

CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 449/TT/2020

Coram:

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

Date of order : 29.05.2021

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for trueing 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 in respect of **Asset-I:** LILO of Patiala-Hissar line at Kaithal Sub-Station along with associated bays; **Asset-II:** 400 kV D/C Patiala-Ludhiana line along with associated bays at Patiala and Ludhiana Sub-station; **Asset-III:** LILO of 1st Circuit of 400 kV D/C Nathpa Jhakri-Nalagarh (Triple Snowbird) Line at Rampur and **Asset IV:** LILO of 2nd ckt. of 400 kV Natpha Jhakri-Nalagarh (Triple Snowbird) line at Rampur covered under "Transmission System associated with Rampur HEP" in the Northern Region.

And in the matter of:

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

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,
Vidyut Bhawan, Vidyut Marg,
Jaipur – 302005 (Rajasthan)

2. Ajmer Vidyut Vitran Nigam Ltd.,
132 kV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan)



3. Jaipur Vidyut Vitran Nigam Ltd.,
132 kV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan)
4. Jodhpur Vidyut Vitran Nigam Ltd.,
132 kV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan)
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004 (Himachal Pradesh),
6. Punjab State Electricity Board,
Thermal Shed Tia,
Near 22 Phatak,
Patiala-147001 (Punjab)
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula- 134109 (Haryana),
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Ltd.,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226001 (Uttar Pradesh)
10. Delhi Transco Ltd.,
Shakti Sadan, Kotla Road,
New Delhi-110002.
11. BSES Yamuna Power Ltd.,
Block, Shakti Kiran, Bldg. (Near Karkadooma Court),
Karkadooma 2nd Floor,
New Delhi-110092.
12. BSES Rajdhani Power Ltd,
BSES Bhawan, Nehru Place,
New Delhi-110019.
13. Tata Power Delhi Distribution Ltd.,
NDPL House, Hudson Lines Kingsway Camp,
Delhi – 110009.
14. Chandigarh Administration,



Sector -9, Chandigarh.

15. Uttarakhand Power Corporation Ltd.,
Urja Bhawan,
Kanwali Road, Dehradun (Uttarakhand),

16. North Central Railway,
Allahabad (Uttar Pradesh)

17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.

...Respondent(s)

For Petitioner: Shri S. S. Raju, PGCIL
Shri B. Dash, PGCIL
Shri A. K. Verma, PGCIL
Shri V. P. Rastogi, PGCIL

For Respondents: Shri R. B. Sharma, Advocate, BRPL
Shri Sachin Dubey, Advocate, BYPL
Ms. Megha Bajpayee, BRPL

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd. for trueing up of transmission tariff of the period from COD to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) of the 2019-24 tariff period in respect of the following transmission assets under “Transmission System associated with Rampur HEP” (hereinafter referred to as “the transmission project”) in the Northern Region:

Asset-I: LILO of Patiala-Hissar line at Kaithal Sub-Station along with associated bays;

Asset-II: 400 kV D/C Patiala-Ludhiana Transmission Line along with associated bays at Patiala and Ludhiana Sub-station;



Asset-III: LILO of 1st Circuit of 400 kV D/C Nathpa Jhakri- Nalagarh (Triple Snowbird) Transmission Line at Rampur; and

Asset IV: LILO of 2nd ckt. of 400 kV Natpha Jhakri-Nalagarh (Triple Snowbird) Transmission Line at Rampur.

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

- “ 1) Approve the actual Additional Capitalisation expenditure incurred during 2014-19 tariff block and proposed add cap in 2019-24 tariff block and excess initial spares claimed project wise.*
- 2) Approve the trued-up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition.*
- 3) Allow the initial spares as a percentage of the project cost as claimed at Para 9.2 above.*
- 4) Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before Hon'ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019.*
- 5) 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.*
- 6) Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the beneficiaries in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 7) Allow the Petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.*
- 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.*
- 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 beneficiaries, if GST on transmission is withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*

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



3. **Backdrop of the petition**

a) Investment Approval (IA) for the transmission project was accorded by the Board of Directors of the Petitioner vide Memorandum Ref: C/CP/Rampur HEP/14 dated 20.2.2009 at an estimated cost of ₹18419.00 lakh, including IDC of ₹1416.00 lakh (based on 4th Quarter, 2008 price level). The Revised Cost Estimate-I (RCE-I) of the transmission project was approved by the Board of Directors of the Petitioner's Company vide Memorandum Ref: C/CP/TS/Rampur HEP dated 11.3.2016 at an estimated cost of ₹17027.00 lakh, including IDC of ₹1183.00 lakh. The Revised Cost Estimate-II (RCE-II) was approved by the Board of Directors of the Petitioner's Company vide Memorandum No. C/CP/PA1920-11-0AD-RCE008 dated 18.2.2020 for the transmission project, at an estimated cost of ₹17063.00 lakh which included IDC of ₹1184.00 lakh based on October, 2019 price level.

b) The entire scope of the transmission project has been covered in the instant petition and the same is as follows:

Transmission Line

- (i) Patiala-Ludhiana 400 kV D/C Transmission Line
- (ii) LILO of 400 kV D/C Nathpa Jhakri-Nalagarh (Triple Snowbird) Transmission Line at Rampur
- (iii) LILO of Patiala-Hissar 400 kV (Triple Snowbird) Transmission Line at Kaithal

Sub-station

- (i) 400/220 kV Patiala Sub-station (Extension)
- (ii) 400/220 kV Ludhiana Sub-station (Extension)
- (iii) 400/220 kV Kaithal Sub-station (Extension)

c) As per IA dated 20.2.2009, the transmission assets under the scope of the transmission project were scheduled to be executed within 33 months from the date of IA i.e. by 19.11.2011. However, Asset-I, Asset-II, Asset-III and Asset-IV achieved COD on 1.9.2011, 1.10.2011, 1.3.2014 and 20.10.2014,



respectively. Time over-run of 27 months in case of Asset-III was condoned by the Commission vide order dated 25.8.2015 in Petition No. 288/TT/2013. Time over-run of 35 months in case of Asset-IV was condoned by the Commission vide order dated 28.3.2016 in Petition No. 137/TT/2015.

d) Transmission tariff of 2009-14 period in respect of Asset-I and Asset-II (Combined Assets-I&II) was trued up and tariff of 2014-19 tariff period was determined vide order dated 17.2.2016 in Petition No. 527/TT/2014. Tariff of 2009-14 period was trued up and tariff of 2014-19 tariff period was determined in respect of Asset-III vide order dated 26.10.2016 in Petition No. 163/TT/2016. Tariff in respect of Asset-IV from 20.10.2014 to 31.3.2019 was determined vide order dated 28.3.2016 in Petition No. 137/TT/2016.

4. The Respondents are distribution licensees and power departments which are procuring transmission service from the Petitioner mainly the beneficiaries of the Northern Region.

5. The Petitioner has served the petition on the Respondents and notice of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. During the course of the hearing on 6.4.2021, learned counsel appearing on behalf of BRPL submitted that no reply has been filed in the matter and made oral submissions and also requested to consider the arguments advanced in Petition No.101/TT/2020, heard earlier on the day. However, BRPL has filed the reply in the matter after the expiry of the time granted for filing the reply and without leave of the Commission. Therefore, the written reply filed by BRPL is not being considered and only the oral submissions made during the hearing on 6.4.2021 are considered. None of the other Respondents have filed any reply in the matter.



6. The hearing in this matter was held on 6.4.2021 through video conference and the Commission reserved order in the matter.

