

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 696/TT/2020**

**Coram:**

**Shri I. S. Jha, Member  
Shri Arun Goyal, Member  
Shri Pravas Kumar Singh, Member**

**Date of Order: 12.09.2021**

**In the matter of:**

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, CERC (Terms and Conditions of Tariff) Regulations, 2014 and CERC (Terms and Conditions of Tariff) Regulations, 2019 for truing up of transmission tariff for 2014-19 tariff period and determination of transmission tariff for 2019-24 tariff period in respect of the **Combined Asset** consisting of **Asset-I:** LILO of 400 kV Hissar-Bassi transmission line at Bhiwadi along with associated bays; **Asset-II:** 400 kV D/C Agra-Bhiwadi transmission line along with associated bays; **Asset-III:** 400 kV D/C Bhiwadi-Moga transmission line along with associated bays at Moga and Bhiwadi end including 02 numbers of 63 MVAR line reactors at Moga end and **Asset-IV:** 80 MVAR Bus Reactor at Bhiwadi Sub-station under Northern Region System Strengthening Scheme-V in Northern Region.

**And in the matter of:**

Power Grid Corporation of India Limited,  
"SAUDAMINI", Plot No-2,  
Sector-29, Gurgaon-122 001 (Haryana).

**.....Petitioner**

**Versus**

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,  
Vidyut Bhawan, Vidyut Marg,  
Jaipur -302005.
2. Ajmer Vidyut Vitran Nigam Limited,  
400 kV GSS Building (Ground Floor), Ajmer Road,  
Heerapura, Jaipur.
3. Jaipur Vidyut Vitran Nigam Limited,  
400 kV GSS Building (Ground Floor), Ajmer Road,  
Heerapura, Jaipur.



4. Jodhpur Vidyut Vitran Nigam Limited,  
400 kV GSS Building (Ground Floor), Ajmer Road,  
Heerapura, Jaipur.
5. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan, Kumar House Complex Building II,  
Shimla-171004.
6. Punjab State Electricity Board,  
Thermal Shed Tia, Near 22 Phatak,  
Patiala-147001.
7. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector-6,  
Panchkula (Haryana)-134109.
8. Power Development Department,  
Govt. of Jammu & Kashmir,  
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Limited,  
(Formerly Uttar Pradesh State Electricity Board),  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow-226001.
10. Delhi Transco Limited,  
Shakti Sadan, Kotla Road,  
New Delhi-110002.
11. BSES Yamuna Power Limited,  
BSES Bhawan, Nehru Place,  
New Delhi.
12. BSES Rajdhani Power Limited,  
BSES Bhawan, Nehru Place,  
New Delhi.
13. North Delhi Power Limited,  
Cennet Building, Adjacent to 66/11 kV Pitampura-3,  
Grid Building, Near PP Jewellers,  
Pitampura, New Delhi-110034.
14. Chandigarh Administration,  
Sector-9, Chandigarh.
15. Uttarakhand Power Corporation Limited,  
Urja Bhawan, Kanwali Road,  
Dehradun.



16. Northern Central Railway,  
Allahabad.
17. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi-110002.

.....Respondent(s)

**For Petitioner** : Shri S. S. Raju, PGCIL  
Shri D. K. Biswal, PGCIL  
Shri V. P. Rastogi, PGCIL  
Shri Amit Yadav, PGCIL

**For Respondent** : None

### **ORDER**

The Petitioner, Power Grid Corporation of India Ltd., a deemed transmission licensee, has filed the instant petition for truing up of the transmission tariff for 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 tariff determination for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following transmission assets forming part of the Combined Asset under Northern Region System Strengthening Scheme-V in Northern Region (hereinafter referred to as “the transmission system”):

**Asset-I:** LILO of 400 kV Hissar-Bassi transmission line at Bhiwadi along with associated bays;

**Asset-II:** 400 kV D/C Agra-Bhiwadi transmission line along with associated bays;

**Asset-III:** 400 kV D/C Bhiwadi-Moga transmission line along with associated bays at Moga and Bhiwadi end including 02 numbers 63 MVAR line reactors at Moga end; and

**Asset-IV:** 80 MVAR Bus Reactor at Bhiwadi Sub-station.



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

- “1) Approve the Additional Capitalisation expenditure incurred during 2014-19 tariff block.
- 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 9.1 and 11.
- 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 Hon'ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019.
- 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (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 beneficiaries 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.
- 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 beneficiaries, if GST on transmission is withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

3. **Backdrop of the case**

a. The administrative approval and expenditure sanction to the transmission system was accorded by the Ministry of Power, Government of



India vide Letter No. 12/15/2004-PG dated 9.6.2006 at an estimated cost of ₹72125.00 lakh, including an IDC of ₹3266.00 lakh (based on 4<sup>th</sup> Quarter, 2005 price level).

b. The scope of work covered under the transmission system is as follows:

**Transmission Lines:**

- i. 400 kV D/C Agra-Bhiwadi line (208.260 kms)
- ii. LILO of 400 kV D/C Hissar-Bassi at Bhiwadi (76.485 kms)
- iii. 400 kV S/C (Twin) at LILO Point at Bhiwadi ( 4.242 kms)
- iv. Moga-Bhiwadi Transmission Line (350.525 kms)

