

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 99/TT/2020

Coram:

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

Date of Order: 27 .01.2021

In the Matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, truing-up of transmission tariff of the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of Asset-1: LILO of both circuit of Siliguri-Purnea 400 kV D/C line along with associated 400 kV Bays; LILO of both circuit of Siliguri Dhalkhola 220 kV D/C line along with 220 kV associated bays at Kishanganj (GIS); 400/220 kV 500 MVA ICT-II with associated bays at Kishanganj (GIS); and 400 kV 125 MVAR Bus Reactor I with associated bays at Kishanganj (GIS), Asset-2(a): 400/220 kV 500 MVA ICT-I with associated bays at Kishanganj (GIS), Asset-2(b): 400 kV 125 MVAR Bus Reactor-II with associated bays at Kishanganj (GIS) under "Transfer of Power from Generation Projects in Sikkim to NR / WR Part-A" in Eastern Region.

And in the Matter of:

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

Vs

....Petitioner

1. Bihar State Power (Holding) Company Ltd.,
(Formerly Bihar State Electricity Board-BSEB),
Vidyut Bhavan, Bailey Road, Patna-800 001, Bihar.
2. West Bengal State Electricity Distribution Company Ltd.,
Bidhyut Bhawan, 7th Floor, DJ Block, Sector II, Salt Lake City,
Kolkata-700091, West Bengal.
3. Grid Corporation of Odisha Ltd.,
Shahid Nagar, Bhubaneswar - 751 007, Odisha.



4. Jharkhand State Electricity Board,
In front of Main Secretariat, Doranda,
Ranchi – 834002, Jharkhand.
5. Damodar Valley Corporation,
DVC Tower, Maniktala, Civic Centre, VIP Road,
Calcutta - 700054, West Bengal.
6. Power Department,
Government of Sikkim, Gangtok - 737101, Sikkim.
7. Gati Infrastructure Chuzachen Ltd.,
1-7-293, Mg Road, 268, Udyog Vihar, Phase-IV,
Secunderabad - 500003, Andhra Pradesh.
8. Gati Infrastructure Bhasmay Power Ltd.,
1-7-293, Mg Road, 268, Udyog Vihar, Phase-IV,
Secunderabad - 500 003, Andhra Pradesh.
9. PTC India Ltd.,
2nd Floor, NBCC Tower 15,
Bhikaji Cama Palace, New Delhi.
10. Lanco Energy Private Ltd.,
Plot No. 397, 2nd Floor, Udyog Vihar, Phase III,
Gurgaon - 122016, Haryana.
11. Dans Energy Private Ltd.,
5th Floor, DLF Building No. 8, Tower C,
DLF Cyber City Phase- II,
Gurgaon - 122002, Haryana.
12. Jal Power Corporation Ltd.,
405-406, Raja House, 30-31,
Nehru Place – 110 019, New Delhi.
13. Madhya Bharat Power Corporation Ltd.,
Nh-31-A, Golitar, Singtam,
Gangtok -737 134, Sikkim.

...Respondents

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

For Respondents : Shri Venkatesh, Advocate, BSPHCL



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 true-up of the transmission tariff for the period from COD to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and determination of tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following assets under “Transfer of Power from Generation Projects in Sikkim to NR / WR Part-A” in Eastern Region (hereinafter referred to as “the transmission project”):

Asset-1: LILO of both circuit of Siliguri-Purnea 400 kV D/C line along with associated 400 kV Bays; LILO of both circuit of Siliguri Dhalkhola 220 kV D/C line along with 220 kV associated bays at Kishanganj (GIS); 400/220 kV 500 MVA ICT-II with associated bays at Kishanganj (GIS); and 400 kV 125 MVAR Bus Reactor-I with associated bays at Kishanganj (GIS);

Asset-2(a): 400/220 kV 500 MVA ICT-I with associated bays at Kishanganj (GIS); and

Asset-2(b): 400 kV 125 MVAR Bus Reactor-II with associated bays at Kishanganj (GIS)

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

“(1) Approve the true-up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 9.1 and 10.0 above.

(2) Approve the Completion cost and additional capitalization incurred during 2014-19.

(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 9.1 and 10.0 above for respective block.

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

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

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

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

(8) Allow the petitioner to claimed initial spares project as whole.

(9) 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 10.6 above.

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

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

Background

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

(a)The Investment Approval (IA) and expenditure sanction of the transmission project was accorded by the Board of Directors of the Petitioner company vide Memorandum No. C/CP/Sikkim Generation project Part A dated 25.5.2010 for ₹25003 lakh including an IDC of ₹1903 lakh based on 3rd Quarter, 2010 price level. The total apportioned approved cost for the instant assets was ₹16727.68 lakh. The Board of Directors of the Petitioner approved the Revised Cost Estimate (RCE) for the transmission project vide Memorandum No. C/CP/RCE-



Sikkim Generation Project Part A dated 11.3.2016 with an estimated cost of ₹39051 lakh including IDC of ₹3088 lakh based on August 2015 price level.

(b)Regulatory approval for the transmission project was accorded by the Commission vide Order in Petition No. 233/2009 (part of 9 HCPTCs).

(c)The transmission tariff of the instant assets from their respective COD to 31.3.2019 was approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 as per the 2014 Tariff Regulations. The tariff allowed during the 2014-19 tariff period in order dated 26.5.2016 is being trued up in the instant petition.

(d)Initially the scope of work covered under the transmission project was as under:-

Transmission lines:

- LILO of Siliguri (existing)-Purnea 400 kV D/C line (quad) at new Pooling Station Kishanganj
- LILO of Siliguri (existing)-Purnea 400 kV D/C line (on which reconductoring is being carried out) at Kishanganj with Quad conductor
- LILO of Siliguri-Dalkhola 220 kV D/C line at new Pooling station Kishanganj
- LILO of Gangtok-Melli 132 kV S/C line upto Rangpo, where Chuzachen-Rangpo 132 kV D/C would be connected so as to form Chuzachen-Gangtok and Chuzachen-Melli 132 kV S/C lines. [This would be a temporary arrangement till establishment of Rangpo Pooling Sub-station under Part-B of the scheme and termination of Gangtok-Rangpo, Melli-Rangpo and Chuzachen-Rangpo 132 kV lines at Rangpo].

Sub-stations:

- Establishment of new 2x315 MVA 400/220 kV GIS Sub-station at Kishanganj

(e)Subsequently, the scope of work covered under the transmission project has been revised as follows:-



Transmission lines:

- LILO of Siliguri (existing)-Purnea 400 kV D/C line (quad) at new Pooling Station Kishanganj
- LILO of Siliguri-Dalkhola 220 kV D/C line at new Pooling Station Kishanganj

Sub-station:

- New 2x500 MVA 400/220/33 kV GIS Sub-station at Kishanganj

(f) The entire scope of the transmission project is covered in the instant petition.

(g) The Commission in order dated 26.5.2016 in Petition No 258/TT/2015 had considered/ approved COD of assets as below:

Asset	COD
Asset-1: LILO of both circuit of Siliguri-Purnea 400 kV D/C line along with associated 400 kV Bays and LILO of both circuit of Siliguri Dhalkhola 220 kV D/C line along with 220 kV associated bays at Kishanganj (GIS), 400/220 kV 500 MVA ICT-II with associated bays at Kishanganj (GIS), 400 kV 125 MVA Bus reactor I with associated bays at Kishanganj (GIS)	18.3.2016 (actual)
Asset-2: 500 MVA, 400/220/33 kV ICT-I along with associated bays; 400 kV 125 MVA Bus Reactor II at Kishanganj Sub-station	15.6.2016 (Anticipated)

(h) In order dated 26.5.2016 in Petition No. 258/TT/2015, the Commission had determined tariff of Asset-2 on basis of anticipated COD. In the instant petition, the Petitioner has bifurcated Asset-2 into Asset-2(a) and Asset-2(b) and claimed actual COD of Asset-2(a) and Asset-2(b) as 5.10.2016 and 9.12.2016 respectively.

(i) The details of commercial operation along with time over-run of the assets covered in the instant petition are as follows:

Asset	SCOD	COD	Time over-run
Asset-1	27.1.2013	18.3.2016	1146 days
Asset-2(a)		5.10.2016	1347 days
Asset-2(b)		9.12.2016	1412 days

(j) The transmission tariff approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 and the trued-up tariff claimed by the Petitioner in the instant Petition is as follows:

(₹ in lakh)					
Asset	Tariff	2015-16	2016-17	2017-18	2018-19
Asset-1	AFC approved vide order dated 26.05.2016 in 258/TT/2015	185.06	5219.54	5692.96	5750.63
	AFC claimed by the Petitioner based on truing up in the instant Petition	185.07	5179.23	5524.07	5613.07
Asset-2	AFC approved vide order dated 26.05.2016 in 258/TT/2015	-	859.00	1193.48	1248.71
Asset-2(a)	AFC claimed by the Petitioner based on truing up in the instant Petition	-	355.51	739.93	763.19
Asset-2(b)	AFC claimed by the Petitioner based on truing up in the instant Petition	-	155.65	518.45	521.41

4. The Respondents are power departments, distribution licensees and transmission licensees, who are procuring transmission services from the Petitioner, mainly beneficiaries of the Eastern Region.