7. Learned counsel for BRPL raised the issue of grossing up of Return on Equity (RoE), Competent Authority to approve the Investment Approval, cost over-run, accrued IDC, Initial Spares, income tax on transmission business and procedural guidelines in annual truing up of grossing up of income tax. He further submitted that the arguments advanced by him in Petition No. 101/TT/2020 may also be considered on behalf of BRPL in the present petition. Learned counsel for BRPL in Petition No. 101/TT/2020 addressed arguments on the issues of non-payment of tax on transmission business during the 2009-14 and 2014-19 tariff periods, non-payment of tax on transmission business during the 2019-24 tariff period, effective tax rate for transmission business and benefits of tax holiday. Learned counsel also submitted that the Petitioner is required to submit region-wise corporate audited balance sheet, profit and loss accounts with all schedules and annexures for the new transmission system and communication system for relevant years as it is a statutory requirement.

8. We have considered the above submissions of BRPL. The Commission in its various recent orders on truing up of tariff of 2014-19 period and determination of tariff of 2019-24 period has already dealt with the above submissions of BRPL. We note that the counsel for BRPL has been raising the same issues in the petitions filed before the Commission despite specific finding of the Commission on those issues. We also note that BRPL has not preferred any appeal against the orders of the Commission. Thus, the orders of the Commission on such issues have attained finality. We, therefore, are of the view that no fresh discussions/findings with regard to the above issues is required to be made in the present case.



9. This order is being issued based on the submissions made by the Petitioner in its petition and Petitioner's affidavit dated 2.12.2020.

10. Having heard the representatives of the Petitioner, learned counsel for BRPL and perusal of the material on record, we proceed to dispose of the petition.

Truing up of Annual Fixed Charges for 2014-19 Tariff Period

11. The details of the trued up transmission charges claimed by the Petitioner in respect of the transmission assets are follows:

Combined Assets - I&II

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	762.79	762.79	762.79	762.79	762.79
Interest on Loan	695.71	627.45	559.04	489.93	422.10
Return on Equity	848.97	852.86	852.43	852.43	854.72
Interest on Working Capital	76.11	75.39	74.60	73.82	73.16
O&M Expenses	416.28	430.15	444.44	459.18	474.41
Total	2799.86	2748.64	2693.30	2638.15	2587.18

Asset - III

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	93.21	104.90	107.43	107.43	107.43
Interest on Loan	110.98	115.60	107.41	94.87	84.41
Return on Equity	103.46	117.04	119.81	119.81	120.13
Interest on Working Capital	7.19	7.88	7.81	7.53	7.30
O&M Expenses	1.89	1.96	2.02	2.09	2.16
Total	316.73	347.38	344.48	331.73	321.43

Asset - IV

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	8.69	23.29	26.50	26.64	26.64
Interest on Loan	10.38	26.55	28.02	25.00	22.37
Return on Equity	9.54	25.76	29.34	29.49	29.57
Interest on Working Capital	0.67	1.78	1.97	1.91	1.85



O&M Expenses	0.29	0.67	0.69	0.71	0.74
Total	29.57	78.05	86.52	83.75	81.17

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

Combined Assets-I&II

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	34.69	35.85	37.04	38.27	39.53
Maintenance Spares	62.44	64.52	66.67	68.88	71.16
Receivables	466.64	458.11	448.88	439.69	431.20
Total Working Capital	563.77	558.48	552.59	546.84	541.89
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	76.11	75.39	74.60	73.82	73.16

Asset-III

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	0.16	0.16	0.17	0.17	0.18
Maintenance Spares	0.28	0.29	0.30	0.31	0.32
Receivables	52.79	57.90	57.41	55.29	53.57
Total Working Capital	53.23	58.35	57.88	55.77	54.07
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	7.19	7.88	7.81	7.53	7.30

Asset-IV

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	0.05	0.06	0.06	0.06	0.06
Maintenance Spares	0.10	0.10	0.10	0.11	0.11
Receivables	11.04	13.01	14.42	13.96	13.53
Total Working Capital	11.19	13.17	14.58	14.13	13.70
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	0.67	1.78	1.97	1.91	1.85

Capital Cost

13. The Commission vide order dated 17.2.2016 in Petition No. 527/TT/2014 allowed capital cost of ₹14418.83 lakh as on 1.4.2014 and as on 31.3.2019 as there was no Additional Capital Expenditure (ACE) for Combined Assets-I&II. For Asset-III,



the Commission vide order dated 26.10.2016 in Petition No. 163/TT/2016 approved capital cost as on 1.4.2014 of ₹1583.70 lakh and projected ACE of ₹366.17 lakh during the 2014-19 period. For Asset-IV, the Commission allowed capital cost of ₹348.64 lakh as on 1.4.2014 and projected ACE of ₹145.16 lakh vide order dated 28.3.2016 in Petition No. 137/TT/2015. The details of the capital cost as allowed by the Commission in the said orders are as follows:

(₹ in lakh)

Assets	Revised Cost Estimate (RCE)-I Apportioned Approved Capital Cost	Capital cost as on 1.4.2014	ACE Allowed					Capital Cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Assets-I&II	14570.95	14418.83	0.00	0.00	0.00	0.00	0.00	14418.83
Asset-III	1956.87	1583.70	266.00	100.17	0.00	0.00	0.00	1949.87
Asset-IV	499.57	348.64**	28.68	58.24	58.24	0.00	0.00	493.80

***Capital Cost as on COD i.e. 20.10.2014*

14. The approved apportioned cost, actual expenditure up to COD and actual ACE during 2014-19 tariff period claimed by the Petitioner are as follows:

(₹ in lakh)

Assets	RCE-I apportioned approved Capital Cost	RCE-II apportioned approved Capital Cost	Capital Cost as on 31.3.2014	ACE Claimed					Total Capital Cost as on 31.3.2019
				2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Assets-I&II	14570.95	14525.95	14419.85	0.00	0.00	0.00	0.00	0.00	14419.85
Asset-III	1956.87	2036.87	1583.70	347.19	95.78	0.00	0.00	0.00	2026.67
Asset-IV	499.57	500.18	348.64**	28.68	116.48	5.11	0.00	0.00	498.91

***Capital Cost as on COD i.e. 20.10.2014*

15. The Petitioner was directed to give reasons for claiming higher capital cost in respect of Asset-III as on 31.3.2019. The Petitioner vide affidavit dated 2.12.2020 has furnished RCE-II approved by Competent Authority showing asset-wise revised apportioned approved capital cost. As per RCE-II, the estimated completion cost of the transmission assets is within apportioned approved cost.



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

16. The Combined Assets-I&II and Asset-III were put into commercial operation during 2009-14 tariff period. IDC and IEDC in respect of Combined Assets-I&II and Asset-III has already been considered in order dated 17.2.2016 in Petition No. 527/TT/2014 and order dated 26.10.2016 in Petition No. 163/TT/2016 respectively.

17. Asset-IV was scheduled to be put into commercial operation on 19.11.2011 against which it was declared under commercial operation on 20.10.2014 after a time over-run of 35 months. The Commission vide its order dated 28.3.2016 in the Petition No. 137/TT/2015 condoned the entire delay in execution of Asset-IV. The Petitioner has claimed IDC in respect of Asset-IV and has also submitted the statement showing IDC claimed, discharge of IDC liability as on COD. The details of the same are as follows:

(₹ in lakh)		
Asset	IDC as per Auditor's Certificate	IDC discharged up to COD
Asset-IV	67.69	67.69

18. For the purpose of determination of allowable IDC, we have considered the loan amount as mentioned in Form 9C. Based on the information available on record, IDC allowed in respect of Asset-IV is as follows:

(₹ in lakh)		
Asset	IDC as allowed	IDC discharged up to COD
Asset-IV	67.69	67.69

19. The Petitioner has claimed IEDC of ₹20.06 lakh in respect of Asset-IV. The Petitioner has submitted that IEDC has been discharged on or before the COD of the asset and it was allowed vide order dated 28.3.2016 in Petition No. 137/TT/2015. The IEDC claimed as on COD is within the permissible limit of hard cost as indicated in the



approved abstract cost estimate. Therefore, IEDC as claimed has been considered for the purpose of tariff.

