63

144. The trued-up IWC allowed for Asset-B1 is as under:-

(₹ in lakh)

<b>Asset-B1</b>					
<b>Particular</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
O & M Expenses	12.06	12.46	12.87	13.30	13.74
Maintenance Spares	21.71	22.43	23.17	23.94	24.74
Receivables	171.08	195.72	196.43	194.10	190.31
Total Working Capital	204.84	230.60	232.47	231.35	228.79
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest on working capital</b>	<b>27.65</b>	<b>31.13</b>	<b>31.38</b>	<b>31.23</b>	<b>30.89</b>

145. Accordingly, IWC approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and trued-up IWC allowed in respect of Asset-B1 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	27.66	30.88	31.19	31.35	30.97
Claimed by the Petitioner in the instant petition	27.66	31.14	31.38	31.23	30.89
Approved after true-up in this order	27.65	31.13	31.38	31.23	30.89

146. The trued-up IWC allowed for Asset-B2 is as under:-

(₹ in lakh)					
Asset-B2					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	7.04	7.27	7.51	7.76	8.02
Maintenance Spares	12.66	13.08	13.52	13.97	14.43
Receivables	68.56	75.82	82.36	85.78	85.21
Total Working Capital	88.26	96.17	103.39	107.51	107.65
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest on working capital</b>	<b>11.92</b>	<b>12.98</b>	<b>13.96</b>	<b>14.51</b>	<b>14.53</b>

147. Accordingly, IWC approved vide order dated 26.4.2016 in Petition No. 244/TT/2014 claimed by the Petitioner in the instant petition and trued-up IWC allowed in respect of Asset-B2 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	11.92	12.82	13.30	13.43	13.36
Claimed by the Petitioner in the instant petition	11.98	13.05	14.02	14.57	14.58
Approved after true-up in this order	11.92	12.98	13.96	14.51	14.53

148. The trued-up IWC allowed for Asset-B3 is as under:-

(₹ in lakh)					
Asset-B3					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	21.56	22.28	23.02	23.78	24.57



Maintenance Spares	38.81	40.10	41.43	42.81	44.23
Receivables	412.34	472.50	500.58	523.79	525.53
Total Working Capital	472.71	534.88	565.04	590.39	594.33
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest on working capital</b>	<b>63.82</b>	<b>72.21</b>	<b>76.28</b>	<b>79.70</b>	<b>80.23</b>

149. Accordingly, IWC approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and trued-up IWC allowed in respect of Asset-B3 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	63.94	74.21	80.24	82.95	81.87
Claimed by the Petitioner in the instant petition	63.99	72.63	76.68	80.09	80.61
Approved after true-up in this order	63.82	72.21	76.28	79.70	80.23

150. The trued-up IWC allowed for Asset-B4 is as under:-

(₹ in lakh)					
Asset-B4					
Particular	2014-15 (Pro-rata for 348 days)	2015-16	2016-17	2017-18	2018-19
O & M Expenses	7.04	7.27	7.51	7.76	8.02
Maintenance Spares	12.66	13.08	13.52	13.97	14.43
Receivables	67.27	76.03	83.09	84.10	83.07
Total Working Capital	86.97	96.38	104.12	105.83	105.52
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest on working capital</b>	<b>11.19</b>	<b>13.01</b>	<b>14.06</b>	<b>14.29</b>	<b>14.24</b>

151. Accordingly, IWC approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and trued-up IWC allowed in respect of Asset-B4 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15 (Pro-rata for 348 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	11.21	13.02	14.06	14.33	14.24





Claimed by the Petitioner in the instant petition	11.23	13.11	14.15	14.38	14.33
Approved after True-up in this order	11.19	13.01	14.06	14.29	14.24

152. The trued-up IWC allowed for Asset-B5 is as under:-

(₹ in lakh)

Particular	2014-15 (Pro-rata for 1 day)
O & M Expenses	22.90
Maintenance Spares	41.21
Receivables	6.29
<b>Total Working Capital</b>	<b>70.39</b>
Rate of Interest (%)	13.50
<b>Interest on working capital</b>	<b>0.03</b>

153. Accordingly, IWC approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and trued-up IWC allowed in respect of Asset-B5 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 1 day)
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	0.68
Claimed by the Petitioner in the instant petition	0.67
Approved after true-up in this order	0.03

154. The trued-up IWC allowed for the Combined Assets-B5 and B6 is as under:-

(₹ in lakh)

Particular	Combined Assets-B5 & B6				
	2014-15 (Pro-rata for 244 days)	2015-16	2016-17	2017-18	2018-19
O & M Expenses	41.40	42.77	44.18	45.65	47.17
Maintenance Spares	74.51	76.98	79.53	82.18	84.91
Receivables	2180.72	2226.94	2224.73	2194.03	2150.91
Total Working Capital	2296.63	2346.69	2348.45	2321.86	2282.99
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest on working capital</b>	<b>207.26</b>	<b>316.80</b>	<b>317.04</b>	<b>313.45</b>	<b>308.20</b>



155. Accordingly, IWC approved vide order dated 26.4.2016 in Petition No. 244/TT/2014, claimed by the Petitioner in the instant petition and trued-up IWC allowed in respect of Combined Assets-B5 and B6 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 244 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	207.31	319.29	324.49	323.62	316.41
Claimed by the Petitioner in the instant petition	207.49	317.11	317.28	313.69	308.43
Approved after True-up in this order	207.26	316.80	317.04	313.45	308.20

156. The trued-up IWC allowed for Asset-C1 is as under:-

(₹ in lakh)

Asset-C1					
Particular	2014-15 (Pro-rata for 91 days)	2015-16	2016-17	2017-18	2018-19
O & M Expenses	5.03	5.19	5.36	5.54	5.73
Maintenance Spares	9.05	9.35	9.66	9.98	10.31
Receivables	31.57	32.34	34.11	35.33	35.06
Total Working Capital	45.64	46.88	49.13	50.85	51.10
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest on working capital</b>	<b>1.54</b>	<b>6.33</b>	<b>6.63</b>	<b>6.86</b>	<b>6.90</b>

157. Accordingly, IWC approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, claimed by the Petitioner in the instant petition and trued-up IWC allowed in respect of Asset-C1 is shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 91 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	1.54	6.45	6.70	6.78	6.82
Claimed by the Petitioner in the instant petition	1.54	6.33	6.63	6.86	6.90
Approved after true-up in this order	1.54	6.33	6.63	6.86	6.90

158. The trued-up IWC allowed for Asset-C2 is as under:-

(₹ in lakh)

<b>Asset-C2</b>				
<b>Particular</b>	<b>2015-16 (Pro-rata for 331 days)</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
O & M Expenses	7.27	7.51	7.76	8.02
Maintenance Spares	13.08	13.52	13.97	14.43
Receivables	88.07	105.91	108.46	107.11
Total Working Capital	108.42	126.94	130.18	129.56
Rate of Interest (%)	13.50	13.50	13.50	13.50
<b>Interest on working capital</b>	<b>13.24</b>	<b>17.14</b>	<b>17.57</b>	<b>17.49</b>

159. Accordingly, the IWC approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, IWC claimed in the instant petition and trued-up IWC allowed in respect of Asset-C2 is shown in the table below:

(₹ in lakh)

<b>Particulars</b>	<b>2015-16 (Pro-rata for 331 days)</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	12.65	15.51	15.73	15.60
Claimed by the Petitioner in the instant petition	13.24	17.14	17.58	17.49
Approved after true-up in this order	13.24	17.14	17.57	17.49

160. The trued up IWC allowed for Asset-C3 is as under:-

(₹ in lakh)