5. The Petitioner has served the petition on the Respondents and notice has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the notices published in the newspapers by the Petitioner. Bihar State Power (Holding) Company Limited (BSPHCL), Respondent No. 1 has filed its reply vide affidavit dated 2.6.2020 and has raised issues of time over-run and Additional Capital Expenditure (ACE) during the 2018-19 period.

6. This order is issued considering the submissions made by the Petitioner in the petition dated 26.12.2019, the Petitioner's affidavit dated 12.3.2020, 15.5.2020, 29.5.2020 and BSPHCL's reply vide affidavit dated 2.6.2020.

7. The hearing in this matter was held on 19.5.2020 through video conference and the order was reserved. BSPHCL, the Respondent No.1, prayed for two weeks' time to file reply to the instant petition which was granted by the Commission. The



Petitioner was also directed to submit certain information and the same has been filed by the Petitioner vide affidavit dated 29.5.2020. BSPHCL has also filed its reply vide affidavit dated 2.6.2020. Having heard the representatives of the Petitioner and perusing the material on record, we proceed to dispose of the petition.

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

8. The details of the trued-up transmission charges claimed by the Petitioner for Assets-1, 2(a) and 2(b) are as under:

(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Depreciation	46.99	1343.90	1490.53	1551.43
Interest on Loan	57.87	1570.54	1556.69	1481.13
Return on Equity	53.71	1545.18	1729.55	1810.46
Interest on working capital	4.85	134.95	143.32	145.95
O & M Expenses	21.65	584.66	603.98	624.10
Total	185.07	5179.23	5524.07	5613.07

(₹ in lakh)

Asset-2(a)			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	91.87	193.62	201.75
Interest on Loan	99.93	199.75	196.55
Return on Equity	105.87	224.30	238.59
Interest on working capital	9.04	18.87	19.47
O & M Expenses	48.80	103.39	106.83
Total	355.51	739.93	763.19

(₹ in lakh)

Asset-2(b)			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	41.61	141.10	144.28
Interest on Loan	45.77	147.10	139.78
Return on Equity	47.41	160.65	165.74
Interest on working capital	3.83	12.76	12.88
O & M Expenses	17.03	56.84	58.73
Total	155.65	518.45	521.41

9. The details of the Interest on Working Capital (IWC) claimed by the Petitioner for Assets-1, 2(a) and 2(b) are as under:

(₹ in lakh)

Asset-1				
Particular	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
O & M Expenses	47.15	48.72	50.33	52.01
Maintenance Spares	84.88	87.70	90.60	93.62
Receivables	806.33	863.21	920.68	935.51
Total	938.36	999.63	1061.61	1081.14
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest on Working Capital	4.85	134.95	143.32	145.95

(₹ in lakh)

Asset-2(a)			
Particular	2016-17 (Pro-rata)	2017-18	2018-19
O & M Expenses	8.34	8.62	8.90
Maintenance Spares	15.01	15.51	16.02
Receivables	121.50	123.32	127.20
Total	144.85	147.45	152.12
Rate of Interest (%)	12.80	12.80	12.80
Interest on Working Capital	9.04	18.87	19.47

(₹ in lakh)

Asset-2(b)			
Particular	2016-17 (Pro-rata)	2017-18	2018-19
O & M Expenses	4.59	4.74	4.89
Maintenance Spares	8.25	8.53	8.81
Receivables	83.80	86.41	86.90
Total	96.64	99.68	100.60
Rate of Interest (%)	12.80	12.80	12.80
Interest on Working Capital	3.83	12.76	12.88

Date of Commercial Operation (COD)

10. The Petitioner, vide affidavit dated 26.12.2019, has submitted that the Asset-1 was put under commercial operation on 18.3.2016 and Assets-2(a) and 2(b) were put under commercial operation on 5.10.2016 and 9.12.2016 respectively.

11. The Commission vide order dated 26.5.2016 in Petition No. 258/TT/2015 approved COD as 18.3.2016 for Asset-1 and provisional COD of Asset-2 {split into



Asset-2(a) and Asset-2(b) in the instant petition} as 15.6.2016. The relevant portion of the said order dated 26.5.2016 in Petition No. 258/TT/2015 is reproduced as follows:

“11. The petitioner, vide affidavit dated 17.5.2016, has submitted that the Transmission Asset-I was put under commercial operation on 18.3.2016 and Asset-II is expected to be put under commercial operation from 15.6.2016. The petitioner has submitted the RLDC trial run certificate in support of claim of commercial operation in respect of Asset-I. Accordingly, the commercial operation date considered for the Asset-I is 18.3.2016 and for Asset-II, the commercial operation date is provisionally being considered 15.6.2016. The tariff is worked out for the instant assets from the COD to 31.3.2019.”

12. The Petitioner has submitted that Asset-2 comprised of 400/220 kV 500 MVA ICT-I with associated bays at Kishanganj (GIS) and 400 kV 125 MVAR Bus Reactor-II with associated bays at Kishanganj (GIS) and anticipated to be put into commercial operation by 15.6.2016. However, portions of Asset-2 have been put under commercial operation on separate dates and split into two assets, namely Asset-2(a) and Asset-2(b). The Petitioner vide its reply dated 12.3.2020 has submitted the ERLDC trial run certificates in support of the date of commercial operation in respect of Assets-2(a) and 2(b).

13. We have considered the submissions of the Petitioner and perused the Trial Run Certificates issued by ERLDC. Accordingly, we approve the date of commercial operation of Asset-2(a) and Asset-2(b) as 5.10.2016 and 9.12.2016 respectively.

Capital Cost

14. The Commission vide order dated 26.5.2016 in Petition No. 258/TT/2015 allowed the following capital cost as on COD and ACE in respect of the instant assets:

Asset	Apportioned approved capital cost as per FR	Expenditure up to COD	Additional Capital Expenditure (ACE)				Total capital cost as on 31.3.2019
			2015-16	2016-17	2017-18	2018-19	
Asset 1	31377.83	23565.69	349.94	4690.47	2080.83	0.00	30686.93

(₹ in lakh)



Asset 2	7673.17	4901.28	0.00	898.42	609.68	288.75	6698.13
Total	39051.00	28466.97	349.94	5588.89	2690.51	288.75	37385.06

15. The Petitioner vide Auditor's Certificate dated 8.11.2019 and 6.11.2019 has submitted the capital cost incurred upto COD, ACE upto 31.3.2019 and estimated ACE during the period 1.4.2019 to 31.3.2020 in respect of Asset-1 & Asset-2(a) and Asset-2(b) respectively. The details of apportioned approved capital cost, capital cost as on COD and ACE incurred up to 31.3.2019 as claimed by the Petitioner for the transmission assets are as under:

Asset	Approved capital cost (Apportioned) as per FR	Revised apportioned capital cost (as per RCE)	Capital cost as on COD	Additional Capital Expenditure				Total capital cost as on 31.3.2019
				2015-16	2016-17	2017-18	2018-19	
Asset-1	12953.97	31377.83	23565.69	349.94	4445.70	1791.98	781.34	30934.65
Asset-2(a)	2539.40	4642.89	3616.87	0.00	111.37	132.04	329.75	4190.03
Asset-2(b)	1234.01	3030.28	2496.79	0.00	189.25	64.95	92.47	2843.46
Total	16727.38	39051.00	29679.35	349.94	4746.32	1988.97	1203.56	37968.14

16. The completion cost including ACE claimed by the Petitioner for Assets-1, 2(a) and 2(b) is within the RCE approved apportioned capital cost and, therefore, there is no cost over-run in respect of the transmission assets.

Time over-run

17. As per the IA, the commissioning schedule of the project was 32 months from the date of IA, i.e., by 27.1.2013. The actual COD of Asset-1 was 18.3.2016, Asset-2(a) was 5.10.2016 and Asset-2(b) was 9.12.2016. Hence, there is a time over-run of 1146 days in case of Asset-1, 1347 days in case of Asset-2(a) and 1412 days in case of Asset-2(b).

18. The Commission vide order dated 26.5.2016 in Petition No. 258/TT/2015 has condoned the entire time over-run of 1146 days in case of Asset-1 and anticipated



time over-run of 1235 days in case of Asset-2 [combined for Asset-2(a) and Asset-2(b)] considering anticipated COD as 26.5.2016. The relevant portion of the said order dated 26.5.2016 in Petition No. 258/TT/2015 is reproduced as under:

“37. In view of the above deliberations, it is to conclude that the time overrun of 1142 days for change in scope and concerned land acquisition at Kishanganj towards Asset I and II, 25 days due to ROW/ obstruction by villagers during construction of 220 kV and 400 kV LILLO lines in Asset I and 115 days due to transportation of ICTs in Asset I and II is being condoned.

38. The petitioner has claimed delay to the tune of 1146 days and 1235 days in Asset I and Asset II respectively. Thus, the entire time overrun is being condoned as the causes for the time overrun cannot be attributed to the petitioner. The corresponding IDC/IEDC is being capitalised.”

19. As observed in para 18 above, the COD of Asset-2(a) and Asset-2(b) is approved as 5.10.2016 and 9.12.2016 respectively. Hence, there is an additional time over-run of 112 and 177 days in case of Asset-2(a) and Asset-2(b) respectively.