Initial Spares

20. Regulation 8 of the 2009 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of plant and machinery cost up to cut-off date, subject to following ceiling norms:

*“(iv) Transmission System
Transmission line: 0.75%
Transmission sub-station: 2.50%
Series Compensation devices and HVDC Station: 3.50%”*

21. The Petitioner has claimed the following Initial Spares for the transmission assets and prayed to revise the Initial Spares allowed earlier in light of judgement of the Appellate Tribunal for Electricity (APTEL) dated 14.9.2019 in Appeal No.74 of 2017:

Assets	Capital Cost as on cut-off date (₹ in lakh) (A)	Initial Spares Claimed (₹ in lakh) (B)	Ceiling limit (%) (C)	Initial Spares claimed in the instant petition	Initial Spares allowed vide order dated 17.2.2016 in Petition No. 527/TT/2014
				D = [(A-B)*C/(100-C)] (₹ in lakh)	(₹ in lakh) (E)
Asset-I	682.25	55.81	2.50	40.58	16.06
Asset-II	1002.54	85.87	2.50		23.50
Asset-III	39.58	0.00	2.50		0.00
Total	1724.37	141.68	2.50		39.56

22. The Petitioner has submitted that Initial Spares were deducted by the Commission during 2009-14 tariff period and that it has added back the Initial Spares disallowed during 2009-14 period in the opening capital cost as on 1.4.2014 in light of (APTEL) judgement dated 14.9.2019 in Appeal No.74 of 2017.



23. We have considered the submissions of 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 initially and subsequently to be allowed as a percentage of the overall project cost. The relevant portion of the said judgement is extracted here as follows:

“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.”

24. Combined Assets-I&II and Asset-III were put into commercial operation during 2009-14 tariff period and Asset-IV declared COD during the 2014-19 tariff period. As per APTEL’s judgement, Initial Spares are to be allowed on the basis of the overall project cost. In the present case, three of transmission assets were put into commercial operation in the 2009-14 tariff period and one transmission asset in the 2019-24 tariff period. Therefore, the overall project cost of the transmission assets can be arrived at only when all the transmission assets are combined, which in the present case is done in the 2019-24 tariff period. Accordingly, Initial Spares are allowed on the basis of the cost of the individual asset in 2014-19 tariff period and Initial Spares are allowed on the basis of the overall project cost in 2019-24 period when the transmission assets are combined and overall project cost is arrived at.

Additional Capital Expenditure (ACE)

25. The Petitioner has not claimed any ACE for Combined Assets-I&II for 2014-19 tariff period. For Asset-III, the Petitioner has claimed ACE of ₹442.97 lakh during 2014-19 tariff period against ACE of ₹366.17 lakh allowed *vide* order dated 26.10.2016 in Petition No. 163/TT/2016. The Petitioner has also claimed ACE in



respect of Asset-IV of ₹150.27 lakh in 2014-19 tariff period against ACE of ₹145.16 lakh allowed *vide* order dated 28.3.2016 in Petition No. 137/TT/2015. The Petitioner has submitted that it has claimed ACE for Asset-III and Asset-IV on account of balance and retention payment for the work already executed and covered under the original scope of works within the cut-off date in accordance with Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations. The Petitioner's claim for ACE in respect of the transmission assets is as follows:

(₹ in lakh)								
Assets	Particulars	Capital cost as on COD/ 31.3.2014	ACE approved/claimed during 2014-19					Total Capital Cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Assets-I&II	Capital Cost approved vide Petition No. 527/TT/2014 dated 17.2.2016	14418.83	-	-	-	-	-	14418.83
	Capital Cost Claimed in instant Petition	14419.85	-	-	-	-	-	14419.85
Asset-III	Capital Cost approved vide Petition No. 163/TT/2016 dated 26.10.2016	1583.70	266.00	100.17	-	-	-	1949.87
	Capital Cost Claimed in instant Petition	1583.70	347.19	95.78	-	-	-	2026.67
Asset-IV	Capital Cost approved vide Petition No. 137/TT/2015 dated 28.3.2016	348.64	28.68	58.24	58.24	-	-	493.80
	Capital Cost Claimed in instant Petition	348.64	28.68	116.48	5.11	-	-	498.91

26. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations. The capital cost as on COD, ACE during 2014-19 period and capital cost as on 31.3.2019 allowed for the transmission assets are as follows:



(₹ in lakh)

Assets	RCE-II Apportioned Approved Capital Cost	Capital cost as on 31.3.2014	ACE allowed					Capital Cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset-I&II	14525.95	14418.83	0.00	0.00	0.00	0.00	0.00	14418.83
Asset-III	2036.87	1583.70	347.19	95.78	0.00	0.00	0.00	2026.67
Asset-IV	500.18	348.64**	28.68	116.48	5.11	0.00	0.00	498.91

**Capital Cost as on COD i.e. 20.10.2014

Debt-Equity ratio

27. The Petitioner has claimed debt-equity ratio of 70:30 as on COD of the transmission assets as on 1.4.2014. The debt-equity ratio has been considered in accordance with Regulations 19(1), 19(3) and 19(5) of the 2014 Tariff Regulations. The debt-equity allowed for individual assets for determination of tariff for the period ending 31.3.2014 has been considered as opening debt-equity of the project as on 1.4.2014. The details of the debt-equity in respect of Combined Assets-I&II, Asset-III and Asset-IV as on COD/1.4.2014 and as on 31.3.2019 are as follows:

Combined Assets-I&II

Particulars	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	10093.18	70.00	10093.18	70.00
Equity	4325.65	30.00	4325.65	30.00
Total	14418.83	100.00	14418.83	100.00

Asset-III

Particulars	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	1108.59	70.00	1418.67	70.00
Equity	475.11	30.00	608.00	30.00
Total	1583.70	100.00	2026.67	100.00



Asset-IV

Particulars	Capital Cost as on COD (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	244.05	70.00	349.24	70.00
Equity	104.59	30.00	149.67	30.00
Total	348.64	100.00	498.91	100.00

Depreciation

28. The Petitioner has claimed depreciation as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations.

29. We have considered the submission of the Petitioner. The gross block during 2014-19 tariff period for the transmission assets has been depreciated at Weighted Average Rate of Depreciation (WAROD) (Annexed as Annexure-1). 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 2014-19 period is as follows:

Combined Assets-I &II

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
(₹ in lakh)					
Depreciation					
Opening Gross Block	14418.83	14418.83	14418.83	14418.83	14418.83
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	14418.83	14418.83	14418.83	14418.83	14418.83
Average Gross Block	14418.83	14418.83	14418.83	14418.83	14418.83
Weighted Average Rate of Depreciation (%)	5.29	5.29	5.29	5.29	5.29
Balance useful life of the asset (Year)	32.00	31.00	30.00	29.00	28.00
Lapsed life (Year)	2.00	3.00	4.00	5.00	6.00
Aggregate Depreciable Value	12976.95	12976.95	12976.95	12976.95	12976.95
Depreciation during the year	762.73	762.73	762.73	762.73	762.73
Cumulative depreciation at the end of year	2651.01	3413.75	4176.48	4939.21	5701.94
Remaining Depreciable Value at the end of year	10325.93	9563.20	8800.47	8037.74	7275.00



Asset-III

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	1583.70	1930.89	2026.67	2026.67	2026.67
ACE	347.19	95.78	0.00	0.00	0.00
Closing Gross Block	1930.89	2026.67	2026.67	2026.67	2026.67
Average Gross Block	1757.30	1978.78	2026.67	2026.67	2026.67
Weighted Average Rate of Depreciation (%)	5.30	5.30	5.30	5.30	5.30
Balance useful life of the asset (Year)	35.00	34.00	33.00	32.00	31.00
Lapsed life (Year)	0.00	1.00	2.00	3.00	4.00
Aggregate Depreciable Value	1581.57	1780.90	1824.00	1824.00	1824.00
Depreciation during the year	93.20	104.90	107.42	107.42	107.42
Cumulative depreciation at the end of year	99.81	204.71	312.13	419.55	526.98
Remaining Depreciable Value at the end of year	1481.75	1576.20	1511.87	1404.45	1297.03

