

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 36/TT/2020

Coram:

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

Date of Order: 08.02.2021

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and trueing-up of transmission tariff of the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of **Asset-1**: 4 Nos. 400 kV Line Bays at Narendra (New) for Kudgi TPS-Narendra (New) 400 kV 2 X D/C Quad Lines, **Asset-2**: 2 Nos. 400 kV line bays at Narendra (New), 2 Nos. 400 kV line bays at Madhugiri (Tumkur), 2X63 MVAR (fixed) line reactors (with 600 ohm NGRs) at Narendra (New) & 2X63 MVAR (fixed) line reactors (with 600 ohm NGRs) at Madhugiri (Tumkur) for Narendra (New)-Madhugiri (Tumkur) 765 kV D/C line (initially charged at 400 kV), **Asset-3**: 2 Nos. 400 kV line bays at Madhugiri (Tumkur) for Madhugiri (Tumkur)-Bidadi 400 kV D/C (Quad) line and **Asset-4**: 2 Nos. 400 kV line bays at Bidadi for Madhugiri (Tumkur)-Bidadi 400 kV D/C (Quad) line under "Sub-Station extension works associated with transmission system required for evacuation of power from Kudgi TPS (3X800 MW in Phase-I) of NTPC Limited" in Southern Region.

And in the matter of:

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

....Petitioner

Vs

1. Karnataka Power Transmission Corporation Ltd.,
Kaveri Bhavan, Bangalore – 560009.
2. Transmission Corporation of Andhra Pradesh Ltd.,
Vidyut Soudha, Hyderabad– 500082.
3. Kerala State Electricity Board,
Vaidyuthi Bhavanam,
Pattom, Thiruvananthapuram – 695004.



4. Tamil Nadu Generation and Distribution Corporation Ltd.,
(Formerly Tamil Nadu Electricity Board -TNEB),
NPKRR Maaligai, 800, Anna Salai, Chennai – 600002.
5. Electricity Department,
Government of Pondicherry, Pondicherry – 605001.
6. Eastern Power Distribution Company of Andhra Pradesh Ltd.,
P&T Colony, Seethmmadhara,
Vishakhapatnam, Andhra Pradesh.
7. Southern Power Distribution Company of Andhra Pradesh Ltd.,
Srinivasasa Kalyana Mandapam Backside,
Tiruchanoor Road, Kesavayana Gunta, TIRUPATI-517501,
Chittoor District, Andhra Pradesh.
8. Central Power Distribution Company of Andhra Pradesh Ltd.,
Corporate Office, Mint Compound,
Hyderabad – 500 063, Telangana.
9. Northern Power Distribution Company of Andhra Pradesh Ltd.,
Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet,
Warangal – 506 004, Telangana.
10. Bangalore Electricity Supply Company Ltd.,
Corporate Office, K.R. Circle,
Bangalore – 560 001, Karnataka.
11. Gulbarga Electricity Supply Company Ltd.,
Station Main Road, Gulbarga, Karnataka.
12. Hubli Electricity Supply Company Ltd.,
Navanagar, PB Road, HUBLI, Karnataka.
13. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle,
Mangalore – 575001, Karnataka.
14. Chamundeswari Electricity Supply Corporation Ltd.,
927, L J Avenue, Ground Floor, New Kantharaj Urs Road,
Saraswathipuram, Mysore – 570009, Karnataka.
15. Electricity Department,
Government of Goa,
Vidyuti Bhawan, Panaji, Goa 403001.
16. Transmission Corporation of Telangana Ltd.,
Vidhyut Sudha, Khairatabad,
Hyderabad, 500082.



17. Tamil Nadu Transmission Corporation
NPKRR Maaligai, 800, Anna Salai,
Chennai – 600002
18. Kudgi Transmission Ltd.,
L&T infrastructure Development Projects Ltd.,
38, Cubban Road, Bangalore-560001.
19. NTPC Ltd.,
NTPC Bhawan, Scope Complex,
7, Institutional Area, Lodhi Road,
New Delhi, 110003.

...Respondents

For Petitioner : Shri S. S. Raju, PGCIL
For Respondents : Shri S. Vallinayagam, Advocate, TANGEDCO

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd., (hereinafter referred to as “the Petitioner”), a deemed transmission licensee, for truing up of transmission tariff of 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of tariff for the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following assets under “Sub-Station extension works associated with transmission system required for evacuation of power from Kudgi TPS (3X800 MW in Phase-I) of NTPC Limited” in Southern Region (hereinafter referred to as “the Transmission Project”):

Asset-1: 4 Nos. 400 kV Line Bays at Narendra (New) for Kudgi TPS-Narendra (New) 400 kV 2 X D/C Quad Lines;

Asset-2: 2 Nos. 400 kV line bays at Narendra (New), 2 Nos. 400 kV line bays at Madhugiri (Tumkur), 2X63 MVAR (fixed) line reactors (with 600 ohm NGRs) at



Narendra (New) & 2X63 MVAR (fixed) line reactors (with 600 ohm NGRs) at Madhugiri (Tumkur) for Narendra (New)-Madhugiri (Tumkur) 765 kV D/C line (initially charged at 400 kV);

Asset-3: 2 Nos. 400 kV line bays at Madhugiri (Tumkur) for Madhugiri (Tumkur)-Bidadi 400 kV D/C (Quad) line; and

Asset-4: 2 Nos. 400 kV line bays at Bidadi for Madhugiri (Tumkur)-Bidadi 400 kV D/C (Quad) line.

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

- “1) Approve the tried up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 10.2 and 11.0 above.*
- 2) Approve the Completion cost and additional capitalization incurred during 2014-19 and approve projected additional capitalization during 2019-24.*
- 3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 10.2 and 11.0 above for respective block.*
- 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*
- 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the beneficiaries in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.*
- 7) Allow the petitioner to file a separate petition before Hon’ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 11.6 above.*
- 8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
- 9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the*



beneficiaries.

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

Background

3. The Investment Approval (IA) for implementation of the Transmission Project was accorded by the Board of Directors of the Petitioner in the 298th meeting held on 5.2.2014 at an estimated cost of ₹16740 lakh including an IDC of ₹806 lakh based on December, 2013 price level (communicated vide Memorandum No. C/CP/Kudgi dated 17.2.2016). The Petitioner vide Affidavit dated 31.3.2017 has submitted the Revised Cost Estimate (RCE) of the project as ₹15727 lakh including IDC of ₹751 lakh based on October, 2016 price level.

4. The scope of work covered under the Transmission Project is as under:

I. Sub-station:

(1) Extension of Narendra (New) substation (GIS) at Kudgi

This sub-station is under construction by PGCIL and shall be extended to accommodate the following under this project:

(i) 4 Nos. 400 kV line bays at Narendra (New) for Kudgi TPS- Narendra (New) 400 kV 2XD/C Quad lines.

(ii) 2 Nos. 400 kV line bays at Narendra (New) for Narendra (New)- Madhugiri 765 kV D/C line initially charged at 400 kV.

(2) Extension of Madhugiri Sub-station (AIS)

This sub-station is under construction by PGCIL and shall be extended to accommodate following under this project:

(i) 2 Nos. 400 kV line bays at Madhugiri for Narendra (New)- Madhugiri 765 kV D/C line initially charged at 400 kV.

(ii) 2 Nos. 400 kV line bays at Madhugiri for Madhugiri- Bidadi 400 kV D/C (Quad) line.



(3)Extension of Bidadi Sub-station (GIS)

This sub-station is under operation by PGCIL and shall be extended to accommodate the following under this project:

- (i) 2 Nos. 400 kV line bays at Bidadi for Madhugiri- Bidadi 400 kV D/C (Quad) line.

II. Reactive Compensation:

(1)Line Reactor

- (i) 2X63 MVAR (fixed) line reactors (with 600 ohm NGRs) at Narendra (New) for Narendra (New)- Madhugiri 765 kV D/C line initially charged at 400 kV.

- (ii) 2X63 MVAR (fixed) line reactors (with 600 ohm NGRs) at Madhugiri for Narendra (New)-Madhugiri 765 kV D/C line initially charged at 400 kV.

5. As per the IA dated 5.2.2014, the Transmission Project was scheduled to be put into commercial operation within 22 months of the IA, i.e. by 4.12.2015. The details of commercial operation of the transmission assets covered under the instant petition are as under:

Asset	COD	Remark
Asset-1	11.12.2015	Earlier covered in Petition No. 201/TT/2015
Asset-2	24.9.2016	Earlier covered in Petition No. 215/TT/2016
Asset-3	25.8.2016	
Asset-4	3.4.2017	

6. The transmission tariff in respect of Asset-1 from its COD to 31.3.2019 was allowed vide order dated 29.7.2016 in Petition No. 201/TT/2015 as per the 2014 Tariff Regulations. The transmission tariff in respect of Assets-2, 3 and 4 from COD to 31.3.2019 was determined vide order dated 9.7.2018 in Petition No. 215/TT/2016 under the 2014 Tariff Regulations.

7. The Respondents are the transmission and distribution licensees, who are procuring transmission services from the Petitioner, mainly beneficiaries of the Southern Region.

8. The Petitioner has served the petition on the Respondents and notice of this petition has also been published in the newspapers 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 newspapers by the Petitioner. General Notice dated 12.3.2020 directing the beneficiaries/Respondents to file reply in the matter was also posted on the Commission's website. However, none of the Respondents have filed their reply in the matter.

9. This order is issued considering the submissions made in the Petitioner's affidavits dated 21.12.2019, 12.3.2020 and 16.7.2020. In the course of hearing of the matter on 24.6.2020, Tamil Nadu Generation and Distribution Corporation Ltd. (TANGEDCO), Respondent No. 4 sought time to file reply but no reply was filed on its behalf. TANGEDCO had raised the issues of recovery of transmission charges from NTPC, security expenses and capital spares during the hearing.