20. The Petitioner has submitted that the unprecedented heavy rains during the months of June–July 2016 and in September–October 2016 has caused the additional delay from the anticipated COD to the actual COD of Assets-2(a) and 2(b). The Petitioner has submitted that the heavy rainfall severely affected the testing and commissioning (T&C) works. The Petitioner has also shared data from Indian Meteorological Department (IMD) for this period in Kishanganj for establishing the unprecedented rainfall and has prayed to condone the entire delay for Assets-2(a) and 2(b).

21. With regard to the additional time over-run, BSPHCL, has made the following submissions:

(a) The reasons for time over-run in case of Asset-2(a) and Asset-2(b) submitted by the Petitioner were already considered in order dated 26.5.2016 in Petition No. 258/TT/2015. As the reasons of time over-run are found to be uncontrollable, the time over-run of 1235 days, i.e., till 15.6.2016 in case of



Asset-2 was condoned. Therefore, any reason of delay prior to June 2016 is extraneous to the present petition and may not be considered while condoning time over-run upto the actual date of commissioning.

(b)The time over-run in case of Asset-2 has been attributed to difficulty in transportation and commissioning of Asset-1 and Asset-2 together. However, the said contention of the Petitioner has been categorically rejected in the previous order. The Petitioner has re-agitated the above ground in the present petition. Therefore, the said submission of the Petitioner is liable to the rejected as unsustainable and being barred by the doctrine of *res judicata*.

(c)The time over-run in case of Assets-2(a) and 2(b) has been attributed due to heavy rainfall in the months of June-July 2016 and September-October 2016. However, the Petitioner has not provided any reasoning as to how the rainfall impaired the COD of the said assets. Further, no documentary evidence has been furnished which can establish the steps taken by the Petitioner to ensure timely completion of the project or the difficulties faced during testing and COD of the assets. Further, delay on account of rainfall is a cascading effect of non-commissioning of plant before June, 2016 on account of reasons which were categorically rejected by the Commission. Therefore, any time over-run attributable to the Petitioner cannot be allowed, as the Petitioner cannot be allowed to take advantage of its own wrong.

22. We have considered the submissions of the Petitioner and BSPHCL. The Commission vide order dated 26.5.2016 in Petition No. 258/TT/2015 has already considered the time over-run on account of change in scope of Kishanganj Sub-station, ROW/ obstruction by villagers and obstruction of ICT & reactor at Kishanganj sub-station and condoned the time over-run upto 15.6.2016 as it was not attributable to the Petitioner.

23. As per the submissions of the Petitioner, unprecedented heavy rains during the months of June–October, 2016 affected the T&C works and it has caused additional



time over-run from the anticipated COD to the actual COD of Assets-2(a) and 2(b). The Petitioner has also submitted data from Indian Meteorological Department (IMD) for this period in Kishanganj to establish that there was unprecedented rainfall. We have perused the documentary evidence submitted by the Petitioner.

24. The Commission vide order dated 29.4.2011 approved the Model Transmission Service Agreement (Model TSA). Clause 14.2.1 of the said Model TSA defines “*force majeure*” as under:

“14.0 Force Majeure

.....
14.2.1 Natural Force Majeure Events (a) Act of God, including, but not limited to drought, fire and explosion (to the extent originating from a source external to the Site), earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred (100) years;”

25. As per clause 14.2.1 of the Model TSA, exceptional adverse weather conditions which are in excess of the statistical measures for the last hundred (100) years can be considered as *force majeure* and in such cases, any delays will not be attributable to the Petitioner. In the instant case, the Petitioner has submitted data in respect of rainfall during the months of June–October, 2016 only and it cannot be determined from this data as to whether the rainfall was in excess of the statistical measures for the last hundred (100) years. Therefore, there is no ground for us to consider the delay claimed on account of heavy rainfall as an event beyond the control of the Petitioner. Moreover, as correctly pointed out by the BSPHCL, it is not clear as to how the Petitioner’s work was affected by the rainfall. The Petitioner has also not elaborated the steps taken to mitigate the difficulties faced during testing and commissioning of Assets-2(a) and 2(b). Therefore, the additional time over-run of 112 and 177 days in case of Asset-2(a) and Asset-2(b) is not condoned and IDC and IEDC for the said period are disallowed.



26. The details of time over-run for the transmission assets are tabulated as under:

Asset	SCOD	COD	Total time over-run	Time over-run condoned	Time over-run not condoned
Asset-1	27.1.2013	18.3.2016	1146 days	1146 days	-
Asset-2(a)		5.10.2016	1347 days	1235 days	112 days
Asset-2(b)		9.12.2016	1412 days	1235 days	177 days

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

27. The Petitioner has claimed IDC for the instant assets and has submitted the Auditor's Certificates in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the IDC discharged.

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

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

Asset	IDC claimed by the Petitioner	IDC admissible	IDC allowed as on COD on cash basis	IDC disallowed on account of time over-run	Un-discharged IDC as on COD	
					Discharged during 2016-17	Discharged during 2017-18
Asset-1	2134.66	2134.66	2134.66	0.00	0.00	0.00
Asset-2(a)	245.62	200.17	164.45	45.45	34.58	1.14
Asset-2(b)	181.43	111.65	97.40	69.78	10.24	4.00



30. The Petitioner vide its reply dated 12.3.2020 has submitted that the entire IEDC has been discharged as on COD for the instant assets. The Commission vide its letter dated 3.3.2020 directed the Petitioner to clarify about the treatment of other income for Assets-2(a) and 2(b) in adjustment of the claimed capital cost. The Petitioner vide affidavit dated 12.3.2020 has submitted that other income to the tune of ₹48.25 lakh and ₹43.27 lakh has been adjusted in the IEDC expense of ₹247.61 lakh and ₹222.05 lakh to reach at claimed IEDC of ₹199.36 lakh and ₹178.78 lakh for Assets-2(a) and 2(b) respectively, details of which are provided in Form 12A enclosed with the petition. Further, the Petitioner has also submitted the details of IEDC from SCOD to anticipated COD and from anticipated COD to actual COD in respect of Asset-2(a) and Asset-2(b).

31. We have considered the submissions of the Petitioner. For Asset-1, IEDC claimed is within the percentage of hard cost as indicated in the abstract cost estimate. Hence, IEDC claimed for Asset-1 has been allowed as claimed. As the time over-run from the anticipated COD of 15.6.2016 to the actual COD in case of Asset-2(a) and Asset-2(b) has not been condoned, IEDC for the said period is disallowed. The details of IEDC claimed by the Petitioner and allowed for the instant assets are as under:

(₹ in lakh)			
Asset	IEDC claimed as per Auditor's Certificate (A)	IEDC disallowed on account of time over-run (B)	IDC Allowed C= A-B
Asset-1	1386.37	0.00	1386.37
Asset-2(a)	199.36	72.63	126.73
Asset-2(b)	178.78	85.52	93.26

Initial Spares

32. Regulation 13(d) of the 2014 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of the 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%
Communication System: 3.5%”

33. The Petitioner has claimed the following Initial Spares for the instant assets:

(₹ in lakh)

Asset	Particular	Capital cost (A)	Spares limit (B) (%)	Spares claimed (C)	Spares permissible D = [(A-C)*B / (100-B)]
Asset-1	Transmission Line	10405.67	1	56.33	104.54
	Sub-station	15219.07	5	576.47	770.66
Asset-2(a)	Sub-station	3340.38	1	128.21	169.06
Asset-2(b)	Sub-station	2412.15	1	87.43	122.35

34. We have considered the submissions of the Petitioner. The Petitioner's claims of Initial Spares for the instant assets are within the norms specified in the 2014 Tariff Regulations. Accordingly, the details of Initial Spares allowed for the 2014-19 tariff period are as under:-

Asset	Particular	Plant & Machinery cost upto cut-off date (excluding IDC and IEDC) (A) (₹ in lakh)	Norms as per the 2009/2014 Tariff Regulations (B) (in %)	Spares claimed (C)	Spares permissible D = [(A-C)*B / (100-B)]	Initial Spares allowed (₹ in lakh)
Asset-1	Transmission Line	10405.67	1	56.33	104.54	56.33
	Sub-station	15219.07	5	576.47	770.66	576.47
Asset-2(a)	Sub-station	3340.38	1	128.21	169.06	128.21
Asset-2(b)	Sub-station	2412.15	1	87.43	122.35	87.43



Capital cost as on COD

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

(₹ in lakh)

Asset	Capital cost as on COD as per Auditor's Certificate	Less: Accrual IDC discharged after COD	Less: IDC Disallowed	Less: IEDC Disallowed	Capital cost considered as on COD
Asset-1	23565.69	0.00	0.00	0.00	23565.69
Asset-2(a)	3693.76	35.72	45.45	72.63	3539.96
Asset-2(b)	2563.05	14.24	69.78	85.52	2393.50

Additional Capital Expenditure (ACE)

36. The Petitioner has claimed the following ACE and submitted Auditor's Certificate in support of the same in respect of the instant assets:-

(₹ in lakh)

Asset	Additional Capital Expenditure			
	2015-16	2016-17	2017-18	2018-19
Asset-1	349.94	4445.70	1791.98	781.34
Asset-2(a)	-	111.37	132.04	329.75
Asset-2(b)	-	189.25	64.95	92.47
Total	349.94	4746.32	1988.97	1203.56

37. COD of Asset-1, Asset-2(a) and Asset-2(b) has been approved as 18.3.2016, 5.10.2016 and 9.12.2016 respectively. Accordingly, cut-off date for all the assets is 31.3.2019 and ACE incurred during 2015-16 to 2018-19 is within the cut-off date.

