

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 37/TT/2020**

**Coram:**

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

**Date of Order: 17.08.2020**

**In the matter of:**

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of Asset-I: Modification of 132 kV Bus arrangement including switchgear to Double Main (DM) scheme with GIS at 220/132 kV Birpara Sub-station, Asset-II: 125 MVAR Bus Reactor at Banka Sub-station, Asset-III: 125 MVAR Bus Reactor at Chaibasa Sub-station, Asset-IV: 125 MVAR Bus Reactor at Lakhisarai Sub-station, Asset-V: 125 MVAR Bus Reactor at Durgapur Sub-station, Asset-VI: 125 MVAR Bus Reactor at Baripada Sub-station, Asset-VII: 125 MVAR Bus Reactor at Bolangir Sub-station and Asset-VIII: 125 MVAR Bus Reactor at Keonjhar Sub-station alongwith associated bays under "Eastern Region Strengthening scheme XIV" in Eastern Region.

**And in the matter of:**

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

**....Petitioner**

**Vs**

1. Bihar State Power (Holding) Company Ltd.  
(Formerly Bihar State Electricity Board -BSEB)  
Vidyut Bhavan, Bailey Road, Patna – 800001
2. West Bengal State Electricity Distribution Company Limited  
Bidyut Bhawan, Bidhan Nagar  
Block DJ, Sector-II, Salt Lake City  
Calcutta - 700091
3. Grid Corporation of Orissa Ltd.



- Shahid Nagar, Bhubaneswar - 751007
4. Jharkhand State Electricity Board  
In front of Main Secretariat  
Doranda, Ranchi - 834002
  5. Damodar Valley Corporation  
DVC Tower, Maniktala  
Civic Centre, VIP Road, Calcutta - 700054
  6. Power Department  
Govt. of Sikkim, Gangtok - 737101

**For Petitioner** : Shri S.S. Raju, PGCIL  
Shri A.K. Verma, PGCIL

**For Respondents** : None

### **ORDER**

The present petition has been filed by Power Grid Corporation of India Ltd. (“the Petitioner”) for truing-up of the transmission tariff for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and tariff determination of 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) of following assets (hereinafter referred to as “transmission assets”) :

**Asset-I:** Modification of 132 kV Bus arrangement including switchgear to Double Main (DM) scheme with GIS at 220/132 kV Birpara Sub-station,

**Asset-II:** 01 No. 125 MVAR Bus Reactor at Banka Sub-station,

**Asset-III:** 01 No. 125 MVAR Bus Reactor at Chaibasa Sub-station,

**Asset-IV:** 01 No. 125 MVAR Bus Reactor at Lakhisarai Sub-station,

**Asset-V:** 01 No. 125 MVAR Bus Reactor at Durgapur Sub-station,

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**Asset-VI:** 01 No. 125 MVAR Bus Reactor at Baripada Sub-station,

**Asset-VII:** 01 No. 125 MVAR Bus Reactor at Bolangir Sub-station and

**Asset-VIII:** 01 No. 125 MVAR Bus Reactor at Keonjhar Sub-station along with associated bays

under “Eastern Region Strengthening Scheme XIV” in Eastern Region (hereinafter referred to as “transmission project”)

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

*“ 1) Approve the trued-up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 10.2 and 11.0 above.*

*2) Approve the Completion cost and additional capitalization incurred during 2014-19 & 2019-24.*

*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 10.2 and 11.0 above for respective block.*

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

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

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

*7) Allow the Petitioner to claimed initial spares project as whole.*

*8) Allow the Petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 11.6 above.*

*9) Allow the Petitioner to claim the capital spares at the end of tariff block as per actual.*



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

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

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

### **Background**

4. The Investment Approval (IA) and expenditure sanction for the transmission project was accorded by the Board of Directors of the Petitioner vide Memorandum No. C/CP/ERSS-XIV dated 5.5.2016 at an estimated cost of ₹16701 lakh including IDC of ₹1009 lakh based on October, 2015 price level. The scope of the transmission project “Eastern Region Strengthening Scheme XIV” in the Eastern Region is as under:-

- (i) Asset-I: Modification of 132 kV Bus arrangement including switchgear to Double Main (DM) scheme with GIS at 220/132 kV Birpara Sub-station;
- (ii) Asset-II: 01 No. 125 MVAR Bus Reactor at Banka Sub-station;
- (iii) Asset-III: 01 No. 125 MVAR Bus Reactor at Chaibasa Sub-station;
- (iv) Asset-IV: 01 No. 125 MVAR Bus Reactor at Lakhisarai Sub-station;
- (v) Asset-V: 01 No. 125 MVAR Bus Reactor at Durgapur Sub-station;
- (vi) Asset-VI: 01 No. 125 MVAR Bus Reactor at Baripada Sub-station;
- (vii) Asset-VII: 01 No. 125 MVAR Bus Reactor at Bolangir Sub-station; and
- (viii) Asset-VIII: 01 No. 125 MVAR Bus Reactor at Keonjhar Sub-station



5. As per IA dated 5.5.2016, the instant transmission project was scheduled to be put into commercial operation within 30 months i.e. by 5.11.2018. The details of commercial operation of the assets covered in the instant petition are as follows:

<b>Asset</b>	<b>COD</b>
Asset-I	31.10.2017
Asset-II	29.09.2018
Asset-III	28.07.2018
Asset-IV	05.11.2018
Asset-V	02.08.2018
Asset-VI	30.06.2018
Asset-VII	30.09.2018
Asset-VIII	01.11.2018

6. The transmission tariff of Asset-I from its COD to 31.3.2019 was determined in Petition No. 163/TT/2018 vide order dated 29.5.2019 as per the 2014 Tariff Regulations. The transmission tariff in respect of Asset-II to Asset-VIII from their respective COD to 31.3.2019 was determined in Petition No. 271/TT/2018 vide order dated 4.10.2019 as per the 2014 Tariff Regulations. There is no time over-run in case of the instant transmission assets.

7. The Petitioner has served the petition on the Respondents and notice has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 (hereinafter referred to as "the Act"). No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. None of the Respondents have filed their reply. The hearing in this matter was held on 19.5.2020. Having heard the representatives of the Petitioner and 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 transmission charges claimed by the Petitioner for the instant assets are as under:-

(₹ in lakh)

Particulars	Asset-I		Asset-II
	2017-18 (Pro-rata)	2018-19	2018-19 (Pro-rata)
Depreciation	36.27	118.73	29.58
Interest on Loan	33.04	100.28	30.02
Return on Equity	37.95	120.50	32.16
Interest on working capital	2.30	7.28	3.63
O & M Expenses	0.00	0.00	34.64
<b>Total</b>	<b>109.56</b>	<b>346.79</b>	<b>130.03</b>

(₹ in lakh)

Particulars	Asset-III	Asset-IV	Asset-V
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Depreciation	44.34	36.40	46.09
Interest on Loan	44.88	34.95	48.64
Return on Equity	48.50	37.29	51.74
Interest on working capital	5.18	3.63	5.31
O & M Expenses	46.50	27.67	45.56
<b>Total</b>	<b>189.40</b>	<b>139.94</b>	<b>197.34</b>

(₹ in lakh)

Particulars	Asset-VI	Asset-VII	Asset-VIII
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Depreciation	115.36	39.96	27.27
Interest on Loan	117.47	39.67	27.09
Return on Equity	125.97	41.73	28.06
Interest on working capital	9.65	4.24	3.13
O & M Expenses	44.25	34.45	28.43
<b>Total</b>	<b>412.70</b>	<b>160.05</b>	<b>113.98</b>

9. The details of the interest on working capital claimed by the Petitioner for the instant assets are as under:-



(₹ in lakh)

Particulars	Asset-I		Asset-II
	2017-18 (Pro-rata)	2018-19	2018-19 (Pro-rata)
Maintenance Spares	0.00	0.00	5.73
O&M expenses	0.00	0.00	10.31
Receivables	43.85	57.80	42.99
<b>Total</b>	<b>43.85</b>	<b>57.80</b>	<b>59.03</b>
Rate of Interest (%)	12.60	12.60	12.20
<b>Interest on Working Capital</b>	<b>2.30</b>	<b>7.28</b>	<b>3.63</b>

(₹ in lakh)