**Sub-station:**

- i. Extension of 400 kV Agra (PGCIL) Sub-station;
- ii. Extension of 400/220 kV Moga (PGCIL) Sub-station; and
- iii. Extension of 400/220 kV Bhiwadi (PGCIL) Sub-station.

c. The entire scope of work under the transmission system is complete and the same is covered in the instant petition.

d. The Dates of Commercial Operation (COD) of Asset-I, Asset-II, Asset-III and Asset-IV was 1.4.2009, 1.9.2009, 1.4.2010 and 1.1.2011 respectively. The Effective Date of Commercial Operation (E-COD) is determined as 10.12.2009.

e. The transmission tariff of Asset-I and Combined Asset (I & II) for the period from 1.4.2009 to 31.3.2014, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 after accounting for Additional Capital Expenditure (ACE) during 2009-10 to 2012-13, was allowed by the Commission vide order dated 25.5.2011 in Petition No. 251/2010.

f. The transmission tariff based on ACE incurred up to COD and ACE projected to be incurred from COD to 31.3.2011 and during 2011-12 for Combined Asset (I, II & III) was determined vide order dated 5.7.2011 in Petition No. 294/2010.



- g. The transmission tariff of Asset-IV for the period from notional COD to 31.3.2014 was allowed vide order dated 19.5.2014 in Petition No. 112/TT/2012.
- h. The transmission tariff of the Combined Asset for the 2009-14 tariff period was trued-up and the tariff for the 2014-19 tariff period was determined vide order dated 9.2.2016 in Petition No. 101/TT/2015.
4. The Respondents are distribution licensees, power departments and transmission licensees, which are procuring transmission services from the Petitioner, mainly beneficiaries of Northern Region.
5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers. None of the Respondents have filed their reply in the matter .
6. The hearing in this matter was held on 6.7.2021 through video conference and the order was reserved.
7. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 9.12.2019 and Petitioner's affidavit dated 15.2.2021 filed in compliance of Technical Validation letter. Having heard the representatives of the Petitioner and after perusal of the materials on record, we proceed to dispose of the petition.

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

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



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3551.25	3551.33	3551.95	3558.15	3563.81
Interest on Loan	613.46	598.25	710.77	711.45	749.99
Return on Equity	3763.89	3781.24	3780.02	3786.97	3803.50
Interest on Working Capital	244.05	246.16	250.84	253.34	256.99
O&M Expenses	1114.14	1151.45	1189.54	1229.01	1269.80
<b>Total</b>	<b>9286.79</b>	<b>9328.43</b>	<b>9483.12</b>	<b>9538.92</b>	<b>9644.09</b>

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	92.85	95.95	99.13	102.42	105.82
Maintenance Spares	167.12	172.72	178.43	184.35	190.47
Receivables	1547.80	1554.74	1580.52	1589.82	1607.35
<b>Total Working Capital</b>	<b>1807.77</b>	<b>1823.41</b>	<b>1858.08</b>	<b>1876.59</b>	<b>1903.64</b>
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of Working Capital</b>	<b>244.05</b>	<b>246.16</b>	<b>250.84</b>	<b>253.34</b>	<b>256.99</b>

### **Capital Cost**

10. The Commission vide order dated 9.2.2016 in Petition No. 101/TT/2015 had allowed capital cost of ₹66766.25 lakh as on 31.3.2014 and the same has been considered as opening capital cost for truing-up of transmission tariff for the 2014-19 tariff period. The capital cost of the Combined Asset has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations.

### **Additional Capital Expenditure**

11. The Commission had allowed ACE of ₹277.00 lakh during 2014-19 period for the Combined Asset vide order dated 9.2.2016 in Petition No. 101/TT/2015. The Petitioner has claimed ACE of ₹2.93 lakh, ₹20.72 lakh and ₹137.03 lakh for Asset-I during the year 2015-16, 2016-17 and 2017-18 respectively. Also, the Petitioner has



claimed ACE of ₹77.21 lakh for Asset-IV during the year 2017-18. The Petitioner has claimed the total ACE of ₹237.89 lakh in accordance with Regulation 14(3)(v) of the 2014 Tariff Regulations on account of liability for works executed prior to the cut-off date in the instant petition.

12. The Petitioner has submitted the vendor-wise ACE details as follows:

Asset	Head/ Agency	2015-16	2016-17	2017-18	Total	Details
Asset-I	Sub-station (M/s BHEL)	2.93	20.72	137.03	160.68	<b>Balance &amp; Retention</b> - Payment of Balance & Retention Payments
Asset-IV		0.00	0.00	77.21	77.21	

13. We have considered the submissions of the Petitioner. ACE claimed is towards balance and retention payments for works executed before the cut-off date and the same has been certified by the Auditor vide Certificates dated 31.7.2019. Further, the total capital expenditure during 2014-19 is within the limits of the total approved capital expenditure and the total cost as on 31.3.2019 is within the approved cost. Thus, the same is allowed in accordance with Regulation 14(3)(v) of the 2014 Tariff Regulations.