38. BSPHCL has submitted that the Petitioner has claimed ACE during 2018-19 without any sanction from the Commission and has failed to furnish any explanation/ reason for such expenditure which was not envisaged during the approval of tariff and has contended that ACE claimed for 2018-19 may be disallowed. BSPHCL has also contended that in terms of Regulation 7(7) of the 2014 Tariff Regulations, the

Commission may direct the Petitioner to refund the excess transmission charges levied by the Petitioner.

39. The Petitioner has submitted that ACE after COD and before cut-off date incurred in case of the instant assets is towards balance and retention payment for undischarged liabilities recognized to be payable at a future date. The Petitioner vide affidavit dated 12.3.2020 has also submitted that ACE claimed is a part of the original scope of work. ACE has been claimed under Regulation 14(1)(i) (undischarged liabilities) of the 2014 Tariff Regulations. The details of party-wise expenditure for the assets before the cut-off date i.e. 31.3.2019 as submitted by the Petitioner is as under:

Asset	Name of the Party	TL/SS	Original Liability as on COD	Discharge				Outstanding Liability as on 31.3.2019
				2015-16	2016-17	2017-18	2018-19	
Asset-1	KEC Int. Ltd.	Sub-station	1140.98	0.00	695.75	114.62	318.17	12.44
	Pinggao Group Co. Ltd.	Sub-station	3004.91	0.00	2082.21	37.57	463.17	421.96
	GE T&D India Ltd.	Sub-station	50.77	0.00	0.00	42.00	0.00	8.77
	Chinki Const. Pvt. Ltd. and others.	Building and Civil Works	807.90	0.00	510.10	297.80	0.00	0.00
	Land	Land	392.88	0.00	235.73	157.15	0.00	0.00
	Jyoti Structures Ltd.	TL	1627.33	282.65	591.45	753.23	0.00	0.00
	M/s. Alstom	TL	787.37	67.29	330.46	389.62	0.00	0.00
	Sub-Total		7812.13	349.94	4445.70	1791.98	781.34	443.17
Asset-2(a)	KEC Int. Ltd.	Sub-station	79.37	0.00	10.98	0.00	63.89	4.50
	Pinggao Group Co. Ltd.	Sub-station	203.73	0.00	32.86	0.00	93.00	77.87
	Chinki Const. Pvt. Ltd. and others.	Building and Civil Works	258.15	0.00	0.00	122.68	101.43	34.04
	Land	Land	71.43	0.00	0.00	0.00	71.43	0.00
	Sub-Total		612.68	0.00	43.84	122.68	329.75	116.41
Asset-2(b)	KEC Int. Ltd.	Sub-station	79.34	0.00	40.20	10.77	23.11	5.25
	Pinggao Group Co. Ltd.	Sub-station	203.60	0.00	110.25	12.81	33.65	46.89
	GE T&D India Ltd.	Sub-station	20.12	0.00	10.06	1.29	0.00	8.77
	Chinki Const. Pvt. Ltd. and	Building and Civil	37.55	0.00	0.00	2.55	0.00	35.00



	others.	Works						
	Land	Land	35.71	0.00	0.00	0.00	35.71	0.00
	Sub-Total		376.32	0.00	160.51	27.43	92.47	95.91

40. As regards ACE claim of ₹247.72 lakh in case of Asset-1 in excess of the amount allowed vide order dated 26.5.2016 in Petition No. 258/TT/2015, the Petitioner has submitted that while projecting the estimated ACE, contracts were not closed, and liabilities were not finalised. However, in the instant true-up petition, ACE is claimed based on actual payments made to the contractor after receipt of final invoices from the contractor with due reconciliation in accordance with contractual clauses as per provisions of contract and incorporating the amendments. The Petitioner has further submitted that the actual capital expenditure incurred by the Petitioner after closure of contract may happen to be higher or lower than the estimated ACE prepared and submitted.

41. We have considered the submissions of the Petitioner and BSPHCL. It is noted that the Petitioner has claimed ACE including the accrued IDC discharged during the period from 2015-16 to 2018-19. Since, we have disallowed IDC on account of additional time over-run in case of Assets-2(a) and 2(b) from anticipated COD to actual COD, IDC claimed by the Petitioner as ACE has also been reduced accordingly.

42. The actual audited ACE claimed by the Petitioner is within the cut-off date and the same has been considered for computation of total capital cost as on 31.3.2019. ACE claimed for the period 2015-16 to 2018-19 is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations. The approved ACE from COD to 31.3.2019 in respect of the assets covered in the instant petition is summarized as under:



(₹ in lakh)

Assets	Particulars	2015-16	2016-17	2017-18	2018-19	Total
Asset-1	ACE	349.94	4445.70	1791.98	781.34	7368.96
	Un-discharged IDC	0.00	0.00	0.00	0.00	0.00
	Total ACE	349.94	4445.70	1791.98	781.34	7368.96
Asset-2(a)	ACE	0.00	43.84	122.68	329.75	496.27
	Un-discharged IDC	0.00	34.58	1.14	0.00	35.72
	Total ACE	0.00	78.42	123.82	329.75	531.99
Asset-2(b)	ACE	0.00	160.51	27.43	92.47	280.41
	Un-discharged IDC	0.00	10.24	4.00	0.0	14.24
	Total ACE	0.00	170.75	31.43	92.47	294.65

43. Accordingly, the capital cost as on COD, ACE for the 2014-19 period and capital cost as on 31.3.2019 considered for truing up of the tariff for the 2014-19 period is as under:

(₹ in lakh)

Asset-1	Revised apportioned approved capital cost	Capital cost as on COD	Additional Capital Expenditure				Total capital cost as on 31.3.2019
			2015-16	2016-17	2017-18	2018-19	
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015	31377.83	23565.69	349.94	4690.47	2080.83	0.00	30686.93
As claimed in the instant Petition	31377.83	23565.69	349.94	4445.70	1791.98	781.34	30934.65
Approved in this order	31377.83	23565.69	349.94	4445.70	1791.98	781.34	30934.65

(₹ in lakh)

Asset-2(a)	Revised apportioned approved capital cost	Capital cost as on COD	Additional Capital Expenditure				Total capital cost as on 31.3.2019
			2015-16	2016-17	2017-18	2018-19	
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 (Combined Asset-2(a) and 2(b))	4642.89	4901.28	0.00	898.42	609.68	288.75	6698.13
As claimed in the instant Petition	4642.89	3616.87	0.00	111.37	132.04	329.75	4190.03
Approved in this order	4642.89	3539.96	0.00	78.42	123.82	329.75	4071.95



(₹ in lakh)

Asset-2(b)	Revised apportioned approved capital cost	Capital Cost as on COD	Additional Capital Expenditure			Total capital cost as on 31.3.2019
			2016-17	2017-18	2018-19	
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 (Combined Asset-2(a) and 2(b))	3030.28	4901.28	898.42	609.68	288.75	6698.13
Claimed by the Petitioner in the instant petition	3030.28	2496.79	189.25	64.95	92.47	2843.46
Approved after true-up in this order	3030.28	2393.50	170.75	31.43	92.47	2688.15

Debt-Equity Ratio

44. The Petitioner has considered debt-equity ratio as 70:30 as on COD and for ACE. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during 2015-16 to 2018-19 period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of the debt-equity as on COD and 31.3.2019 considered for the purpose of tariff computation for the 2014-19 tariff period are as under:

Asset-1	As on COD		As on 31.3.2019	
	Capital cost (₹ in lakh)	(%)	Capital cost (₹ in lakh)	(%)
Debt	16495.98	70.00	21654.27	70.00
Equity	7069.71	30.00	9280.38	30.00
Total	23565.69	100.00	30934.65	100.00

Asset-2(a)	As on COD		As on 31.3.2019	
	Capital cost (₹ in lakh)	(%)	Capital cost (₹ in lakh)	(%)
Debt	2477.97	70.00	2850.37	70.00
Equity	1061.99	30.00	1221.57	30.00
Total	3539.96	100.00	4071.94	100.00



Asset-2(b)	As on COD		As on 31.3.2019	
	Capital cost (₹ in lakh)	(%)	Capital cost (₹ in lakh)	(%)
Debt	1675.73	70.01	1882.00	70.01
Equity	717.77	29.99	806.16	29.99
Total	2393.50	100.00	2688.15	100.00

Interest on Loan (IoL)

45. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2014 for respective loans. The change in interest rate is due to floating rate of interest applicable for the project to be claimed/adjusted over a period of 5 years directly from the beneficiaries. We have considered the submissions of the Petitioner and accordingly calculated the IoL based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The interest on loan has been worked out as under:

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

46. The details of IoL calculated are as under:

(₹ in lakh)				
Asset-1				
Particular	2015-16 (Pro-rata for 14 days)	2016-17	2017-18	2018-19
Gross Normative Loan	16495.98	16740.94	19852.94	21107.33
Cumulative Repayments up to Previous Year	0.00	46.50	1377.71	2855.55
Net Loan-Opening	16495.98	16694.44	18475.24	18251.78
Addition due to Additional	244.96	3112.00	1254.39	546.94



Capitalisation				
Repayment during the year	46.50	1331.21	1477.84	1538.74
Net Loan-Closing	16694.44	18475.24	18251.78	17259.98
Average Loan	16595.21	17584.84	18363.51	17755.88
Weighted Average Rate of Interest on Loan (%)	9.12	8.93	8.49	8.36
Interest on Loan	57.87	1570.65	1558.25	1483.82

(₹ in lakh)

Asset-2(a)			
Particular	2016-17 (Pro-rata for 178 days)	2017-18	2018-19
Gross Normative Loan	2477.97	2532.87	2619.54
Cumulative Repayments upto Previous Year	0.00	88.65	274.65
Net Loan-Opening	2477.97	2444.21	2344.89
Additions	54.90	86.67	230.83
Repayment during the year	88.65	186.00	193.98
Net Loan-Closing	2444.21	2344.89	2381.74
Average Loan	2461.09	2394.55	2363.31
Weighted Average Rate of Interest on Loan (%)	8.12	8.10	8.08
Interest on Loan	97.41	193.86	191.06

(₹ in lakh)

Asset-2(b)			
Particular	2016-17(Pro-rata for 113 days)	2017-18	2018-19
Gross Normative Loan	1675.73	1795.26	1817.27
Cumulative Repayments upto Previous Year	0.00	39.43	172.13
Net Loan-Opening	1675.73	1755.83	1645.14
Additions	119.53	22.00	64.73
Repayment during the year	39.43	132.69	135.00
Net Loan-Closing	1755.83	1645.14	1574.87
Average Loan	1715.78	1700.49	1610.01
Weighted Average Rate of Interest on Loan (%)	8.24	8.21	8.21
Interest on Loan	43.78	139.65	132.11

47. Accordingly, IoL approved vide order dated 26.5.2016 in Petition No. 258/TT/2015, IoL claimed by the Petitioner in the instant petition and trued-up IoL allowed in the instant order is as follows:



(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata for 14 days)	2016-17	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015	58.05	1612.18	1699.88	1628.59
Claimed by the Petitioner in the instant petition	57.87	1570.54	1556.69	1481.13
Approved after true-up in this order	57.87	1570.65	1558.25	1483.82

(₹ in lakh)

Asset-2(a)			
Particulars	2016-17 (Pro-rata for 178 days)	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 on anticipated COD (Combined Asset-2(a) and 2(b))	251.58	340.32	340.52
Claimed by the Petitioner in the instant petition	99.93	199.75	196.55
Approved after true-up in this order	97.41	193.86	191.06

(₹ in lakh)

Asset-2(b)			
Particulars	2016-17 (Pro-rata for 113 days)	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 on anticipated COD (Combined Asset-2(a) and 2(b))	251.58	340.32	340.52
Claimed by the Petitioner in the instant petition	45.77	147.10	139.78
Approved after true-up in this order	43.78	139.65	132.11

Return on Equity (RoE)

48. The Petitioner is entitled for Return on Equity for the instant assets in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is 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 (MAT) rate (t) (%)	Base rate (%)	Grossed up RoE [Base Rate/(1-t)] (%)
2014-15	21.018	15.50	19.624
2015-16	21.382	15.50	19.715
2016-17	21.338	15.50	19.704
2017-18	21.337	15.50	19.704
2018-19	21.549	15.50	19.757

49. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has already arrived at the effective tax rate for the Petitioner based on the notified MAT rates. The relevant portion of the order dated 27.4.2020 is as under:

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

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

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

50. The MAT rates considered in order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing-

up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Accordingly, the grossed up RoE rate is as follows:

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

51. Accordingly, RoE allowed for the transmission assets is as under:

(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata for 14 days)	2016-17	2017-18	2018-19
Opening Equity	7069.71	7174.69	8508.39	9045.98
Addition due to Additional Capitalization	104.98	1333.70	537.59	234.40
Closing Equity	7174.69	8508.39	9045.98	9280.38
Average Equity	7122.20	7841.54	8777.18	9163.18
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.705	19.705	19.705	19.758
Return on Equity	53.68	1545.17	1729.54	1810.46

(₹ in lakh)

Asset-2(a)			
Particulars	2016-17 (Pro-rata for 178 days)	2017-18	2018-19
Net Opening Equity	1061.99	1085.51	1122.65
Increase in Equity due to addition during the year	23.53	37.14	98.92
Closing Equity	1085.51	1122.65	1221.57
Average Equity	1073.75	1104.08	1172.11
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
Tax Rate applicable (%)	21.342	21.342	21.549
Applicable ROE Rate (%)	19.705	19.705	19.758
Return on Equity for the year	103.18	217.56	231.59

(₹ in lakh)

Asset-2(b)			
Particulars	2016-17 (Pro-rata for 113 days)	2017-18	2018-19
Net Opening Equity	717.77	768.99	778.42
Increase in Equity due to addition during the year	51.22	9.43	27.74
Closing Equity	768.99	778.42	806.16
Average Equity	743.38	773.70	792.29
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
Tax Rate applicable (%)	21.342	21.342	21.549
Applicable ROE Rate (%)	19.705	19.705	19.758
Return on Equity for the year	45.35	152.46	156.54

52. Accordingly, RoE approved vide order dated 26.5.2016 in Petition No. 258/TT/2015, RoE claimed by the Petitioner in the instant petition and true-up RoE allowed vide this order is as follows:

(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata for 14 days)	2016-17	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015	53.83	1552.45	1752.59	1814.10
Claimed by the Petitioner in the instant petition	53.71	1545.18	1729.55	1810.46
Approved after true-up in this order	53.68	1545.17	1729.54	1810.46

(₹ in lakh)

Asset-2(a)			
Particulars	2016-17 (Pro-rata for 178 days)	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 on anticipated COD (Combined Asset-2(a) and 2(b))	251.31	360.88	387.43
Claimed by the Petitioner in the instant petition	105.87	224.30	238.59
Approved after true-up in this order	103.18	217.56	231.59



(₹ in lakh)

Asset-2(b)			
Particulars	2016-17 (Pro-rata for 113 days)	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 on anticipated COD (Combined Asset-2(a) and 2(b))	251.31	360.88	387.43
Claimed by the Petitioner in the instant petition	47.41	160.65	165.74
Approved after true-up in this order	45.35	152.46	156.54

Depreciation

53. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed for Assets-1 and 2 in order dated 26.5.2016 in Petition No. 258/TT/2015. The Petitioner has neither given any justification for claiming higher depreciation than that was allowed earlier in order nor made any specific prayer for allowing higher depreciation in this petition.

54. Subsequently, it was identified that in Petition No. 258/TT/2015 for tariff determination of the instant assets for the 2014-19 tariff period, the Petitioner had submitted capital cost of IT equipment in Sub-station cost and therefore depreciation for IT equipment was allowed @5.28% of the corresponding capital cost. The Petitioner now at the time of truing-up for the 2014-19 period has segregated the IT equipment cost from Sub-station cost and has considered depreciation rate for IT equipment @15% and the salvage value as NIL as per the 2014 Tariff Regulations. Similar issue had come up in Petition No. 19/TT/2020 wherein the Commission vide order dated 9.5.2020 decided 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 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. In line with above decision, the Gross Block during the tariff period 2014-19 has been depreciated at weighted average rate of depreciation (WAROD) (as placed in Annexure-1). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during the 2014-19 period is as under:

(₹ in lakh)				
Asset-1				
Particulars	2015-16 (Pro-rata for 14 days)	2016-17	2017-18	2018-19
Opening Gross Block	23565.69	23915.63	28361.33	30153.31
Addition during 2014-19 due to Additional Capitalisation	349.94	4445.70	1791.98	781.34
Closing Gross Block	23915.63	28361.33	30153.31	30934.65
Average Gross Block	23740.66	26138.48	29257.32	30543.98
Weighted average rate of Depreciation (WAROD) (%)	5.12	5.09	5.05	5.04
Balance useful life of the asset at the beginning of the year (Years)	29	29	28	27
Aggregate Depreciable Value	20829.15	22881.11	25511.27	26598.55



Depreciation during the year	46.50	1331.21	1477.84	1538.74
Aggregate Cumulative Depreciation	46.50	1377.71	2855.55	4394.29
Remaining Aggregate Depreciable Value	20782.65	21503.40	22655.72	22204.25

(₹ in lakh)

Asset-2(a)			
Particulars	2016-17 (Pro-rata for 178 days)	2017-18	2018-19
Opening Gross Block	3539.96	3618.38	3742.20
Additional Capitalisation	78.42	123.82	329.75
Closing Gross Block	3618.38	3742.20	4071.95
Average Gross Block	3579.17	3680.29	3907.07
Balance useful life (at the beginning of the year)	24	24	23
Rate of Depreciation (%)	5.08	5.05	4.96
Aggregate Depreciable Value	3127.61	3218.61	3390.58
Depreciation during the year	88.65	186.00	193.98
Cumulative Aggregate Depreciation	88.65	274.65	468.63
Remaining Aggregate Depreciable	3038.95	2943.97	2921.94