Asset-IV

(₹ in lakh)

Particulars	2014-15 (pro-rata for 163 days)	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	348.64	377.32	493.80	498.91	498.91
ACE	28.68	116.48	5.11	0.00	0.00
Closing Gross Block	377.32	493.80	498.91	498.91	498.91
Average Gross Block	362.98	435.56	496.36	498.91	498.91
Weighted Average Rate of Depreciation (%)	5.36	5.35	5.34	5.34	5.34
Balance useful life of the asset (Year)	33.00	33.00	32.00	31.00	30.00
Elapsed life (Year)	0.00	0.00	1.00	2.00	3.00
Aggregate Depreciable Value	326.68	392.00	446.72	449.02	449.02
Depreciation during the year	8.69	23.29	26.50	26.64	26.64
Cumulative depreciation at the end of year	8.69	31.98	58.48	85.12	111.75
Remaining Depreciable Value at the end of year	317.99	360.02	388.24	363.90	337.27

30. The details of depreciation approved vide order dated 17.2.2016 in Petition No. 527/TT2014 in respect of Combined Assets-I&II, order dated 26.10.2016 in Petition



No. 163/TT/2016 in respect of Asset-III and order dated 28.3.2016 in Petition No. 137/TT/2015 in respect of Asset-IV, depreciation claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

Combined Assets-I&II

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 17.2.2016 in Petition No. 527/TT/2014	762.73	762.73	762.73	762.73	762.73
Claimed by the Petitioner in the instant petition	762.79	762.79	762.79	762.79	762.79
Allowed after true-up in this order	762.73	762.73	762.73	762.73	762.73

Asset-III

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 26.10.2016 in Petition No. 163/TT/2016	91.05	100.72	103.37	103.37	103.37
Claimed by the Petitioner in the instant petition	93.21	104.90	107.43	107.43	107.43
Allowed after true-up in this order	93.20	104.90	107.42	107.42	107.42

Asset-IV

(₹ in lakh)

Particulars	2014-15 (pro-rata for 163 days)	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 28.3.2016 in Petition No.137/TT/2015	8.69	21.75	24.83	26.37	26.37
Claimed by the Petitioner in the instant petition	8.69	23.29	26.50	26.64	26.64
Allowed after true-up in this order	8.69	23.29	26.50	26.64	26.64

Interest on Loan (IoL)

31. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest. We have considered the submissions of the Petitioner. IoL has been calculated based on actual interest rate submitted by the Petitioner in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed in respect of the transmission assets is as follows:



Combined Assets-I&II**(₹ in lakh)**

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan					
Gross Normative Loan	10093.18	10093.18	10093.18	10093.18	10093.18
Cumulative Repayments up to Previous Year	1888.28	2651.01	3413.75	4176.48	4939.21
Net Loan-Opening	8204.90	7442.17	6679.44	5916.70	5153.97
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	762.73	762.73	762.73	762.73	762.73
Net Loan-Closing	7442.17	6679.44	5916.70	5153.97	4391.24
Average Loan	7823.53	7060.80	6298.07	5535.34	4772.60
Weighted Average Rate of Interest on Loan (%)	8.8917	8.8856	8.8756	8.8502	8.8435
Interest on Loan	695.64	627.39	558.99	489.89	422.06

Asset-III**(₹ in lakh)**

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan					
Gross Normative Loan	1108.59	1351.62	1418.67	1418.67	1418.67
Cumulative Repayments up to Previous Year	6.61	99.81	204.71	312.13	419.55
Net Loan-Opening	1101.98	1251.81	1213.96	1106.54	999.12
Additions due to ACE	243.03	67.05	0.00	0.00	0.00
Repayment during the year	93.20	104.90	107.42	107.42	107.42
Net Loan-Closing	1251.81	1213.96	1106.54	999.12	891.69
Average Loan	1176.90	1232.89	1160.25	1052.83	945.40
Weighted Average Rate of Interest on Loan (%)	9.4301	9.3762	9.2579	9.0110	8.9294
Interest on Loan	110.98	115.60	107.42	94.87	84.42

Asset- IV**(₹ in lakh)**

Particulars	2014-15 (pro-rata for 163 days)	2015-16	2016-17	2017-18	2018-19
Interest on Loan					
Gross Normative Loan	244.05	264.12	345.66	349.24	349.24
Cumulative Repayments up to Previous Year	0.00	8.69	31.98	58.48	85.12
Net Loan-Opening	244.05	255.43	313.68	290.76	264.12
Additions due to ACE	20.08	81.54	3.58	0.00	0.00
Repayment during the year	8.69	23.29	26.50	26.64	26.64
Net Loan-Closing	255.43	313.68	290.76	264.12	237.48



Average Loan	249.74	284.56	302.22	277.44	250.80
Weighted Average Rate of Interest on Loan (%)	9.3038	9.3312	9.2715	9.0102	8.9195
Interest on Loan	10.38	26.55	28.02	25.00	22.37

32. The details of IoL approved vide order dated 17.2.2016 in Petition No. 527/TT2014 in respect of Combined Assets-I&II, order dated 26.10.2016 in Petition No. 163/TT/2016 for Asset-III and order dated 28.3.2016 in Petition No. 137/TT/2015 in respect of Asset-IV, IoL claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

Combined Assets-I&II

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 17.2.2016 in Petition No. 527/TT/2014	695.66	628.38	560.82	493.10	425.37
Claimed by the Petitioner in the instant petition	695.71	627.45	559.04	489.93	422.10
Allowed after true-up in this order	695.64	627.39	558.99	489.89	422.06

Asset-III

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.10.2016 in Petition No. 163/TT/2016	107.57	110.53	104.25	94.56	84.86
Claimed by the Petitioner in the instant petition	110.98	115.60	107.41	94.87	84.41
Allowed after true-up in this order	110.98	115.60	107.42	94.87	84.42

Asset-IV

(₹ in lakh)

Particulars	2014-15 (pro-rata for 163 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.3.2016 in Petition No. 137/TT/2015	10.38	24.54	26.15	25.65	23.19
Claimed by the Petitioner in the instant petition	10.38	26.55	28.02	25.00	22.37
Allowed after true-up in this order	10.38	26.55	28.02	25.00	22.37



Return on Equity (RoE)

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

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

34. Learned counsel for BRPL has submitted that effective tax rate in the petition after grossing up the rate of return on equity at the end of every financial year is not based on actual tax paid.

35. We have considered the submissions of the Petitioner and BRPL. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same are as follows:

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

36. The MAT rates considered in order dated 27.4.2020 in Petition No. 274/TT/2019 are considered in the present case 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, which are as follows:

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

37. The Petitioner has claimed RoE for 2014-19 tariff period after grossing up the RoE @15.50% with Effective Tax rates (based on MAT rates) each year as per the above said Regulation. RoE is trued up on the basis of MAT rates applicable in the respective years and is allowed for the transmission assets as follows:

Combined Assets-I&II

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	4325.65	4325.65	4325.65	4325.65	4325.65
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	4325.65	4325.65	4325.65	4325.65	4325.65
Average Equity	4325.65	4325.65	4325.65	4325.65	4325.65
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity	848.26	852.37	852.37	852.37	854.66

Asset-III

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	475.11	579.27	608.00	608.00	608.00
Additions due to ACE	104.16	28.73	0.00	0.00	0.00
Closing Equity	579.27	608.00	608.00	608.00	608.00
Average Equity	527.19	593.63	608.00	608.00	608.00
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity	103.38	116.98	119.81	119.81	120.13