Particulars	Asset-III	Asset-IV	Asset-V
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
O&M expenses	5.73	5.73	5.73
Maintenance Spares	10.31	10.31	10.31
Receivables	46.65	57.92	49.61
<b>Total</b>	<b>62.69</b>	<b>73.96</b>	<b>65.65</b>
Rate of Interest (%)	12.20	12.20	12.20
<b>Interest on Working Capital</b>	<b>5.18</b>	<b>3.63</b>	<b>5.31</b>

(₹ in lakh)

Particulars	Asset-VI	Asset-VII	Asset-VIII
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
O&M expenses	4.89	5.73	5.73
Maintenance Spares	8.81	10.31	10.31
Receivables	91.29	53.20	45.92
<b>Total</b>	<b>104.99</b>	<b>69.24</b>	<b>61.96</b>
Rate of Interest (%)	12.20	12.20	12.20
<b>Interest on Working Capital</b>	<b>9.65</b>	<b>4.24</b>	<b>3.13</b>

### Capital Cost

10. The Commission vide order dated 29.5.2019 in Petition No. 163/TT/2018 approved the capital cost of ₹2296.45 lakh for Asset-I and vide order dated 4.10.2019 in Petition No. 271/TT/2018 approved the capital cost of ₹1160.96 lakh, ₹1205.56 lakh, ₹1684.15 lakh, ₹1272.27 lakh, ₹3286.04 lakh, ₹1651.18 lakh and ₹1697.62 lakh for Asset-II, Asset-III, Asset-IV, Asset-V, Asset-VI, Asset-VII and



Asset-VIII respectively as opening capital cost as on 1.4.2019 for determination of tariff for 2014-19 period.

11. The Petitioner vide Auditor's Certificates dated 31.7.2019 has submitted the capital cost incurred up to COD, Additional Capital Expenditure (ACE) up to 31.3.2019 and estimated ACE for the period from 1.4.2019 to 31.3.2021. The details of approved apportioned capital cost, capital cost as on COD, Additional Capital Expenditure (ACE) incurred up to 31.3.2019 and projected ACE incurred upto 31.3.2019 as claimed by the Petitioner for the instant transmission assets are as under:-

(₹ in lakh)

Assets	RCE approved apportioned capital cost	Capital cost as on COD as per Auditor Certificate*	Additional Capital Expenditure (claimed)*		Total capital cost as on 31.3.2019 (claimed)
			2017-18	2018-19	
Asset-I	2636.99	1176.54	848.36	134.08	2158.98
Asset-II	1427.84	976.5	0.00	237.89	1214.39
Asset-III	1467.73	1113.95	0.00	218.21	1332.16
Asset-IV	2336.52	1424.03	0.00	337.01	1761.04
Asset-V	1844.00	1137.19	0.00	359.81	1497.00
Asset-VI	3579.49	2693.54	0.00	348.8	3042.42
Asset-VII	1814.69	1265.67	0.00	289.39	1555.06
Asset-VIII	1805.74	712.51	0.00	863.37	1575.88

\*The capital cost figures shown in the table are as claimed by the Petitioner in the instant petition on accrual basis.

### **Cost Over-run**

12. The completion cost including additional capital expenditure in respect of the instant assets is within the RCE approved apportioned capital cost as mentioned in Table under para 11 above. Therefore, there is no cost over-run in respect of the instant assets.





### **Interest During Construction (IDC)**

13. The Petitioner has claimed Interest During Construction (IDC) for the instant 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.

14. The allowable IDC has been worked out considering the information submitted by the Petitioner for the individual assets separately on cash basis. The loan details submitted in Form-9C for 2014-19 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.

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

(₹ in lakh)							
Assets	IDC as per Auditor's Certificate	IDC Admissible	Computational difference	IDC discharged as on COD	IDC Un-discharged as on COD	IDC Discharged in 2018-19	IDC to be discharged in 2019-24 period
A	B	C	D=B-C	E	F=C-E	H	G=F-H
Asset-I	32.28	31.60	0.68	18.00	13.60	13.60	0.00
Asset-II	28.58	28.38	0.20	9.28	19.10	18.67	0.43
Asset-III	31.61	31.52	0.09	17.63	13.89	13.68	0.21
Asset-IV	46.99	46.99	0.00	16.77	30.22	27.76	2.46
Asset-V	11.96	11.84	0.12	11.40	0.44	0.44	0.00
Asset-VI	27.03	26.72	0.31	10.12	16.59	16.59	0.00
Asset-VII	21.09	21.02	0.07	14.84	6.18	6.18	0.00
Asset-VIII	6.27	6.26	0.01	6.26	0.00	0.00	0.00



### **Incidental Expenditure During Construction (IEDC)**

16. The Petitioner has claimed IEDC of ₹2.92 lakh, ₹20.28 lakh, ₹15.98 lakh, ₹56.50 lakh, ₹45.41 lakh, ₹62.51 lakh, ₹39.72 lakh and ₹20.48 lakh for Asset-I, II, III, IV, V, VI, VII and VIII respectively and has submitted 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 instant assets. The IEDC claimed is within the estimated expenditure of IEDC as indicated in the Abstract Cost Estimate, in respect of the instant assets. Hence, IEDC claimed has been allowed.

### **Initial spares**

17. The Petitioner 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:-

<b>Assets</b>	<b>Plant &amp; Machinery cost up to the cut-off date (excluding IDC and IEDC) (A) (₹ in lakh)</b>	<b>Initial Spares claimed (B) (₹ in lakh)</b>	<b>Ceiling Limit (C) (in %)</b>	<b>Initial Spares worked out by the Petitioner (₹ in lakh)</b>
Asset-I	2459.5	165.50	5	120.74
Asset-II	1214.49	72.87	6	72.87
Asset-III	1245.94	74.76	6	74.76
Asset-IV	1752.15	105.13	6	105.13
Asset-V	1539.19	103.66	6	91.63
Asset-VI	3383.38	197.91	5	167.66
Asset-VII	1717.17	99.85	6	103.23
Asset-VIII	1737.38	99.85	6	104.52
<b>Total</b>	<b>15049.2</b>	<b>919.53</b>		<b>840.53</b>

18. We have considered the submissions of the Petitioner. APTEL in its judgement dated 14.9.2019 in Appeal No. 74 of 2017 observed that the



Commission for the purpose of prudence check may restrict the initial spares to the cost of the individual asset and later at the time of truing up allow initial spares as per the ceiling limits on the overall project cost. The relevant portion of the said judgement is extracted here under:-

“18.13. .... 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.”

19. The instant assets were put into commercial operation during the 2014-19 tariff period and accordingly, the norms specified for the initial spares in the 2014 Tariff Regulations are applicable for computation of the allowable initial spares asset/element wise. As per APTEL's judgement, the Initial Spares are to be allowed as a percentage of the overall project cost subsequently. In the present case, though the instant assets were put into commercial operation during the 2014-19 tariff period, the overall project cost of the assets is arrived at only when all the instant assets are combined while claiming the tariff for the 2019-24 tariff period. Therefore, the initial spares are allowed on the basis of the cost of the individual assets in the 2014-19 tariff period and the initial spares are allowed on the basis of the overall project cost in the 2019-24 period when the instant assets are combined and the overall project cost is arrived at. Accordingly, the details of Initial Spares allowed for the 2014-19 tariff period are as under:-



Assets	Plant & Machinery cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2014 Tariff Regulations (in %)	Initial Spares as per the norms of the 2014 Tariff Regulations (₹ in lakh)	Initial Spares allowed (₹ in lakh)	
Asset-I	2459.50	165.50	5	120.74	120.74	
Asset-II	1214.49	72.87	6	72.87	72.87	
Asset-III	1245.94	74.76	6	74.76	74.76	
Asset-IV	1752.15	105.13	6	105.13	105.13	
Asset-V	1539.19	103.66	6	91.63	91.63	
Asset-VI	3383.38	197.91	5	167.66	167.66	
Asset-VII	1717.17	99.85	6	103.23	99.85	
Asset-VIII	1737.38	99.85	6	104.52	99.85	

### Capital cost as on the COD

20. Accordingly, the capital cost allowed as on COD is summarized hereunder:-

Assets	Capital cost as on COD as per Auditor's Certificate	Less: IDC as on COD due to		Excess Initial Spares	Capital Cost as on COD (on cash basis)
		Computational Difference	Un-discharged IDC		
Asset-I	1176.54	0.68	13.60	44.76	1117.50
Asset-II	976.5	0.20	19.10	0.00	957.20
Asset-III	1113.95	0.09	13.89	0.00	1099.97
Asset-IV	1424.03	0.00	30.22	0.00	1393.81
Asset-V	1137.19	0.12	0.44	12.03	1124.60
Asset-VI	2693.54	0.31	16.59	30.25	2646.39
Asset-VII	1265.67	0.07	6.18	0.00	1259.42
Asset-VIII	712.51	0.01	0.00	0.00	712.50

### Additional Capital Expenditure (ACE)

21. The Petitioner has claimed the following ACE for the assets covered in the instant petition:-

Assets	(₹ in lakh)		
	2017-18	2018-19	
	ACE claimed vide Auditor's Certificate	ACE claimed vide Auditor's Certificate	IDC Discharged



Asset-I	848.36	119.80	14.28
Asset-II	0.00	219.15	18.74
Asset-III	0.00	204.45	13.76
Asset-IV	0.00	309.25	27.76
Asset-V	0.00	359.37	0.44
Asset-VI	0.00	332.00	16.88
Asset-VII	0.00	283.14	6.25
Asset-VIII	0.00	863.37	0

22. The Petitioner has submitted that the ACE incurred for the instant assets is on account of undischarged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date. The Additional Capital Expenditure for the years 2017-18 and 2018-19 for all the assets has been claimed under Regulation 14(1)(i) (undischarged liabilities) and Regulation 14(1)(ii) (unexecuted works) of the 2014 Tariff Regulations.