(₹ in lakh)

Asset-2(b)			
Particular	2016-17 (Pro-rata for 113 days)	2017-18	2018-19
Opening Gross Block	2393.50	2564.25	2595.68
Additional Capitalisation	170.75	31.43	92.47
Closing Gross Block	2564.25	2595.68	2688.15
Average Gross Block	2478.88	2579.97	2641.92
Balance useful life (at the beginning of the year)	24	24	23
Rate of Depreciation (%)	5.14	5.14	5.11
Aggregate Depreciable Value	2185.36	2276.35	2316.03
Depreciation during the year	39.43	132.69	135.00
Cumulative Aggregate Depreciation	39.43	172.13	307.13
Remaining Aggregate Depreciable Value	2145.93	2104.22	2008.90

56. Accordingly, the depreciation approved vide order dated 26.5.2016 in Petition No. 258/TT/2015, depreciation claimed by the Petitioner in the instant petition and trued-up depreciation allowed vide this order is as follows:

(₹ in lakh)

Asset-1				
Particulars	2015-16	2016-17	2017-18	2018-19

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	(Pro-rata for 14 days)			
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015	46.63	1334.40	1489.38	1534.80
Claimed by the Petitioner in the instant petition	46.99	1343.90	1490.53	1551.43
Approved after true-up in this order	46.50	1331.21	1477.84	1538.74

(₹ in lakh)

Asset-2(a)			
Particulars	2016-17 (Pro-rata for 178 days)	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 on anticipated COD (Combined Asset-2(a) and 2(b))	209.68	300.14	321.89
Claimed by the Petitioner in the instant petition	91.87	193.62	201.75
Approved after true-up in this order	88.65	186.00	193.98

(₹ in lakh)

Asset-2(b)			
Particulars	2016-17 (Pro-rata for 113 days)	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 on anticipated COD(Combined Asset-2(a) and 2(b))	209.68	300.14	321.89
Claimed by the Petitioner in the instant petition	41.61	141.10	144.28
Approved after true-up in this order	39.43	132.69	135.00

Operation & Maintenance Expenses (O&M Expenses)

57. The Petitioner has claimed O&M Expenses as per the norms specified in Regulation 29(4)(a) of the 2014 Tariff Regulations and the same is allowed. The O&M Expenses allowed for the transmission assets are given as under:

(₹ in lakh)

Asset-I				
Particulars	2015-16 (Pro-rata for 14 days)	2016-17	2017-18	2018-19



Sub-station Bays				
400 kV Bay (GIS) at Kishanganj and Purnea	6	6	6	6
Norm (₹ lakh/bay)	53.25	55.02	56.84	58.73
Total	319.50	330.12	341.04	352.38
220 kV Bay (GIS) at Kishanganj	5	5	5	5
Norm (₹ lakh/bay)	43.61	45.06	46.55	48.10
Total	218.05	225.30	232.75	240.50
Total Sub-station O&M Expenses	537.55	555.42	573.79	592.88
Transmission Line				
Norms for AC Lines				
LILO of both circuit of 400kV Siliguri-Purnea line (km)	5.44	5.44	5.44	5.44
Norm [D/C Bundled with 4 or more sub-conductor] (₹ lakh/km)	1.10	1.13	1.17	1.21
Total	5.97	6.17	6.37	6.59
LILO of both circuit of 400kV Siliguri-Dhalkhola line (km)	15.298	15.298	15.298	15.298
Norms for D/C Single Conductor (₹ lakh/km)	0.31	0.32	0.33	0.35
Total O&M	4.79	4.96	5.11	5.29
LILO of both circuit of 400kV Siliguri-Purnea line (km)	5.63	5.63	5.63	5.63
Norms for Multi Ckt Bundled with 4 or more sub-conductor(₹ lakh/km)	1.93	1.99	2.06	2.12
Total O&M	10.84	11.20	11.57	11.96
LILO of both circuit of 400kV Siliguri-Dhalkhola line (km)	5.222	5.222	5.222	5.222
Norms for Multi Ckt Twin/Triple (₹ lakh/km)	1.28	1.32	1.37	1.41
Total O&M	6.69	6.91	7.14	7.38
Total O&M for Transmission Line	28.30	29.24	30.20	31.22
Total O&M Expense for Asset-1 (₹ in lakh)	21.64	584.66	603.99	624.10

(₹ in lakh)

Asset-2(a)			
Particulars	2016-17 (Pro-rata for 178 days)	2017-18	2018-19
Norms- Sub-station Bays (₹ lakh/bay)			
400 kV Bay (GIS)	55.02	56.84	58.73
220 kV Bay (GIS)	45.06	46.55	48.10
Number of bays			
400 kV Bay (GIS) at Kishanganj	1	1	1
220 kV Bay (GIS) at Kishanganj	1	1	1
Total O&M Expense (₹ in lakh)	48.81	103.39	106.83

(₹ in lakh)

Asset-2(b)

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Particulars	2016-17	2017-18	2018-19
Norms- Sub-station Bays (₹ lakh/bay)			
400 kV Bay (GIS)	55.02	56.84	58.73
Number of bays			
400 kV Bay (GIS) at Kishanganj	1	1	1
Total O&M Expense (₹ in lakh)	55.02	56.84	58.73
Pro-rata O&M Expense (₹ in lakh)	17.03	56.84	58.73

58. Accordingly, the O&M Expenses approved vide order dated 26.5.2016 in Petition No. 258/TT/2015, O&M Expenses claimed in the instant petition and trued-up O&M Expenses allowed in this order is as follows:

(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata for 14 days)	2016-17	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015	21.64	584.66	603.99	624.10
Claimed by the Petitioner in the instant petition	21.64	584.66	603.99	624.10
Approved after true-up in this order	21.64	584.66	603.99	624.10

(₹ in lakh)

Asset-2(a)			
Particulars	2016-17 (Pro-rata for 178 days)	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 on anticipated COD (Combined Asset-2(a) and 2(b))	123.23	160.23	165.56
Claimed by the Petitioner in the instant petition	48.80	103.39	106.83
Approved after true-up in this order	48.81	103.39	106.83

(₹ in lakh)

Asset-2(b)			
Particulars	2016-17 (Pro-rata for 113 days)	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 on anticipated COD (Combined Asset-2(a) and 2(b))	123.23	160.23	165.56
Claimed by the Petitioner in the instant	17.03	56.84	58.73



petition			
Approved after true-up in this order	17.03	56.84	58.73

Interest on Working Capital (“IWC”)

59. The Petitioner is entitled to claim IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under:

(i) **Maintenance spares:**

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

(ii) **O & M Expenses:**

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

(iii) **Receivables:**

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

(iv) **Rate of interest on working capital:**

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

60. The trued up IWC allowed for the transmission assets is as under:

(₹ in lakh)				
Asset-1				
Particulars	2015-16 (Pro-rata for 14 days)	2016-17	2017-18	2018-19
O & M Expenses	47.15	48.72	50.33	52.01
Maintenance Spares	84.88	87.70	90.60	93.61
Receivables	804.03	861.06	918.78	933.81
Total Working Capital	936.06	997.48	1059.71	1079.43
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest of Working Capital	4.83	134.66	143.06	145.72

(₹ in lakh)



Asset-2(a)			
Particulars	2016-17 (Pro-rata for 178 days)	2017-18	2018-19
O & M Expenses	8.34	8.62	8.90
Maintenance Spares	15.01	15.51	16.02
Receivables	118.56	119.87	123.75
Total Working Capital	141.91	144.00	148.68
Rate of Interest (%)	12.80	12.80	12.80
Interest on working capital	8.86	18.43	19.03

(₹ in lakh)

Asset-2(b)			
Particulars	2016-17 (Pro-rata for 114 days)	2017-18	2018-19
O & M Expenses	4.59	4.74	4.89
Maintenance Spares	8.25	8.53	8.81
Receivables	80.37	82.31	82.45
Total Working Capital	93.21	95.58	96.15
Rate of Interest (%)	12.80	12.80	12.80
Interest on working capital	3.69	12.23	12.31

61. Accordingly, IWC approved vide order dated 26.5.2016 in Petition No. 258/TT/2015, IWC claimed by the Petitioner in the instant petition and trued-up IWC allowed vide this order is as follows:

(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata for 14 days)	2016-17	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015	4.85	135.86	147.12	149.05
Claimed by the Petitioner in the instant petition	4.85	134.95	143.32	145.95
Approved after true-up in this order	4.83	134.66	143.06	145.72

(₹ in lakh)

Asset-2(a)			
Particulars	2016-17 (Pro-rata for 178 days)	2017-18	2018-19



Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 on anticipated COD (Combined Asset-2(a) and 2(b))	23.21	31.90	33.31
Claimed by the Petitioner in the instant petition	9.04	18.87	19.47
Approved after true-up in this order	8.86	18.43	19.03

(₹ in lakh)