10. The hearing in this matter was held on 24.6.2020 through video conference and the order was reserved.

11. Having heard the representatives of the Petitioner, advocate of the TANGEDCO and perused the material on record, we proceed to dispose of the petition.

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

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



(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Depreciation	69.92	246.91	260.34	260.34
Interest on Loan	75.38	252.91	246.19	224.84
Return on Equity	78.22	276.16	291.26	292.04
Interest on working capital	8.75	30.02	30.92	30.87
O & M Expenses	65.18	220.08	227.36	234.92
Total	297.45	1026.08	1056.07	1043.01

(₹ in lakh)

Asset-2			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	149.28	294.25	303.59
Interest on Loan	157.24	288.96	273.99
Return on Equity	165.23	325.76	337.12
Interest on working capital	16.75	32.72	33.27
O & M Expenses	123.64	246.70	254.88
Total	612.14	1188.39	1202.85

(₹ in lakh)

Asset-3			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	11.26	24.07	29.37
Interest on Loan	11.75	23.25	26.26
Return on Equity	12.47	26.72	32.74
Interest on working capital	4.81	8.57	9.11
O & M Expenses	77.24	133.02	137.42
Total	117.53	215.63	234.90

(₹ in lakh)

Asset-4		
Particulars	2017-18 (Pro-rata)	2018-19
Depreciation	107.53	118.26
Interest on Loan	110.92	111.41
Return on Equity	118.85	131.20
Interest on working capital	13.06	13.79
O & M Expenses	113.06	117.46
Total	463.42	492.12

13. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner for the transmission asset for the 2014-19 tariff period are as under:

(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19



O & M Expenses	17.75	18.34	18.95	19.58
Maintenance Spares	31.95	33.01	34.10	35.24
Receivables	162.00	171.01	176.01	173.84
Total	211.70	222.36	229.06	228.66
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest on Working Capital	8.75	30.02	30.92	30.87

(₹ in lakh)

Asset-2			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
O & M Expenses	19.90	20.56	21.24
Maintenance Spares	35.82	37.01	38.23
Receivables	197.03	198.07	200.48
Total	252.75	255.64	259.95
Rate of Interest (%)	12.80	12.80	12.80
Interest on Working Capital	16.75	32.72	33.27

(₹ in lakh)

Asset-3			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
O & M Expenses	10.73	11.09	11.45
Maintenance Spares	19.31	19.95	20.61
Receivables	32.65	35.94	39.15
Total	62.69	66.98	71.21
Rate of Interest (%)	12.80	12.80	12.80
Interest on Working Capital	4.81	8.57	9.11

(₹ in lakh)

Asset-4		
Particulars	2017-18 (Pro-rata)	2018-19
O & M Expenses	9.47	9.79
Maintenance Spares	17.05	17.62
Receivables	77.66	82.02
Total	104.18	109.43
Rate of Interest (%)	12.60	12.60
Interest on Working Capital	13.06	13.79

Capital Cost

14. The Commission vide order dated 29.7.2016 in Petition No. 201/TT/2015 allowed capital cost of ₹4227.61 lakh as on COD and Additional Capital Expenditure (ACE) of ₹506.22 lakh from COD to 31.3.2019 in respect of Asset-1. Further, the Commission vide order dated 9.7.2018 in Petition No. 215/TT/2016 allowed capital



cost of ₹5305.37 lakh as on COD and ACE of ₹1070.29 lakh from COD to 31.3.2019 for Asset-2, capital cost of ₹351.69 lakh as on COD and ACE of ₹372.42 lakh from COD to 31.3.2019 for Asset-3 and capital cost of ₹1891.43 lakh as on COD and ACE of ₹390.41 lakh from COD to 31.3.2019 for Asset-4.

15. The Petitioner vide Auditor's Certificate dated 30.7.2019 has submitted the capital cost incurred upto COD, ACE from COD to 31.3.2019 and estimated ACE during the period from 1.4.2019 to 31.3.2020. The details of approved apportioned capital cost, capital cost as on COD and ACE incurred upto 31.3.2019 as claimed by the Petitioner for the transmission assets are as under:

(₹ in lakh)

Asset Name	Apportioned approved capital cost as per RCE	Capital cost as on COD (on cash basis)	Additional Capital Expenditure				Total capital cost as on 31.3.2019
			2015-16	2016-17	2017-18	2018-19	
Asset-1	5174.75	4227.61	188.52	510.90	0.00	0.00	4927.03
Asset-2	7161.28	5305.37	0.00	184.94	40.65	313.20	5844.16
Asset-3	895.43	351.69	0.00	0.00	200.75	0.00	552.44
Asset-4	2495.54	1891.43	0.00	0.00	260.03	124.00	2275.46

16. We have considered the submissions of the Petitioner. It is observed that the estimated completion cost of the transmission assets as on 31.3.2019 including ACE is within the RCE approved apportioned capital cost. Therefore, there is no cost over-run in case of the transmission assets.

Time Over-run

17. As per the Investment Approval dated 5.2.2014, the scheduled date of commercial operation (SCOD) of the assets under the instant petition is 4.12.2015. Against SCOD, the actual COD of the transmission assets is as under:

Assets	SCOD	COD	Time over-run
Asset-1	4.12.2015	11.12.2015	7 days
Asset-2		24.9.2016	9 months and 21 days



Asset-3		25.8.2016	8 months and 22 days
Asset-4		3.4.2017	16 months

18. The Commission vide order dated 29.7.2016 in Petition No. 201/TT/2015 did not condone the time over-run of 7 days in the in case of Asset-1. Similarly, the time over-run in respect of Assets-2, 3 and 4 was also disallowed by the Commission vide order dated 9.7.2018 in Petition No. 215/TT/2016.

Interest During Construction (IDC)

19. The Petitioner has claimed IDC of ₹206.67 lakh, ₹247.26 lakh, ₹10.78 lakh and ₹205.88 lakh for Assets-1, 2, 3 and 4 respectively and has also submitted the Auditor’s certificate in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the discharged IDC.

20. The allowable IDC has been worked out considering the information submitted by the Petitioner for the transmission assets on cash basis. The loan details submitted in Form-9C for the 2014-19 tariff period and the IDC computation sheet have been considered for the purpose of computation of IDC on cash basis and on accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged. The IDC is being allowed till SCOD only for the transmission assets as the time over-run in case of the transmission assets was disallowed by the Commission vide orders dated 29.7.2016 in Petition No. 201/TT/2015 and vide order dated 9.7.2018 in Petition No. 215/TT/2016.

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



(₹ in lakh)

Asset Name	IDC approved in order dated 29.7.2016 in Petition No. 201/TT/2015 and order dated 9.7.2018 in Petition No. 215/TT/2016	IDC claimed by Petitioner (as per Auditor Certificate)	Entitled IDC up to SCOD	IDC disallowed as on SCOD due to computation difference	Un-discharged portion of entitled IDC as on SCOD	IDC allowed on cash basis as on SCOD
		A	B	C= A-B	D	E=B-D
Asset-1	199.81	206.67	195.87	10.80	195.87	0.00
Asset-2	81.49	247.26	81.46	165.80	0.00	81.46
Asset-3	2.90	10.78	3.48	7.30	0.58	2.90
Asset-4	53.94	205.88	53.94	151.94	0.00	53.94

22. The un-discharged portion of IDC is being allowed as ACE during the respective year of discharge and the same is summarized as under:

(₹ in lakh)

Assets	Un-discharged portion of entitled IDC as on SCOD	IDC being discharged as ACE	
		2015-16	2016-17
Asset-1	195.87	173.66	22.22
Asset-3	0.58	0.00	0.58

Incidental Expenditure During Construction (IEDC)

23. The Petitioner has claimed IEDC of ₹63.77 lakh, ₹150.26 lakh, ₹7.28 lakh and ₹86.77 lakh for Assets-1, 2, 3 and 4 respectively and has submitted Auditor's certificate in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the transmission assets. The allowable IEDC for the transmission assets considering the time over-run disallowed, is as under:

(₹ in lakh)

Asset Name	IEDC approved in order dated 29.7.2016 in Petition No. 201/TT/2015 and order dated 9.7.2018 in Petition No. 215/TT/2016	IEDC claimed by Petitioner (as per Auditor Certificate)	Entitled IEDC up to SCOD	IEDC disallowed as on SCOD due to computation difference	IEDC allowed on cash basis as on SCOD
		A	B	C= A-B	D = A-C



Asset-1	63.77	63.77	62.37	1.40	62.37
Asset-2	104.18	150.26	104.18	46.08	104.18
Asset-3	5.21	7.28	5.21	2.07	5.21
Asset-4	50.20	86.77	50.20	36.57	50.20

Initial Spares

24. Regulation 13(d) of the 2014 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:

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

25. The Petitioner has claimed the following Initial Spares for the transmission assets and prayed to allow the Initial Spares as per the actuals:

Asset Name	Particulars	Estimated Completion Cost (A) (₹ in lakh)	Initial Spares Claimed (B) (₹ in lakh)	Ceiling Limit (%) (C)	Initial Spares Worked out by Petitioner
					$D = [(A-B) * C / (100-C)]$
Asset-1	Sub-Station (GIS)	4573.20	23.11	5.0	239.48
Asset-2	Sub-Station (AIS)	5510.26	33.74	6.0	349.57
Asset-3	Sub-Station (AIS)	544.43	0.00	6.0	34.74
Asset-4	Sub-Station (GIS)	2329.78	17.11	6.0	121.72

26. We have considered the submissions of the Petitioner. The details of commercial operation of the transmission assets covered under the instant petition and their cut-off dates are as under:

Assets	COD	Cut-off Date
Asset-1	11.12.2015	31.3.2018
Asset-2	24.9.2016	31.3.2019
Asset-3	25.8.2016	31.3.2019
Asset-4	3.4.2017	31.3.2020

27. The capital cost up to the cut-off date has been considered for computation of Initial Spares. The Petitioner’s claim of Initial Spares for the transmission assets is



within the norms specified in Regulation 13(d) of the 2014 Tariff Regulations and is accordingly allowed as under:

Asset Name	Plant & machinery cost up to cut-off date (excluding IDC and IEDC as per Auditor certificate) (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Ceiling Limit (%) (C)	Allowable Initial Spares worked out	Excess Initial Spares (₹ in lakh)	Initial Spares allowed (₹ in lakh)
				$D = [(A-B)*C / (100-C)]$		
Asset-1	4573.20	23.11	5.0	239.48	Nil	23.11
Asset-2	5510.26	33.74	6.0	349.57	Nil	33.74
Asset-3	544.43	0.00	6.0	34.75	Nil	0.00
Asset-4	2329.78	17.11	6.0	121.72	Nil	17.11

Capital cost as on COD

28. Accordingly, the capital cost allowed as on COD is summarized as under:

(₹ in lakh)

Asset Name	Capital cost as on COD as per Auditor Certificate	Less: IDC as on COD due to		Less: IEDC disallowed as on COD	Capital cost considered as on COD (on cash basis)
		Computation difference	Un-discharged		
Asset-1	4434.27	10.80	195.87	1.40	4226.20
Asset-2	5517.22	165.80	0.00	46.08	5305.34
Asset-3	361.64	7.30	0.58	2.07	351.69
Asset-4	2079.95	151.94	0.00	36.57	1891.44

Additional Capital Expenditure (ACE)

29. The admissibility of ACE after the date of commercial operation is to be dealt in accordance with the provisions of Regulation 14(1) of the 2014 Tariff Regulations. The Petitioner has claimed ACE of ₹699.42 lakh with respect to Asset-1 during 2014-19 tariff period, including accrued IDC of ₹177.03 lakh discharged during the year 2015-16 and ₹22.78 lakh during the year 2017-18 wherein the Petitioner has reduced IDC of ₹6.86 lakh which was previously disallowed vide order dated 29.7.2016 in Petition No. 201/TT/2015 from ₹29.64 lakh accrued IDC discharged during the year 2017-18. Therefore, against the entire un-discharged IDC of ₹206.67 lakh with respect to Asset-1, the Petitioner has effectively claimed un-discharged IDC as ACE



of ₹199.81 lakh. With regard to Asset-2, the Petitioner has claimed ACE of ₹538.79 lakh during 2014-19 tariff period including accrued IDC of ₹44.51 lakh discharged during the year 2017-18 and ₹36.17 lakh during the year 2018-19. The Petitioner has claimed ACE of ₹200.75 lakh and ₹384.03 lakh with respect to Assets-3 and 4 respectively during 2014-19 tariff period. The Petitioner, vide affidavit dated 21.12.2019, has submitted that the ACE is mainly on account of un-discharged liability towards the final payment/ withheld payment due to contractual exigencies of works executed within the cut-off date and the works deferred for execution. The ACE in case of the transmission assets during the 2014-19 tariff period has been claimed under Regulation 14(1)(i) and (ii) of the 2014 Tariff Regulations and is within the cut-off date.

30. The Petitioner has further submitted that ACE upto 31.3.2019 has been considered in the Auditor's certificate as per actuals whereas the ACE claimed for the period from 1.4.2019 to 31.3.2020 is on estimated basis and may vary due to final claim/ reconciliation at the time of contract closing. The contract-wise details of works deferred for execution are as under:

Assets	Party	Package	(₹ in lakh)			
			Financial Year			
			2015-16	2016-17	2017-18	2018-19
Asset-1	Larsen & Turbo Ltd.	Building & Civil Work, Sub-station Work & Communication System	11.49	223.86	0.00	0.00
	Hyosung Corporation	Sub-station Work	0.00	264.26	0.00	0.00
Total			11.49	488.12	0.00	0.00
Asset-2	Mcnally Bharat Engineering Co. Ltd.	Sub-station Work	0.00	184.94	40.65	161.29
	Mcnally Bharat Engineering Co. Ltd.	LD recovered during the year	0.00	0.00	0.00	121.91
Total			0.00	184.94	40.65	283.20



Assets	Party	Package	Financial Year			
			2015-16	2016-17	2017-18	2018-19
Asset-3	Mcnally Bharat Engineering Co. Ltd.	Sub-station Work	0.00	0.00	200.75	0.00
Total			0.00	0.00	200.75	0.00
Asset-4	Hyosung Corporation	Sub-station Work	0.00	0.00	69.31	0.00
	Mcnally Bharat Engineering Co. Ltd.	Sub-station Work	0.00	0.00	190.72	0.00
	Mcnally Bharat Engineering Co. Ltd.	LD recovered during the year	0.00	0.00	0.00	124.00
Total			0.00	0.00	260.03	124.00

31. The contract-wise details for balance and retention payments are as under:

Asset	Party	Package	(₹ in lakh)
			Financial Year 2018-19
Asset-4	Mcnally Bharat Engineering Co. Ltd.	Sub-station Work	30.00
Total			30.00

32. The Commission vide RoP of hearing dated 24.6.2020 sought year-wise reconciliation statement of ACE, additional capitalization reflecting the gross additional capitalization, liquidated damages (LD) adjustment amount and net ACE after adjustment of LD for Asset-2 and Asset-4 during the 2014-19 tariff period. The Petitioner vide affidavit dated 16.7.2020 has submitted the details of LD adjustment as under:

(₹ in lakh)			
Asset-2			
Year	Gross ACE	LD Adjustment Amount	Net ACE after LD adjustment
2016-17	184.94	0.00	184.94
2017-18	40.65	0.00	40.65
2018-19	313.20	121.91	191.29

(₹ in lakh)



Asset-4			
Year	Gross ACE	LD Adjustment Amount	Net ACE after LD adjustment
2017-18	260.03	0.00	260.03
2018-19	124.00	124.00	0.00

33. The Petitioner has further submitted that the Commission vide order dated 9.7.2018 in Petition No. 215/TT/2016 disallowed IDC and IEDC of ₹211.85 lakh for Asset-2 and ₹188.51 lakh for Asset-4 on account of time over-run and reduced it from the capital cost as on the date of commercial operation. Subsequently, an amount of ₹121.91 lakh for Asset-2 and ₹124.00 lakh for Asset-4 was recovered as LD from the executing agency(ies) during the year 2018-19. The Petitioner has submitted that LD recovered to the extent of disallowed IDC and IEDC is added back as ACE as mentioned in footnote of the Auditor's Certificate submitted by the Petitioner.

34. It has been observed that the Petitioner has adopted a similar approach of capitalizing LD recovered from the contractor as ACE as carried out in few other Petitions wherein LD towards time over-run, imposed on contractor(s) has been reduced from the ACE [amount payable to contractor(s)] as the LD imposed on the contractor reduces the amount payable to the contractor(s) and the gross block in the books of accounts. Further, the Petitioner has submitted that LD is added back to the extent of IDC and IEDC disallowed or LD recovered whichever is lower, because the recovered LD have already been reduced from the capital expenditure of respective financial year and disallowed IDC and IEDC has already been reduced from COD cost and admitted cost as on COD. Accordingly, LD recovered of ₹121.91 lakh in 2018-19 for Asset-2 and ₹124.00 lakh in 2018-19 for Asset-4 is added back to the capital cost in respective year as mentioned in footnote of the Auditor's Certificate



submitted by the Petitioner. The Petitioner has prayed to allow the adjustment of recovered LD in the capital expenditure in the respective Financial Year.

35. We have considered the submissions made by the Petitioner. APTEL in its judgement dated 27.4.2011 in Appeal No. 72/2010 has laid down the following principles for dealing with the issue of time over-run in execution of projects.

“7.4. The delay in execution of a generating project could occur due to following reasons:

i) due to factors entirely attributable to the generating company, e.g., imprudence in selecting the contractors/suppliers and in executing contractual agreements including terms and conditions of the contracts, delay in award of contracts, delay in providing inputs like making land available to the contractors, delay in payments to contractors/suppliers as per the terms of contract, mismanagement of finances, slackness in project management like improper co-ordination between the various contractors, etc.

ii) due to factors beyond the control of the generating company e.g. delay caused due to force majeure like natural calamity or any other reasons which clearly establish, beyond any doubt, that there has been no imprudence on the part of the generating company in executing the project.

iii) situation not covered by (i) & (ii) above.

In our opinion in the first case the entire cost due to time over run has to be borne by the generating company. However, the Liquidated Damages (LDs) and insurance proceeds on account of delay, if any, received by the generating company could be retained by the generating company. In the second case the generating company could be given benefit of the additional cost incurred due to time over-run. However, the consumers should get full benefit of the LDs recovered from the contractors/suppliers of the generating company and the insurance proceeds, if any, to reduce the capital cost. In the third case the additional cost due to time overrun including the LDs and insurance proceeds could be shared between the generating company and the consumer. It would also be prudent to consider the delay with respect to some benchmarks rather than depending on the provisions of the contract between the generating company and its contractors/suppliers. If the time schedule is taken as per the terms of the contract, this may result in imprudent time schedule not in accordance with good industry practices.”

36. As per the above directions of APTEL, when the time over-run is attributable to the project developer, the cost of the time over-run, i.e. IDC and IEDC have to be borne by the project developer and LD, if any, recovered can be retained by the Petitioner. In the instant case, the time over-run in case of Assets-2 and 4 was not condoned by the Commission. Accordingly, the IDC and IEDC for the period of time

over-run that was not condoned in case of Assets-2 and 4 were not capitalised and the LD recovered by the Petitioner can be retained by the Petitioner. The capital cost of the said two assets is allowed in accordance with the observations of APTEL's judgement dated 27.4.2011. The IDC and IEDC disallowed in case of the said assets is deducted from the capital cost as on their respective dates of commercial operation and the additional capital expenditure incurred by the Petitioner after the COD is added to the capital cost. Therefore, the Petitioner is allowed to retain the LD to the extent of IDC and IEDC disallowed and allowed to adjust ACE on this account.