Asset-IV**(₹ in lakh)**

Particulars	2014-15 (pro-rata for 163 days)	2015-16	2016-17	2017-18	2018-19
Opening Equity	104.59	113.20	148.14	149.67	149.67
Additions due to ACE	8.60	34.94	1.53	0.00	0.00
Closing Equity	113.20	148.14	149.67	149.67	149.67
Average Equity	108.89	130.67	148.91	149.67	149.67
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity	9.54	25.75	29.34	29.49	29.57

38. The details of RoE approved vide order dated 17.2.2016 in Petition No. 527/TT2014 in respect of Combined Assets-I&II, order dated 26.10.2016 in Petition No. 163/TT/2016 for Asset-III and order dated 28.3.2016 in Petition No. 137/TT/2015 in respect of Asset-IV, RoE claimed by the Petitioner and trued up in the instant order are as follows:

Combined Assets-I&II**(₹ in lakh)**

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 17.2.2016 in Petition No. 527/TT/2014	848.24	848.24	848.24	848.24	848.24
Claimed by the Petitioner in the instant petition	848.97	852.86	852.43	852.43	854.72
Allowed after true-up in this order	848.26	852.37	852.37	852.37	854.66

Asset-III**(₹ in lakh)**

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.10.2016 in Petition No. 163/TT/2016	101.00	112.31	115.27	115.27	115.27
Claimed by the Petitioner in the instant petition	103.46	117.04	119.81	119.81	120.13
Allowed after true-up in this order	103.38	116.98	119.81	119.81	120.13



Asset-IV

(₹ in lakh)

Particulars	2014-15 (pro-rata for 163 days)	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 28.3.2016 in Petition No. 137/TT/2015	9.54	23.91	27.34	29.05	29.05
Claimed by the Petitioner in the instant petition	9.54	25.76	29.34	29.49	29.57
Allowed after true-up in this order	9.54	25.75	29.34	29.49	29.57

Operation & Maintenance Expenses (O&M Expenses)

39. The O&M Expenses claimed by the Petitioner for the transmission assets are as follows:

Combined Assets-I&II

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission line LILO of 400 kV Patiala Hissar Transmission Line at Kaithal					
D/C Bundled (Twin and triple conductors) (km)	33.505	33.505	33.505	33.505	33.505
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Transmission Line Patiala Ludhiana S/C line					
S/C Bundled (Twin /triple conductors) (km)	76.215	76.215	76.215	76.215	76.215
Norms (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
Sub-station Bays 400 kV (Conventional)					
Patiala Bay (Number)	1				
Hissar Bay (Number)	1				
Ludhiana I Bay (Number)	1				
Ludhiana II Bay (Number)	1				
Patiala I bay (Number)	2				
Norms (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
Total O&M Expenses (₹ in lakh)	416.28	430.15	444.44	459.18	474.41



Asset-III

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission line LILO of 1st Circuit of 400 kV D/C Nathpa Jhakri - Nalagarh (triple Snowbird) line at Rampur					
D/C Bundled (Twin and triple conductors) (km)	2.680	2.680	2.680	2.680	2.680
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Total O&M Expenses (₹ in lakh)	1.89	1.96	2.02	2.09	2.16

Asset-IV

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission line LILO of 2nd Circuit of 400 kV D/C Nathpa Jhakri- Nalagarh (triple Snowbird) line at Rampur					
D/C Bundled (Twin and triple conductors) (km)	0.915	0.915	0.915	0.915	0.915
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Total O&M Expenses (₹ in lakh)	0.29	0.67	0.69	0.71	0.74

40. We have considered the submissions of the Petitioner. The O&M Expenses norms specified for the elements covered in the transmission assets under Regulation 29(3) of the 2014 Tariff Regulations are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission line 400 kV D/C line					
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Transmission line S/C Bundled (Twin /triple conductors)					
Norms (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
Sub-station Bays 400 kV (Conventional)					
Norms (₹ lakh/bays)	60.30	62.30	64.37	66.51	68.71

41. The O&M Expenses determined are in line with the norms specified in Regulation 29(3) of the 2014 Tariff Regulations and are allowed as follows:



Combined Assets-I&II

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission line LILO of 400 kV Patiala Hissar at Kaithal					
D/C Bundled (Twin and triple conductors) (km)	33.505	33.505	33.505	33.505	33.505
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Transmission line Patiala Ludhiana line					
S/C Bundled (Twin/triple conductors) (km)	76.215	76.215	76.215	76.215	76.215
Norms (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
Sub-station Bays 400 kV (Conventional)					
Patiala Bay (Number)	1				
Hissar Bay (Number)	1				
Ludhiana I Bay (Number)	1				
Ludhiana II Bay (Number)	1				
Patiala I bay (Number)	2				
Norms (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
Total O&M expenses (₹ in lakh)	416.28	430.15	444.44	459.19	474.40

Asset-III

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission line LILO of 1st Circuit of 400 kV D/C Nathpa Jhakri- Nalagarh (triple Snowbird) line at Rampur					
D/C Bundled (Twin and triple conductors) (km)	2.680	2.680	2.680	2.680	2.680
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Total O&M expenses (₹ in lakh)	1.89	1.96	2.02	2.09	2.16

Asset-IV

Particulars	2014-15 (pro-rata for 163 days)	2015-16	2016-17	2017-18	2018-19
Transmission line LILO of 2nd Circuit of 400 kV D/C Nathpa Jhakri- Nalagarh (triple Snowbird) line at Rampur					
D/C Bundled (Twin and triple conductors) (km)	0.915	0.915	0.915	0.915	0.915
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Total O&M expenses (₹ in lakh)	0.29	0.67	0.69	0.71	0.74



42. The details of the O&M Expenses approved vide order dated 17.2.2016 in Petition No. 527/TT2014 for Combined Assets-I&II, order dated 26.10.2016 in Petition No. 163/TT/2016 for Asset-III and order dated 28.3.2016 in Petition No. 137/TT/2015 in respect of Asset-IV, claimed by the Petitioner in the instant petition and trueed up in the instant order are as follows:

Combined Assets-I&II

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 17.2.2016 in Petition No. 527/TT/2014	416.28	430.15	444.44	459.19	474.40
Claimed by the Petitioner in the instant petition	416.28	430.15	444.44	459.18	474.41
Allowed after true-up in this order	416.28	430.15	444.44	459.19	474.40

Asset-III

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.10.2016 in Petition No. 163/TT/2016	1.89	1.96	2.02	2.09	2.16
Claimed by the Petitioner in the instant petition	1.89	1.96	2.02	2.09	2.16
Allowed after true-up in this order	1.89	1.96	2.02	2.09	2.16

Asset-IV

(₹ in lakh)

Particulars	2014-15 (pro-rata for 163 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.3.2016 in Petition No. 137/TT/2015	0.29	0.67	0.69	0.71	0.74
Claimed by the Petitioner in the instant petition	0.29	0.67	0.69	0.71	0.74
Allowed after true-up in this order	0.29	0.67	0.69	0.71	0.74



Interest on Working Capital (IWC)

43. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and is allowed for the transmission assets as follows:

Combined Assets-I&II

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital					
O&M Expenses (O&M Expenses for 1 month)	34.69	35.85	37.04	38.27	39.53
Maintenance Spares (15% of O&M Expenses)	62.44	64.52	66.67	68.88	71.16
Receivables (Equivalent to 2 months of annual fixed cost)	466.50	458.00	448.86	439.67	431.17
Total Working Capital	563.63	558.37	552.56	546.81	541.86
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	76.09	75.38	74.60	73.82	73.15

Asset-III

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital					
O&M Expenses (O&M Expenses for 1 month)	0.16	0.16	0.17	0.17	0.18
Maintenance Spares (15% of O&M Expenses)	0.28	0.29	0.30	0.31	0.32
Receivables (Equivalent to 2 months of annual fixed cost)	52.77	57.88	57.41	55.29	53.57
Total Working Capital	53.22	58.34	57.89	55.77	54.08
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	7.18	7.88	7.81	7.53	7.30

Asset-IV

(₹ in lakh)