<b>Asset-C3</b>					
<b>Particular</b>	<b>2014-15 (Pro-rata for 121 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
O & M Expenses	7.04	7.27	7.51	7.76	8.02
Maintenance Spares	12.66	13.08	13.52	13.97	14.43
Receivables	69.95	78.14	90.64	94.74	93.98
Total Working Capital	89.65	98.49	111.67	116.47	116.43
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest on working capital</b>	<b>4.01</b>	<b>13.30</b>	<b>15.07</b>	<b>15.72</b>	<b>15.72</b>



161. Accordingly, IWC approved vide order dated 28.4.2016 in Petition No. 409/TT/2014, IWC claimed in the instant petition and trued-up IWC allowed in respect of Asset-C3 is shown in the table below:

(₹ in lakh)					
Particulars	2014-15 (Pro-rata for 121 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	3.55	11.84	13.21	13.49	13.43
Claimed by the Petitioner in the instant petition	4.03	13.37	15.14	15.78	15.77
Approved after true-up in this order	4.01	13.30	15.07	15.72	15.72

162. The trued up IWC allowed for Asset-D is as under:-

(₹ in lakh)				
Asset-D				
Particular	2015-16 (Pro-rata for 167 days)	2016-17	2017-18	2018-19
O & M Expenses	67.92	70.17	72.51	74.92
Maintenance Spares	122.26	126.30	130.52	134.86
Receivables	4860.91	5036.23	5115.49	5042.29
Total Working Capital	5051.10	5232.70	5318.51	5252.07
Rate of Interest (%)	13.50	13.50	13.50	13.50
<b>Interest on working capital</b>	<b>311.14</b>	<b>706.41</b>	<b>718.00</b>	<b>709.03</b>

163. Accordingly, IWC approved vide order dated 26.5.2016 in Petition No. 266/TT/2015, claimed by the Petitioner in the instant petition and trued-up IWC allowed in respect of Asset-D is shown in the table below:

(₹ in lakh)				
Particulars	2015-16 (Pro-rata for 167 days)	2016-17	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 266/TT/2015	310.61	699.21	706.78	695.16
Claimed by the Petitioner in the instant petition	311.21	706.45	718.03	709.06
Approved after true-up in this order	311.14	706.41	718.00	709.03

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

164. The annual fixed charges after truing-up for the 2014-19 tariff period for the Combined Asset-A are as under:-

(₹ in lakh)					
<b>Combined 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	920.92	1049.67	1190.36	1278.43	1293.71
Interest on Loan	854.75	972.18	1099.14	1114.53	1037.28
Return on Equity	1105.97	1276.23	1456.31	1562.45	1587.63
Int. on Working Capital	96.55	107.14	118.48	124.38	124.63
Op. and Maintenance	547.05	565.20	583.97	603.38	623.36
<b>Total</b>	<b>3525.25</b>	<b>3970.41</b>	<b>4448.26</b>	<b>4683.17</b>	<b>4666.62</b>

(₹ in lakh)					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Approved vide order dated 7.9.2017 in Petition No. 86/TT/2017	3525.35	3962.91	4393.49	4547.78	4468.14
Claimed by the Petitioner in the instant petition	3532.71	3978.09	4454.74	4689.14	4672.05
Allowed after true-up in this order	3525.25	3970.41	4448.26	4683.17	4666.62

165. The annual fixed charges after truing-up for the 2014-19 tariff period for Asset-B1 are as under:-

(₹ in lakh)					
<b>Asset-B1</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	266.57	315.95	323.64	326.61	326.61
Interest on Loan	290.49	323.96	306.69	281.48	252.82
Return on Equity	297.02	353.74	362.35	365.67	366.65
Int. on Working Capital	27.65	31.13	31.38	31.23	30.89
Op. and Maintenance	144.72	149.52	154.49	159.62	164.91
<b>Total</b>	<b>1026.45</b>	<b>1174.30</b>	<b>1178.56</b>	<b>1164.61</b>	<b>1141.88</b>

(₹ in lakh)					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	1026.63	1163.11	1170.14	1169.86	1145.68
Claimed by the Petitioner in the instant petition	1026.68	1174.49	1178.55	1164.62	1141.89
Allowed after true-up in this order	1026.45	1174.30	1178.56	1164.61	1141.88

166. The annual fixed charges after true-up for the 2014-19 tariff period for Asset-B2 are as under:-

(₹ in lakh)

<b>Asset-B2</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	98.87	113.60	127.74	136.65	138.17
Interest on Loan	106.00	113.94	119.31	117.42	107.23
Return on Equity	110.17	127.19	143.02	153.00	155.11
Int. on Working Capital	11.92	12.98	13.96	14.51	14.53
Op. and Maintenance	84.42	87.22	90.12	93.11	96.20
<b>Total</b>	<b>411.38</b>	<b>454.93</b>	<b>494.15</b>	<b>514.69</b>	<b>511.25</b>

(₹ in lakh)

<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	411.38	447.53	465.01	466.71	459.27
Claimed by the Petitioner in the instant petition	414.15	457.85	496.74	517.01	513.30
Allowed after true-up in this order	411.38	454.93	494.15	514.69	511.25

167. The annual fixed charges after true-up for the 2014-19 tariff period for Asset-B3 are as under:-

(₹ in lakh)

<b>Asset-B3</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	615.44	721.74	777.80	833.61	850.40
Interest on Loan	698.99	794.34	821.15	822.58	779.66
Return on Equity	837.01	979.38	1052.04	1121.48	1147.99
Int. on Working Capital	63.82	72.21	76.28	79.70	80.23
Op. and Maintenance	258.76	267.35	276.23	285.40	294.87
<b>Total</b>	<b>2474.01</b>	<b>2835.02</b>	<b>3003.50</b>	<b>3142.77</b>	<b>3153.17</b>

(₹ in lakh)

<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	2479.39	2924.10	3179.39	3287.06	3225.99
Claimed by the Petitioner in the instant petition	2481.90	2853.90	3021.38	3160.06	3169.87
Allowed after true-up in this order	2474.01	2835.02	3003.50	3142.77	3153.17

168. The annual fixed charges after truing-up for the 2014-19 tariff period for Asset-B4 are as under:-

(₹ in lakh)

<b>Asset-B4</b>					
<b>Particulars</b>	<b>2014-15 (Pro-rata for 348 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	92.27	113.03	127.17	131.40	131.79
Interest on Loan	96.74	113.19	120.54	114.36	103.87
Return on Equity	104.15	129.71	146.65	151.47	152.32
Int. on Working Capital	11.19	13.01	14.06	14.29	14.24
Op. and Maintenance	80.49	87.22	90.12	93.11	96.20
<b>Total</b>	<b>384.83</b>	<b>456.16</b>	<b>498.54</b>	<b>504.62</b>	<b>498.43</b>

(₹ in lakh)

<b>Particulars</b>	<b>2014-15 (Pro-rata for 348 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	385.74	456.59	498.79	506.42	498.31
Claimed by the Petitioner in the instant petition	386.40	460.47	502.63	508.57	502.22
Allowed after true-up in this order	384.83	456.16	498.54	504.62	498.43

169. The annual fixed charges after truing-up for the 2014-19 tariff period for Asset-B5 are as under:-

(₹ in lakh)

<b>Asset-B5</b>	
<b>Particulars</b>	<b>2014-15 (Pro-rata for 1 day)</b>
Depreciation	5.91
Interest on Loan	8.72
Return on Equity	9.92
Int. on Working Capital	0.03
Op. and Maintenance	0.75
<b>Total</b>	<b>25.32</b>

(₹ in lakh)

<b>Particulars</b>	<b>2014-15 (Pro-rata for 1 day)</b>
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	29.04
Claimed by the Petitioner in the instant petition	28.89
Allowed after true-up in this order	25.32



170. The annual fixed charges after truing-up for the 2014-19 tariff period for the Combined Assets-B5 and B6 are as under:-

(₹ in lakh)