37. ACE claimed by the Petitioner for Assets-1, 2, 3 and 4 is on account of works deferred for execution, balance and retention payment and accrued IDC discharged during 2015-16 and 2016-17. ACE claimed by the Petitioner during 2014-19 tariff period for the transmission assets is within the cut-off date. The same has been considered for computation of total capital cost as on 31.3.2019. Further, ACE during 2014-15 to 2018-19 is allowed under Regulation 14(1)(i) and (ii) of the 2014 Tariff Regulations.

38. The details of ACE allowed is as follows:

Asset-1	Additional Capital Expenditure (₹ in lakh)	
	2015-16	2016-17
ACE to the extent of Balance & Retention Payments and work deferred for execution	11.49	488.12
Add: IDC Discharged	173.66	22.22
Total ACE allowed	185.15	510.34

Asset-2	Additional Capital Expenditure (₹ in lakh)		
	2016-17	2017-18	2018-19
ACE to the extent of Balance & Retention Payments and work deferred for execution	140.43	4.48	313.20
Add: IDC Discharged	0.00	0.00	0.00
Total ACE allowed	140.43	4.48	313.20

(₹ in lakh)



Asset-3	Additional Capital Expenditure		
	2016-17	2017-18	2018-19
ACE to the extent of Balance & Retention Payments and work deferred for execution	0.00	200.75	0.00
Add: IDC Discharged	0.58	0.00	0.00
Total ACE allowed	0.58	200.75	0.00

(₹ in lakh)

Asset-4	Additional Capital Expenditure	
	2017-18	2018-19
ACE to the extent of Balance & Retention Payments and work deferred for execution	260.03	124.00
Add: IDC Discharged	0.00	0.00
Total ACE allowed	260.03	124.00

Capital Cost summary from 1.4.2014 to 31.3.2019

39. Accordingly, the capital cost considered for computation of tariff is as under:

(₹ in lakh)

Asset Name	Capital cost as on COD	Additional Capital Expenditure				Total capital cost including additional capitalization as on 31.3.2019
		2015-16	2016-17	2017-18	2018-19	
Asset-1	4226.20	185.15	510.34	0.00	0.00	4921.68
Asset-2	5305.34	0.00	140.43	4.48	313.20	5763.45
Asset-3	351.69	0.00	0.58	200.75	0.00	553.02
Asset-4	1891.44	0.00	0.00	260.03	124.00	2275.47

(₹ in lakh)

Asset-1	Capital cost as on COD	Additional Capital Expenditure				Total capital cost including additional capitalization as on 31.3.2019
		2015-16	2016-17	2017-18	2018-19	
Approved earlier vide order dated 29.7.2016 in Petition No. 201/TT/2015	4227.61	354.36	101.24	50.62	0.00	4733.83
Claimed by the Petitioner in the instant petition	4227.60	188.52	510.90	0.00	0.00	4927.02
Allowed after true-up in this order	4226.20	185.15	510.34	0.00	0.00	4921.68

(₹ in lakh)

Asset-2	Capital cost as on COD	Additional Capital Expenditure			Total capital cost including additional capitalization as on 31.3.2019
		2016-17	2017-18	2018-19	

Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	5305.37	571.64	398.80	99.85	6375.66
Claimed by the Petitioner in the instant petition	5305.37	184.94	40.65	313.20	5844.16
Allowed after true-up in this order	5305.34	140.43	4.48	313.20	5763.45

(₹ in lakh)

Asset-3	Capital cost as on COD	Additional Capital Expenditure			Total capital cost including additional capitalization as on 31.3.2019
		2016-17	2017-18	2018-19	
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	351.69	148.97	130.35	93.10	724.11
Claimed by the Petitioner in the instant petition	351.69	0.00	200.75	0.00	552.44
Allowed after true-up in this order	351.69	0.58	200.75	0.00	553.02

(₹ in lakh)

Asset-4	Capital cost as on COD	Additional Capital Expenditure		Total capital cost including additional capitalization as on 31.3.2019
		2017-18	2018-19	
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	1891.43	273.29	117.12	2281.84
Claimed by the Petitioner in the instant petition	1891.44	260.03	124.00	2275.47
Allowed after true-up in this order	1891.44	260.03	124.00	2275.47

Debt-Equity Ratio

40. The Petitioner has considered debt-equity ratio as 70:30 as on COD and for additional capitalization post COD. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and for additional capitalization during 2015-16, 2016-17, 2017-18 and 2018-19 as provided under Regulation 19 of the 2014 Tariff Regulations. The details of the debt-equity ratio as on the date of COD and as on 31.3.2019 considered for the purpose of tariff computation for the 2014-19 tariff period is as follows:



Asset-1	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	2958.34	70.00	3445.18	70.00
Equity	1267.86	30.00	1476.50	30.00
Total	4226.20	100.00	4921.68	100.00
Asset-2	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	3713.74	70.00	4034.42	70.00
Equity	1591.60	30.00	1729.03	30.00
Total	5305.34	100.00	5763.45	100.00
Asset-3	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	246.19	70.00	387.12	70.00
Equity	105.51	30.00	165.90	30.00
Total	351.69	100.00	553.02	100.00
Asset-4	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	1324.01	70.00	1592.85	70.00
Equity	567.43	30.00	682.62	30.00
Total	1891.44	100.00	2275.47	100.00

Interest on Loan (IoL)

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

42. We have considered the submissions of the Petitioner. It is observed that the loans from SBI and ICICI with respect to transmission assets in the instant petition have been deployed with floating rates of interest. Accordingly, factoring in the impact

of floating rate of interest, IoL has been worked out based on the actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations.

43. The details of the trued up IoL allowed for Assets-1, 2, 3 and 4 are as follows:

(₹ in lakh)

Asset-1				
Particular	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Gross Normative Loan	2958.34	3087.94	3445.18	3445.18
Cumulative Repayments up to Previous Year	0.00	69.87	316.50	576.55
Net Loan-Opening	2958.34	3018.07	3128.67	2868.62
Additions due to Additional Capitalization	129.60	357.23	0.00	0.00
Repayment during the year	69.87	246.63	260.05	260.05
Net Loan-Closing	3018.07	3128.67	2868.62	2608.57
Average Loan	2988.21	3073.37	2998.65	2738.60
Weighted Average Rate of Interest on Loan (%)	8.24	8.22	8.20	8.20
Interest on Loan	75.33	252.63	245.92	224.59

(₹ in lakh)

Asset-2			
Particular	2016-17 (Pro-rata)	2017-18	2018-19
Gross Normative Loan	3713.74	3812.04	3815.18
Cumulative Repayments up to Previous Year	0.00	147.45	436.03
Net Loan-Opening	3713.74	3664.60	3379.15
Additions due to Additional Capitalization	98.30	3.14	219.24
Repayment during the year	147.45	288.58	296.97
Net Loan-Closing	3664.60	3379.15	3301.43
Average Loan	3689.17	3521.88	3340.29
Weighted Average Rate of Interest on Loan (%)	8.20	8.11	8.09
Interest on Loan	156.62	285.78	270.29

(₹ in lakh)

Asset-3			
Particular	2016-17 (Pro-rata)	2017-18	2018-19
Gross Normative Loan	246.19	246.59	387.12
Cumulative Repayments up to Previous Year	0.00	11.27	35.38
Net Loan-Opening	246.19	235.32	351.74
Additions due to Additional Capitalization	0.41	140.53	0.00
Repayment during the year	11.27	24.11	29.41

Net Loan-Closing	235.32	351.74	322.34
Average Loan	240.75	293.53	337.04
Weighted Average Rate of Interest on Loan (%)	8.14	7.93	7.80
Interest on Loan	11.76	23.28	26.28

(₹ in lakh)

Asset-4		
Particular	2017-18 (Pro-rata)	2018-19
Gross Normative Loan	1324.01	1506.05
Cumulative Repayments up to Previous Year	0.00	106.15
Net Loan-Opening	1324.01	1399.90
Additions due to Additional Capitalization	182.04	86.80
Repayment during the year	106.15	116.87
Net Loan-Closing	1399.90	1369.83
Average Loan	1361.95	1384.87
Weighted Average Rate of Interest on Loan (%)	8.19	8.06
Interest on Loan	110.98	111.57

44. IoL approved vide order dated 29.7.2016 in Petition No. 201/TT/2015, claimed by the Petitioner in the instant petition for the 2014-19 period and trued-up IoL allowed in the instant order of the 2014-19 period with respect to Asset-1 are as under:

(₹ in lakh)

Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Approved vide order dated 29.7.2016 in Petition No. 201/TT/2015	77.00	251.06	235.11	216.03
Claimed by the Petitioner in the instant petition	75.38	252.91	246.19	224.84
Allowed after true-up in this order	75.33	252.63	245.92	224.59

45. Accordingly, IoL approved vide order dated 9.7.2018 in Petition No. 215/TT/2016, claimed by the Petitioner in the instant petition for the 2014-19 period and trued-up IoL allowed in the instant order of the 2014-19 period with respect to Asset-2, 3 and 4 are as under:

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
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Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	163.78	324.71	312.02
Claimed by the Petitioner in the instant petition	157.24	288.96	273.99
Allowed after true-up in this order	156.62	285.78	270.29

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	14.23	29.89	33.56
As claimed by the Petitioner in the instant petition	11.75	23.25	26.26
Allowed after true-up in this order	11.76	23.28	26.28

(₹ in lakh)

Particulars	2017-18 (Pro-rata)	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	114.69	117.36
As claimed by the Petitioner	110.92	111.41
Allowed after true-up	110.98	111.57

Return on Equity (RoE)

46. 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 they are liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax (%)	Grossed up RoE [Base Rate/(1-t)] (%)
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757

47. The Commission in 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. The relevant portion of the order dated 27.4.2020 is as under:



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

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

Year	Notified MAT rates (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

48. The MAT rates considered in the above order are considered for the purpose of grossing up the rate of RoE for truing up of the tariff of the 2014-19 period in terms of the provisions of the 2014 Tariff Regulations. The same are as under:

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	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

49. The trued-up RoE allowed for Assets-1, 2, 3 and 4 are as follows:

(₹ in lakh)				
Asset-1				
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Opening Equity	1267.86	1323.40	1476.50	1476.50
Addition due to Additional Capitalization	55.54	153.10	0.00	0.00



Asset-1				
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Closing Equity	1323.40	1476.50	1476.50	1476.50
Average Equity	1295.63	1399.95	1476.50	1476.50
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50
Tax Rate applicable (%)	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax)	78.13	275.86	290.95	291.73

(₹ in lakh)

Asset-2			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Opening Equity	1591.60	1633.73	1635.07
Addition due to Additional Capitalization	42.13	1.34	93.96
Closing Equity	1633.73	1635.07	1729.03
Average Equity	1612.67	1634.40	1682.05
Return on Equity (Base Rate) (%)	15.50	15.50	15.50
Tax Rate applicable (%)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.705	19.758
Return on Equity (Pre-tax)	164.55	322.06	332.34

(₹ in lakh)

Asset-3			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Opening Equity	105.51	105.68	165.90
Addition due to Additional Capitalization	0.17	60.22	0.00
Closing Equity	105.68	165.90	165.90
Average Equity	105.60	135.79	165.90
Return on Equity (Base Rate) (%)	15.50	15.50	15.50
Tax Rate applicable (%)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.705	19.758
Return on Equity (Pre-tax)	12.48	26.76	32.78

(₹ in lakh)

Asset-4		
Particulars	2017-18 (Pro-rata)	2018-19
Opening Equity	567.43	645.42
Addition due to Additional Capitalization	77.99	37.20
Closing Equity	645.42	682.62
Average Equity	606.42	664.02
Return on Equity (Base Rate) (%)	15.50	15.50
Tax Rate applicable (%)	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.758
Return on Equity (Pre-tax)	118.84	131.20



50. RoE approved earlier vide order dated 29.7.2016 in Petition No. 201/TT/2015, claimed by the Petitioner in the instant petition for the 2014-19 period and trued-up RoE allowed in this order for the 2014-19 period with respect to Asset-1 are as under:

(₹ in lakh)

Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Approved earlier vide order dated 29.7.2016 in Petition No. 201/TT/2015	79.51	272.53	277.00	278.49
As claimed by the Petitioner	78.22	276.16	291.26	292.04
Allowed after truing-up	78.13	275.86	290.95	291.73

51. RoE approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016, claimed by the Petitioner in the instant petition for the 2014-19 period and trued-up RoE allowed in this order for the 2014-19 period with respect to Assets-2, 3 and 4 are as under:

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	170.32	357.48	372.14
As claimed by the Petitioner	165.23	325.76	337.12
Allowed after truing-up	164.55	322.06	332.34

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	15.04	33.29	39.86
Claimed by the Petitioner in the instant petition	12.47	26.72	32.74
Allowed after true-up in this order	12.48	26.76	32.78

(₹ in lakh)

Particulars	2017-18 (Pro-rata)	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	118.66	130.80
As claimed by the Petitioner	118.85	131.20
Allowed after truing-up	118.84	131.20

Depreciation

52. The Petitioner has claimed depreciation considering capital expenditure as on COD and ACE during 2014-19 (including IDC discharged during 2015-16, 2016-17 and 2017-18) for the transmission assets as under:

(₹ in lakh)

Asset Name	Apportioned approved capital cost as per RCE	Capital cost as on COD	Additional capital Expenditure (Claimed)			
			2015-16	2016-17	2017-18	2018-19
Asset-1	5174.75	4227.61	188.52*	510.90*	0.00	0.00
Asset-2	7161.28	5305.37	0.00	184.94*	40.65*	313.20
Asset-3	895.43	351.69	0.00	0.00	200.75	0.00
Asset-4	2495.54	1891.43	0.00	0.00	260.03	124.00
TOTAL	15727.00	11776.10	188.52	695.84	501.43	437.20

(* includes un-discharged IDC)

53. It is observed that earlier in Petition No. 215/TT/2016 wherein tariff was determined for Assets-2, 3 and 4 for the 2014-19 tariff period, the Petitioner had submitted the capital cost of IT equipment in sub-station cost and as such the depreciation for IT equipment was allowed @5.28% of the corresponding capital cost. The Petitioner now at the time of truing up of tariff of the 2014-19 period has segregated the IT equipment cost from sub-station cost and has considered depreciation rate for IT Equipment @15% and the salvage value for "IT Equipment" as NIL as per the 2014 Tariff Regulations. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of the 2014-19 period. In a similar case, the Commission in order dated 9.5.2020 in Petition No. 19/TT/2020 held as under:

"31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012 and 9.5.2013 in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital



expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014- 19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations(the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the substation upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations."

54. Accordingly, depreciation has been considered @5.28% for IT Equipment as part of the sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations.

55. Depreciation has been computed considering capital expenditure as on COD and approved ACE during the 2014-19 tariff period. The Gross Block during the tariff period 2014-19 with regard to Assets-1, 2, 3 and 4 has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is attached as Annexures-1, 2, 3 and 4 respectively. WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations.

56. Depreciation allowed during the 2014-19 tariff period for Assets-1, 2, 3 and 4 are as under:

(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Opening Gross Block	4226.20	4411.35	4921.68	4921.68
Additional Capitalisation	185.15	510.34	0.00	0.00
Closing Gross Block	4411.35	4921.68	4921.68	4921.68
Average Gross Block	4318.77	4666.52	4921.68	4921.68
Weighted average rate of Depreciation (WAROD) (%)	5.29	5.29	5.28	5.28
Balance useful life of the asset at the beginning of the year	25.00	25.00	24.00	23.00
Aggregated Depreciable Value	3886.90	4199.86	4429.51	4429.51
Remaining Depreciable value at the end of the year	3817.03	3883.36	3852.96	3592.91
Combined Depreciation during the year	69.87	246.63	260.05	260.05

(₹ in lakh)

Asset-2			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Opening Gross Block	5305.34	5445.77	5450.25
Additional Capitalisation	140.43	4.48	313.20
Closing Gross Block	5445.77	5450.25	5763.45
Average Gross Block	5375.56	5448.01	5606.85
Weighted average rate of Depreciation (WAROD) (%)	5.30	5.30	5.30
Balance useful life of the asset at the beginning of the year	25.00	25.00	24.00
Aggregated Depreciable Value	4838.00	4903.21	5046.17
Remaining Depreciable value at the end of the year	4690.56	4467.19	4313.18
Combined Depreciation during the year	147.45	288.58	296.97

(₹ in lakh)

Asset-3			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Opening Gross Block	351.69	352.27	553.02
Additional Capitalisation	0.58	200.75	0.00
Closing Gross Block	352.27	553.02	553.02
Average Gross Block	351.98	452.65	553.02
Weighted average rate of Depreciation (WAROD) (%)	5.34	5.33	5.32



Balance useful life of the asset at the beginning of the year	24.00	24.00	23.00
Aggregated Depreciable Value	316.79	407.38	497.72
Remaining Depreciable value at the end of the year	305.51	372.00	432.94
Combined Depreciation during the year	11.27	24.11	29.41

(₹ in lakh)

Asset-4		
Particulars	2017-18 (Pro-rata)	2018-19
Opening Gross Block	1891.44	2151.47
Additional Capitalisation	260.03	124.00
Closing Gross Block	2151.47	2275.47
Average Gross Block	2021.45	2213.47
Weighted average rate of Depreciation (WAROD) (%)	5.28	5.28
Balance useful life of the asset at the beginning of the year	25.00	25.00
Aggregated Depreciable Value	1819.31	1992.12
Remaining Depreciable value at the end of the year	1713.16	1769.10
Combined Depreciation during the year	106.15	116.87

57. Depreciation approved earlier vide order dated 29.7.2016 in Petition No. 201/TT/2015, claimed by the Petitioner in the instant petition for the 2014-19 period and trued up depreciation allowed with respect to Asset-1 in this order is shown in the table below:

(₹ in lakh)

Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Approved earlier vide order dated 29.7.2016 in Petition No. 201/TT/2015	71.44	244.80	248.79	250.12
Claimed by the Petitioner in the instant petition	69.92	246.91	260.34	260.34
Allowed after true-up in this order	69.87	246.63	260.05	260.05

58. Depreciation approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016, claimed by the Petitioner in the instant petition for the 2014-19 period and trued up depreciation allowed with respect to Assets-2, 3 and 4 in this order is shown below:



(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	153.36	321.82	335.01
Claimed by the Petitioner in the instant petition	149.28	294.25	303.59
Allowed after true-up in this order	147.45	288.58	296.97

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	13.63	30.11	36.02
Claimed by the Petitioner in the instant petition	11.26	24.07	29.37
Allowed after true-up in this order	11.27	24.11	29.41

(₹ in lakh)

Particulars	2017-18 (Pro-rata)	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	106.50	117.39
Claimed by the Petitioner in the instant petition	107.53	118.26
Allowed after true-up in this order	106.15	116.87

Operation & Maintenance Expenses (O&M Expenses)

59. The O&M Expenses claimed by the Petitioner and allowed as per Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of computation of tariff for Assets-1, 2, 3 and 4 are the same and are as under:

(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Norm (₹ lakh/bay)				
400 kV Bay (GIS)	53.25	55.02	56.84	58.73
Number of bays				
400 kV Bay (GIS)	4.00	4.00	4.00	4.00
Total O&M Expense (Claimed)	65.18	220.08	227.36	234.92
Total O&M Expense (Approved)	65.18	220.08	227.36	234.92



(₹ in lakh)

Asset-2			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Norm (₹ lakh/bay)			
400 kV Bay (AIS)	64.37	66.51	68.71
400 kV Bay (GIS)	55.02	56.84	58.73
Number of bays			
400 kV Bay (AIS)	2	2	2
400 kV Bay (GIS)	2	2	2
Total O&M Expense (Claimed)	123.64	246.70	254.88
Total O&M Expense (Approved)	123.64	246.70	254.88