23. The Petitioner has also submitted that ACE upto 31.3.2019 has been considered in the Auditor's certificate as per actuals whereas the ACE claimed for the period from 1.4.2019 to 31.3.2021 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.

24. The cut-off date for Asset-I is 31.3.2020 and that for Asset-II to Asset-VIII is 31.3.2021. It is observed that the total estimated completion cost including Additional Capital Expenditure from 2014-15 to 2018-19 period for Assets-I, II, III, IV, V, VI, VII and VIII is within the approved apportioned capital cost.

25. The ACE claimed by the Petitioner for 2017-18 and 2018-19 for the instant assets is within the cut-off date. Therefore, the same has been considered for computation of total capital cost as on 31.3.2019. The undischarged IDC as on



COD has been allowed as ACE in its respective year of discharge. The ACE claimed for 2014-19 tariff period is allowed under Regulation 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations. Accordingly, ACE allowed for the instant assets are as follows:

(₹ in lakh)

Assets	2017-18	2018-19		
	ACE to the extent of Balance & Retention Payments and work deferred for execution other than IDC	ACE to the extent of Balance & Retention Payments and work deferred for execution other than IDC	IDC Discharged	Total
Asset-I	848.36	119.80	13.60	133.40
Asset-II	0.00	219.15	18.67	237.82
Asset-III	0.00	204.45	13.68	218.13
Asset-IV	0.00	309.25	27.76	337.01
Asset-V	0.00	359.37	0.44	359.81
Asset-VI	0.00	332.00	16.59	348.59
Asset-VII	0.00	283.14	6.18	289.32
Asset-VIII	0.00	863.37	0.00	863.37

26. The Petitioner initially vide the affidavit dated 12.3.2020 has claimed the de-capitalization of 132 kV Bus arrangement including switchgear in Baripara Sub-station which is part of the Chukha Transmission System in the instant petition. The de-capitalisation details submitted by the petitioner are as follows:

(₹ in lakh)

Year of De-capitalization	Work/equipment proposed to be decapitalised	Year of Capitalisation of Asset/equipment to be capitalised	Original book value of the asset being decapitalised	Cumulative depreciation corresponding to decapitalisation date	Net Book value
2017-18	SS Item	1986	62.16	55.97	6.22

However, the Petitioner, vide affidavit dated 29.5.2020 has submitted that it will claim the decapitalisation of the said element in the Chukha Transmssion System.



27. We have considered the submissions of the Petitioner. The Chukka Transmission System is associated with the evacuation of power generated from Chukha Hydroelectric Power Project situated in Bhutan. The Chukha Transmission System was initially implemented by NHPC and was subsequently taken over by the Petitioner. The Ministry of Power, Government of India accorded its approval to the revised cost estimates of ` 13909 lakh, including IDC of ` 824 lakh vide its letter dated 4.9.1998. The notional COD of the Chukha Transmission System was considered as 1.4.1987. The tariff of the 2014-19 period of the single main and transfer bus scheme at 132 kV level at Baripara Sub-station, which was part of the Chukha Transmission System was trued up and tariff for the 2014-19 period was allowed vide order dated 8.1.2016 in Petition No 60/TT/2015. The 132 kV Bus arrangement including switchgear was modified by the Petitioner to Double Main (DM) scheme with GIS at 220/132 kV Birpara Sub-station, which is Asset-I of the instant petition and was put into commercial operation on 31.10.2017 and tariff for the 2014-19 period was approved by the Commission vide order dated in Petition No. 163/TT/2018 as part of instant ERSS-XIV. As the 132 single main and transfer bus scheme at Baripara Sub-station is part of the Chukha Transmission System, We are of the view that the Petitioner should claim the decapitalisation of the 132 single main and transfer bus scheme at Baripara Sub-station in Petition No.269/TT/2020, in which the Petitioner has claimed the truing up of the tariff of the 2014-19 tariff period and determination of tariff of the 2019-24 tariff period of the Chukha Transmission System and not under the instant ERSS-XIV covered in the instant petition. Therefore, the Petitioner is directed to submit all the information required for decapitalisation of the 132 single main and transfer bus scheme at Baripara Sub-station on affidavit with a copy to all the Respondents within seven



days from the date of issue of the instant order in Petition No.269/TT/2020. The staff is directed to decapitalise the 132 single main and transfer bus scheme at Baripara Sub-station which is part of the Chukha Transmission System in Petition No.269/TT/2019.

### **Capital cost for the 2014-19 tariff period**

28. Accordingly, the capital cost considered as on 31.3.2019 for the tariff period 2014-19 is as follows:-

(Rs. in lakh)

<b>Assets</b>	<b>Capital Cost as on COD</b>	<b>ACE 2017-18</b>	<b>ACE 2018-19</b>	<b>Total Capital Cost as on 31.3.2019</b>
Asset-I	1117.50	848.36	133.40	2099.26
Asset-II	957.20	0.00	237.82	1195.02
Asset-III	1099.97	0.00	218.13	1318.10
Asset-IV	1393.81	0.00	337.01	1730.82
Asset-V	1124.60	0.00	359.81	1484.41
Asset-VI	2646.39	0.00	348.59	2994.98
Asset-VII	1259.42	0.00	289.32	1548.74
Asset-VIII	712.50	0.00	863.37	1575.87

### **Debt-Equity Ratio**

29. The Petitioner has considered debt-equity ratio of 70:30 as on COD and for Additional Capital Expenditure post COD. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The same has been summarised as under:-

<b>Asset-I</b>	<b>As on COD</b>		<b>As on 31.3.2019</b>	
	<b>Amount (₹ in lakh)</b>	<b>(%)</b>	<b>Amount (₹ in lakh)</b>	<b>(%)</b>
Debt	782.25	70.00	1469.48	70.00
Equity	335.25	30.00	629.78	30.00
<b>Total</b>	<b>1117.50</b>	<b>100.00</b>	<b>2099.26</b>	<b>100.00</b>





Asset-II	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	670.04	70.00	836.52	70.00
Equity	287.16	30.00	358.50	30.00
<b>Total</b>	<b>957.20</b>	<b>100.00</b>	<b>1195.02</b>	<b>100.00</b>

  

Asset-III	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	769.98	70.00	922.68	70.00
Equity	329.99	30.00	395.42	30.00
<b>Total</b>	<b>1099.97</b>	<b>100.00</b>	<b>1318.09</b>	<b>100.00</b>

Asset-IV	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	975.67	70.00	1211.58	70.00
Equity	418.14	30.00	519.24	30.00
<b>Total</b>	<b>1393.81</b>	<b>100.00</b>	<b>1730.82</b>	<b>100.00</b>

  

Asset-V	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	787.22	70.00	1039.10	70.00
Equity	337.38	30.00	445.32	30.00
<b>Total</b>	<b>1124.60</b>	<b>100.00</b>	<b>1484.41</b>	<b>100.00</b>

  

Asset-VI	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	1852.47	70.00	2096.49	70.00
Equity	793.91	30.00	898.49	30.00
<b>Total</b>	<b>2646.38</b>	<b>100.00</b>	<b>2994.97</b>	<b>100.00</b>

  