Asset-2(b)			
Particulars	2016-17 (Pro-rata for 113 days)	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 on anticipated COD (Combined Asset-2(a) and 2(b))	23.21	31.90	33.31
Claimed by the Petitioner in the instant petition	3.83	12.76	12.88
Approved after true-up in this order	3.69	12.23	12.31

Annual Fixed Charges for the 2014-19 Tariff Period

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

(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata for 14 days)	2016-17	2017-18	2018-19
Depreciation	46.50	1331.21	1477.84	1538.74
Interest on Loan	57.87	1570.65	1558.25	1483.82
Return on Equity	53.68	1545.17	1729.54	1810.46
Int. on Working Capital	4.83	134.66	143.06	145.72
Op. and Maintenance	21.64	584.66	603.99	624.10
Total	184.53	5166.35	5512.69	5602.84

(₹ in lakh)

Asset-2(a)			
Particulars	2016-17 (Pro-rata for 178 days)	2017-18	2018-19
Depreciation	88.65	186.00	193.98
Interest on Loan	97.41	193.86	191.06
Return on Equity	103.18	217.56	231.59
Int. on Working Capital	8.86	18.43	19.03
Op. and Maintenance	48.81	103.39	106.83
Total	346.91	719.24	742.49

(₹ in lakh)



Asset-2(b)			
Particulars	2016-17 (Pro-rata for 113 days)	2017-18	2018-19
Depreciation	39.43	132.69	135.00
Interest on Loan	43.78	139.65	132.11
Return on Equity	45.35	152.46	156.54
Int. on Working Capital	3.69	12.23	12.31
Op. and Maintenance	17.03	56.84	58.73
Total	149.29	493.88	494.69

63. The annual fixed charges approved vide order dated 26.5.2016 in Petition No. 258/TT/2015, claimed by the Petitioner in the instant petition and trued up annual fixed charges vide this order for 2014-19 period is as follows:

(₹ in lakh)

Asset-1				
Particulars	2015-16 (Pro-rata for 14 days)	2016-17	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015	185.06	5219.55	5692.96	5750.63
Claimed by the Petitioner in the instant petition	185.07	5179.23	5524.07	5613.07
Approved after true-up in this order	184.53	5166.35	5512.69	5602.84

(₹ in lakh)

Asset-2(a)			
Particulars	2016-17 (Pro-rata for 178 days)	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 on anticipated COD (Combined Asset-2(a) and 2(b))	859.00	1193.48	1248.71
Claimed by the Petitioner in the instant petition	355.51	739.93	763.19
Approved after true-up in this order	346.91	719.24	742.49

(₹ in lakh)

Asset-2(b)			
Particulars	2016-17 (Pro-rata for 113 days)	2017-18	2018-19
Approved vide order dated 26.5.2016 in Petition No. 258/TT/2015 on anticipated COD (Combined Asset-2(a) and 2(b))	859.00	1193.48	1248.71
Claimed by the Petitioner in the instant	155.65	518.45	521.41



petition			
Approved after true-up in this order	149.29	493.88	494.69

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

64. The Petitioner has submitted the tariff forms for Combined Asset as a single asset. Accordingly, as per proviso (i) of Regulation 8(1) of 2019 Tariff Regulations, single tariff for the Combined Asset has been worked out for the 2019-24 tariff period.

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

(₹ in lakh)					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	1942.07	1958.70	1958.70	1952.75	1934.01
Interest on Loan	1721.82	1575.55	1412.35	1249.07	1085.47
Return on Equity	2157.76	2176.23	2176.23	2176.23	2176.23
Interest on Working Capital	116.85	116.49	115.09	113.65	111.74
Operation and Maintenance	672.52	696.35	720.59	746.17	771.19
Total	6611.02	6523.32	6382.96	6237.87	6078.64

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

(₹ in lakh)					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
O&M expenses	56.04	58.03	60.05	62.18	64.27
Maintenance Spares	100.87	104.45	108.09	111.93	115.68
Receivables	812.82	804.24	786.93	769.05	747.37
Total	969.74	966.72	955.06	943.15	927.31
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	116.85	116.49	115.09	113.65	111.74

Effective Date of Commercial Operation (E-COD)



67. The Petitioner has claimed E-COD of the combined asset as 29.4.2016. However, based on the trued up admitted capital cost and actual COD of the assets, E-COD has been worked out as follows:

Computation of Effective COD						
Assets	Actual COD	Admitted capital cost as on 31.3.2019 (₹ in lakh)	Weight of the cost (in %)	No. of days from last COD	Weighted days	Effective COD (latest COD – Total weighted days)
Asset-1	18.3.2016	30934.65	82.07%	266.00	218.30	27.4.2016
Asset-2(a)	5.10.2016	4071.95	10.80%	65.00	7.02	
Asset-2(b)	9.12.2016	2688.15	7.13%	0.00	0.00	
Total		37694.75	100.00%		225.32	

68. E-COD has been 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)

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

70. The combined asset may have multiple elements (i.e. Land, Building, Transmission line, Sub-station and PLCC) and each element may have different span of life. Therefore, the concept of Weighted Average Life (WAL) has been used as the useful life of the project as whole.

71. The Weighted Average Life (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 it was defined in the 2014 Tariff Regulations prevailing at the time of actual COD of the individual



assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, the Weighted Average Life (WAL) of the Combined Asset has been worked out as under:

Particulars	Combined Capital Cost (₹ in lakh) (a)	Life as per 2019 Regulation (Years) (b)	Weighted Cost (c)=(a) x (b)	Weighted Average Life = (d)= (c) ÷(a)
Land	1251.92	0	0.00	27.43 Years (rounded off to 27 years)
Building	1626.17	25	40654.30	
Transmission Line	12884.62	35	450961.70	
Sub-station	21477.44	25	536935.99	
PLCC	291.20	15	4368.00	
Leasehold Land	0.00	25	0.00	
IT Equipment and software	163.40	7	1089.31	
Total	37694.75		1034009.30	

72. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. Effective COD of the assets being 27.4.2016, the lapsed life of the project as a whole works out as two (02) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from Effective COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 25 (=27 minus 2) years.

Capital Cost

73. Regulation 19 of the 2019 Tariff Regulations provides as under: -

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

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

(a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of



the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

(c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;

(e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;

(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;

(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;

(h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;

(i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;

(k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;

(l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;

(m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;

(n) Expenditure on account of change in law and force majeure events; and

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

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

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;

(b) Additional Capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;

(c) Capital expenditure on account of 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 inconformity with National R&R Policy and R&R package as approved; and
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area

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

- (a) The assets forming part of the project, but not in use, as declared in the tariff petition;
- (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."

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

(₹ in lakh)				
Assets	Apportioned approved	Capital cost claimed as on	ACE claimed in	Estimated completion



	capital cost (RCE)	31.3.2019	2019-20	capital cost
Asset-1	31377.83	30934.65	443.17	31377.82
Asset-2(a)	4642.89	4190.03	116.41	4306.44
Asset-2(b)	3030.28	2843.46	95.91	2939.37
Total	39051.00	37968.14	655.49	38623.63

75. Against the overall apportioned approved capital cost (as per RCE) of ₹39501.00 lakh, the estimated completion cost including ACE is ₹38623.63 lakh. The individual cost of each asset is also within the respective RCE apportioned cost. Therefore, there is no cost over-run.

76. The capital cost has been dealt with in line with Regulation 19(3) of the 2019 Tariff Regulations. The element wise capital cost (i.e. land, building, transmission line, sub-station and PLCC) as admitted by the Commission as on 31.3.2019 for the instant 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)

Particulars	Asset-1	Asset-2(a)	Asset-2(b)	Combined capital cost (a)
Land	990.04	175.48	86.40	1251.92
Building	1276.50	304.87	44.80	1626.17
Transmission Line	12884.62	0.00	0.00	12884.62
Sub Station	15361.76	3571.88	2543.80	21477.44
PLCC	291.20	0.00	0.00	291.20
Leasehold Land	0.00	0.00	0.00	0.00
IT Equipment and software	130.53	19.71	13.15	163.40
Total	30934.65	4071.95	2688.15	37694.75

77. The trued-up capital cost of ₹37694.75 lakh for Combined Asset is considered as admitted capital cost as on 1.4.2019 for working out tariff for the 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 up to the cut-off date

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

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

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

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

25. Additional 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 of ₹655.49 lakh for the 2019-24 tariff period for the Combined Asset. The breakup of ACE across assets as submitted by the Petitioner is as follows:

(₹ in lakh)

Assets	Projected Additional Capital Expenditure (2019-20)	Reason for Additional Capital Expenditure
Asset-1	443.17	After the cut-off date and covered under Regulation 25(1)(d) of the 2019 Tariff Regulations
Asset-2(a)	116.41	
Asset-2(b)	95.91	
Total	655.49	

80. The Petitioner vide affidavit dated 12.3.2020 has submitted that ACE claimed for the period 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 along with LOA No. for balance and retention payments are as under:

(₹ in lakh)