Combined Assets-B5 and B6					
Particulars	2014-15 (Pro-rata for 244 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	2684.86	4146.84	4196.37	4231.33	4241.75
Interest on Loan	2502.74	3696.36	3559.20	3286.16	2979.56
Return on Equity	3019.84	4688.43	4745.61	4785.38	4809.92
Int. on Working Capital	207.26	316.80	317.04	313.45	308.20
Op. and Maintenance	332.08	513.20	530.19	547.84	566.04
<b>Total</b>	<b>8746.79</b>	<b>13361.64</b>	<b>13348.40</b>	<b>13164.16</b>	<b>12905.48</b>

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 244 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.4.2016 in Petition No. 244/TT/2014	8748.79	13472.05	13679.35	13616.08	13270.20
Claimed by the Petitioner in the instant petition	8756.68	13375.18	13359.25	13174.71	12915.70
Allowed after true-up in this order	8746.79	13361.64	13348.40	13164.16	12905.48

171. The annual fixed charges after truing-up for the 2014-19 tariff period for Asset-C1 are as under:-

(₹ in lakh)

Asset-C1					
Particulars	2014-15 (Pro-rata for 91 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	9.45	39.25	42.91	45.77	45.77
Interest on Loan	10.67	42.23	42.70	41.58	37.61
Return on Equity	10.53	43.94	48.03	51.25	51.38
Int. on Working Capital	1.54	6.33	6.63	6.86	6.90
Op. and Maintenance	15.03	62.30	64.37	66.51	68.71
<b>Total</b>	<b>47.23</b>	<b>194.05</b>	<b>204.64</b>	<b>211.98</b>	<b>210.38</b>

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 91 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	47.56	199.58	207.68	208.40	206.79





Claimed by the Petitioner in the instant petition	47.24	194.08	204.64	211.97	210.37
Allowed after true-up in this order	47.23	194.05	204.64	211.98	210.38

172. The annual fixed charges after truing-up for the 2014-19 tariff period for Asset-C2 are as under:-

(₹ in lakh)

Asset-C2				
Particulars	2015-16 (Pro-rata for 331 days)	2016-17	2017-18	2018-19
Depreciation	118.74	166.39	176.27	177.78
Interest on Loan	134.10	175.54	166.44	151.62
Return on Equity	132.94	186.29	197.35	199.58
Int. on Working Capital	13.24	17.14	17.57	17.49
Op. and Maintenance	78.88	90.12	93.11	96.20
<b>Total</b>	<b>477.90</b>	<b>635.48</b>	<b>650.74</b>	<b>642.67</b>

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 331 days)	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	451.65	563.17	568.81	558.65
Claimed by the Petitioner in the instant petition	477.97	635.48	650.75	642.67
Allowed after true-up in this order	477.90	635.48	650.74	642.67

173. The annual fixed charges after truing-up for the 2014-19 tariff period for Asset-C3 are as under:-

(₹ in lakh)

Asset-C3					
Particulars	2014-15 (Pro-rata for 121 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	33.33	116.55	141.70	152.83	154.35
Interest on Loan	36.68	121.30	138.27	135.67	124.34
Return on Equity	37.13	130.49	158.65	171.11	173.28
Int. on Working Capital	4.01	13.30	15.07	15.72	15.72
Op. and Maintenance	27.99	87.22	90.12	93.11	96.20
<b>Total</b>	<b>139.14</b>	<b>468.86</b>	<b>543.82</b>	<b>568.45</b>	<b>563.90</b>



(₹ in lakh)

Particulars	2014-15 (Pro-rata for 121 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.4.2016 in Petition No. 409/TT/2014	118.67	404.29	460.85	469.17	462.31
Claimed by the Petitioner in the instant petition	140.18	472.22	546.82	571.16	566.33
Allowed after true-up in this order	139.14	468.86	543.82	568.45	563.90

174. The annual fixed charges after true-up for the 2014-19 tariff period for Asset-D are as under:-

(₹ in lakh)

Asset-D				
Particulars	2015-16 (Pro-rata for 167 days)	2016-17	2017-18	2018-19
Depreciation	4007.63	9213.63	9617.83	9716.66
Interest on Loan	4120.96	9118.50	8694.21	7992.47
Return on Equity	4496.10	10336.85	10792.79	10936.54
Int. on Working Capital	311.14	706.41	718.00	709.03
Op. and Maintenance	371.91	841.99	870.10	899.04
<b>Total</b>	<b>13307.75</b>	<b>30217.40</b>	<b>30692.94</b>	<b>30253.74</b>

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 167 days)	2016-17	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 266/TT/2015	13284.03	29897.06	30194.42	29637.48
Claimed by the Petitioner in the instant petition	13310.88	30219.04	30694.43	30255.15
Allowed after true-up in this order	13307.75	30217.40	30692.94	30253.74

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

175. The Petitioner has submitted the tariff forms combining the transmission assets, which achieved COD prior to 1.4.2019, into a single asset and has claimed combined tariff. Accordingly, as per proviso (i) of the Regulation 8(1) of the 2019 Tariff Regulations, single tariff for the Combined Asset has been worked out for the 2019-24 tariff period.



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

(₹ in lakh)					
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	17148.81	17175.71	17146.18	17145.93	17145.93
Interest on Loan	12248.31	10840.56	9439.48	8498.25	7616.23
Return on equity	18681.17	18716.76	18716.76	18716.76	18716.76
Interest on Working Capital	868.46	855.39	839.11	830.45	820.79
O & M Expenses	3337.50	3453.55	3574.84	3701.89	3830.76
<b>Total</b>	<b>52284.25</b>	<b>51041.97</b>	<b>49716.37</b>	<b>48893.28</b>	<b>48130.47</b>

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

(₹ in lakh)					
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
O & M expenses	278.13	287.80	297.90	308.49	319.23
Maintenance Spares	500.63	518.03	536.23	555.28	574.61
Receivables	6428.39	6292.85	6129.41	6027.94	5917.68
<b>Total</b>	<b>7207.15</b>	<b>7098.68</b>	<b>6963.54</b>	<b>6891.71</b>	<b>6811.52</b>
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
<b>Interest</b>	<b>868.46</b>	<b>855.39</b>	<b>839.11</b>	<b>830.45</b>	<b>820.79</b>

### **Effective Date of Commercial Operation (E-COD)**

178. The Petitioner has claimed E-COD of the Combined Asset as 11.3.2015. Accordingly, based on the trued-up admitted capital cost and actual COD of all the transmission assets, E-COD has been worked out as follows:-

Computation of effective COD					
Asset	Actual COD	Admitted Capital Cost as on 31.3.2019	Weight of the cost (%)	No. of days from last COD	Weighted days
Combined Asset-A	6.1.2014	26863.28	8.12	649.00	52.72
Asset-B1	1.4.2014	6185.76	1.87	564.00	10.55
Asset-B2	1.4.2014	2616.91	0.79	564.00	4.46
Asset-B3	1.4.2014	19479.94	5.89	564.00	33.22
Asset-B4	18.4.2014	2569.73	0.78	547.00	4.25
Asset-B5	30.7.2014	0.00	0.00	444.00	0.00
Asset-B6	31.7.2014	81272.21	24.57	443.00	108.86



Asset-C1	31.12.2014	866.95	0.26	290.00	0.76
Asset-C2	6.5.2015	3367.14	1.02	164.00	1.67
Asset-C3	1.12.2014	2923.38	0.88	320.00	2.83
Asset-D	17.10.2015	184581.07	55.81	0.00	0.00
<b>Total</b>	<b>-</b>	<b>330726.36</b>	<b>100.00</b>		<b>219.32</b>
<b>Effective COD 11.3.2015</b>					

179. E-COD is used to determine the lapsed life of the project as a whole, which works out as 4 (four) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

### **Weighted Average Life (WAL) of the Transmission Asset**

180. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of Weighted Average Life.

181. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have a different span of life. Therefore, the concept of Weighted Average Life (WAL) has been used as the useful life of the project as a whole.

182. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The element-wise life as defined in the 2009 Tariff Regulations or the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 33 years as shown below:-

<b>Particular (1)</b>	<b>Combined Cost (₹ in lakh) (2)</b>	<b>Life in Years (3)</b>	<b>Weighted Cost (₹ in lakh) (4) = (2)x(3)</b>	<b>Weighted Avg. Life of Asset (in years) (5) = (4)/ (2)</b>
Building	11311.80	25	282794.96	

Transmission line	253250.53	35	8863768.48	
Sub-station	62533.29	25	1563332.37	
PLCC	497.57	15	7463.48	
IT Equipment and Software	198.14	7	1320.94	
<b>Total</b>	<b>327791.33</b>		<b>10718680.22</b>	<b>32.70 (Rounded off to 33 years)</b>

183. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed above, the Effective COD of the assets is 11.3.2015 and the lapsed life of the project as a whole works out as four (04) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from Effective COD). Accordingly, the WAL has been used to determine the remaining useful life as on 31.3.2019 to be 29 years.

#### **Capital Cost as on 1.4.2019**

184. Regulations 19 of the 2019 Tariff Regulations provides as under:

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

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

- (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*



- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) Expenditure on account of change in law and force majeure events; and*
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

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

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

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

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



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

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

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

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

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

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

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

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

185. The Petitioner in the petition has claimed the capital cost of the transmission assets which has been added to arrive at the capital cost claimed during the 2019-24 period for Combined Asset as per the following details:-

				(₹ in lakh)
Asset	RCE apportioned approved capital cost	Total cost as on 31.3.2019	Projected ACE in 2019-20	Total estimated cost
Combined Asset-A	28800.57	26872.20	41.30	26913.50
Asset-B1	6592.42	6209.51	-	6209.51
Asset-B2	2998.15	2616.91	-	2616.91
Asset-B3	21475.58	19657.63	719.58	20377.21
Asset-B4	2857.18	2605.57	-	2605.57
Asset-B5	68429.08	67627.42	287.63	67915.05
Asset-B6	14302.05	13702.72	205.72	13908.44
Asset-C1	1241.13	909.01	-	909.01
Asset-C2	3638.68	3477.61	-	3477.61
Asset-C3	3140.82	2923.38	-	2923.38
Asset-D	184995.33	184581.07	8.94	184590.01



<b>Total</b>	<b>338470.99</b>	<b>331183.03</b>	<b>1263.17</b>	<b>332446.20</b>
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186. Against the overall RCE approved capital cost of ₹338470.99 lakh, the estimated completion cost including ACE is ₹332446.20 lakh. The individual cost of each asset is also within the respective RCE apportioned cost.

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

(₹ in lakh)

Particulars	Combined Asset A	Asset B1	Asset B2	Asset B3	Asset B4	Combined Asset B5&B6	Asset C1	Asset C2	Asset C3	Asset D	Combined Cost (a)
Land	1264.21	0.00	0.00	1670.82	0.00	0.00	0.00	0.00	0.00	0.00	<b>2935.03</b>
Building	2928.57	0.00	0.00	4497.99	200.47	2239.42	0.00	0.00	0.00	1445.35	<b>11311.80</b>
Transmission Line	4353.83	0.00	0.00	2351.45	0.00	70532.72	0.00	0.00	0.00	176012.53	<b>253250.53</b>
Sub Station	18110.64	6185.76	2584.50	10826.85	2362.11	8429.27	866.95	3367.14	2887.94	6912.13	<b>62533.29</b>
PLCC	144.15	0.00	0.00	104.29	0.00	56.26	0.00	0.00	0.00	192.86	<b>497.57</b>
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
IT Equipment and software	61.88	0.00	32.40	28.53	7.15	14.54	0.00	0.00	35.44	18.20	<b>198.14</b>
<b>Total</b>	<b>26863.28</b>	<b>6185.76</b>	<b>2616.91</b>	<b>19479.94</b>	<b>2569.73</b>	<b>81272.21</b>	<b>866.95</b>	<b>3367.14</b>	<b>2923.38</b>	<b>184581.07</b>	<b>330726.36</b>

### Initial Spares

188. As stated in above, initial spares are allowed for the 2014-19 period on the basis of the cost of the individual assets. The assets covered in the transmission project are combined and the overall project cost is arrived at in the 2019-24 tariff period and therefore initial spares are allowed during the 2019-24 tariff period on the





basis of the overall project cost as per APTEL's judgement dated 14.9.2019 in Appeal No.74 of 2017. Accordingly, Initial Spares allowed for the 2019-24 tariff period are as under:

**Assets achieved COD during the 2009-14 tariff period:**

Asset	Capital Cost as on cut-off date (₹ in lakh)	Initial Spares Claimed (₹ in lakh)	Ceiling Limit (%)	Initial Spares worked out as per APTEL Judgment (₹ in lakh)	Initial Spares allowed (₹ in lakh)	Additional Initial Spares allowed (₹ in lakh)
<b>Sub-station</b>						
Asset-A1	15839.80	349.92		397.18	349.92	
Asset-A2	2219.73	56.68		55.46	55.70	
Asset-A3	750.92	19.05		18.77	18.82	
Asset-A4	2984.13	74.95		74.59	61.02	
<b>Total</b>	<b>21794.58</b>	<b>500.60</b>	<b>2.50</b>	<b>546.00</b>	<b>485.46</b>	<b>15.14</b>
<b>Transmission Line</b>						
Asset-A2	4369.77	28.84	0.75	32.80	28.84	0

**Assets achieved COD during the 2014-19 tariff period:**

Asset	Plant & Machinery cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Ceiling limit (%)	Initial Spares worked out as per APTEL Judgment (₹ in lakh)	Initial Spares allowed in 2014-19 period (₹ in lakh)	Additional Initial Spares allowed (₹ in lakh)
<b>Sub-station</b>						
Asset-B1	5582.50	94.61	4		94.61	
Asset-B2	2316.23	29.42	4		29.42	
Asset-B3	10497.82	328.29	4		328.29	
Asset-B4	2249.60	0.00	4		0.00	
Asset-B5	7520.22	0.00	4		0.00	
Asset-B6	13024.16	125.06	4		125.06	
Asset-C1	731.10	28.00	4		28.00	
Asset-C2	2957.49	104.00	4		104.00	
Asset-C3	2508.97	88.00	4		88.00	
Asset-D	6447.49	28.28	4		28.28	
<b>Total</b>	<b>53835.58</b>	<b>825.66</b>	<b>4</b>	<b>2208.75</b>	<b>825.66</b>	<b>0.00</b>
<b>Transmission Line</b>						
Asset-B3	2322.00	0.00	1		0.00	



Asset-B5	52516.07	582.51	1		524.58	
Asset-D	153921.59	1459.21	1		1459.21	
<b>Total</b>	<b>208759.66</b>	<b>2041.72</b>	<b>1</b>	<b>2088.06</b>	<b>1983.79</b>	<b>57.93</b>

189. Accordingly, Initial Spares of ₹73.07 lakh (₹15.14 lakh against sub-station and ₹57.93 lakh against transmission line) are being allowed as part of the combined capital cost as on 1.4.2019 in line with APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017.

190. Capital cost as on 1.4.2019 is worked out as under:

(₹ in lakh)		
Combined Capital Cost as on 31.3.2019	Additional Spares allowed as per APTEL judgment dated 14.9.2019	Combined Capital Cost as on 1.4.2019
330726.36	73.07	330799.43

191. The combined capital cost of ₹330799.43 lakh is considered as admitted capital cost as on 1.4.2019 for Combined Asset for working out tariff for the 2019-24 tariff period.