Asset-VII	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	881.59	70.00	1084.12	70.00
Equity	377.83	30.00	464.61	30.00
<b>Total</b>	<b>1259.42</b>	<b>100.00</b>	<b>1548.74</b>	<b>100.00</b>

  

Asset-VIII	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	498.75	70.00	1103.11	70.00
Equity	213.75	30.00	472.76	30.00
<b>Total</b>	<b>712.50</b>	<b>100.00</b>	<b>1575.87</b>	<b>100.00</b>

### Interest on Loan (IOL)

30. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2019 for respective loans. The change in interest rate is due to floating rate of



interest applicable for the project to be claimed/ adjusted over a period of 5 years directly from the beneficiaries. We have considered the submissions of the Petitioner and accordingly calculated IOL based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The interest on loan has been worked out as detailed below: -

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

31. The details of IOL calculated are as follows: -

(₹ in lakh)

Asset-I		
Particular	2017-18 (Pro-rata)	2018-19
Gross Normative Loan	782.25	1376.10
Cumulative Repayments upto Previous Year	0.00	33.90
Net Loan-Opening	782.25	1342.20
Addition due to Additional Capitalization	593.85	93.38
Repayment during the year	33.90	107.32
Net Loan-Closing	1342.20	1328.26
Average Loan	1062.23	1335.23
Weighted Average Rate of Interest on Loan (%)	7.476	7.555
<b>Interest on Loan</b>	<b>33.07</b>	<b>100.87</b>

(₹ in lakh)

Particular	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI	Asset-VII	Asset-VIII
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Gross Normative Loan	670.04	769.98	975.67	787.23	1852.47	881.59	498.75
Cumulative Repayments upto Previous Year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Loan-Opening	670.04	769.98	975.67	787.23	1852.47	881.59	498.75
Addition due to Additional Capitalization	166.48	152.70	235.91	251.87	244.02	202.53	604.36
Repayment during the year	28.64	43.20	33.22	45.67	112.21	37.17	24.99
Net Loan-Closing	807.88	879.48	1178.36	993.43	1984.28	1046.95	1078.12
Average Loan	738.96	824.73	1077.01	890.33	1918.37	964.27	788.43
Weighted Average Rate of Interest on Loan (%)	7.980	7.997	8.066	8.133	8.129	8.162	8.276
<b>Interest on Loan</b>	<b>29.73</b>	<b>44.63</b>	<b>34.99</b>	48.01	<b>117.49</b>	<b>39.46</b>	<b>27.00</b>



### **Return on Equity (ROE)**

32. The Petitioner is entitled for Return on Equity for the instant 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

31. We have considered the submissions of the Petitioner. The Commission vide order dated 27.4.2020 in Petition No. 247/TT/2019 has 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</b>	<b>Effective tax</b>
-------------	--------------------------------------	----------------------



	<i>of surcharge &amp; cess)</i>	<i>(in %)</i>
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

”

32. The same MAT rates as above are considered 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.

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

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

(₹ in lakh)

<b>Asset-I</b>		
Particulars	2017-18 (Pro-rata)	2018-19
Opening Equity	335.25	589.76
Addition due to Additional Capitalization	254.51	40.02
Closing Equity	589.76	629.78
Average Equity	462.50	609.77
Return on Equity (Base Rate) (%)	15.500	15.500
Tax Rate applicable (%)	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.758
<b>Return on Equity (Pre-tax)</b>	<b>37.95</b>	<b>120.47</b>

(₹ in lakh)

Particulars	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI	Asset-VII	Asset-VIII
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Opening Equity	287.16	329.99	418.14	337.38	793.91	377.83	213.75
Addition due to Additional Capitalization	71.34	65.43	101.10	107.94	104.57	86.79	259.01
Closing Equity	358.50	395.42	519.24	445.32	898.48	464.61	472.76
Average Equity	322.83	362.70	468.69	391.35	846.20	421.22	343.25



Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	21.549	21.549	21.549	21.549	21.549	21.549	21.549
Rate of Return on Equity (Pre-tax)	19.758	19.758	19.758	19.758	19.758	19.758	19.758
<b>Return on Equity (Pre-tax)</b>	<b>32.15</b>	<b>48.49</b>	<b>37.29</b>	51.26	<b>125.96</b>	<b>41.73</b>	<b>28.06</b>

### Depreciation

34. The Petitioner has claimed depreciation considering capital expenditure of ₹11117.50 lakh, ₹957.33 lakh, ₹1099.99 lakh, ₹1393.81 lakh, ₹1136.75 lakh, 2646.49 lakh, ₹1259.42 lakh and ₹712.51 lakh as on COD and Additional Capital Expenditure of ₹982.44 lakh, ₹237.89 lakh, ₹218.21 lakh, ₹337.01 lakh, ₹359.81 lakh, ₹348.80, ₹289.39 and ₹1031.89 lakh for Assets-I, II, III, IV, V, VI, VII and VIII respectively.

35. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed for Asset-I in order dated 29.5.2019 in Petition No. 163/TT/2018 and for the Assets-II, III, IV, V, VI, VII and VIII in order dated 4.10.2019 in Petition No. 271/TT/2018. The Petitioner has neither given any justification for claiming higher depreciation than that was previously allowed nor made any specific prayer for allowing higher depreciation in this petition.

36. Subsequently, it was identified that in Petition No.163/TT/2018 and Petition No. 271/TT/2018 for tariff determination of the instant assets for 2014-19 tariff period, the Petitioner has submitted capital cost of IT equipment in sub-station cost and therefore depreciation for IT equipment was allowed @5.28% of the corresponding capital cost.



37. The Petitioner now at the time of truing-up for the 2014-19 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.

38. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2014-19 period and the tariff from the respective CODs to 31.3.2019 was allowed vide order dated 29.5.2019 in Petition No. 163/TT/2018 for Asset-I and vide order dated 4.10.2019 in Petition No. 271/TT/2018 for Assets-II, III, IV, V, VI, VII and VIII. It is pertinent to point out that the Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said petitions where tariff for the instant assets for the 2014-19 period was allowed even though there was a clear provision in the 2014 Tariff Regulations providing depreciation @15% for IT equipment. Having failed to make a claim as per the 2014 Tariff Regulations, the Petitioner has now, at the time of truing-up of the tariff of the 2014-19 period, apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this petition but in some other Petitions. 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 the 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 the 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 request 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 Sub-station upto 31.3.2019 while truing-up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations.

39. 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-1. The weighted average rate of depreciation (WAROD) has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during tariff period 2017-18 and 2018-19 is as under:-

(₹ in lakh)		
<b>Asset-I</b>		
<b>Particulars</b>	<b>2017-18 (Pro-rata)</b>	<b>2018-19</b>
Opening Gross Block	1117.50	1965.86
Additional Capital Expenditure	848.36	133.40
Closing Gross Block	1965.86	2099.26
Average Gross Block	1541.68	2032.56
Weighted Average Rate of Depreciation (WAROD) (%)	5.28	5.28
Balance useful life at the beginning of the year	25	25
Aggregated Depreciable Value	1387.51	1829.30
Remaining Aggregated Depreciable Value at the beginning of the year	1387.51	1795.40
<b>Combined Depreciation during the year</b>	<b>33.90</b>	<b>107.32</b>

(₹ in lakh)



Particulars	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI	Asset-VII	Asset-VIII
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Opening Gross Block	957.20	1099.97	1393.81	1124.60	2646.38	1259.42	712.50
Additional Capital Expenditure	237.82	218.13	337.01	359.81	348.59	289.32	863.37
Closing Gross Block	1195.02	1318.09	1730.82	1484.41	2994.97	1548.74	1575.87
Average Gross Block	1076.11	1209.03	1562.31	1304.51	2820.68	1404.08	1144.18
Weighted Average Rate of Depreciation (WAROD) (%)	5.28	5.28	5.28	5.28	5.28	5.28	5.28
Balance useful life at the beginning of the year	25	25	24	25	25	24	24
Aggregated Depreciable Value	968.50	1088.13	1406.08	1174.06	2538.61	1263.67	1029.76
Remaining Aggregated Depreciable Value at the beginning of the year	968.50	1088.13	1406.08	1174.06	2538.61	1263.67	1029.76
<b>Combined Depreciation during the year</b>	<b>28.64</b>	<b>43.20</b>	<b>33.22</b>	<b>45.67</b>	<b>112.21</b>	<b>37.17</b>	<b>24.99</b>