14. Accordingly, the details of the approved capital cost considered for truing up of tariff for the 2014-19 tariff period are as follows:

(₹ in lakh)					
Apportioned Approved Cost as per FR	Capital Cost as on 31.3.2014	ACE 2015-16	ACE 2016-17	ACE 2017-18	Capital Cost as on 31.3.2019
72124.70	66766.25	2.93	20.72	214.24	67004.14





15. The details of capital cost allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015, capital cost claimed by the Petitioner and trued-up in the instant order are as follows:

(₹ in lakh)			
Particulars	Capital cost as on 1.4.2014 on cash basis	ACE 2014-19	Total Capital cost including ACE as on 31.3.2019
Allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015	66766.25	277.00	21930.13
Claimed by the Petitioner in the instant petition	66766.25	237.89	21986.24
Approved after true-up in this order	66766.25	237.89	21986.24

### **Debt-Equity Ratio**

16. The debt-equity ratio has been allowed in accordance with Regulation 19(3) of the 2014 Tariff Regulations. As per Regulation 19(3) of the 2014 Tariff Regulations, the debt-equity ratio allowed by the Commission for determination of tariff for the period ending on 31.3.2014 shall be considered. Accordingly, the details of the debt-equity ratio as on 1.4.2014 and 31.3.2019 of the Combined Asset is as follows:

Funding	Capital Cost as on 1.4.2014 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	47587.18	71.27	47753.70	71.27
Equity	19179.07	28.73	19250.44	28.73
<b>Total</b>	<b>66766.25</b>	<b>100.00</b>	<b>67004.14</b>	<b>100.00</b>

### **Depreciation**

17. The Petitioner's claim towards depreciation in this petition was found higher than the depreciation allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015. The Petitioner has neither given any justification for claiming higher depreciation as allowed earlier nor made any specific prayer for allowing higher depreciation in this petition. It is observed that vide order dated 9.2.2016 in Petition No. 101/TT/2015, the



depreciation for IT equipment was allowed @5.28%. The Petitioner, now at the time of truing-up of the tariff of the 2014-19 period, has segregated the IT equipment cost from the sub-station cost and has considered depreciation rate for IT Equipment @15% and salvage value for IT Equipment is NIL as per the 2014 Tariff Regulations. A similar issue had come up before the Commission in Petition No. 19/TT/2020 which was dealt by the Commission vide order dated 9.5.2020.

18. In terms of order dated 9.5.2020 in Petition No. 19/TT/2020, depreciation has been considered for IT Equipment @5.28% as part of the sub-station up to 31.3.2019 while truing up the capital expenditure for the 2014-19 period. However, for the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 of the 2019 Tariff Regulations. The Gross Block during the 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD) and working of WAROD is at Annexure-I. WAROD has been worked out after considering the depreciation rates of the transmission assets as specified in the 2014 Tariff Regulations and depreciation approved during 2014-19 tariff period is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Depreciation</b>					
Opening Gross Block	66766.25	66766.25	66769.18	66789.90	67004.14
ACE	0.00	2.93	20.72	214.24	0.00
Closing Gross Block	66766.25	66769.18	66789.90	67004.14	67004.14
Average Gross Block	66766.25	66767.72	66779.54	66897.02	67004.14
Weighted Average Rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
Aggregate Depreciable Value	60089.63	60090.94	60101.59	60207.32	60303.73
Balance useful life of the asset (Year)	30	29	28	27	26
Lapsed life (Year)	4	5	6	7	8



<b>Combined Depreciation during the year</b>	<b>3527.55</b>	<b>3527.63</b>	<b>3528.25</b>	<b>3534.46</b>	<b>3540.11</b>
Cumulative depreciation at the end of the year	18401.41	21929.04	25457.29	28991.75	32531.86
Remaining Depreciable Value at the end of the year	41688.21	38161.90	34644.29	31215.57	27771.87

19. The details of depreciation allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015, depreciation claimed by the Petitioner in the instant petition and as trued-up in the instant order are as follows:

<b>Particulars</b>	<b>(₹ in lakh)</b>				
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015	3534.86	3542.18	3542.18	3542.18	3542.18
Claimed by the Petitioner in the instant petition	3551.25	3551.33	3551.95	3558.15	3563.81
Approved after true-up in this order	3527.55	3527.63	3528.25	3534.46	3540.11

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

20. The Petitioner has claimed IoL in terms of Regulation 26 of the 2014 Tariff Regulations. IoL has been calculated based on actual interest rate submitted by the Petitioner in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed in respect of the Combined Asset is as follows:

<b>Particulars</b>	<b>(₹ in lakh)</b>				
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Interest on Loan</b>					
Gross Normative Loan	47587.18	47587.18	47589.23	47603.74	47753.70
Cumulative Repayments up to Previous Year	14873.86	18401.41	21929.04	25457.29	28991.75
Net Loan-Opening	32713.32	29185.77	25660.19	22146.44	18761.96
Additions	0.00	2.05	14.50	149.97	0.00
Repayment during the year	3527.55	3527.63	3528.25	3534.46	3540.11
Net Loan-Closing	29185.77	25660.19	22146.44	18761.96	15221.84
Average Loan	30949.54	27422.98	23903.32	20454.20	16991.90
Weighted Average Rate of Interest on Loan (in %)	1.9829	2.1844	2.9809	3.4924	4.4417
<b>Interest on Loan</b>	<b>613.71</b>	<b>599.02</b>	<b>712.54</b>	<b>714.33</b>	<b>754.74</b>



21. The details of IoL allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015, IoL claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015	614.15	546.06	475.98	405.91	335.83
Claimed by the Petitioner in the instant petition	613.46	598.25	710.77	711.45	749.99
Approved after true-up in this order	613.71	599.02	712.54	714.33	754.74