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

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

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

*(1) The Additional Capital Expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

- (a) Undischarged liabilities recognized to be payable at a future date;*
- (b) Works deferred for execution;*
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;*
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;*
- (e) Change in law or compliance of any existing law; and*
- (f) Force Majeure events:*



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

*(2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.*

**25. Additional Capitalization 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 cut-off date may be admitted by the Commission, subject to prudence check:*

- (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- (b) Change in law or compliance of any existing law;*
- (c) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (d) Liability for works executed prior to the cut-off date;*
- (e) Force Majeure events;*
- (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and*
- (g) Raising of ash dyke as a part of ash disposal system.*

*(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:*

- (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;*
- (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;*
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and*
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission.”*

193. The Petitioner has claimed projected ACE for 2019-24 period in respect of Combined Asset-A, Asset-B3, Asset-B5, Asset-B6 and Asset-D only and has submitted Auditor's certificates in support of the same. The Petitioner has submitted that ACE claimed for the period 1.4.2019 to 31.3.2021 is on estimated basis and may vary due to final claim/ reconciliation at the time of contract closing. The details of projected ACE in respect of the Combined Asset are shown as under:-



(₹ in lakh)

Assets	Projected ACE 2019-24
	2019-20
Combined Asset-A	41.30
Asset-B3	719.58
Asset-B5	287.63
Asset-B6	205.72
Asset-D	8.94
<b>Total</b>	<b>1263.17</b>

194. It is observed that the entire ACE claimed in the 2019-24 period falls beyond the cut-off date in the instant petition. The Petitioner is directed to submit the actual details of ACE for 2019-24 at the time of truing-up. ACE allowed on projected basis is summarized below which is subject to true-up:-

(₹ in lakh)

Particulars	Regulation	Combined Asset
		2019-20
ACE to the extent of un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date	Regulation 25(1)(d)	1263.17

### **Capital Cost for the 2019-24 Tariff Period**

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

(₹ in lakh)

Capital cost allowed as on 1.4.2019	ACE allowed for the year 2019-20	Total Estimated Completion cost up to 31.3.2024
330799.43	1263.17	332062.60

### **Debt-Equity Ratio**

196. Regulation 18 of the 2019 Tariff Regulations provides as under:-

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

*Provided that:*



- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

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

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

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

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

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as Additional Capital Expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.”

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



Combined Asset	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	231560.04	70.00	232444.26	70.00
Equity	99239.38	30.00	99618.33	30.00
<b>Total</b>	<b>330799.43</b>	<b>100.00</b>	<b>332062.60</b>	<b>100.00</b>

### **Return on Equity (“RoE”)**

198. Regulations 30 and Regulation 31 of the 2019, Tariff Regulations provide as under:-

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

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

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

*Provided further that:*

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

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

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

- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;*
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:*

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



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

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

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

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 trueing-up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”

199. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, MAT rate applicable during the year 2019-20 has been



considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019, Tariff Regulations. Accordingly, the RoE allowed for the Combined Asset as per Regulation 30 of the 2019 Tariff Regulations is as under:-

(₹ in lakh)

<b>Combined Asset</b>					
<b>Particular</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Net Opening Equity	99239.38	99618.33	99618.33	99618.33	99618.33
Increase in Equity due to addition during the year	378.95	0.00	0.00	0.00	0.00
Increase due to discharge during the year/period	0.00	0.00	0.00	0.00	0.00
Closing Equity	99618.33	99618.33	99618.33	99618.33	99618.33
Average Equity	99428.86	99618.33	99618.33	99618.33	99618.33
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Applicable ROE Rate (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity for the year	<b>18674.73</b>	<b>18710.32</b>	<b>18710.32</b>	<b>18710.32</b>	<b>18710.32</b>

### **Interest on Loan (IoL)**

200. Regulation 32 of the 2019, Tariff Regulations provides as under:-

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

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

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

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





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

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

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

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

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

201. The Petitioner has submitted that IoL for the 2019-24 period has been calculated on the basis of interest rates prevailing as on 1.4.2019 for respective loans. The change in the interest rate due to floating rate of interest applicable, if any, for the project needs to be claimed / adjusted over the tariff block of 05 years directly from/ with the beneficiaries. We have considered the submissions of Petitioner. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019 in the instant order. The change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period shall be considered and adjusted at the time of true-up and it cannot be claimed by the Petitioner from the beneficiaries directly. IoL allowed in accordance with Regulation 32 of the 2019 Tariff Regulations for the Combined Asset is as under:

	(₹ in lakh)				
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	231560.04	232444.26	232444.26	232444.26	232444.26
Cumulative Repayments upto Previous Year	65786.09	82929.26	100099.34	117269.41	134439.48
Net Loan-Opening	165773.96	149515.00	132344.93	115174.85	98004.78
Additions	884.22	0.00	0.00	0.00	0.00
Repayment during the year	17143.17	17170.07	17170.07	17170.07	17170.07
Net Loan-Closing	149515.00	132344.93	115174.85	98004.78	80834.71
Average Loan	157644.48	140929.96	123759.89	106589.82	89419.74



Weighted Average Rate of Interest on Loan (%)	7.782	7.706	7.642	7.989	8.536
<b>Interest on Loan</b>	<b>12267.37</b>	<b>10859.86</b>	<b>9457.93</b>	<b>8515.63</b>	<b>7632.76</b>

## **Depreciation**

202. Regulation 33 of the 2019, Tariff Regulations provides as under:

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

(₹ in lakh)

Combined Asset					
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	330799.43	332062.60	332062.62	332062.62	332062.62
Additional Capital Expenditure during the year	1263.17	0.00	0.00	0.00	0.00
Closing Capital Cost	332062.60	332062.60	332062.60	332062.60	332062.60
Average Capital Cost	331431.01	332062.60	332062.60	332062.60	332062.60
Aggregate Depreciable Value	295664.57	296231.37	296231.37	296231.37	296231.37
Rate of Depreciation (%)	5.17	5.17	5.17	5.17	5.17
Elapsed life at the beginning of the year	4	5	6	7	8



Balance useful life at the beginning of the year	29	28	27	26	25
<b>Depreciation during the year</b>	<b>17143.17</b>	<b>17170.07</b>	<b>17170.07</b>	<b>17170.07</b>	<b>17170.07</b>
Aggregate Cumulative Depreciation	82929.26	100099.33	117269.41	134439.48	151609.55
Remaining Aggregate Depreciable Value	212735.31	196132.03	178961.96	161791.89	144621.82

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

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

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

...

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

<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>Norms for sub-station Bays (₹ Lakh per bay)</b>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<b>Norms for Transformers (₹ Lakh per MVA)</b>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<b>Norms for AC and HVDC lines (₹ Lakh per km)</b>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
<b>Norms for HVDC stations</b>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958



<i>Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)</i>	1,666	1,725	1,785	1,848	1,913
<i>500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)</i>	2,252	2,331	2,413	2,498	2,586
<i>±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)</i>	2,468	2,555	2,645	2,738	2,834
<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)</i>	2,563	2,653	2,746	2,842	2,942

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

*Provided further that:*

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

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

(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.”