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

40. The Petitioner has not claimed O&M Expenses in respect of Asset-I. The Petitioner has claimed O&M Expenses for Assets-II to VIII as per the norms specified in Regulation 29(4)(a) of the 2014 Tariff Regulations and is allowed. The O&M Expenses allowed for Asset-II, III, IV, V, VI, VII, VIII are given hereunder:-

(₹ in lakh)

Particulars	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI	Asset-VII	Asset-VIII
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
<b>Norm(₹ lakh/bay)</b>							
400 kV Bay	68.71	68.71	68.71	68.71	58.73*	68.71	68.71





<b>O&amp;M Expenses</b>	<b>34.64</b>	<b>46.50</b>	<b>27.67</b>	<b>45.56</b>	<b>44.25</b>	<b>34.45</b>	<b>28.43</b>
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\*400 kV Bay (GIS)

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

41. The Petitioner is entitled for IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under:-

**i. Maintenance spares:**

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

**ii. O & M Expenses:**

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

**iii. Receivables:**

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

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

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

42. IWC allowed for the assets is as under:-

(A) Asset-I

(₹ in lakh)

<b>Asset-I</b>		
<b>Particulars</b>	<b>2017-18 (Pro-rata)</b>	<b>2018-19</b>
O & M Expenses	0.00	0.00
Maintenance Spares	0.00	0.00
Receivables	42.89	55.95
<b>Total</b>	<b>42.89</b>	<b>55.95</b>
Rate of Interest on working capital (%)	12.60	12.60
<b>Interest of working Capital</b>	<b>2.25</b>	<b>7.05</b>

Accordingly, IWC allowed earlier vide order dated 29.5.2019 in Petition No. 163/TT/2018, IWC as claimed by the Petitioner in the instant Petition and as trued-up in respect of Asset-I is shown in the table below:-



(₹ in lakh)		
Particulars	2017-18	2018-19
Allowed earlier vide order dated 29.5.2019 in Petition No. 163/TT/2018	2.26	7.38
As claimed by the Petitioner	2.30	7.28
Allowed after Truing-up	2.25	7.05

(B) Asset-II

(₹ in lakh)	
Asset-II	
Particulars	2018-19 (Pro-rata)
O & M Expenses	5.73
Maintenance Spares	10.31
Receivables	42.57
<b>Total</b>	<b>58.60</b>
Rate of Interest on working capital (%)	12.20
<b>Interest of working Capital</b>	<b>3.60</b>

Accordingly, IWC allowed vide order dated 4.10.2019 in Petition No. 271/TT/2019, as claimed by the Petitioner in the instant Petition and as trued-up in respect of Asset-II is shown in the table below:-

(₹ in lakh)	
Particulars	2018-19
Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2019	3.55
As claimed by the Petitioner	3.63
Allowed after Truing-up	3.60

(C) Asset-III

(₹ in lakh)	
Asset-III	
Particulars	2018-19 (Pro-rata)
O & M Expenses	5.73
Maintenance Spares	10.31
Receivables	46.29
<b>Total</b>	<b>62.33</b>
Rate of Interest on working capital (%)	12.20
<b>Interest of working Capital</b>	<b>5.15</b>

Accordingly, IWC allowed vide order dated 4.10.2019 in Petition No. 271/TT/2019, as claimed by the Petitioner in the instant Petition and as trued-up in respect of Asset-III is shown in the table below:-



(₹ in lakh)	
Particulars	2018-19
Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2019	4.96
As claimed by the Petitioner	5.18
Allowed after Truing-up	5.15

(D) Asset-IV

(₹ in lakh)	
Asset-IV	
Particulars	2018-19 (Pro-rata)
O & M Expenses	5.73
Maintenance Spares	10.31
Receivables	56.59
<b>Total</b>	<b>72.62</b>
Rate of Interest on working capital (%)	12.20
<b>Interest of working Capital</b>	<b>3.57</b>

Accordingly, IWC allowed vide order dated 4.10.2019 in Petition No. 271/TT/2019, as claimed by the Petitioner in the instant Petition and as trued-up in respect of Asset-IV is shown in the table below:-

(₹ in lakh)	
Particulars	2018-19
Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2019	3.48
As claimed by the Petitioner	3.63
Allowed after Truing-up	3.57

(E) Asset-V

(₹ in lakh)	
Asset-V	
Particulars	2018-19 (Pro-rata)
O & M Expenses	5.73
Maintenance Spares	10.31
Receivables	49.21
<b>Total</b>	<b>65.25</b>
Rate of Interest on working capital (%)	12.20
<b>Interest of working Capital</b>	<b>5.28</b>

Accordingly, IWC allowed vide order dated 4.10.2019 in Petition No. 271/TT/2019, as claimed by the Petitioner in the instant Petition and as trued-up in respect of Asset-V is shown in the table below:-



(₹ in lakh)	
Particulars	2018-19
Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2019	4.99
As claimed by the Petitioner	5.31
Allowed after Truing-up	5.28

(F) Asset-VI

(₹ in lakh)	
Asset-VI	
Particulars	2018-19 (Pro-rata)
O & M Expenses	4.89
Maintenance Spares	8.81
Receivables	90.59
<b>Total</b>	<b>104.29</b>
Rate of Interest on working capital (%)	12.20
<b>Interest of working Capital</b>	<b>9.59</b>

Accordingly, IWC allowed vide order dated 4.10.2019 in Petition No. 271/TT/2019, as claimed by the Petitioner in the instant Petition and as trued-up in respect of Asset-VI is shown in the table below:-

(₹ in lakh)	
Particulars	2018-19
Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2019	9.88
As claimed by the Petitioner	9.65
Allowed after Truing-up	9.59

(G) Asset-VII

(₹ in lakh)	
Asset-VII	
Particulars	2018-19 (Pro-rata)
O & M Expenses	5.73
Maintenance Spares	10.31
Receivables	52.18
<b>Total</b>	<b>68.21</b>
Rate of Interest on working capital (%)	12.20
<b>Interest of working Capital</b>	<b>4.17</b>

Accordingly, IWC allowed vide order dated 4.10.2019 in Petition No. 271/TT/2019, as claimed by the Petitioner in the instant Petition and as trued-up in respect of Asset-VII is shown in the table below:-

(₹ in lakh)	
Particulars	2018-19



Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2019	4.22
As claimed by the Petitioner	4.24
Allowed after Truing-up	4.17

(H) Asset-VIII

(₹ in lakh)

<b>Asset-VIII</b>	
<b>Particulars</b>	<b>2018-19 (Pro-rata)</b>
O & M Expenses	5.73
Maintenance Spares	10.31
Receivables	44.94
<b>Total</b>	<b>60.97</b>
Rate of Interest on working capital (%)	12.20
<b>Interest of working Capital</b>	<b>3.08</b>

Accordingly, IWC allowed vide order dated 4.10.2019 in Petition No. 271/TT/2019, as claimed by the Petitioner in the instant Petition and as trued-up in respect of Asset-VIII is shown in the table below:-

(₹ in lakh)

<b>Particulars</b>	<b>2018-19</b>
Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2019	3.12
As claimed by the Petitioner	3.13
Allowed after Truing-up	3.08

**Annual Transmission Charges for 2014-19 Tariff Period**

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

(₹ in lakh)

<b>Asset-I</b>		
<b>Particulars</b>	<b>2017-18 (Pro-rata)</b>	<b>2018-19</b>
Depreciation	33.90	107.32
Interest on Loan	33.07	100.87
Return on Equity	37.95	120.47
Int. on Working Capital	2.25	7.05
Op. and Maintenance	0.00	0.00
<b>Total</b>	<b>107.17</b>	<b>335.72</b>

(₹ in lakh)



<b>Particulars</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed earlier in order dated 29.5.2019 in Petition No. 163/TT/2018	107.50	351.34
As claimed by the Petitioner	109.56	346.79
Allowed after Truing-up	107.17	335.72

(₹ in lakh)

<b>Asset-II</b>	
<b>Particulars</b>	<b>2018-19 (Pro-rata)</b>
Depreciation	28.64
Interest on Loan	29.73
Return on Equity	32.15
Int. on Working Capital	3.60
Op. and Maintenance	34.64
<b>Total</b>	<b>128.76</b>

(₹ in lakh)

<b>Particulars</b>	<b>2018-19</b>
Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2018	126.16
As claimed by the Petitioner	130.03
Allowed after Truing-up	128.76

(₹ in lakh)