Particulars	2014-15 (pro-rata for 163 days)	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital					
O&M Expenses (O&M Expenses for 1 month)	0.05	0.06	0.06	0.06	0.06
Maintenance Spares (15% of O&M Expenses)	0.10	0.10	0.10	0.11	0.11
Receivables (Equivalent to 2 months of annual fixed cost)	11.03	13.01	14.42	13.96	13.53
Total Working Capital	11.19	13.16	14.58	14.12	13.70



Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	0.67	1.78	1.97	1.91	1.85

44. The details of IWC approved vide order dated 17.2.2016 in Petition No. 527/TT2014 for Combined Assets-I&II, order dated 26.10.2016 in Petition No. 163/TT/2016 for Asset-III and order dated 28.3.2016 in Petition No. 137/TT/2015 in respect of Asset-IV, IWC claimed by the Petitioner and trued up in the instant order are as follows:

Combined Assets-I&II

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 17.2.2016 in Petition No. 527/TT/2014	76.09	75.31	74.54	73.80	73.08
Claimed by the Petitioner in the instant petition	76.11	75.39	74.60	73.82	73.16
Allowed after true-up in this order	76.09	75.38	74.60	73.82	73.15

Asset-III

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.10.2016 in Petition No. 163/TT/2016	7.00	7.56	7.54	7.32	7.11
Claimed by the Petitioner in the instant petition	7.19	7.88	7.81	7.53	7.30
Allowed after true-up in this order	7.18	7.88	7.81	7.53	7.30

Asset-IV

Particulars	(₹ in lakh)				
	2014-15 (pro-rata for 163 days)	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.3.2016 in Petition No. 137/TT/2015	0.67	1.65	1.84	1.91	1.85
Claimed by the Petitioner in the instant petition	0.67	1.78	1.97	1.91	1.85
Allowed after true-up in this order	0.67	1.78	1.97	1.91	1.85



Approved Annual Fixed Charges for 2014-19 Tariff Period

45. The trued-up Annual Fixed Charges approved for the transmission assets for 2014-19 tariff period are as follows:

Combined Assets-I&II

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	762.73	762.73	762.73	762.73	762.73
Interest on Loan	695.64	627.39	558.99	489.89	422.06
Return on Equity	848.26	852.37	852.37	852.37	854.66
Interest on Working Capital	76.09	75.38	74.60	73.82	73.15
O&M Expenses	416.28	430.15	444.44	459.19	474.40
Total	2799.01	2748.03	2693.13	2638.00	2587.01

Asset-III

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	93.20	104.90	107.42	107.42	107.42
Interest on Loan	110.98	115.60	107.42	94.87	84.42
Return on Equity	103.38	116.98	119.81	119.81	120.13
Interest on Working Capital	7.18	7.88	7.81	7.53	7.30
O&M Expenses	1.89	1.96	2.02	2.09	2.16
Total	316.64	347.30	344.48	331.72	321.43

Asset-IV

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	8.69	23.29	26.50	26.64	26.64
Interest on Loan	10.38	26.55	28.02	25.00	22.37
Return on Equity	9.54	25.75	29.34	29.49	29.57
Interest on Working Capital	0.67	1.78	1.97	1.91	1.85
O&M Expenses	0.29	0.67	0.69	0.71	0.74
Total	29.57	78.04	86.52	83.75	81.17

46. Accordingly, the Annual Transmission Charges approved vide order dated 17.2.2016 in Petition No. 527/TT2014 for Combined Assets-I&II, order dated 26.10.2016 in Petition No. 163/TT/2016 for Asset-III and order dated 28.3.2016 in Petition No. 137/TT/2015 in respect of Asset-IV, claimed by the Petitioner in the instant petition and approved after truing up in the instant order are as follows:



Combined Assets-I&II

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 17.2.2016 in Petition No. 527/TT/2014	2798.99	2744.80	2690.77	2637.05	2583.82
Claimed by the Petitioner in the instant petition	2799.86	2748.64	2693.30	2638.15	2587.18
Allowed after true-up in this order	2799.01	2748.03	2693.13	2638.00	2587.01

Asset-III

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 26.10.2016 in Petition No. 163/TT/2016	308.51	333.08	332.46	322.61	312.76
Claimed by the Petitioner in the instant petition	316.73	347.38	344.48	331.73	321.43
Allowed after true-up in this order	316.64	347.30	344.48	331.72	321.43

Asset-IV

(₹ in lakh)

Particulars	2014-15 (pro-rata for 163 days)	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 28.3.2016 in Petition No. 137/TT/2015	29.57	72.52	80.85	83.69	81.20
Claimed by the Petitioner in the instant petition	29.57	78.05	86.52	83.75	81.17
Allowed after true-up in this order	29.57	78.04	86.52	83.75	81.17

Determination of Annual Fixed Charges for the 2019-24 Tariff Period

47. The Petitioner has combined the transmission assets covered in the transmission project into one single Combined Asset and has filed a consolidated petition claiming tariff for the Combined Asset as a whole for the 2019-24 tariff period as provided in Regulation 8(1) of the 2019 Tariff Regulations.

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



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	897.04	897.24	897.24	897.24	897.24
Interest on Loan	450.62	371.55	292.19	212.74	133.11
Return on Equity	955.02	955.23	955.23	955.23	955.23
Interest on Working Capital	46.31	45.63	44.85	44.09	43.24
O&M Expenses	267.98	277.27	286.85	296.78	307.07
Total	2616.97	2546.92	2476.36	2406.08	2335.89

49. The details of IWC claimed by the Petitioner for 2019-24 period in respect of the Combined Asset are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	22.33	23.11	23.90	24.73	25.59
Maintenance Spares	40.20	41.59	43.03	44.52	46.06
Receivables	321.76	314.01	305.31	296.84	287.20
Total Working Capital	384.29	378.71	372.24	365.89	358.85
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	46.31	45.63	44.85	44.09	43.24

Effective Date of Commercial Operation (E-COD)

50. The Petitioner has claimed that E-COD of the Combined Asset works out to be 16.2.2012. Based on the trued-up admitted capital cost as on 31.3.2019 and actual COD of all the transmission assets, E-COD has been worked out as follows:

Assets	Capital Cost as on 31.3.2019 (₹ in lakh)	COD	Number of days from last COD	Weightage of Cost (%)	Weighted days	Effective COD (latest COD – weighted days)
Combined Assets-I&II	14418.83	1.10.2011	-	85.09	0.00	16.2.2012
Asset-III	2026.67	1.03.2014	882.00	11.96	105.49	
Asset-IV	498.91	20.10.2014	1115.00	2.94	32.83	
Total	16944.41			100	138.32	



51. E-COD is used to determine the lapsed life of the project as a whole which works out as 7 (seven) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (WAL) of the Assets

52. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of Weighted Average Life. 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 WAL has been used as the useful life of the project as a whole.

53. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as specified in the 2019 Tariff Regulations. Accordingly, WAL of the transmission assets has been worked out as 34 years as shown under:

Particulars	Capital Cost as on 31.3.2019 (₹ in lakh) (1)	Life (in years) (2)	Weighted Cost (₹ in lakh) (3) = (1)x(2)	Weighted Average Life of Asset (in years) (4) = (3)/(1)
Building & Civil Works	0.00	25	0.00	33.90657 (rounded off to 34 years)
Transmission Line	15294.24	35	535298.40	
Sub Station	1447.58	25	36189.50	
PLCC	202.59	15	3038.85	
IT Equipment (Including Software)	0.00	6	0.00	
Total	16944.41		574526.75	

54. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed above, Effective COD of the Combined Asset is 16.2.2012 and the lapsed life of the project as a whole works out as 7 years 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 27 years.