205. The O&M Expenses claimed by the Petitioner for the Combined Asset for the 2019-24 period is as under:-

(₹ in lakh)					
<b>Combined Asset</b>					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Sub-station Bays</b>					
400 kV Bays (AIS) – Nos.	8	8	8	8	8
765 kV Bays (AIS) – Nos.	18	18	18	18	18
<b>Norm (₹lakh/bay)</b>					
400 kV Bay (AIS)	32.150	33.280	34.450	35.660	36.910
765 kV Bay (AIS)	31.507	32.620	33.761	34.951	36.176
<b>Total O&amp;M (Sub-station Bays)</b>	<b>1067.38</b>	<b>1105.04</b>	<b>1143.74</b>	<b>1184.02</b>	<b>1225.52</b>
<b>Transformers</b>					
765 kV – Capacity (MVA)	3000	3000	3000	3000	3000
<b>Norm (₹lakh/ MVA)</b>					
765 kV	0.491	0.508	0.526	0.545	0.564
<b>Total Transformers</b>	<b>1473.00</b>	<b>1524.00</b>	<b>1578.00</b>	<b>1635.00</b>	<b>1692.00</b>
<b>AC &amp; HVDC Lines</b>					
D/C Four conductors- length (km)	440.446	440.446	440.446	440.446	440.446
D/C Six conductors (km)	149.789	149.789	149.789	149.789	149.789
S/C with four conductors	9.077	9.077	9.077	9.077	9.077
<b>Norm (₹ lakh/ km)</b>					
D/C Twin Conductor	0.881	0.912	0.944	0.977	1.011
D/C Quad Conductor	1.322	1.368	1.416	1.466	1.517
<b>Total Transmission Line</b>	<b>787.14</b>	<b>814.53</b>	<b>843.12</b>	<b>872.88</b>	<b>903.26</b>
<b>Communication System (PLCC)</b>					
Original Project Cost (₹ lakh)	498.76	498.76	498.76	498.76	498.76
Norm (% of Project Cost)	2	2	2	2	2
<b>O&amp;M Expenses for PLCC</b>	<b>9.98</b>	<b>9.98</b>	<b>9.98</b>	<b>9.98</b>	<b>9.98</b>
<b>Total O&amp;M Expenses</b>	<b>3337.50</b>	<b>3453.55</b>	<b>3574.84</b>	<b>3701.89</b>	<b>3830.76</b>

206. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well.



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

*"103. Thus, although PLCC equipment is a communication system, it has been considered as a part of sub-station, as it is used both for protection and communication. Therefore, we are of the considered view that rightly, it was not considered for separate O&M Expenses while framing norms of O&M for 2019-24 tariff period. While specifying norms for bays and transformers, O&M Expenses for PLCC have been included within norms for O&M Expenses for sub-station. Norms of O&M Expenses @2% of the capital cost in terms of Regulation 35(4) of the 2019 Tariff Regulations have been specified for communication system such as PMU, RMU, OPGW etc. and not for PLCC equipment."*

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

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

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

207. The O&M Expenses allowed for the Combined Asset as per the norms specified in the 2019 Tariff Regulations are as follows:

(₹ in lakh)					
<b>Combined Asset</b>					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Sub-station Bays</b>					
400 kV Bays (AIS) – Nos.	8	8	8	8	8
765 kV Bays (AIS) – Nos.	18	18	18	18	18
<b>Norm (₹ lakh/bay)</b>					
400 kV Bay (AIS)	32.150	33.280	34.450	35.660	36.910
765 kV Bay (AIS)	31.507	32.620	33.761	34.951	36.176
<b>Total O&amp;M (Sub-station Bays)</b>	<b>1067.38</b>	<b>1105.04</b>	<b>1143.74</b>	<b>1184.02</b>	<b>1225.52</b>
<b>Transformers</b>					
765 kV – Capacity (MVA)	3000	3000	3000	3000	3000
<b>Norm (₹ lakh/ MVA)</b>					
765 kV	0.491	0.508	0.526	0.545	0.564
<b>Total Transformers</b>	<b>1473.00</b>	<b>1524.00</b>	<b>1578.00</b>	<b>1635.00</b>	<b>1692.00</b>
<b>AC &amp; HVDC Lines</b>					
D/C Four conductors- length (km)	440.446	440.446	440.446	440.446	440.446
D/C Six conductors (km)	149.789	149.789	149.789	149.789	149.789
S/C with four conductors	9.077	9.077	9.077	9.077	9.077
<b>Norm (₹ lakh/ km)</b>					
D/C Twin Conductor	0.881	0.912	0.944	0.977	1.011
D/C Quad Conductor	1.322	1.368	1.416	1.466	1.517
<b>Total Transmission Line</b>	<b>787.14</b>	<b>814.53</b>	<b>843.12</b>	<b>872.88</b>	<b>903.26</b>
<b>Total O&amp;M Expenses</b>	<b>3327.52</b>	<b>3443.57</b>	<b>3564.86</b>	<b>3691.90</b>	<b>3820.78</b>

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

208. Regulations 34 and Regulation 3(7) of the 2019 Tariff Regulations provides as under:-

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

(a) **For Coal-based/lignite-fired thermal generating stations:**

- (i) Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;
- (ii) Advance payment for 30 days towards cost of coal or lignite and





*limestone for generation corresponding to the normative annual plant availability factor;*

*(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;*

*(iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;*

*(v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and*

*(vi) Operation and maintenance expenses, including water charges and security expenses, for one month.*

**(b) For Open-cycle Gas Turbine/Combined Cycle thermal generating stations:**

*(i) Fuel cost for 30 days corresponding to the normative annual plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;*

*(ii) Liquid fuel stock for 15 days corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;*

*(iii) Maintenance spares @ 30% of operation and maintenance expenses including water charges and security expenses;*

*(iv) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel; and*

*(v) Operation and maintenance expenses, including water charges and security expenses, for one month.*

**(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.*

*(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:*

*Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.*

*(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 1<sup>st</sup> 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;”

209. The Petitioner has submitted that it has computed the IWC for the 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 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-24. The components of the working capital and interest allowed thereon for the Combined Asset is as under:-

(₹ in lakh)

Particular	Combined Asset				
	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	277.29	286.96	297.07	307.66	318.40
Maintenance Spares	499.13	516.54	534.73	553.79	573.12
Receivables	6427.98	6285.37	6125.66	6024.15	5913.88
Total Working Capital	7204.41	7088.87	6957.46	6885.59	6805.39
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
<b>Interest on working capital</b>	868.13	797.50	782.71	774.63	765.61

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

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



<b>Combined Asset</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Depreciation	17143.17	17170.07	17170.07	17170.07	17170.07
Interest on Loan	12267.37	10859.86	9457.93	8515.63	7632.76
Return on Equity	18674.73	18710.32	18710.32	18710.32	18710.32
Int. on Working Capital	868.13	797.50	782.71	774.63	765.61
Op. and Maintenance	3327.52	3443.57	3564.86	3691.90	3820.78
<b>Total</b>	<b>52280.93</b>	<b>50981.32</b>	<b>49685.89</b>	<b>48862.55</b>	<b>48099.54</b>

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

211. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on Pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

### **Licence Fee and RLDC Fees and Charges**

212. The Petitioner has requested to allow it to bill and recover license fee and RLDC fees and charges, separately from the Respondents. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019, Tariff Regulations for the 2019-24 tariff period. The Petitioner shall also be entitled for recovery of RLDC fee and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

### **Goods and Services Tax**

213. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if at any time GST on transmission is withdrawn from the negative list in future. MPPMCL has submitted that the demand of the Petitioner is premature and need not be considered at this juncture. In response, the Petitioner has submitted that currently transmission of electricity by an electric transmission



utility is exempt from GST. Hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondents to the Petitioner and the same shall be charged and billed separately.

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

### **Security Expenses**

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

216. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. It is observed that the Petitioner has already filed the Petition No.



260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

### **Capital Spares**

217. The Petitioner has sought reimbursement of capital spares at the end of tariff period. The Petitioner's claim towards capital spares, if any, will be dealt in accordance with the provisions of the 2019 Tariff Regulations.