<b>Asset-III</b>	
<b>Particulars</b>	<b>2018-19 (Pro-rata)</b>
Depreciation	43.20
Interest on Loan	44.63
Return on Equity	48.49
Int. on Working Capital	5.15
Op. and Maintenance	46.50
<b>Total</b>	<b>187.97</b>

(₹ in lakh)

<b>Particulars</b>	<b>2018-19</b>
Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2018	178.97
As claimed by the Petitioner	189.40
Allowed after Truing-up	187.97

(₹ in lakh)

<b>Asset-IV</b>	
<b>Particulars</b>	<b>2018-19 (Pro-rata)</b>
Depreciation	33.22
Interest on Loan	34.99
Return on Equity	37.29



Int. on Working Capital	3.57
Op. and Maintenance	27.67
<b>Total</b>	<b>136.75</b>

(₹ in lakh)	
Particulars	2018-19
Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2018	132.30
As claimed by the Petitioner	139.94
Allowed after Truing-up	136.75

(₹ in lakh)	
Asset-V	
Particulars	2018-19 (Pro-rata)
Depreciation	45.67
Interest on Loan	48.01
Return on Equity	51.26
Int. on Working Capital	5.28
Op. and Maintenance	45.56
<b>Total</b>	<b>195.77</b>

(₹ in lakh)	
Particulars	2018-19
Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2018	181.38
As claimed by the Petitioner	197.34
Allowed after Truing-up	196.69

(₹ in lakh)	
Asset-VI	
Particulars	2018-19 (Pro-rata)
Depreciation	112.21
Interest on Loan	117.49
Return on Equity	125.96
Int. on Working Capital	9.59
Op. and Maintenance	44.25
<b>Total</b>	<b>409.50</b>

(₹ in lakh)	
Particulars	2018-19
Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2018	423.93
As claimed by the Petitioner	412.70
Allowed after Truing-up	409.50

(₹ in lakh)	
Asset-VII	
Particulars	2018-19 (Pro-rata)
Depreciation	37.17
Interest on Loan	39.46



Return on Equity	41.73
Int. on Working Capital	4.17
Op. and Maintenance	34.45
<b>Total</b>	<b>156.97</b>

(₹ in lakh)	
Particulars	2018-19
Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2018	159.08
As claimed by the Petitioner	160.05
Allowed after Truing-up	156.97

(₹ in lakh)	
Asset-VIII	
Particulars	2018-19 (Pro-rata)
Depreciation	24.99
Interest on Loan	27.00
Return on Equity	28.06
Int. on Working Capital	3.08
Op. and Maintenance	28.43
<b>Total</b>	<b>111.55</b>

(₹ in lakh)	
Particulars	2018-19
Allowed earlier in order dated 4.10.2019 in Petition No. 271/TT/2018	113.45
As claimed by the Petitioner	113.98
Allowed after Truing-up	111.55

The difference in the Annual Transmission Charges claimed by the Petitioner and allowed after truing-up is due to the disallowances in IDC and difference in the rate of tax claimed by the Petitioner and that allowed.

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

44. The Petitioner has submitted the tariff forms combining the Assets-I to Asset-VIII, wherein the COD has been achieved prior to 1.4.2019, as a single asset. Accordingly, as per proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations, single tariff for the Combined Asset has been worked out for the 2019-24 tariff period.





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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	824.48	884.67	895.69	895.69	895.69
Interest on Loan	773.93	769.25	708.81	635.91	562.59
Return on Equity	839.09	903.31	915.07	915.07	915.07
Interest on Working Capital	46.04	48.29	48.06	47.32	46.47
Op. and Maintenance	215.41	222.98	230.82	238.92	247.30
<b>Total</b>	<b>2698.95</b>	<b>2828.50</b>	<b>2798.45</b>	<b>2732.91</b>	<b>2667.12</b>

46. The Petitioner has claimed the following 'Interest on Working Capital' for the Combined Asset for the 2019-24 tariff period:-

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	17.95	18.58	19.24	19.91	20.61
Maintenance Spares	32.31	33.45	34.62	35.84	37.10
Receivables	331.84	348.72	345.01	336.93	327.92
<b>Total</b>	<b>382.10</b>	<b>400.75</b>	<b>398.87</b>	<b>392.68</b>	<b>385.63</b>
Rate of Interest	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>46.04</b>	<b>48.29</b>	<b>48.06</b>	<b>47.32</b>	<b>46.47</b>

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

47. The Petitioner has claimed E-COD of the combined asset as 18.7.2018. However, the effective COD works out to be 17.7.2018. Accordingly, based on the trued-up admitted capital cost and actual COD of all the assets, the E-COD has been worked out as follows:-

Computation of Effective COD						
Asset	Actual COD	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Weight of the cost	No. of days from last COD	Weighted Days	Effective COD (latest COD – total weighted Days)
Asset- I	31-Oct-17	2099.26	15.05%	370.00	55.69	17.7.2018
Asset – II	29-Sep-18	1195.02	8.57%	37.00	3.17	



Asset – III	28-Jul-18	1318.09	9.45%	100.00	9.45
Asset- IV	05-Nov-18	1730.82	12.41%	0.00	0.00
Asset- V	02-Aug-18	1484.41	10.64%	95.00	10.11
Asset- VI	30-Jun-18	2994.97	21.47%	128.00	27.49
Asset- VII	30-Sep-18	1548.74	11.10%	36.00	4.00
Asset- VIII	01-Nov-18	1575.87	11.30%	4.00	0.45
<b>Total</b>	05-Nov-2018	<b>13947.18</b>	<b>100.00%</b>		<b>110.36</b>

48. The E-COD is used to determine the lapsed life of the project as a whole which works out as 0 (zero) 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)**

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

50. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have 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.

51. The 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, the WAL of the Combined Asset has been worked out as 24 years as shown below:-

<b>Admitted Capital Cost as on 31.3.2019</b>				
<b>Particulars</b>	<b>Combined</b>	<b>Life in Years</b>	<b>Weighted Cost</b>	<b>Weighted</b>



(1)	Asset (₹ in lakh) (2)	(3)	(₹ in lakh) (4) = (2)x(3)	Avg. Life of Asset (in years) (5) = (4)/ (2)
Transmission Line	0.00	35	0.00	
Sub-station Equipment	13553.77	25	338844.13	
PLCC	0.00	15	0.00	
IT Equipment & Software	393.41	7	2622.76	
<b>Total</b>	<b>13947.18</b>		<b>341466.89</b>	<b>24.48 years, rounded to 24 years</b>

52. The 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 at paragraphs 47 and 48, the Effective COD of the assets is 17.7.2018 and the lapsed life of the project as a whole works out as NIL as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from Effective COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 24 years.

### **Capital Cost**

53. Regulation 19(3) and (5) of the 2019 Tariff Regulation provides as follows:-

*“19. Capital Cost:*

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

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued-up by excluding liability, if any, as on 1.4.2019;*
- (b) Additional Capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
- (c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;*
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (e) Capital expenditure incurred towards railway infrastructure and its*



augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and

(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”

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

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

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

*Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be 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.”

54. The Petitioner has claimed the capital cost of the individual assets which has been added to arrive at the capital cost claimed during the 2019-24 period for consolidated assets as per following details:-

(₹ in lakh)

Assets	FR Apportioned Approved Capital Cost	RCE Apportioned Approved Capital Cost	Capital Cost claimed as on 31.3.2019	Additional Capital Expenditure Claimed		Estimated Completion Cost
				2019-20	2020-21	



Asset-I	2675.19	2636.99	2099.94	350.00	0.00	2449.94
Asset-II	1478.72	1427.84	1195.22	195.23	34.38	1424.83
Asset-III	1510.77	1467.73	1318.2	116.33	20.49	1455.02
Asset-IV	2376.67	2336.52	1730.82	512.32	89.97	2333.11
Asset-V	1829.44	1844.00	1496.56	100.00	0.00	1596.56
Asset-VI	3103.31	3579.49	2995.29	297.38	150.00	3442.67
Asset-VII	1848.45	1814.69	1548.81	134.77	94.40	1777.98
Asset-VIII	1878.45	1805.74	1575.88	160.00	28.25	1764.13
<b>Total</b>	<b>16701.00</b>	<b>16913.00</b>	<b>13960.72</b>	<b>1866.03</b>	<b>417.49</b>	<b>16244.24</b>

55. Against the overall apportioned approved capital cost (as per RCE) of ₹16913 lakh, the estimated completion cost including ACE is ₹16244.24 lakh. The individual cost of each asset is also within the respective RCE apportioned cost. Therefore, there is no cost over-run as per RCE.