Capital Cost

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

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

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

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) *Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) *Expenditure on account of change in law and force majeure events; and*
- (o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*



- (3) *The Capital cost of an existing project shall include the following:*
- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly tried up by excluding liability, if any, as on 1.4.2019;*
 - (b) *Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
 - (c) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
 - (d) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
 - (e) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
 - (f) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”*
- (4) *The capital cost in case of existing or new hydro generating station shall also include:*
- (a) *cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
 - (b) *cost of the developer’s 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*
- (5) *The following shall be excluded from the capital cost of the existing and new projects:*
- (a) *The assets forming part of the project, but not in use, as declared in the tariff petition;*
 - (b) *De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*
- Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be decapitalised only after its redeployment;*
- Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.*
- (c) *In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*
 - (d) *Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and*
 - (e) *Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”*



56. The Petitioner has claimed the capital cost of ₹16945.43 lakh as on 31.3.2019 for the Combined Asset. However, we have worked out capital cost of ₹16944.41 lakh as on 31.3.2019.

Initial Spares

57. As stated in earlier part of this order, Initial Spares are allowed for 2014-19 tariff period on the basis of the cost of individual asset. The transmission assets covered in the transmission project are combined and overall project cost has been arrived at in 2019-24 tariff period. Accordingly, Initial Spares have been allowed during 2019-24 tariff period on the basis of the overall project cost as per APTEL's judgement dated 14.9.2019 in Appeal No.74 of 2017.

58. In view of above, Initial Spares are allowed in 2019-24 tariff period are as follows:

Assets	Plant & Machinery Cost as on COD (₹ in lakh) (A)	Initial Spares claimed (₹ in lakh) (B)	Ceiling limit (%) (C)	Initial Spares worked out	Initial Spares Allowed (₹ in lakh) (E)	Initial Spares allowed earlier (₹ in lakh) (F)	Excess Initial Spares allowed in 2019-24 period (₹ in lakh) (G)
				D = $[(A-B)*C/(100-C)]$ (₹ in lakh)			
For sub-station							
Asset-I	682.25	55.81	2.50	16.06	16.06	16.06	
Asset-II	1002.54	85.87	2.50	23.50	23.50	23.50	
Asset-III	39.58	0.00	2.50	1.02	1.02	0.00	1.02
Total	1724.37	141.68	2.50	40.58	40.58	39.56	1.02

59. Accordingly, additional Initial Spares of ₹1.02 lakh has been allowed as part of the combined capital cost as on 1.4.2019 for Combined Asset 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 follows:



(₹ in lakh)

Asset	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
Combined Asset	16944.41	1.02	16945.43

61. The capital cost of ₹16945.43 lakh has been allowed 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 follows:

“24. Additional Capitalisation 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 of ₹7.50 lakh for Asset-III beyond the cut-off date on account of balance and retention payment for works already executed during 2019-24 tariff period under Regulation 25(1)(d) of 2019 Tariff Regulations.



64. We have considered the submissions of the Petitioner. ACE is admitted under Regulation 25(1)(d) of 2019 Tariff Regulations. Accordingly, capital cost considered for 2019-24 tariff period is as follows:

(₹ in lakh)		
Total Capital Cost as on 1.4.2019	ACE admitted for 2019-24	Total Capital Cost as on 31.3.2024
16945.43	7.50	16952.93

Debt-Equity ratio

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

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

Provided that:

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

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

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

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



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

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

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

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

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

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	11861.80	70.00	11867.05	70.00
Equity	5083.63	30.00	5085.88	30.00
Total	16945.43	100.00	16952.93	100.00

Depreciation

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

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

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



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

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

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

68. The depreciation has been worked out considering the admitted capital expenditure as on 1.4.2019 and accumulated depreciation up to 31.3.2019. The depreciation has been calculated in accordance with Regulation 33(5) of the 2019 Tariff Regulations. The depreciation allowed in respect of Combined Asset for 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	16945.43	16952.93	16952.93	16952.93	16952.93
Additional Capitalisation	7.50	0.00	0.00	0.00	0.00
Closing Gross Block	16952.93	16952.93	16952.93	16952.93	16952.93
Average Gross Block	16949.18	16952.93	16952.93	16952.93	16952.93
Weighted Average Rate of Depreciation (%)	5.29	5.29	5.29	5.29	5.29
Aggregate Depreciable Value	4618.49	4618.49	4618.49	4618.49	4618.49
Balance useful life of the asset (Years)	27.00	26.00	25.00	24.00	23.00
Lapsed life (Years)	7.00	8.00	9.00	10.00	11.00
Aggregate Depreciable Value	15254.26	15257.64	15257.64	15257.64	15257.64
Depreciation during the year	897.04	897.24	897.24	897.24	897.24
Cumulative depreciation at the end of year	7237.72	8134.96	9032.20	9929.44	10826.68
Remaining Depreciable Value at the end of year	8016.55	7122.68	6225.44	5328.19	4430.95



Interest on Loan (IoL)

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

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

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

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

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

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

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

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

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

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

70. 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. IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the Combined Asset is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	11861.80	11867.05	11867.05	11867.05	11867.05
Cumulative Repayments up to Previous Year	6340.67	7237.72	8134.96	9032.20	9929.44
Net Loan-Opening	5521.13	4629.33	3732.09	2834.85	1937.61
Additions due to ACE	5.25	0.00	0.00	0.00	0.00
Repayment during the year	897.04	897.24	897.24	897.24	897.24
Net Loan-Closing	4629.33	3732.09	2834.85	1937.61	1040.37
Average Loan	5075.23	4180.71	3283.47	2386.23	1488.99
Weighted Average Rate of Interest on Loan (%)	8.8794	8.8879	8.8996	8.9164	8.9419
Interest on Loan	450.65	371.58	292.22	212.77	133.14

Return on Equity (RoE)

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

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

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

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

Provided further that:

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

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



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

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

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

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

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

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

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

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

Illustration-

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

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

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

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

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

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

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



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

72. The Petitioner has submitted that MAT rate is applicable to it and has claimed MAT at 21.55%.

73. We have considered the submissions of the Petitioner. MAT rate applicable in 2019-20 has been considered for the purpose of RoE which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations.

RoE allowed for Combined Asset is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	5083.63	5085.88	5085.88	5085.88	5085.88
Additions due to ACE	2.25	0.00	0.00	0.00	0.00
Closing Equity	5085.88	5085.88	5085.88	5085.88	5085.88
Average Equity	5084.75	5085.88	5085.88	5085.88	5085.88
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	954.99	955.20	955.20	955.20	955.20

Operation & Maintenance Expenses (O&M Expenses)

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

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission line LILO of 400 kV Patiala Hissar transmission line at Kaithal					
D/C Bundled (Twin and triple conductors) (km)	37.100	37.100	37.100	37.100	37.100



Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
Transmission line Patiala Ludhiana					
S/C Bundled (Twin /triple conductors) (km)	76.215	76.215	76.215	76.215	76.215
Norms (₹ lakh/km)	0.503	0.521	0.539	0.558	0.578
Sub-station Bays 400 kV (Conventional)					
Patiala Bay (Number)	1				
Hissar Bay (Number)	1				
Ludhiana I Bay (Number)	1				
Ludhiana II Bay (Number)	1				
Patiala I bay (Number)	2				
Norms (₹ lakh/bay)	32.15	33.28	34.45	35.66	36.91
O&M claimed for PLCC (2% of ₹202.59 lakh)	4.05	4.05	4.05	4.05	4.05
Total O&M Expenses (₹ in lakh)	267.98	277.27	286.85	296.78	307.07

75. Regulation 35(3)(a) and Regulation 33(4) of the 2019 Tariff Regulations provides as follows:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
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
Norms for Transformers (₹ Lakh per MVA)					
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
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578



Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;

ii. the O&M expenses norms for HVDC bi-pole line shall be considered as



Double Circuit quad AC line;

iii. the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);

iv. the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;

v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and

vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three year

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

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

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

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

76. The Petitioner has claimed O&M Expenses separately for PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station have been specified accordingly. Accordingly, the Commission *vide* order dated 24.1.2021 in Petition No. 126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019



Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The relevant portions of the order dated 24.1.2021 in Petition No. 126/TT/2020 are extracted as follows:

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

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

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

77. The O&M Expenses have been worked out for the Combined Asset in accordance with Regulation 35(3)(a) of the 2019 Tariff Regulations and the same are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission line LILO of 400 kV Patiala Hissar at Kaithal					
D/C Bundled (Twin and triple conductors) (km)	37.100	37.100	37.100	37.100	37.100



Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
Transmission line Patiala Ludhiana					
S/C Bundled (Twin /triple conductors) (km)	76.215	76.215	76.215	76.215	76.215
Norms (₹ lakh/km)	0.503	0.521	0.539	0.558	0.578
Sub-station Bays 400 kV (Conventional)					
Patiala Bay (Number)	1				
Hissar Bay (Number)	1				
Ludhiana I Bay (Number)	1				
Ludhiana II Bay (Number)	1				
Patiala I bay (Number)	2				
Norms (₹ lakh/bay)	32.15	33.28	34.45	35.66	36.91
Total O&M Expenses (₹ in lakh)	263.92	273.22	282.80	292.73	303.02

Interest on Working Capital (IWC)

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

“34. Interest on Working Capital

(1)...

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

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

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

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

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



“3.Definitions ...

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

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses for 1 month)	21.99	22.77	23.57	24.39	25.25
Maintenance Spares (15% of O&M Expenses)	39.59	40.98	42.42	43.91	45.45
Receivables (Equivalent to 45 days of annual transmission charges)	321.24	313.11	304.41	295.76	287.12
Total Working Capital	382.82	376.86	370.40	364.06	357.83
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	46.13	42.40	41.67	40.96	40.26

Annual Fixed Charges of the 2019-24 Tariff Period

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	897.04	897.24	897.24	897.24	897.24
Interest on Loan	450.65	371.58	292.22	212.77	133.14
Return on Equity	954.99	955.20	955.20	955.20	955.20
Interest on Working Capital	46.13	42.40	41.67	40.96	40.26
O & M Expenses	263.92	273.22	282.80	292.73	303.02



Total	2612.74	2539.64	2469.13	2398.90	2328.87
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Filing Fee and Publication Expenses

81. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

License Fee and Publication Expenses

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

Goods and Services Tax

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

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

Security Expenses

85. The Petitioner has submitted that security expenses for the transmission assets are not claimed in the instant petition and it would file a separate petition for claiming



the overall security expenses and consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on a 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 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 a yearly basis.

86. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. It is observed that the Petitioner has already filed the Petition No. 260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

Capital Spares

87. 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

88. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission



(Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

89. To summarise:

(a) The trued-up Annual Fixed Charges allowed for 2014-19 tariff period are:

Combined Assets-I&II

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	2799.01	2748.03	2693.13	2638.00	2587.01

Asset-III

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	316.64	347.30	344.48	331.72	321.43

Asset-IV

(₹ in lakh)					
Particulars	2014-15 (pro-rata for 163 days)	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	29.57	78.04	86.52	83.75	81.17

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	2612.74	2539.64	2469.13	2398.90	2328.87

90. Annexure-1 and Annexure-2 given hereinafter form part of the instant order.



91. This order disposes of Petition No. 449/TT/2020 in terms of above discussions and findings.

sd/-
(Pravas Kumar Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson



Combined Asset-I & II

2014-19 Capital Cost (₹ in lakh)	Admitted Opening Capital Cost (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Annual Depreciation as per Regulator (₹ in lakh)	
			Rate of Depn.	2014-19
Land - Freehold	-	-	-	-
Land - Leasehold	-	-	3.34	-
Building Civil Works & Colony	-	-	3.34	-
Transmission Line	12,836.16	12,836.16	5.28	677.75
Sub Station	1,447.58	1,447.58	5.28	76.43
PLCC	135.09	135.09	6.33	8.55
IT Equipment (Incl. Software)	-	-	5.28	-
Total	14,418.83	14,418.83	Total	762.73
Average Gross Block (₹ in lakh)				14418.83
Weighted Average Rate of Depreciation				5.29%

Asset-III

2014-19 Capital Cost (₹ in lakh)	Admitted Opening Capital Cost (₹ in lakh)	Allowed Additional Capitalisation (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Annual Depreciation as per Regulator (₹ in lakh)					
		2014-15	2015-16	Total Claimed		Rate of Depn.	2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	-	-	-	-	-	-	-	-	-	-	-
Land - Leasehold	-	-	-	-	-	3.34	-	-	-	-	-
Building Civil Works & Colony	-	-	-	-	-	3.34	-	-	-	-	-
Transmission Line	1,544.12	347.19	95.78	442.97	1,987.09	5.28	90.70	102.39	104.92	104.92	104.92
Sub Station	-	-	-	-	-	5.28	-	-	-	-	-
PLCC	39.58	-	-	-	39.58	6.33	2.51	2.51	2.51	2.51	2.51
IT Equipment (Incl. Software)	-	-	-	-	-	5.28	-	-	-	-	-
Total	1,583.70	347.19	95.78	442.97	2,026.67	Total	93.20	104.90	107.42	107.42	107.42
Average Gross Block (₹ in lakh)							1757.30	1978.78	2026.67	2026.67	2026.67
Weighted Average Rate of Depreciation							5.30%	5.30%	5.30%	5.30%	5.30%

Asset-IV

2014-19 Capital Cost (₹ in lakh)	Admitted Opening Capital Cost (₹ in lakh)	Allowed Additional Capitalisation (₹ in lakh)				Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Annual Depreciation as per Regulator (₹ in lakh)					
		2014-15	2015-16	2016-17	Total Claimed		Rate of Depn.	2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	-	-	-	-	-	-	-	-	-	-	-	-
Land - Leasehold	-	-	-	-	-	-	3.34	-	-	-	-	-
Building Civil Works & Colony	-	-	-	-	-	-	3.34	-	-	-	-	-
Transmission Line	320.72	28.68	116.48	5.11	150.27	470.99	5.28	17.69	21.52	24.73	24.87	24.87
Sub Station	-	-	-	-	-	-	5.28	-	-	-	-	-
PLCC	27.92	-	-	-	-	27.92	6.33	1.77	1.77	1.77	1.77	1.77
IT Equipment (Incl. Software)	-	-	-	-	-	-	5.28	-	-	-	-	-
Total	348.64	28.68	116.48	5.11	150.27	498.91	Total	19.46	23.29	26.50	26.64	26.64
Average Gross Block (₹ in lakh)								362.98	435.56	496.36	498.91	498.91
Weighted Average Rate of Depreciation								5.36%	5.35%	5.34%	5.34%	5.34%



Combined Asset

2019-24	Capital Cost (₹ in lakh)	Allowed ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depn.	Annual Depreciation as per Regulator				
		Admitted Opening Capital Cost (₹ in lakh)	2019-20			2020-21	2019-20	2020-21	2021-22	2022-23
Land - Freehold	-	-	-	-	-	-	-	-	-	-
Land - Leasehold	-	-	-	-	3.34	-	-	-	-	-
Building Civil Works & Colony	-	-	-	-	3.34	-	-	-	-	-
Transmission Line	15,294.24	7.50	-	15,301.74	5.28	807.73	807.93	807.93	807.93	807.93
Sub Station	1,448.60	-	-	1,448.60	5.28	76.49	76.49	76.49	76.49	76.49
PLCC	202.59	-	-	202.59	6.33	12.82	12.82	12.82	12.82	12.82
IT Equipment (Incl. Software)	-	-	-	-	15.00	-	-	-	-	-
Total	16,945.43	7.50	-	16,952.93	Total	897.04	897.24	897.24	897.24	897.24
Average Gross Block (₹ in lakh)						16949.18	16952.93	16952.93	16952.93	16952.93
Weighted Average Rate of Depreciation						5.29%	5.29%	5.29%	5.29%	5.29%