(₹ in lakh)

Asset-3			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Norm (₹ lakh/bay)			
400 kV Bay (AIS)	64.37	66.51	68.71
Number of bays			
400 kV Bay (AIS)	2	2	2
Total O&M Expense (Claimed)	77.24	133.02	137.42
Total O&M Expense (Approved)	77.24	133.02	137.42

(₹ in lakh)

Asset-4		
Particulars	2017-18 (Pro-rata)	2018-19
Norm (₹ lakh/bay)		
400 kV Bay (GIS)	56.84	58.73
Number of bays		
400 kV Bay (GIS)	2	2
Total O&M Expenses (Claimed)	113.06	117.46
Total O&M Expenses (Approved)	113.06	117.46

60. O&M Expenses approved earlier vide order dated 29.7.2016 in Petition No. 201/TT/2015, claimed by the Petitioner in the instant petition for the 2014-19 period and trued up O&M Expenses allowed with respect to Asset-1 in this order is shown in the table below:



(₹ in lakh)

Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Approved earlier vide order dated 29.7.2016 in Petition No. 201/TT/2015	76.26	257.48	266.04	274.84
Claimed by the Petitioner in the instant petition	65.18	220.08	227.36	234.92
Allowed after true-up in this order	65.18	220.08	227.36	234.92

61. O&M Expenses approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016, claimed by the Petitioner in the instant petition for the 2014-19 period and trued up O&M Expenses allowed with respect to Assets-2, 3 and 4 in this order is shown below:

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	123.64	246.70	254.88
Claimed by the Petitioner in the instant petition	123.64	246.70	254.88
Allowed after true-up in this order	123.64	246.70	254.88

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	77.24	133.02	137.42
Claimed by the Petitioner in the instant petition	77.24	133.02	137.42
Allowed after true-up in this order	77.24	133.02	137.42

(₹ in lakh)

Particulars	2017-18 (Pro-rata)	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	113.05	117.46
Claimed by the Petitioner in the instant petition	113.06	117.46
Allowed after true-up in this order	113.06	117.46

Interest on Working Capital (IWC)

62. The Petitioner is entitled to claim IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under. The components of the working capital and the Petitioner's entitlement to interest thereon are discussed hereunder:

(i) Maintenance Spares:

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

(ii) O & M Expenses:

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

(iii) Receivables:

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

(iv) Rate of interest on working capital

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

63. The trued up IWC has been worked out for the Assets-1, 2, 3 and 4 as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and is allowed as under:

(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
O & M Expenses	17.75	18.34	18.95	19.58
Maintenance Spares	31.95	33.01	34.10	35.24
Receivables	161.89	170.87	175.86	173.69
Total Working Capital	211.59	222.22	228.91	228.50
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest of working capital	8.74	30.00	30.90	30.85

(₹ in lakh)

Asset-2			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
O & M Expenses	19.90	20.56	21.24
Maintenance Spares	35.82	37.01	38.23
Receivables	196.00	195.93	197.90
Total Working Capital	251.71	253.49	257.38
Rate of Interest (%)	12.80	12.80	12.80
Interest of working capital	16.68	32.45	32.94

(₹ in lakh)

Asset-3			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
O & M Expenses	10.73	11.09	11.45
Maintenance Spares	19.31	19.95	20.61
Receivables	32.66	35.96	39.17
Total Working Capital	62.70	66.99	71.23
Rate of Interest (%)	12.80	12.80	12.80
Interest of working capital	4.82	8.58	9.12

(₹ in lakh)

Asset-4		
Particulars	2017-18 (Pro-rata)	2018-19
O & M Expenses	9.47	9.79
Maintenance Spares	17.05	17.62
Receivables	77.43	81.81
Total Working Capital	103.96	109.22
Rate of Interest (%)	12.60	12.60
Interest of working capital	13.03	13.76

64. Accordingly, IWC approved earlier vide order dated 29.7.2016 in Petition No. 201/TT/2015, claimed by the Petitioner in the instant petition for the 2014-19 period and trued up IWC allowed with respect to Asset-1 are as under:

(₹ in lakh)

Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Approved earlier vide order dated 29.7.2016 in Petition No. 201/TT/2015	9.46	31.91	32.21	32.32
Claimed by the Petitioner in the instant petition	8.75	30.02	30.92	30.87
Allowed after true-up in this order	8.74	30.00	30.90	30.85



65. Accordingly, IWC approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016, claimed by the Petitioner in the instant petition for the 2014-19 period and trued up IWC allowed respect to Assets-2, 3 and 4 are as under:

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	17.11	34.79	35.55
Claimed by the Petitioner in the instant petition	16.75	32.72	33.27
Allowed after true-up in this order	16.68	32.45	32.94

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	4.98	8.99	9.57
As claimed by the Petitioner in the instant petition	4.81	8.57	9.11
Allowed after true-up in this order	4.82	8.58	9.12

(₹ in lakh)

Particulars	2017-18 (Pro-rata)	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	13.11	13.89
As claimed by the Petitioner in the instant petition	13.06	13.79
Allowed after true-up in this order	13.03	13.76

Approved Annual Fixed Charges for the 2014-19 Tariff Period

66. The trued up annual transmission charges allowed for Assets-1, 2, 3 and 4 for the 2014-19 tariff period are as under:

(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Depreciation	69.87	246.63	260.05	260.05
Interest on Loan	75.33	252.63	245.92	224.59
Return on Equity	78.13	275.86	290.95	291.73
Int. on Working Capital	8.74	30.00	30.90	30.85
Op. and Maintenance	65.18	220.08	227.36	234.92

Total	297.25	1025.21	1055.18	1042.14
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(₹ in lakh)

Asset-2			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	147.45	288.58	296.97
Interest on Loan	156.62	285.78	270.29
Return on Equity	164.55	322.06	332.34
Int. on Working Capital	16.68	32.45	32.94
Op. and Maintenance	123.64	246.70	254.88
Total	608.94	1175.56	1187.43

(₹ in lakh)

Asset-3			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	11.27	24.11	29.41
Interest on Loan	11.76	23.28	26.28
Return on Equity	12.48	26.76	32.78
Int. on Working Capital	4.82	8.58	9.12
Op. and Maintenance	77.24	133.02	137.42
Total	117.58	215.74	235.00

(₹ in lakh)

Asset-4		
Particulars	2017-18 (Pro-rata)	2018-19
Depreciation	106.15	116.87
Interest on Loan	110.98	111.57
Return on Equity	118.84	131.20
Int. on Working Capital	13.03	13.76
Op. and Maintenance	113.06	117.46
Total	462.05	490.86

67. The Annual Transmission Charges allowed vide order dated 29.7.2016 in Petition No. 201/TT/2015, claimed by the Petitioner in the instant petition for the 2014-19 period and allowed after true up of the 2014-19 period in this order with respect to Asset-1 are as under:

(₹ in lakh)

Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Approved earlier vide order dated 29.7.2016 in Petition No. 201/TT/2015	313.67	1057.78	1059.15	1051.80
As claimed by the Petitioner	297.45	1026.08	1056.07	1043.01
Allowed after truing-up	297.25	1025.21	1055.18	1042.14



68. The Annual Transmission Charges allowed vide order dated 9.7.2018 in Petition No. 215/TT/2016, claimed by the Petitioner in the instant petition for the 2014-19 period and allowed after true up of the 2014-19 period in this order with respect to Assets-2, 3 and 4 are as under:

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	628.21	1285.50	1309.60
As claimed by the Petitioner in the instant petition	612.14	1188.39	1202.85
Allowed after true-up in this order	608.94	1175.56	1187.43

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	125.12	235.30	256.43
As claimed by the Petitioner in the instant petition	117.53	215.63	234.90
Allowed after true-up in this order	117.58	215.74	235.00

(₹ in lakh)

Particulars	2017-18 (Pro-rata)	2018-19
Approved earlier vide order dated 9.7.2018 in Petition No. 215/TT/2016	466.01	496.90
As claimed by the Petitioner	463.42	492.12
Allowed after true-up	462.05	490.86

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

69. The Petitioner has combined all the assets in the instant petition and the transmission tariff claimed by the Petitioner for the Combined Asset for the 2019-24 tariff period is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	728.34	733.59	733.59	733.59	733.59
Interest on Loan	595.33	538.69	480.28	422.01	361.75
Return on Equity	769.65	773.04	773.04	773.04	773.04
Interest on Working Capital	45.24	45.09	44.70	44.32	43.84

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	315.66	326.50	337.74	349.35	361.35
Total	2454.22	2416.91	2369.35	2322.31	2273.57

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	26.31	27.21	28.15	29.11	30.11
Maintenance Spares	47.35	48.98	50.66	52.40	54.20
Receivables	301.75	297.98	292.11	286.31	279.54
Total	375.41	374.17	370.92	367.82	363.85
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	45.24	45.09	44.70	44.32	43.84

Effective Date of Commercial Operation (E-COD)

71. The Petitioner has claimed E-COD of the Combined Asset as 12.7.2016. Based on the trued-up admitted capital cost and actual COD of all the assets, E-COD is worked out as follows:

Computation of Effective COD						
Asset	Actual COD	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Weight of the cost (%)	No. of Days from last COD	Weighted Days	Effective COD (Latest COD – Total weighted Days)
Asset-1	11.12.2015	4921.68	36.42	479.00	174.45	12.7.2016
Asset-2	24.9.2016	5763.45	42.65	191.00	81.46	
Asset-3	25.8.2016	553.02	4.09	221.00	9.04	
Asset-4	3.4.2017	2275.47	16.84	0.00	0.00	
Total		13513.63	100.00		264.96	

72. E-COD is used to determine the lapsed life of the Project as a whole, which works out as 2 (two) 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)

73. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 25 years as shown below:

Admitted Capital Cost as on 31.03.2019				
Particulars (1)	Combined Asset (₹ in lakh) (2)	Life in Years (3)	Weighted Cost (₹ in lakh) (4) = (2)x(3)	Weighted Avg. Life of Asset (in years) (5) = (4)/ (2)
Building & Other Civil Works	122.07	25	3051.78	
Transmission Line	66.03	35	2311.02	
Sub-Station Equipment	12936.13	25	323403.37	
PLCC	350.83	15	5262.47	
IT Equipment & Software	38.56	6.67	257.09	
Total	13513.63		334285.74	24.74 years, rounded off to 25 years

Capital Cost

74. Regulation 19 of the 2019 Tariff Regulation 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.

Additional Capitalization

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



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

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

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

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

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

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

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

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

75. The Petitioner has claimed the capital cost of Combined Asset as ₹13599.09 lakh as on 31.3.2019.

76. The admitted trued-up capital cost of ₹4921.68 lakh for Asset-1, ₹5763.45 lakh for Asset-2, ₹553.02 lakh for Asset-3 and ₹2275.47 lakh for Asset-4 as on 31.3.2019 has been considered as the opening capital cost as on 1.4.2019 for determination of tariff for 2019-24 tariff period in accordance with Regulation 19 of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, sub-station and PLCC) as admitted by the Commission as on 31.3.2019 for transmission assets are clubbed together and the combined capital cost has been considered as capital cost for Combined Asset as on 1.4.2019, as per the following details:



(₹ in lakh)

Element	Asset-1 (A)	Asset-2 (B)	Asset-3 (C)	Asset-4 (D)	Capital Cost for Combined Asset as on 1.4.2019 E = (A+B+C+D)
Building & Other Civil Works	95.30	26.77	0.00	0.00	122.07
Transmission Line	0.00	0.00	0.00	66.03	66.03
Sub-Station Equipment	4632.66	5574.80	533.41	2195.26	12936.13
PLCC	193.72	137.50	19.62	0.00	350.83
IT Equipment & Software	0.00	24.39	0.00	14.18	38.56
Total	4921.68	5763.45	553.02	2275.47	13513.63

77. The trued-up capital cost of ₹13513.63 lakh as on 31.3.2019 for Combined Asset has been considered as admitted capital cost as on 1.4.2019 for working out tariff for 2019-24 tariff period.

Additional Capital Expenditure (ACE)

78. Regulations 24 and 25 of the 2019 Tariff Regulations provide as under:

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

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

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

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

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

25. Additional Capitalisation within the original scope and after the cut-off date:



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

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

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

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

79. The Petitioner has claimed projected ACE for 2019-24 period and submitted Auditor’s Certificates in support of the same. The details of projected ACE for 2019-20 period as per Auditor’s Certificates is ₹120.47 lakh.

Asset	Projected ACE 2019-24
	2019-20
Asset-4 (under Combined Asset)	120.47

80. The Petitioner vide affidavit dated 21.12.2019 has submitted that ACE claimed for the period 1.4.2019 to 31.3.2020 is on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed upto the cut-off date and works to be executed upto cut-off date. The contract-wise details for balance and retention payments are as detailed below:



(₹ in lakh)

Party	Package	Financial Year
		2019-20
Mcnally Bharat Engineering Co. Ltd.	Sub-station Work	78.00
Total		78.00

81. The details of works deferred for execution are as under:

(₹ in lakh)

Asset	Element	Financial Year
		2019-20
Asset-4 (under Combined Asset)	IT Equipment & Software	42.47
Total		42.47

82. We have considered the submissions of the Petitioner. It is observed that the projected ACE falls within the cut-off date and is on account of balance and retention payment for works executed within the cut-off date and works deferred for execution. The same has been considered for computation of total capital cost as on 31.3.2024. ACE claimed during the period 2019-20 is allowed under Regulation 24(1)(a) and (b) of the 2019 Tariff Regulations which is subject to true up.

83. ACE allowed subject to true up is summarized below:

(₹ in lakh)

Particulars	Regulation	Combined Asset
		2019-20
ACE to the extent of Balance & Retention Payments for works executed before the cut-off date and works deferred for execution	Regulation 24(1)(a) and (b) of the 2019 Tariff Regulations	120.47

Capital cost for the 2019-24 tariff period

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

(₹ in lakh)



Capital Cost allowed as on 1.4.2019	ACE allowed for the year 2019-20	Total Estimated Completion Cost up to 31.3.2024
13513.63	120.47	13634.10

85. Against the overall RCE approved capital cost of ₹15727.00 lakh, the estimated project cost of the Combined Asset including additional capital expenditure is ₹13634.10 lakh which is within the RCE cost. Therefore, there is no cost over-run as per the RCE cost.

Debt-Equity Ratio

86. Regulation 18 of the 2019 Tariff Regulations provide as under:

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

Provided that:

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

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

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

(3). In case of the generating station and the transmission project including communication, project 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 project including communication project 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 project including communication project 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.”

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

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	9459.57	70.00	9543.90	70.00
Equity	4054.06	30.00	4090.20	30.00
Total	13513.63	100.00	13634.10	100.00

Return on Equity (RoE)

88. Regulations 30 and 31 of the 2019 Tariff Regulations provide as under:-

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

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission project including communication project 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 project;

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 project 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 project up to load dispatch centre or protection project 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.”

89. The Petitioner has submitted that MAT rate is applicable to the Petitioner company. Accordingly, the MAT rate applicable during the 2019-20 has been considered for the purpose of RoE, which shall be trued up with actual tax rate in accordance with Clause (3) of Regulation 31 of the 2019 Tariff Regulations. RoE allowed for the Combined Asset under Regulation 30 of the 2019 Tariff Regulations is as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	4054.06	4090.20	4090.20	4090.20	4090.20
Addition due to Additional Capitalization	36.14	0.00	0.00	0.00	0.00
Closing Equity	4090.20	4090.20	4090.20	4090.20	4090.20
Average Equity	4072.13	4090.20	4090.20	4090.20	4090.20
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	764.83	768.22	768.22	768.22	768.22



Interest on Loan (IoL)

90. Regulation 32 of the 2019 Tariff Regulations provide as under:

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

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

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

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

Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the Combined Asset is follows:

(₹ in lakh)					
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	9459.57	9543.90	9543.90	9543.90	9543.90
Cumulative Repayments up to Previous Year	1857.40	2581.23	3310.30	4039.38	4768.45
Net Loan-Opening	7602.17	6962.67	6233.60	5504.52	4775.45
Addition due to Additional Capitalization	84.33	0.00	0.00	0.00	0.00
Repayment during the year	723.83	729.07	729.07	729.07	729.07
Net Loan-Closing	6962.67	6233.60	5504.52	4775.45	4046.38
Average Loan	7282.42	6598.13	5869.06	5139.99	4410.92
Weighted Average Rate of Interest on Loan (%)	8.131	8.121	8.141	8.168	8.161
Interest on Loan	592.10	535.82	477.78	419.86	359.98

Depreciation

92. Regulation 33 of the 2019 Tariff Regulations provide as under:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

93. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). WAROD has been worked out and placed as Annexure-5 after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered Nil, i.e. IT asset has been considered as 100 per cent depreciable. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated

depreciation up to 31.3.2019. The depreciation allowed for the Combined Asset is as follows:

(₹ in lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	13513.63	13634.10	13634.10	13634.10	13634.10
Addition during the year 2019-24 due to projected Additional Capitalisation	120.47	0.00	0.00	0.00	0.00
Closing Gross Block	13634.10	13634.10	13634.10	13634.10	13634.10
Average Gross Block	13573.87	13634.10	13634.10	13634.10	13634.10
Weighted average rate of Depreciation (WAROD)(%)	5.33	5.35	5.35	5.35	5.35
Balance useful life at the beginning of the year	23.00	22.00	21.00	20.00	19.00
Aggregated Depreciable Value	12222.46	12278.79	12278.79	12278.79	12278.79
Remaining Aggregate Depreciable Value at the end of the year	9641.23	8968.49	8239.42	7510.34	6781.27
Combined Depreciation during the year	723.83	729.07	729.07	729.07	729.07
Aggregate Cumulative Depreciation	2581.23	3310.30	4039.38	4768.45	5497.52

Operation & Maintenance Expenses (O&M Expenses)

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

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578



Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more)	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	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	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

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



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

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

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

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

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

95. The Petitioner has claimed O&M Expenses for following transmission elements during the 2019-24 period:

I. Sub-stations (400 kV AIS):

- (1) Madhugiri (Tumkur):2 Nos. 400 kV line bays at Narendra (New) and 2 Nos. 400 kV line bays at Madhugiri (Tumkur) – 2 Bays
- (2) Madhugiri (Tumkur) -Bidadi Bay I– 1 Bay
- (3) Madhugiri (Tumkur) - Bidadi Bay II – 1 Bay

II. Sub-stations (400 kV GIS):

- (1) Bijapur (Kudgi):Kudgi NTPC Bays-1,2,3&4 – 4 Bays
- (2) Bijapur (Kudgi):2 Nos. 400 kV Line Bays at Narendra (New) & 2 Nos. 400 kV Line Bays at Madhugiri (Tumkur) – 2 Bays
- (3) Bidadi:2 Nos. 400 kV Line Bays at Bidadi for Madhugiri – 2 Bays



III. Communication System:

i. PLCC

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

Sub-Station Bays					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M for Sub-station bays (as per norms)					
400 kV AIS	128.60	133.12	137.80	142.64	147.64
400 kV GIS	180.04	186.36	192.92	199.69	206.69
Total O&M Expenses	308.64	319.48	330.72	342.33	354.33

PLCC					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M for PLCC (as per norms)					
PLCC	7.02	7.02	7.02	7.02	7.02
Total O&M Expenses	7.02	7.02	7.02	7.02	7.02

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Total O&M Expenses Claimed	315.66	326.50	337.74	349.35	361.35

97. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition and the Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and 2019 Tariff Regulations and the norms for sub-station has been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The

relevant portions of the order dated 24.1.2021 in Petition No.126/TT/2020 are extracted hereunder.