56. The capital cost has been dealt in line with clause (3) of Regulation 19 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 instant assets are clubbed together and the combined capital cost has been considered as capital cost for the Combined Asset, as per the following details:-

Element	(₹ in lakh)								Capital cost for Combined Asset
	Asset-I	Asset-II	Asset-III	Asset-IV	Asset-V	Asset-VI	Asset-VII	Asset-VIII	
Free hold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Sub-station Equipment	1982.04	1175.83	1300.72	1648.96	1484.41	2951.39	1491.33	1519.09	13553.77
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
IT Equipment & Software	117.22	19.19	17.37	81.86	0.00	43.59	57.41	56.78	393.42
<b>Total</b>	<b>2099.26</b>	<b>1195.02</b>	<b>1318.09</b>	<b>1730.82</b>	<b>1484.41</b>	<b>2994.97</b>	<b>1548.74</b>	<b>1575.87</b>	<b>13947.18</b>

### Initial spares



57. As stated in para 10 above of this order, initial spares are allowed for the 2014-19 period on the basis of the cost of individual assets. The assets covered in the instant transmission scheme 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 the APTEL's judgement dated 14.9.2019 in Appeal No.74 of 2017.

58. Accordingly, Initial Spares allowed in the 2019-24 tariff period are as under:-

Assets	Plant & Machinery cost upto cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2014 Tariff Regulations (in %)	Initial Spares allowable as per norms and APTEL judgement dated 14.9.2019 (₹ in lakh)	Initial Spares allowed in 2014-19 (₹ in lakh)
A	B	C	D	E	G
<b>Sub-station (Brownfield) GIS</b>					
Asset-I	2459.50	165.50	5	288.39	288.39
Asset-VI	3383.38	197.91			
<b>Total</b>	<b>5842.88</b>	<b>363.41</b>			
<b>Sub-station (Brownfield) AIS</b>					
Asset-II	1214.49	72.87	6	552.14	544.08
Asset-III	1245.94	74.76			
Asset-IV	1752.15	105.13			
Asset-V	1539.19	103.66			
Asset-VII	1717.17	99.85			
Asset-VIII	1737.38	99.85			
<b>Total</b>	<b>9206.32</b>	<b>556.12</b>			
<b>Grand Total</b>	<b>15049.20</b>	<b>919.53</b>		<b>840.53</b>	<b>832.48</b>

59. Accordingly, additional Initial Spares of ₹8.05 lakh 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.

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



(₹ in lakh)		
Combined Capital Cost as on 31.3.2019	Additional Initial Spares allowed as per APTEL judgement dated 14.9.2019	Combined Capital Cost as on 1.4.2019
13947.18	8.05	13955.23

61. The trued-up capital cost of ₹13955.23 lakh for the Combined Asset is considered as admitted capital cost as on 1.4.2019 for working out tariff for 2019-24 tariff period.

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

62. Regulation 24 of the 2019 Tariff Regulations provides as under:-

*“24. Additional Capitalization within the original scope and upto the cut-off date*

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

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

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

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

63. The Petitioner has claimed projected ACE for 2019-24 period and 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 instant assets are shown as under:-

(₹ in lakh)

Assets	Projected ACE 2019-24	
	2019-20	2020-21
Asset-I	350.00	0.00
Asset-II	195.23	34.38
Asset-III	116.33	20.49
Asset-IV	512.32	89.97
Asset-V	100.00	0.00
Asset-VI	297.38	150.00
Asset-VII	134.77	94.40
Asset-VIII	160.00	28.25
<b>Total</b>	<b>1866.03</b>	<b>417.49</b>

64. It is observed that entire ACE claimed in the 2019-24 period falls within the cut-off date in the instant petition. The ACE allowed is summarized below which is subject to true-up:-

(₹ in lakh)

Particulars	Regulation	Combined Asset	
		2019-20	2020-21
ACE to the extent of Balance & Retention Payments and work deferred for execution before cut-off date	Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations	1866.03	417.49

#### **Capital cost for the 2019-24 tariff period**

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

(₹ in lakh)

Capital Cost allowed as on 1.4.2019	ACE allowed for the year 2019-20	ACE allowed for the year 2020-21	Total Estimated Completion Cost up to 31.3.2024
13955.23	1866.03	417.49	16238.75

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





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

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

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

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

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

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

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

<b>Combined Asset</b>	<b>Capital Cost as on 1.4.2019 (₹ in lakh)</b>	<b>(%)</b>	<b>Total Capital Cost as on 31.3.2024 (₹ in lakh)</b>	<b>(%)</b>
Debt	9768.72	70.00	11367.18	70.00
Equity	4186.51	30.00	4871.57	30.00
<b>Total</b>	<b>13955.23</b>	<b>100.00</b>	<b>16238.75</b>	<b>100.00</b>

### **Return on Equity**

68. Regulation 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:*

*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.

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

69. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, MAT rate applicable during the year 2019-20 has been considered for the purpose of ROE, which shall be true-up with actual tax rate in accordance with Clause (3) of Regulation 31 of the 2019 Tariff Regulations. The ROE allowed for the instant transmission assets under Regulation 30 of the 2019 Tariff Regulations is as under:-

(₹ in lakh)

<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>
Opening Equity	4186.52	4746.32	4871.57	4871.57	4871.57
Addition due to Additional Capitalization	559.80	125.25	0.00	0.00	0.00
Closing Equity	4746.32	4871.57	4871.57	4871.57	4871.57
Average Equity	4466.42	4808.94	4871.57	4871.57	4871.57
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity (Pre-tax)</b>	<b>838.86</b>	<b>903.19</b>	<b>914.95</b>	<b>914.95</b>	<b>914.95</b>

### **Interest on Loan (IOL)**

70. 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”.

71. 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 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. In view of above, IOL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IOL allowed is as follows:-

(₹ 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>
Gross Normative Loan	9768.72	11074.95	11367.19	11367.19	11367.19
Cumulative Repayments upto Previous Year	466.32	1290.67	2175.30	3070.96	3966.63
Net Loan-Opening	9302.41	9784.29	9191.89	8296.23	7400.57
Addition due to Additional Capitalization	1306.23	292.24	0.00	0.00	0.00
Repayment during the year	824.35	884.64	895.66	895.66	895.66
Net Loan-Closing	9784.29	9191.89	8296.23	7400.57	6504.91
Average Loan	9543.35	9488.09	8744.06	7848.40	6952.74
Weighted Average Rate of Interest on Loan (%)	8.131	8.130	8.131	8.130	8.123
<b>Interest on Loan</b>	<b>775.99</b>	<b>771.43</b>	<b>710.99</b>	<b>638.09</b>	<b>564.78</b>

### **Depreciation**

72. Regulation 33(1), (2) and (5) of the 2019 Tariff Regulations provide as under:-

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

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

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

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

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



73. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). The weighted average rate of depreciation (WAROD) has been worked out (refer Annexure-2) after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100 per cent depreciable. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed for the instant asset is as follows:-

(₹ in lakh)					
<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>
Opening Gross Block	13955.23	15821.26	16238.75	16238.75	16238.75
Additional Capital expenditure	1866.03	417.49	0.00	0.00	0.00
Closing Gross Block	15821.26	16238.75	16238.75	16238.75	16238.75
Average Gross Block	14888.24	16030.00	16238.75	16238.75	16238.75
Weighted Average Rate of Depreciation (WAROD) (%)	5.54	5.52	5.52	5.52	5.52
Balance useful life at the beginning of the year	24.00	23.00	22.00	21.00	20.00
Aggregated Depreciable value	13438.77	14466.36	14654.23	14654.23	14654.23
Remaining Depreciable Value at the beginning of the year	12972.45	13175.70	12478.93	11583.27	10687.61
<b>Combined Depreciation during the year</b>	824.35	884.64	895.66	895.66	895.66
Aggregated Cumulative depreciation at the end of the year	1290.67	2175.30	3070.96	3966.63	4862.29

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

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

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

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



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

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme



(2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for  $\pm 500$  kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);

- iv. the O&M expenses of  $\pm 800$  kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for  $\pm 800$  kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of  $\pm 800$  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  $\pm 800$  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 triuing-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 triuing-up.”