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

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

Year	Claimed effective tax rate (in %)	Grossed-up RoE (in %) [(Base Rate/(1-t))]
2014-15	21.018	19.624
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

23. We have considered the submissions of the Petitioner. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified Minimum Alternate Tax (MAT) rates and the same is given in the table below:

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



24. MAT rates considered in order dated 27.4.2020 for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period, in terms of the provisions of the 2014 Tariff Regulations, is considered in the instant case which is as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Base rate of RoE (in %)	Grossed-up RoE (in %) [(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

25. The Petitioner has claimed RoE for the 2014-19 period after grossing up the RoE of 15.50% with Effective Tax rates (based on MAT rates) each year as per Regulation 25(3) of the 2014 Tariff Regulations. We have considered the submission of the Petitioner. RoE is trued-up on the basis of the MAT rate applicable in the respective years and is allowed for the Combined Asset as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	19179.07	19179.07	19179.95	19186.17	19250.44
Additions	0.00	0.88	6.22	64.27	0.00
Closing Equity	19179.07	19179.95	19186.17	19250.44	19250.44
Average Equity	19179.07	19179.51	19183.06	19218.30	19250.44
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
<b>Return on Equity</b>	<b>3761.02</b>	<b>3779.32</b>	<b>3780.02</b>	<b>3786.97</b>	<b>3803.50</b>

26. The details of RoE allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015, RoE claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015	3769.25	3777.40	3777.40	3777.40	3777.40
Claimed by the Petitioner in the instant petition	3763.89	3781.24	3780.02	3786.97	3803.50
Approved after true-up in this order	3761.02	3779.32	3780.02	3786.97	3803.50

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

27. The total O&M Expenses claimed by the Petitioner for the Combined Asset are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Transmission line</b>					
<b>400 kV D/C Agra-Bhiwadi Line</b> D/C Bundled (Two and three conductors) (km)	208.260	208.260	208.260	208.260	208.260
<b>LILO of 400 kV D/C Hissar-Bassi at Bhiwadi</b> D/C Bundled (Two and three conductors) (km)	76.485	76.485	76.485	76.485	76.485
<b>Moga- Bhiwadi</b> D/C Bundled (Two and three conductors) (km)	350.525	350.525	350.525	350.525	350.525
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
<b>400 kV S/C Twin at LILO Point Bhiwadi</b> S/C Bundled (Twin and three conductors) (km)	4.242	4.242	4.242	4.242	4.242
Norms (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
<b>Sub-station Bays 400 kV (Conventional)</b>					
Bhiwadi: 400 kV Bus Reactor bay	1 number	1 number	1 number	1 number	1 number
Agra: 400 kV Line bays	2 numbers	2 numbers	2 numbers	2 numbers	2 numbers
Bhiwadi: 400 kV line bays	2 numbers	2 numbers	2 numbers	2 numbers	2 numbers
Bhiwadi: Line bays at Bhiwadi (Hissar and Bassi)	2 numbers	2 numbers	2 numbers	2 numbers	2 numbers
Moga: Moga-I Bay	1 number	1 number	1 number	1 number	1 number
Moga: Moga-II Bay	1 number	1 number	1 number	1 number	1 number
Bhiwadi: Bhiwadi I Bay	1 number	1 number	1 number	1 number	1 number
Bhiwadi: Bhiwadi II Bay	1 number	1 number	1 number	1 number	1 number
Norms (₹ lakh/bays)	60.30	62.30	64.37	66.51	68.71
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>1114.14</b>	<b>1151.45</b>	<b>1189.54</b>	<b>1229.01</b>	<b>1269.80</b>

28. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The norms specified in respect of the elements covered in the Combined Asset are as follows:



Element	Norms for 2014-15	Norms for 2015-16	Norms for 2016-17	Norms for 2017-18	Norms for 2018-19
Single Circuit (Two and Three Conductor) (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
Double Circuit (Two and Three Conductor) (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806
400 kV Sub-station (₹ lakh/ bay)	60.30	62.30	64.37	66.51	68.71

29. The O&M Expenses are allowed for the Combined Asset as per the norms specified in Regulation 29(3) of the 2014 Tariff Regulations and are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Transmission line</b>					
<b>400 kV D/C Agra-Bhiwadi Line</b> D/C Bundled (Two and Three Conductor) (km)	208.260	208.260	208.260	208.260	208.260
<b>LILO of 400 kV D/C Hissar-Bassi at Bhiwadi</b> D/C Bundled (Two and Three Conductor) (km)	76.485	76.485	76.485	76.485	76.485
<b>Moga-Bhiwadi</b> D/C Bundled (Two and Three Conductor) (km)	350.525	350.525	350.525	350.525	350.525
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
<b>400 kV S/C Twin at LILO Point Bhiwadi</b> S/C Bundled (Two and Three Conductor) (km)	4.242	4.242	4.242	4.242	4.242
Norms (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
<b>Sub-station Bays 400 kV (Conventional)</b>					
Bhiwadi:400 kV Bus Reactor bay at Bhiwadi	1 number	1 number	1 number	1 number	1 number
Agra:400 kV Line bays at Agra	2 numbers	2 numbers	2 numbers	2 numbers	2 numbers
Bhiwadi:400 kV line bays at Bhiwadi	2 numbers	2 numbers	2 numbers	2 numbers	2 numbers
Bhiwadi: Line days at Bhiwadi (Hissar and Bassi)	2 numbers	2 numbers	2 numbers	2 numbers	2 numbers
Moga: Moga-I Bay	1 number	1 number	1 number	1 number	1 number
Moga: Moga-II Bay	1 number	1 number	1 number	1 number	1 number
Bhiwadi: Bhiwadi I Bay	1 number	1 number	1 number	1 number	1 number
Bhiwadi: Bhiwadi II Bay	1 number	1 number	1 number	1 number	1 number
Norms (₹ lakh/bays)	60.30	62.30	64.37	66.51	68.71
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>1114.15</b>	<b>1151.46</b>	<b>1189.53</b>	<b>1229.01</b>	<b>1269.79</b>