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

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

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

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

98. The O&M Expenses allowed for the Combined Asset under Regulation 35(3) and (4) of the 2019 Tariff Regulations are as under:

Sub-Station Bays					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norm (₹ lakh/bay)					
400 kV AIS	32.150	33.280	34.450	35.660	36.910
400 kV GIS	22.505	23.296	24.115	24.962	25.837
Number of bays					
400 kV AIS	4	4	4	4	4
400 kV GIS	8	8	8	8	8



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expense for 400 kV AIS	128.60	133.12	137.80	142.64	147.64
O&M Expense for 400 kV GIS	180.04	186.37	192.92	199.70	206.70
Total O&M Expenses	308.64	319.49	330.72	342.34	354.34

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Total O&M Expenses Allowed	308.64	319.49	330.72	342.34	354.34

Interest on Working Capital (IWC)

99. Regulation 34(1)(c), 34(3), 34(4) and Regulation 3(7) of the 2019 Tariff

Regulations provide as follows:

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

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

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

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

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

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

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

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

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

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



100. 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 interest on working capital as 12.05%.

101. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC 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, Rate of Interest 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 thereon allowed for the Combined Asset is as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	25.72	26.62	27.56	28.53	29.53
Maintenance Spares	46.30	47.92	49.61	51.35	53.15
Receivables	299.28	295.54	289.73	283.97	277.25
Total	371.30	370.09	366.89	363.85	359.93
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest of working capital	44.74	44.60	44.21	43.84	43.37

Annual Fixed Charges for the 2019-24 Tariff Period

102. The annual fixed charges for the Combined Asset for the tariff period 2019-24 are summarized below:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	723.83	729.07	729.07	729.07	729.07
Interest on Loan	592.10	535.82	477.78	419.86	359.98
Return on Equity	764.83	768.22	768.22	768.22	768.22
Interest on Working Capital	44.74	44.60	44.21	43.84	43.37
Operation and Maintenance	308.64	319.49	330.72	342.34	354.34
Total	2434.14	2397.20	2350.00	2303.33	2254.98

Filing Fee and Publication Expenses

103. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner shall be entitled for reimbursement of the



filing fees and publication expenses in connection with the present petition directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee and RLDC Fees and Charges

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

Goods and Services Tax

105. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if GST on transmission is withdrawn from negative list in future.

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

Security Expenses

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

108. During the proceedings held on 24.6.2020 in the instant Petition, the learned counsel of TANGEDCO submitted that the Petitioner is entitled to claim the security expenses and capital spares if the recovery of the same is allowed under the provisions of the Tariff Regulations and that specifically seeking the approval to file a separate petition to claim security expenses and capital spares is not required.

109. In response, the Petitioner vide affidavit dated 16.7.2020 submitted that with respect to security expenses Petition No. 260/MP/2020 has been filed claiming the overall security expenses and consequential IOWC on that security expenses vide.

110. We have considered the submissions of the Petitioner and TANGEDCO. 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

111. 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

112. During the proceedings held on 24.6.2020 in the instant Petition, the learned counsel of TANGEDCO submitted that the Petitioner has not placed on record the details of recovery of transmission charges from NTPC with respect to Asset-1 in the current Petition.

113. In response, the representative of the Petitioner submitted that as per the directions of the Commission at paragraph 74 in order dated 29.7.2016 in Petition No. 201/TT/2015, the transmission charges for Asset-1 which includes 4 nos. of 400 kV Line Bays at Narendra (New) for Kudgi TPS-Narendra (New) 400 kV 2XD/C Quad lines was to be borne by NTPC till the COD of its first unit or the date of start of LTA. He further submitted that the first unit of Kudgi TPS-Narendra (New) achieved its COD on 1.8.2017 and accordingly, the Petitioner has raised bilateral bills to NTPC from 11.12.2015 till 31.7.2017 complying with the directions of the Commission. The Petitioner has further clarified that NTPC has already paid all the transmission charges billed. Further, the Petitioner vide affidavit dated 16.7.2020 has submitted the details of transmission charges billed to NTPC till the COD of its first unit i.e. till 31.7.2017 with respect to Asset-1. Further, the COD certificate of Unit-1 of Kudgi TPS (3X800 MW in Phase-I) of NTPC has been submitted by the Petitioner.

114. We have considered the submissions of TANGEDCO and the Petitioner. We are satisfied with the documentary evidence produced by the Petitioner in support of its submissions regarding the recovery of transmission charges from NTPC with respect to Asset-1.

115. The billing, collection and disbursement of the transmission charges approved in this order in respect of Asset-1 w.e.f. 1.8.2017 (from COD to 31.7.2017, it is



payable by NTPC) and in respect of Assets-2, 3 and 4 w.e.f. COD shall be governed by the provisions of 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.

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

(₹ in lakh)				
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Asset-1	297.25	1025.21	1055.18	1042.14
Asset-2	-	608.94	1175.56	1187.43
Asset-3	-	117.58	215.74	235.00
Asset-4	-	-	462.05	490.86

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	2434.14	2397.20	2350.00	2303.33	2254.98

118. This order disposes of Petition No. 36/TT/2020.

**Sd/
(Arun Goyal)
Member**

**Sd/
(I. S. Jha)
Member**

**Sd/
(P. K. Pujari)
Chairperson**



Petition No.:	36-TT-2020
Period	2014-19 True-up

Annexure - 1

Asset-1

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations			
		2015-16	2016-17	2017-18			2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
Building	81.79	3.37	10.14	0.00	95.30	3.34%	2.79	3.01	3.18	3.18
Transmission Line	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00
Sub Station	3965.87	174.43	492.36	0.00	4632.66	5.28%	214.00	231.61	244.60	244.60
PLCC	178.54	7.35	7.83	0.00	193.72	6.33%	11.53	12.01	12.26	12.26
Leasehold Land	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00
IT Equipment and Software	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00
TOTAL	4226.20	185.15	510.34	0.00	4921.68		228.33	246.63	260.05	260.05
Average Gross Block (₹ in lakh)							4318.77	4666.52	4921.68	4921.68
Weighted Average Rate of Depreciation (₹ in lakh)							5.29%	5.29%	5.28%	5.28%



Petition No.:	36-TT-2020
Period	2014-19 True-up

Annexure - 2
Asset-2

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations		
		2016-17	2017-18	2018-19			2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00
Building	26.77	0.00	0.00	0.00	26.77	3.34%	0.89	0.89	0.89
Transmission Line	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00
Sub Station	5116.69	140.43	4.48	313.20	5574.80	5.28%	273.87	277.69	286.08
PLCC	137.50	0.00	0.00	0.00	137.50	6.33%	8.70	8.70	8.70
Leasehold Land	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00
IT Equipment and Software	24.39	0.00	0.00	0.00	24.39	5.28%	1.29	1.29	1.29
TOTAL	5305.34	140.43	4.48	313.20	5763.45		284.75	288.58	296.97
Average Gross Block (₹ in lakh)							5375.56	5448.01	5606.85
Weighted Average Rate of Depreciation (₹ in lakh)							5.30%	5.30%	5.30%



Petition No.:	36-TT-2020
Period	2014-19 True-up

Annexure - 3

Asset-3

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations		
		2016-17	2017-18	2018-19			2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00
Building	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00
Transmission Line	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00
Sub Station	332.08	0.58	200.75	0.00	533.41	5.28%	17.55	22.86	28.16
PLCC	19.62	0.00	0.00	0.00	19.62	6.33%	1.24	1.24	1.24
Leasehold Land	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00
IT Equipment and Software	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00
TOTAL	351.69	0.58	200.75	0.00	553.02		18.79	24.11	29.41
Average Gross Block (₹ in lakh)							351.98	452.65	553.02
Weighted Average Rate of Depreciation (₹ in lakh)							5.34%	5.33%	5.32%



Petition No.:	36-TT-2020
Period	2014-19 True-up

Annexure - 4
Asset-4

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations	
		2017-18	2018-19			2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Freehold Land	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
Building	0.00	0.00	0.00	0.00	3.34%	0.00	0.00
Transmission Line	66.03	0.00	0.00	66.03	5.28%	3.49	3.49
Sub Station	1811.23	260.03	124.00	2195.26	5.28%	102.50	112.64
PLCC	0.00	0.00	0.00	0.00	6.33%	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	3.34%	0.00	0.00
IT Equipment and Software	14.18	0.00	0.00	14.18	5.28%	0.75	0.75
TOTAL	1891.44	260.03	124.00	2275.47		106.73	116.87
Average Gross Block (₹ in lakh)						2021.45	2213.47
Weighted Average Rate of Depreciation (₹ in lakh)						5.28%	5.28%



Petition No.:	36-TT-2020
Period	2019-24 Tariff

Annexure - 5

2019-24 Capital Expenditure as on 1.4.2019	Combined Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Additional Capital Expenditure (₹ in lakh) 2019-20	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations				
					2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Freehold Land	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Building	122.07	0.00	122.07	3.34%	4.08	4.08	4.08	4.08	4.08
Transmission Line	66.03	0.00	66.03	5.28%	3.49	3.49	3.49	3.49	3.49
Sub Station	12936.13	78.00	13014.13	5.28%	685.09	687.15	687.15	687.15	687.15
PLCC	350.83	0.00	350.83	6.33%	22.21	22.21	22.21	22.21	22.21
Leasehold Land	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment and Software	38.56	42.47	81.03	15.00%	8.97	12.15	12.15	12.15	12.15
TOTAL	13513.63	120.47	13634.10		723.83	729.07	729.07	729.07	729.07
Average Gross Block (₹ in lakh)					13573.87	13634.10	13634.10	13634.10	13634.10
Weighted Average Rate of Depreciation (₹ in lakh)					5.33%	5.35%	5.35%	5.35%	5.35%