### **Sharing of Transmission Charges**

218. The billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

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

(₹ in lakh)					
<b>Asset</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Combined Asset-A	3525.25	3970.41	4448.26	4683.17	4666.62
Asset-B1	1026.45	1174.30	1178.56	1164.61	1141.88
Asset-B2	411.38	454.93	494.15	514.69	511.25
Asset-B3	2474.01	2835.02	3003.50	3142.77	3153.17
<b>Asset</b>	<b>2014-15 (Pro-rata for 348 days)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Asset-B4	384.83	456.16	498.54	504.62	498.43
<b>Asset</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>



	(Pro-rata for 1 day)				
Asset-B5	25.32	Combined with Asset-B6			
<b>Asset</b>	<b>2014-15 (Pro-rata for 244 day)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Combined Assets-B5 & B6	8746.79	13361.64	13348.40	13164.16	12905.48
<b>Asset</b>	<b>2014-15 (Pro-rata for 91 day)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Asset-C1	47.23	194.05	204.64	211.98	210.38
<b>Asset</b>	-	<b>2015-16 (Pro-rata for 331 days)</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Asset-C2	-	477.90	635.48	650.74	642.67
<b>Asset</b>	<b>2014-15 (Pro-rata for 121 day)</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Asset-C3	139.14	468.86	543.82	568.45	563.90
<b>Asset</b>	-	<b>2015-16 (Pro-rata for 167 days)</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Asset-D	-	13307.75	30217.40	30692.94	30253.74

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

	(₹ in lakh)				
<b>Combined Asset</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Annual Fixed Charges	52280.93	50981.32	49685.89	48862.55	48099.54

220. This order disposes of Petition No. 310/TT/2020.

sd/-  
(Arun Goyal)  
Member

sd/-  
(I. S. Jha)  
Member

sd/-  
(P.K. Pujari)  
Chairperson



## Annexure-I

Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
	Capital Expenditure as on COD		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Land	1172.96	76.79	14.46	0.00	0.00	0.00	1,264.21	0.00	0.00	0.00	0.00	0.00	0.00
	Building	363.18	157.50	1,555.26	500.54	194.93	157.16	2,928.57	3.34	14.76	43.36	77.70	89.31	95.19
Combi ned Asset - A	Transmission Line	3089.97	233.95	446.29	579.90	3.72	0.00	4,353.83	5.28	169.33	187.29	214.38	229.78	229.88
	Sub Station	12819.41	1,973.94	1,008.99	1,956.26	352.04	0.00	18,110.64	5.28	728.98	807.73	886.01	946.95	956.24
	PLCC	45.72	67.50	27.31	3.62	0.00	0.00	144.15	6.33	5.03	8.03	9.01	9.12	9.12
	IT Equipment and software	45.01	16.87	0.00	0.00	0.00	0.00	61.88	5.28	2.82	3.27	3.27	3.27	3.27
	<b>TOTAL</b>	<b>17,536.25</b>	<b>2,526.55</b>	<b>3,052.31</b>	<b>3,040.32</b>	<b>550.69</b>	<b>157.16</b>	<b>26,863.28</b>		<b>920.92</b>	<b>1049.67</b>	<b>1190.36</b>	<b>1278.43</b>	<b>1293.71</b>
	<b>Average Gross Block (₹ in lakh)</b>										18799.53	21588.96	24635.27	26430.78
<b>Weighted Average Rate of Depreciation (WAROD) (%)</b>										4.90	4.86	4.83	4.84	4.83



Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
	Capital Expenditure as on COD		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00
	Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00
Asset -B1	Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00
	Sub Station	4203.14	1,691.16	179.14	112.32	0.00	0.00	6,185.76	5.28	266.57	315.95	323.64	326.61	326.61
	PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33	0.00	0.00	0.00	0.00	0.00
	IT Equipment and software	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00
	<b>TOTAL</b>	<b>4203.14</b>	<b>1,691.16</b>	<b>179.14</b>	<b>112.32</b>	<b>0.00</b>	<b>0.00</b>	<b>6,185.76</b>			<b>266.57</b>	<b>315.95</b>	<b>323.64</b>	<b>326.61</b>
<b>Average Gross Block (₹ in lakh)</b>										<b>5048.72</b>	<b>5983.87</b>	<b>6129.60</b>	<b>6185.76</b>	<b>6185.76</b>
<b>Weighted Average Rate of Depreciation (WAROD) (%)</b>										<b>5.28</b>	<b>5.28</b>	<b>5.28</b>	<b>5.28</b>	<b>5.28</b>





Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
	Capital Expenditure as on COD		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00
	Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00
Asset -B2	Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00
	Sub Station	1697.65	293.71	255.52	280.06	57.56	0.00	2,584.50	5.28	97.39	111.89	126.03	134.94	136.46
	PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33	0.00	0.00	0.00	0.00	0.00
	IT Equipment and software	23.84	8.56	0.00	0.00	0.00	0.00	32.40	5.28	1.48	1.71	1.71	1.71	1.71
	<b>TOTAL</b>	<b>1,721.50</b>	<b>302.27</b>	<b>255.52</b>	<b>280.06</b>	<b>57.56</b>	<b>0.00</b>	<b>2,616.91</b>		<b>98.87</b>	<b>113.60</b>	<b>127.74</b>	<b>136.65</b>	<b>138.17</b>
<b>Average Gross Block (₹ in lakh)</b>										1872.63	2151.53	2419.32	2588.13	2616.91
<b>Weighted Average Rate of Depreciation (WAROD) (%)</b>										<b>5.28</b>	<b>5.28</b>	<b>5.28</b>	<b>5.28</b>	<b>5.28</b>



Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
	Capital Expenditure as on COD		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Land	1627.50	43.32	0.00	0.00	0.00	0.00	1,670.82	0.00	0.00	0.00	0.00	0.00	0.00
	Building	1960.08	1,190.31	470.75	451.32	200.93	224.60	4,497.99	3.34	85.34	113.08	128.48	139.38	146.48
Asset - B3	Transmission Line	1656.24	143.83	7.61	543.51	0.26	0.00	2,351.45	5.28	91.25	95.24	109.79	124.15	124.16
	Sub Station	6872.27	2,622.70	198.76	766.22	366.90	0.00	10,826.85	5.28	432.10	506.58	532.06	561.97	571.66
	PLCC	82.30	1.71	0.03	20.25	0.00	0.00	104.29	6.33	5.26	5.32	5.96	6.60	6.60
	IT Equipment and software	27.95	0.58	0.00	0.00	0.00	0.00	28.53	5.28	1.49	1.51	1.51	1.51	1.51
	<b>TOTAL</b>	<b>12,226.35</b>	<b>4,002.45</b>	<b>677.15</b>	<b>1,781.30</b>	<b>568.09</b>	<b>224.60</b>	<b>19,479.94</b>		<b>615.44</b>	<b>721.74</b>	<b>777.80</b>	<b>833.61</b>	<b>850.40</b>
<b>Average Gross Block (₹ in lakh)</b>										14227.57	16567.37	17796.60	18971.29	19367.64
<b>Weighted Average Rate of Depreciation (WAROD) (%)</b>										4.33	4.36	4.37	4.39	4.39



Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
	Capital Expenditure as on COD		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Building	31.91	67.24	93.41	7.91	0.00	0.00	200.47	3.34	2.19	4.87	6.56	6.70	6.70
Asset -B4	Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00
	Sub Station	1693.11	182.39	331.51	140.25	14.85	0.00	2,362.11	5.28	94.21	107.78	120.23	124.33	124.72
	PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33	0.00	0.00	0.00	0.00	0.00
	IT Equipment and software	6.97	0.18	0.00	0.00	0.00	0.00	7.15	5.28	0.37	0.38	0.38	0.38	0.38
	<b>TOTAL</b>	<b>1,731.99</b>	<b>249.81</b>	<b>424.92</b>	<b>148.16</b>	<b>14.85</b>	<b>0.00</b>	<b>2,569.73</b>		<b>96.77</b>	<b>113.03</b>	<b>127.17</b>	<b>131.40</b>	<b>131.79</b>
<b>Average Gross Block (₹ in lakh)</b>										1856.89	2194.26	2480.80	2562.30	2569.73
<b>Weighted Average Rate of Depreciation (WAROD) (%)</b>										5.21	5.15	5.13	5.13	5.13



Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
	Capital Expenditure as on COD		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
	Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Building	1900.34	176.58	99.74	62.76	0.00	0.00	<b>2,239.42</b>	3.34	66.42	71.03	73.75	74.80	74.80
<b>Combined Asset - B5 &amp; B6</b>	Transmission Line	65618.59	3,159.19	397.09	1,049.49	79.50	228.86	<b>70,532.72</b>	5.28	3548.06	3641.95	3680.14	3709.95	3718.09
	Sub Station	7048.70	976.18	237.89	79.97	66.62	19.91	<b>8,429.27</b>	5.28	397.94	429.99	438.39	442.26	444.54
	PLCC	48.89	0.00	0.02	7.35	0.00	0.00	<b>56.26</b>	6.33	3.10	3.10	3.33	3.56	3.56
	IT Equipment and software	14.54	0.00	0.00	0.00	0.00	0.00	<b>14.54</b>	5.28	0.77	2.18	2.18	2.18	2.18
	<b>TOTAL</b>	<b>74,631.07</b>	<b>4,311.95</b>	<b>734.74</b>	<b>1,199.57</b>	<b>146.12</b>	<b>248.77</b>	<b>81,272.22</b>		<b>4016.29</b>	<b>4148.26</b>	<b>4197.78</b>	<b>4232.74</b>	<b>4243.17</b>
<b>Average Gross Block (₹ in lakh)</b>										76787.05	79310.39	80277.55	80950.39	81147.84
<b>Weighted Average Rate of Depreciation (WAROD) (%)</b>										5.23	5.23	5.23	5.23	5.23



Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
	Capital Expenditure as on COD		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Asset -C1	Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00
	Sub Station	707.53	20.94	29.77	108.71	0.00	0.00	866.95	5.28	37.91	39.25	42.91	45.77	45.77
	PLCC	0.00	0.00	0.00	0.00	0.00	0.00		6.33					
	<b>TOTAL</b>	<b>707.53</b>	<b>20.94</b>	<b>29.77</b>	<b>108.71</b>	0.00	0.00	<b>866.95</b>		<b>37.91</b>	<b>39.25</b>	<b>42.91</b>	<b>45.77</b>	<b>45.77</b>
<b>Average Gross Block (₹ in lakh)</b>										718.00	743.36	812.60	866.95	866.95
<b>Weighted Average Rate of Depreciation (WAROD) (%)</b>										5.28	5.28	5.28	5.28	5.28



Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)				Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)			
	Capital Expenditure as on COD		2015-16	2016-17	2017-18	2018-19			2015-16	2016-17	2017-18	2018-19
Asset -C2	Transmission Line							5.28				
	Sub Station	1,980.33	1,012.75	316.50	57.56	-	3,367.14	5.28	131.30	166.39	176.27	177.78
	PLCC							6.33				
	<b>TOTAL</b>	<b>1,980.33</b>	<b>1,012.75</b>	<b>316.50</b>	<b>57.56</b>	<b>-</b>	<b>3,367.14</b>		<b>131.30</b>	<b>166.39</b>	<b>176.27</b>	<b>177.78</b>
<b>Average Gross Block (₹ in lakh)</b>									2486.71	3151.33	3338.36	3367.14
<b>Weighted Average Rate of Depreciation (WAROD) (%)</b>									5.28	5.28	5.28	5.28



Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
	Capital Expenditure as on COD		2014-15	2015-16	2016-17	2017-18	20 nm 18-19			2014-15	2015-16	2016-17	2017-18	2018-19
Asset -C3	Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00
	Sub Station	1867.60	10.28	588.40	364.10	57.56	0.00	<b>2887.94</b>	5.28	98.88	114.69	139.83	150.96	152.48
	PLCC	0.00	-	0.00	0.00	0.00	0.00	<b>0.00</b>	6.33	0.00	0.00	0.00	0.00	0.00
	IT Equipment and software	27.18	8.16	0.10	0.00	0.00	0.00	<b>35.44</b>	5.28	1.65	1.87	1.87	1.87	1.87
	<b>TOTAL</b>	<b>1894.78</b>	<b>18.44</b>	<b>588.50</b>	<b>364.10</b>	<b>57.56</b>	<b>0.00</b>	<b>2923.38</b>		<b>100.53</b>	<b>116.55</b>	<b>141.70</b>	<b>152.83</b>	<b>154.35</b>
<b>Average Gross Block (₹ in lakh)</b>										1904.00	2207.47	2683.77	2894.60	2923.38
<b>Weighted Average Rate of Depreciation (WAROD) (%)</b>										5.28	5.28	5.28	5.28	5.28



Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)				Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)			
	Capital Expenditure as on COD		2015-16	2016-17	2017-18	2018-19			2015-16	2016-17	2017-18	2018-19
	Building	985.31	82.04	30.52	281.76	65.72	<b>1,445.35</b>	3.34	34.28	36.16	41.37	47.18
	Transmission Line	157255.66	4,437.11	11,395.10	2,877.85	46.81	<b>1,76,012.53</b>	5.28	8420.24	8838.21	9215.01	9292.23
Asset -D	Sub Station	5916.26	122.92	274.03	565.88	33.04	<b>6,912.13</b>	5.28	315.62	326.10	348.28	364.09
	PLCC	189.67	2.98	0.21	0.00	0.00	<b>192.86</b>	6.33	12.10	12.20	12.21	12.21
	IT Equipment and software	17.90	0.28	0.02	0.00	0.00	<b>18.20</b>	5.28	0.95	0.96	0.96	0.96
	<b>TOTAL</b>	<b>1,64,364.80</b>	<b>4,645.33</b>	<b>11,699.88</b>	<b>3,725.49</b>	<b>145.57</b>	<b>1,84,581.07</b>		<b>8783.19</b>	<b>9213.63</b>	<b>9617.83</b>	<b>9716.66</b>
<b>Average Gross Block (₹ in lakh)</b>									166687.47	174860.07	182572.76	184508.29
<b>Weighted Average Rate of Depreciation (WAROD) (%)</b>									5.27	5.27	5.27	5.27





Petition No. 310/TT/2020

Period: 2019-24

Asset	Particular	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
			2019-20			2014-15	2015-16	2016-17	2017-18	2018-19
	Land	2935.03	3.62	<b>2938.65</b>	0.00	0.00	0.00	0.00	0.00	0.00
	Building	11311.80	655.00	<b>11966.80</b>	3.34	388.75	399.69	399.69	399.69	399.69
<b>Combined Asset</b>	Transmission Line	253308.46	502.29	<b>253810.75</b>	5.28	13387.95	13401.21	13401.21	13401.21	13401.21
	Sub Station	62548.43	102.26	<b>62650.69</b>	5.28	3305.26	3307.96	3307.96	3307.96	3307.96
	PLCC	497.57	0.00	<b>497.57</b>	6.33	31.50	31.50	31.50	31.50	31.50
	IT Equipment and software	198.14	0.00	<b>198.14</b>	15.00	29.72	29.72	29.72	29.72	29.72
	<b>TOTAL</b>	<b>330799.43</b>	<b>1263.17</b>	<b>332062.60</b>		<b>17143.17</b>	<b>17170.07</b>	<b>17170.07</b>	<b>17170.07</b>	<b>17170.07</b>
<b>Average Gross Block (₹ in lakh)</b>						331431.01	332062.62	332062.62	332062.62	332062.62
<b>Weighted Average Rate of Depreciation (WAROD) (%)</b>						5.17	5.17	5.17	5.17	5.17