30. The details of O&M Expenses allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015	1114.15	1151.46	1189.53	1229.01	1269.79
Claimed by the Petitioner in the instant petition	1114.14	1151.45	1189.54	1229.01	1269.80
Approved after true-up in this order	1114.15	1151.46	1189.53	1229.01	1269.79

### **Interest on Working Capital**

31. The Petitioner has claimed IWC in terms of Regulation 28 of the 2014 Tariff Regulations. We have considered the submission of the Petitioner. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and the trued-up IWC allowed for the Combined Asset for the 2014-19 tariff period are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Interest on Working Capital</b>					
Working capital for O&M Expenses (O&M Expenses for 1 month)	92.85	95.95	99.13	102.42	105.82
Working capital for Maintenance Spares (15% of O&M Expenses)	167.12	172.72	178.43	184.35	190.47
Working capital for Receivables (Equivalent to 2 months of annual fixed cost)	1543.31	1550.50	1576.78	1586.27	1604.12
<b>Total Working Capital</b>	<b>1803.28</b>	<b>1819.18</b>	<b>1854.34</b>	<b>1873.04</b>	<b>1900.40</b>
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest on Working Capital</b>	<b>243.44</b>	<b>245.59</b>	<b>250.34</b>	<b>252.86</b>	<b>256.55</b>

32. The details of IWC allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015, IWC claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:





(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015	243.81	244.66	245.15	245.72	246.36
Claimed by the Petitioner in the instant petition	244.05	246.16	250.84	253.34	256.99
Approved after true-up in this order	243.44	245.59	250.34	252.86	256.55

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

33. The trued-up Annual Fixed Charges (AFC) for the Combined Asset for the 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3527.55	3527.63	3528.25	3534.46	3540.11
Interest on Loan	613.71	599.02	712.54	714.33	754.74
Return on Equity	3761.02	3779.32	3780.02	3786.97	3803.50
O&M Expenses	1114.15	1151.46	1189.53	1229.01	1269.79
Interest on Working Capital	243.44	245.59	250.34	252.86	256.55
<b>Total</b>	<b>9259.87</b>	<b>9303.01</b>	<b>9460.68</b>	<b>9517.63</b>	<b>9624.70</b>

34. Accordingly, the Annual Transmission Charges allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 9.2.2016 in Petition No. 101/TT/2015	9276.23	9261.76	9230.24	9200.21	9171.56
Claimed by the Petitioner in the instant petition	9286.79	9328.43	9483.12	9538.92	9644.09
Approved after true-up in this order	9259.87	9303.01	9460.68	9517.63	9624.70

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

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



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	3529.21	3527.22	3527.22	777.02	777.02
Interest on Loan	623.25	458.73	294.12	193.81	158.45
Return on Equity	3615.62	3615.62	3615.62	3615.62	3615.62
Interest on Working Capital	157.02	156.27	155.24	113.76	114.53
O&M Expenses	922.39	954.59	987.88	1022.23	1057.66
<b>Total</b>	<b>8847.49</b>	<b>8712.43</b>	<b>8580.08</b>	<b>5722.44</b>	<b>5723.28</b>

36. The details of IWC claimed by the Petitioner for the 2019-24 period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	76.87	79.55	82.32	85.19	88.14
Maintenance Spares	138.36	143.19	148.18	153.33	158.65
Receivables	1087.81	1074.14	1057.82	705.51	703.68
<b>Total Working Capital</b>	<b>1303.04</b>	<b>1296.88</b>	<b>1288.32</b>	<b>944.03</b>	<b>950.47</b>
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest of Working Capital</b>	<b>157.02</b>	<b>156.27</b>	<b>155.24</b>	<b>113.76</b>	<b>114.53</b>

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

37. The Petitioner has claimed E-COD of the Combined Asset as 1.4.2010. Based on the tried-up admitted capital cost and actual COD of all the transmission assets, E-COD has been worked out as follows:

Asset	Admitted Capital Cost as on 31.3.2014 (₹ in lakh)	Actual COD	Number of Days from last COD	Weight of cost (in %)	Weighted Days	Effective COD (Latest COD - total Weighted Days)
Asset-I	7914.42	1.4.2009	640	11.85%	75.87	
Asset-II	22863.76	1.9.2009	487	34.24%	166.77	
Asset-III	34985.67	1.4.2010	275	52.40%	144.10	
Asset-IV	1002.39	1.1.2011	-	1.50%	0.00	
<b>Total</b>	<b>66766.25</b>			<b>100%</b>	<b>386.74</b>	<b>10.12.2009</b>



### Weighted Average Life (WAL)

38. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2014 and their respective life as stipulated in the 2014 Tariff Regulations. Accordingly, WAL of the Combined Asset has been worked out as 34 years as follows:

Particulars	Useful Life (in years) (A)	Capital Cost as on 31.3.2014 (₹ in lakh) (B)	Weighted Cost (₹ in lakh) (C=A x B)	Weighted Avg. Life of Asset (in years) (D=C / B)
Building & Civil Works	25	69.53	1,738.25	<b>33.78 years (rounded off to 34 years)</b>
Transmission Line	35	58,944.22	20,63,047.70	
Sub-station	25	7405.67	1,85,141.75	
PLCC	15	346.83	5,202.45	
<b>Total</b>		<b>66,766.25</b>	<b>22,55,130.15</b>	

### Capital Cost

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

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

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

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



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

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

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

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

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen 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 decapitalised only after its redeployment;

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

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

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

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

40. The Petitioner has claimed capital cost of ₹67004.14 lakh as on 31.3.2019 for the Combined Asset. The same has been worked out by the Commission as on 31.3.2019 and considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

41. The Petitioner has not projected any ACE during the 2019-24 tariff period for the Combined Asset. Accordingly, the capital cost considered for the 2019-24 tariff period is as follows:

(₹ in lakh)		
Capital Cost (as on 1.4.2019)	ACE (2019-24)	Capital Cost (as on 31.3.2024)
67004.14	0.00	67004.14

### **Debt-Equity Ratio**

42. Regulation 18 of the 2019 Tariff Regulations provides as follows:



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

Provided that:

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

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

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

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

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

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

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





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

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

Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	47753.70	71.27	47753.70	71.27
Equity	19250.44	28.73	19250.44	28.73
<b>Total</b>	<b>67004.14</b>	<b>100.00</b>	<b>67004.14</b>	<b>100.00</b>

### Depreciation

44. Regulations 33(1), 33(2) and 33(5) of the 2019 Tariff Regulations provide as follows:

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

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

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

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

*Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial*



*operation of the station shall be spread over the balance useful life of the assets.”*

45. The Gross Block during the 2019-24 tariff period has been depreciated at WAROD. WAROD at Annexure-II till 2021-22 has been worked out after considering the depreciation rates of assets as prescribed in the 2019 Tariff Regulations. As the Combined Asset shall complete 12 years of useful life on 31.3.2023, the remaining depreciable value is spread over the balance useful life as mentioned in Regulation 33(5) of the 2019 Tariff Regulations. The depreciation allowed for the Combined Asset for the 2019-24 period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Depreciation</b>					
Opening Gross Block	67004.14	67004.14	67004.14	67004.14	67004.14
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	0.00	0.00	0.00	0.00	0.00
Average Gross Block	67004.14	67004.14	67004.14	67004.14	67004.14
Weighted Average Rate of Depreciation (in %)	5.32	5.32	5.32	1.16	1.16
Aggregate Depreciable Value	60328.12	60328.12	60328.12	60328.12	60328.12
Balance useful life of the asset (Year)	25	24	23	22	21
Lapsed life (Year)	9	10	11	12	13
<b>Depreciation during the year</b>	<b>3563.82</b>	<b>3563.82</b>	<b>3563.82</b>	<b>777.49</b>	<b>777.49</b>
Cumulative depreciation at the end of the year	36095.68	39659.50	43223.33	44000.82	44778.31
Remaining Depreciable Value at the end of the year	24232.44	20668.62	17104.79	16327.30	15549.81

### **Interest on Loan**

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

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

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





(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of 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.”

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

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	47753.70	47753.70	47753.70	47753.70	47753.70



<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Cumulative Repayments up to Previous Year	32531.86	36095.68	39659.50	43223.33	44000.82
Net Loan-Opening	15221.84	11658.02	8094.20	4530.38	3752.89
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	3563.82	3563.82	3563.82	777.49	777.49
Net Loan-Closing	11658.02	8094.20	4530.38	3752.89	2975.40
Average Loan	13439.93	9876.11	6312.29	4141.63	3364.14
Weighted Average Rate of Interest on Loan (in %)	4.6725	4.6759	4.6810	4.6914	4.7242
<b>Interest on Loan</b>	<b>627.99</b>	<b>461.80</b>	<b>295.48</b>	<b>194.30</b>	<b>158.93</b>

### **Return on Equity**

48. Regulations 30 and 31 of the 2019 Tariff Regulations provides as follows:

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

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

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

*Provided further that:*

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

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

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

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



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

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

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

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

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

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

#### **Illustration-**

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

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

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

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

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

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore / Rs 1000 Crore = 24%;

(d) Rate of return on equity =  $15.50 / (1 - 0.24) = 20.395\%$ .

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including



*interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”*

49. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company.