75. The O&M Expenses claimed by the Petitioner for the instant assets are as follows:-

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>O&amp;M for bays (as per norms)</b>					
400 kV	192.90	199.68	206.70	213.96	221.46
400 kV (GIS)	22.51	23.30	24.12	24.96	25.84
<b>Total O&amp;M Expenses</b>	<b>215.41</b>	<b>222.98</b>	<b>230.82</b>	<b>238.92</b>	<b>247.30</b>





76. The O&M Expenses claimed by the Petitioner are in accordance with Regulation 35(3) of the 2019 Tariff Regulations. Hence, they are allowed as claimed.

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

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

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

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

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

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

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

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

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

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

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

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

78. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the bank rate as on 1.4.2019.



79. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC is considered as 12.05%. The components of the working capital and interest thereon have been worked as follows:-

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	17.95	18.58	19.23	19.91	20.61
Maintenance Spares	32.31	33.45	34.62	35.84	37.09
Receivables	332.05	348.97	345.27	337.19	328.18
<b>Total</b>	<b>382.31</b>	<b>401.00</b>	<b>399.12</b>	<b>392.93</b>	<b>385.88</b>
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
<b>Interest of working capital</b>	<b>46.07</b>	<b>48.32</b>	<b>48.09</b>	<b>47.35</b>	<b>46.50</b>

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

76. Various components of the Annual Fixed Charges for the Combined Asset for the tariff period 2019-24 are summarized below:-

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	824.35	884.64	895.66	895.66	895.66
Interest on Loan	775.99	771.43	710.99	638.09	564.78
Return on Equity	838.86	903.19	914.95	914.95	914.95
Interest on Working Capital	46.07	48.32	48.09	47.35	46.50
Operation and Maintenance	215.41	222.98	230.82	238.92	247.30
<b>Total</b>	<b>2700.67</b>	<b>2830.55</b>	<b>2800.52</b>	<b>2734.98</b>	<b>2669.18</b>

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

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

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



78. The Petitioner has requested to allow the Petitioner to bill and recover License fee and RLDC fees and charges, separately from the Respondents. The Petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clauses (4) and (3) respectively of Regulation 70 of the 2019 Tariff Regulations.

### **Goods and Services Tax**

79. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if at any time GST on transmission is withdrawn from negative list in future. We have considered the submission of the Petitioner. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is pre-mature and the Petitioner is at liberty to approach the Commission if GST is levied subsequently.

### **Security Expenses**

80. The Petitioner has submitted that security expenses for the instant assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential Interest on Working Capital. 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. We have considered the submissions of the Petitioner. Any application filed by the Petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2019 Tariff Regulations.

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

### **Capital Spares**

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

### **Sharing of Transmission Charges**

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



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

(₹ in lakh)		
Asset	2017-18 (Pro-rata)	2018-19
Asset-I	107.17	335.72
-	-	<b>(pro-rata)</b>
Asset-II	-	128.76
Asset-III	-	187.97
Asset-IV	-	136.75
Asset-V	-	195.77
Asset-VI	-	409.50
Asset-VII	-	156.97
Asset-VIII	-	111.55

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

(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23
Annual Fixed Charges	2700.67	2830.55	2800.52	2734.98

85. This order disposes of Petition No. 37/TT/2020.

sd/-  
(Arun Goyal)  
Member

sd/-  
(I.S. Jha)  
Member

sd/-  
(P. K. Pujari)  
Chairperson



<b>Petition No.:</b>	37-TT-2020
<b>Period</b>	2014-19 True-up

### Annexure - 1

Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capitalization (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation	Annual Depreciation (₹ in lakh)		Average Gross Block (₹ in lakh)		Weighted Average Rate of Depreciation
	Capital Expenditure as on 1.4.2014		2017-18	2018-19			2017-18	2018-19	2017-18	2018-19	
Asset-I	Sub-station	1117.50	731.14	133.40	1982.04	5.28%	32.61	101.13	1541.68	2032.56	5.28%
	IT Equipment & Software	0.00	117.22	0.00	117.22	5.28%	1.29	6.19			
	<b>TOTAL</b>	<b>1117.50</b>	<b>848.36</b>	<b>133.40</b>	<b>2099.26</b>		<b>33.90</b>	<b>107.32</b>			
Asset-II	Sub-station	938.38	0.00	237.45	1175.83	5.28%	0.00	28.14	0.00	1076.11	5.28%
	IT Equipment & Software	18.82	0.00	0.37	19.19	5.28%	0.00	0.51			
	<b>TOTAL</b>	<b>957.20</b>		<b>237.82</b>	<b>1195.02</b>			<b>28.64</b>			
Asset-III	Sub-station	1,082.80	0.00	217.92	1,300.72	5.28%	0.00	42.58	0.00	1209.03	5.28%
	IT Equipment & Software	17.16	0.00	0.21	17.37	5.28%	0.00	0.62			
	<b>TOTAL</b>	<b>1,099.97</b>		<b>218.13</b>	<b>1,318.09</b>			<b>43.20</b>			
Asset-IV	Sub-station	1,313.55	0.00	335.41	1,648.96	5.28%	0.00	31.50	0.00	1562.31	5.28%
	IT Equipment & Software	80.26	0.00	1.60	81.86	5.28%	0.00	1.72			
	<b>TOTAL</b>	<b>1,393.81</b>		<b>337.01</b>	<b>1,730.82</b>			<b>33.22</b>			
Asset-V	Sub-station	1,124.60	0.00	359.81	1,484.41	5.28%	0.00	68.88	0.00	1304.51	5.28%
	<b>TOTAL</b>	<b>1,124.60</b>	<b>0.00</b>	<b>359.81</b>	<b>1,484.41</b>			<b>68.88</b>			
Asset-VI	Sub-station	2,603.06	0.00	348.32	2,951.39	5.28%	0.00	110.48	0.00	2820.68	5.28%
	IT Equipment & Software	43.32	0.00	0.27	43.59	5.28%	0.00	1.73			



<b>Petition No.:</b>	37-TT-2020
<b>Period</b>	2014-19 True-up

### Annexure - 1

Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capitalization (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation	Annual Depreciation (₹ in lakh)		Average Gross Block (₹ in lakh)		Weighted Average Rate of Depreciation
	Capital Expenditure as on 1.4.2014		2017-18	2018-19			2017-18	2018-19	2017-18	2018-19	
	<b>TOTAL</b>	<b>2,646.38</b>	<b>0.00</b>	<b>348.59</b>	<b>2,994.97</b>		<b>0.00</b>	<b>112.21</b>			
Asset-VII	Sub-station	1,202.29	0.00	289.04	1,491.33	5.28%	0.00	35.65	0.00	1404.08	5.28%
	IT Equipment & Software	57.13	0.00	0.28	57.41	5.28%	0.00	1.52			
	<b>TOTAL</b>	<b>1,259.42</b>	<b>0.00</b>	<b>289.32</b>	<b>1,548.74</b>		<b>0.00</b>	<b>37.17</b>			
Asset-VIII	Sub-station	655.73	0.00	863.37	<b>1,519.09</b>	5.28%	0.00	23.75	0.00	1144.18	5.28%
	IT Equipment & Software	56.78	0.00	0.00	56.78	5.28%	0.00	1.24			
	<b>TOTAL</b>	<b>712.51</b>	<b>0.00</b>	<b>863.37</b>	<b>1,575.87</b>		<b>0.00</b>	<b>24.99</b>			



<b>Petition No.:</b>	37-TT-2020
<b>Period</b>	2019-24 Tariff

**Annexure - 2**

Asset	2019-24	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Additional Capitalization (₹ in lakh)		Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation	Annual Depreciation (₹ in lakh)				
	Capital Expenditure as on 1.4.2019		2019-20	2020-21			2019-20	2020-21	2021-22	2022-23	2023-24
Combined Assets	Sub-station	13561.82	1865.88	417.49	15845.19	5.28%	765.32	825.60	836.63	836.63	836.63
	IT Equipment & Software	393.41	0.15	0.00	393.56	15.00%	59.02	59.03	59.03	59.03	59.03
	<b>TOTAL</b>	<b>13955.23</b>	<b>1866.03</b>	<b>417.49</b>	<b>16238.75</b>		<b>824.35</b>	<b>884.64</b>	<b>895.66</b>	<b>895.66</b>	<b>895.66</b>
					<b>Average Gross Block (₹ in lakh)</b>		<b>14888.24</b>	<b>16030.00</b>	<b>16238.75</b>	<b>16238.75</b>	<b>16238.75</b>
					<b>Weighted Average Rate of Depreciation</b>		<b>5.54%</b>	<b>5.52%</b>	<b>5.52%</b>	<b>5.52%</b>	<b>5.52%</b>