50. We have considered the submission of the Petitioner. Accordingly, MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the Combined Asset for the 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	19250.44	19250.44	19250.44	19250.44	19250.44
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	19250.44	19250.44	19250.44	19250.44	19250.44
Average Equity	19250.44	19250.44	19250.44	19250.44	19250.44
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity</b>	<b>3615.62</b>	<b>3615.62</b>	<b>3615.62</b>	<b>3615.62</b>	<b>3615.62</b>

### **Operation & Maintenance Expenses**

51. The O&M Expenses claimed by the Petitioner for the various elements included in the Combined Asset for the 2019-24 tariff period are as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Transmission line</b>					
<b>400 kV D/C Agra- Bhiwadi Line</b> D/C Bundled (Twin/Triple conductors) (km)	208.260	208.260	208.260	208.260	208.260
<b>LILO of 400 kV D/C Hissar-Bassi at Bhiwadi</b> D/C Bundled (Twin/Triple conductors) (km)	76.485	76.485	76.485	76.485	76.485



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Moga- Bhiwadi</b> D/C Bundled (Twin/Triple conductors) (km)	350.525	350.525	350.525	350.525	350.525
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
<b>400 kV S/C Twin at LILO Point Bhiwadi</b> S/C Bundled (Twin/Triple conductors) (km)	4.242	4.242	4.242	4.242	4.242
Norms (₹ lakh/km)	0.252	0.26	0.27	0.279	0.289
<b>Sub-station Bays 400 kV(Conventional)</b>					
Bhiwadi:400 kV Bus Reactor bay at Bhiwadi	1 number	1 number	1 number	1 number	1 number
Agra:400 kV Line bays at Agra	2 numbers	2 numbers	2 numbers	2 numbers	2 numbers
Bhiwadi:400 kV line bays at Bhiwadi	2 numbers	2 numbers	2 numbers	2 numbers	2 numbers
Bhiwadi: Line days at Bhiwadi (Hissar and Bassi)	2 numbers	2 numbers	2 numbers	2 numbers	2 numbers
Moga: Moga-I Bay	1 number	1 number	1 number	1 number	1 number
Moga: Moga-II Bay	1 number	1 number	1 number	1 number	1 number
Bhiwadi: Bhiwadi I Bay	1 number	1 number	1 number	1 number	1 number
Bhiwadi: Bhiwadi II Bay	1 number	1 number	1 number	1 number	1 number
Norms (₹ lakh/bays)	32.15	33.28	34.45	35.66	36.91
<b>PLCC</b>	2% of the PLCC Project Cost				
PLCC related project cost (₹ in lakh)	346.83	346.83	346.83	346.83	346.83
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>922.39</b>	<b>954.59</b>	<b>987.88</b>	<b>1022.23</b>	<b>1057.66</b>

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

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<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



<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<b>Norms for AC and HVDC lines (₹ Lakh per km)</b>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
<b>Norms for HVDC stations</b>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834





<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<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 year*

*(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.”

53. We have considered the submissions of the Petitioner. The Petitioner has claimed O&M Expenses separately for 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 2019 Tariff Regulations and the norms for sub-station has been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No. 126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations. Therefore, the Petitioner’s claim for separate O&M Expenses for PLCC @2% is not allowed.

54. The O&M Expenses allowed for the Combined Asset is as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Transmission line</b>					
<b>400 KV D/C Agra- Bhiwadi Line</b> D/C Bundled (Twin/Triple conductors) (km)	208.260	208.260	208.260	208.260	208.260
<b>LILO of 400 KV D/C Hissar-Bassi at Bhiwadi</b> D/C Bundled (Twin/Triple conductors) (km)	76.485	76.485	76.485	76.485	76.485
<b>Moga- Bhiwadi</b> D/C Bundled (Twin/Triple conductors) (km)	350.525	350.525	350.525	350.525	350.525
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
<b>400 kV S/C Twin at LILO Point Bhiwadi</b> S/C Bundled (Twin/Triple conductors) (km)	4.242	4.242	4.242	4.242	4.242





Norms (₹ lakh/km)	0.252	0.26	0.27	0.279	0.289
<b>Sub-station Bays 400 kV (Conventional)</b>					
Bhiwadi:400 kV Bus Reactor bay at Bhiwadi	1 number	1 number	1 number	1 number	1 number
Agra:400 kV Line bays at Agra	2 numbers	2 numbers	2 numbers	2 numbers	2 numbers
Bhiwadi:400 kV line bays at Bhiwadi	2 numbers	2 numbers	2 numbers	2 numbers	2 numbers
Bhiwadi: Line days at Bhiwadi (Hissar and Bassi)	2 numbers	2 numbers	2 numbers	2 numbers	2 numbers
Moga: Moga-I Bay	1 number	1 number	1 number	1 number	1 number
Moga: Moga-II Bay	1 number	1 number	1 number	1 number	1 number
Bhiwadi: Bhiwadi I Bay	1 number	1 number	1 number	1 number	1 number
Bhiwadi: Bhiwadi II Bay	1 number	1 number	1 number	1 number	1 number
Norms (₹ lakh/bays)	32.15	33.28	34.45	35.66	36.91
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>915.46</b>	<b>947.66</b>	<b>980.93</b>	<b>1015.29</b>	<b>1050.72</b>

### **Interest on Working Capital**

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

***“34. Interest on Working Capital***

*(1)...*

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

- i. Receivables equivalent to 45 days of fixed cost;*
- ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*
- iii. Operation and maintenance expenses, including security expenses for one month”*

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

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

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

*“3. Definitions ...*



(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;"

56. The Petitioner has submitted that it has computed 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 Interest (RoI) considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, RoI for 2020-21 onwards has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) and for 2021-22 onwards, RoI has been considered as 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for 1 month)	76.29	78.97	81.74	84.61	87.56
Working Capital for Maintenance Spares (15% of O&M Expenses)	137.32	142.15	147.14	152.29	157.61
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	1091.83	1076.91	1059.18	702.91	701.08
<b>Total Working Capital</b>	<b>1305.43</b>	<b>1298.03</b>	<b>1288.06</b>	<b>939.81</b>	<b>946.25</b>
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
<b>Interest on Working Capital</b>	<b>157.30</b>	<b>146.03</b>	<b>135.25</b>	<b>98.68</b>	<b>99.36</b>

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

57. The transmission charges allowed for the Combined Asset for the 2019-24 tariff period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	3563.82	3563.82	3563.82	777.49	777.49
Interest on Loan	627.99	461.80	295.48	194.30	158.93
Return on Equity	3615.62	3615.62	3615.62	3615.62	3615.62



O&M Expenses	915.46	947.66	980.93	1015.29	1050.72
Interest on Working Capital	157.30	146.03	135.25	98.68	99.36
<b>Total</b>	<b>8880.19</b>	<b>8734.92</b>	<b>8591.10</b>	<b>5701.37</b>	<b>5702.11</b>

**Filing Fee and Publication Expenses**

58. The Petitioner has claimed reimbursement of filing fee 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.

**License Fee & RLDC Fees and Charges**

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

**Goods and Services Tax**

60. The Petitioner has submitted that if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory authorities, the same may be allowed to be recovered from the beneficiaries.



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

### **Security Expenses**

62. The Petitioner has submitted that security expenses in respect of 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.

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

### **Capital Spares**

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

### **Sharing of Transmission Charges**

65. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission system was governed by the 2010 Sharing Regulations. With effect from 1.11.2020, sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of transmission charges



determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. For subsequent period, the billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

66. To summarise:

- a) The trued-up AFC approved for the Combined Asset for the 2014-19 tariff period are:

(₹ in lakh)				
2014-15	2015-16	2016-17	2017-18	2018-19
9259.87	9303.01	9460.68	9517.63	9624.70

- b) AFC allowed for the Combined Asset for the 2019-24 tariff period in the instant order are:

(₹ in lakh)				
2019-20	2020-21	2021-22	2022-23	2023-24
8880.19	8734.92	8591.10	5701.37	5702.11

67. Annexure-I and Annexure-II given hereinafter shall form part of this order.

68. This order disposes of Petition No. 696/TT/2020 in terms of the above discussions and findings.

**sd/-**  
**(Pravas Kumar Singh)**  
**Member**

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

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



## Annexure-I

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2015-16	2016-17	2017-18	2018-19	Total			2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	-	-	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	-	3.34%	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	69.53	0.00	0.00	0.00	0.00	0.00	69.53	3.34%	2.32	2.32	2.32	2.32	2.32
Transmission Line	58944.22	0.00	0.00	0.00	0.00	0.00	58944.22	5.28%	3112.25	3112.25	3112.25	3112.25	3112.25
Sub Station	7161.73	2.93	20.72	214.24	0.00	237.89	7399.62	5.28%	378.14	378.22	378.84	385.04	390.70
PLCC	346.83	0.00	0.00	0.00	0.00	0.00	346.83	6.33%	21.95	21.95	21.95	21.95	21.95
IT Equipment (Incl. Software)	243.94	0.00	0.00	0.00	0.00	0.00	243.94	5.28%	12.88	12.88	12.88	12.88	12.88
<b>Total</b>	<b>66766.25</b>	<b>2.93</b>	<b>20.72</b>	<b>214.24</b>	<b>0.00</b>	<b>237.89</b>	<b>67004.14</b>		<b>3527.55</b>	<b>3527.63</b>	<b>3528.25</b>	<b>3534.45</b>	<b>3540.11</b>
<b>Average Gross Block (₹ in lakh)</b>									<b>66766.25</b>	<b>66767.72</b>	<b>66779.54</b>	<b>66897.02</b>	<b>67004.14</b>
<b>Weighted Average Rate of Depreciation</b>									<b>5.28%</b>	<b>5.28%</b>	<b>5.28%</b>	<b>5.28%</b>	<b>5.28%</b>

## Annexure-II

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh) 2019-24	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
					2019-20	2020-21	2021-22	2022-23	2023-24
Land - Freehold	0.00	0.00	0.00	-	0.00	0.00	0.00		
Land - Leasehold	0.00	0.00	0.00	3.34%	0.00	0.00	0.00		
Building Civil Works & Colony	69.53	0.00	69.53	3.34%	2.32	2.32	2.32		
Transmission Line	58944.22	0.00	58944.22	5.28%	3112.25	3112.25	3112.25		
Sub Station	7399.62	0.00	7399.62	5.28%	390.70	390.70	390.70		
PLCC	346.83	0.00	346.83	6.33%	21.95	21.95	21.95		
IT Equipment (Incl. Software)	243.94	0.00	243.94	15.00%	36.59	36.59	36.59		
<b>Total</b>	<b>67004.14</b>	<b>0.00</b>	<b>67004.14</b>		<b>3563.82</b>	<b>3563.82</b>	<b>3563.82</b>	<b>777.49</b>	<b>777.49</b>
<b>Average Gross Block (₹ in lakh)</b>					<b>67004.14</b>	<b>67004.14</b>	<b>67004.14</b>	<b>67004.14</b>	<b>67004.14</b>
<b>Weighted Average Rate of Depreciation</b>					<b>5.32%</b>	<b>5.32%</b>	<b>5.32%</b>	<b>1.16%</b>	<b>1.16%</b>