Asset	Name of the Party	TL/SS	Original liability as on 1.4.2019	Discharge during 2019-20	Outstanding liability as on 31.3.2024
Asset-1	KEC Int. Ltd.	Sub-station	12.44	12.44	0.00
	Pinggao Group Co. Ltd.	Sub-station	421.96	421.96	0.00
	GE T&D India Ltd.	Sub-station	8.77	8.77	0.00
	Chinki Const. Pvt. Ltd. and others.	Building and Civil Works	0.00	0.00	0.00
	Land	Land	0.00	0.00	0.00
	Jyoti Structures Ltd.	TL	0.00	0.00	0.00
	M/s. Alstom	TL	0.00	0.00	0.00
	Sub-Total		443.17	443.17	0.00
Asset-2(a)	KEC Int. Ltd.	Sub-station	4.50	4.50	0.00
	Pinggao Group Co. Ltd.	Sub-station	77.87	77.87	0.00
	Chinki Const. Pvt. Ltd. and	Building and Civil	34.04	34.04	0.00



	others.	Works			
	Sub-Total		116.41	116.41	0.00
Asset-2(b)	KEC Int. Ltd.	Sub-station	5.25	5.25	0.00
	Pinggao Group Co. Ltd.	Sub-station	46.89	46.89	0.00
	GE T&D India Ltd.	Sub-station	8.77	8.77	0.00
	Chinki Const. Pvt. Ltd. and others.	Building and Civil Works	35.00	35.00	0.00
	Sub-Total		95.91	95.91	0.00

81. It is observed that the entire ACE claimed for the 2019-24 period falls beyond the cut-off date. The Petitioner is directed to submit the actual details of ACE during 2019-24 at the time of truing-up. The ACE allowed is summarized below which is subject to true-up.

(₹ in lakh)

Assets	Admitted additional capital expenditure (2019-20)
Asset-1	443.17
Asset-2(a)	116.41
Asset-2(b)	95.91
Total	655.49

Capital Cost for the 2019-24 Tariff Period

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

(₹ in lakh)

Capital Cost allowed as on 1.4.2019	ACE allowed for the year 2019-20	Total estimated completion capital cost up to 31.3.2024
37694.75	655.49	38350.24

Debt-Equity Ratio

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

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

Provided that:



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

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

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

(3). In case of the generating station and the transmission 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.”

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

Combined Asset	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	26386.64	70.00	26845.48	70.00
Equity	11308.11	30.00	11504.76	30.00
Total	37694.75	100.00	38350.24	100.00



Return on Equity (RoE)

85. 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.”

86. The Petitioner has submitted that MAT rate is applicable to the Petitioner's 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	Combined Asset				
	2019-20	2020-21	2021-22	2022-23	2023-24
Net Opening Equity	11308.11	11504.76	11504.76	11504.76	11504.76
Increase in Equity due to addition during the year	196.65	0.00	0.00	0.00	0.00
Closing Equity	11504.76	11504.76	11504.76	11504.76	11504.76
Average Equity	11406.43	11504.76	11504.76	11504.76	11504.76
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Applicable ROE Rate (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity for the year	2142.36	2160.82	2160.82	2160.82	2160.82

Interest on Loan (IoL)

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

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

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

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

88. The weighted average rate of IoL has been considered on the basis of the 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, the IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL allowed for the Combined Asset is as under:

(₹ in lakh)

Particular	Combined Assets				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	26386.64	26845.48	26845.48	26845.48	26845.48
Cumulative Repayments upto Previous Year	5170.06	7098.26	9043.11	10987.95	12932.80
Net Loan-Opening	21216.59	19747.22	17802.38	15857.53	13912.69
Additions	458.84	0.00	0.00	0.00	0.00
Repayment during the year	1928.21	1944.84	1944.84	1944.84	1944.84
Net Loan-Closing	19747.22	17802.38	15857.53	13912.69	11967.84
Average Loan	20481.90	18774.80	16829.95	14885.11	12940.27
Weighted Average Rate of Interest on Loan (%)	8.363	8.350	8.352	8.353	8.343
Interest on Loan	1712.84	1567.73	1405.69	1243.32	1079.61

Depreciation

89. Regulation 33 of the 2019 Tariff Regulations provides as under: -

“33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission project or element thereof including communication project. In case of the tariff of all the units of a generating station or all elements of a transmission project including communication project 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 project 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 project, 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 project, weighted average life for the generating station of the transmission project 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 project:

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.”

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

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	37694.75	38350.24	38350.24	38350.24	38350.24
Additional Capital Expenditure during the year	655.49	0.00	0.00	0.00	0.00
Closing Capital Cost	38350.24	38350.24	38350.24	38350.24	38350.24
Average Capital Cost	38022.50	38350.24	38350.24	38350.24	38350.24
Rate of Depreciation (%)	5.07	5.07	5.07	5.07	5.07
Balance useful life at the beginning of the year	25	24	23	22	21
Aggregate Depreciable Value	33109.86	33404.83	33404.83	33404.83	33404.83
Depreciation during the year	1928.21	1944.84	1944.84	1944.84	1944.84
Cumulative Aggregate Depreciation	7098.26	9043.11	10987.95	12932.80	14877.64
Remaining Aggregate Depreciable Value at the end of the year	27915.89	26284.29	24341.08	22397.87	20454.66

Operation & Maintenance Expenses (O&M Expenses)

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



“35. Operation and Maintenance Expenses:

...

(3) Transmission system:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (Rs Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (Rs Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (Rs Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (Rs. Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh)(3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:



- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three 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.”

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2001-22	2022-23	2023-24
Transmission Line					
Norms (D/C Bundled with 4 or more sub-conductor) (₹	1.322	1.368	1.416	1.466	1.517



lakh/km)					
LILO of both ckts of 400 kV Siliguri-Purnea line (Line Length 5.444km)					
O&M	7.20	7.45	7.71	7.98	8.26
Norms (D/C Single Conductor) (₹ lakh/km)	0.377	0.391	0.404	0.419	0.433
LILO of both ckts of 220 kV Siliguri-Dhalkhola line (Line Length 15.298 km)					
O&M	5.77	5.98	6.18	6.41	6.62
Norms (Multi Ckt Bundled with 4 or more sub-conductor) (₹ lakh/km)	2.319	2.401	2.485	2.572	2.662
LILO of both ckts of 400 kV Siliguri-Purnea M/C line (Line Length 5.632km)					
O&M	13.06	13.52	14.00	14.49	14.99
Norms (Multi Ckt Twin/Triple Conductor) (₹ lakh/km)	1.544	1.598	1.654	1.713	1.773
LILO of both ckts of 220 kV Siliguri-Dhalkhola M/C Line (line Length 5.222km)					
O&M	8.06	8.34	8.64	8.95	9.26
Total Transmission Line	34.09	35.30	36.52	37.82	39.13
Sub-station					
Norm-400kV GIS bays (₹ lakh/bay)	22.505	23.296	24.115	24.962	25.837
No. of 400kV GIS bays	8	8	8	8	8
O&M	180.04	186.37	192.92	199.70	206.70
Norm-220kV GIS bays (₹ lakh/bay)	15.757	16.31	16.884	17.472	18.088
No. of 220kV GIS bays	6	6	6	6	6
O&M	94.54	97.86	101.30	104.83	108.53
Total Sub-station	274.58	284.23	294.22	304.53	315.22
Transformers					
Norm-400kV ICT (₹ lakh/ MVA)	0.358	0.371	0.384	0.398	0.411
Capacity (MVA)	1000	1000	1000	1000	1000
O&M	358.00	371.00	384.00	398.00	411.00
Communication System (PLCC)					
Project Cost (₹ lakh)	291.20	291.20	291.20	291.20	291.20
Norms (% of project cost)	2	2	2	2	2
PLCC	5.82	5.82	5.82	5.82	5.82
Total O&M Expenses	672.52	696.35	720.17	746.17	771.19

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

separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The relevant portions of the order dated 24.1.2021 in Petition No.126/TT/2020 are extracted hereunder.

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

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

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

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

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	201-22	2022-23	2023-24
Transmission Line					
Norms (D/C Bundled with 4 or more sub-conductor) (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517



LILO of both ckts of 400 kV Siliguri-Purnea line (Line Length 5.444km)					
O&M	7.20	7.45	7.71	7.98	8.26
Norms (D/C Single Conductor) (₹ lakh/km)	0.377	0.391	0.404	0.419	0.433
LILO of both ckts of 220 kV Siliguri-Dhalkhola line (Line Length 15.298 km)					
O&M	5.77	5.98	6.18	6.41	6.62
Norms (Multi Ckt Bundled with 4 or more sub-conductor) (₹ lakh/km)	2.319	2.401	2.485	2.572	2.662
LILO of both ckts of 400 kV Siliguri-Purnea M/C line (Line Length 5.632km)					
O&M	13.06	13.52	14.00	14.49	14.99
Norms (Multi Ckt Twin/Triple Conductor) (₹ lakh/km)	1.544	1.598	1.654	1.713	1.773
LILO of both ckts of 220 kV Siliguri-Dhalkhola M/C Line (line Length 5.222km)					
O&M	8.06	8.34	8.64	8.95	9.26
Total Transmission Line	34.09	35.30	36.52	37.82	39.13
Sub-station					
Norm-400kV GIS bays (₹ lakh/bay)	22.505	23.296	24.115	24.962	25.837
No. of 400kV GIS bays	8	8	8	8	8
O&M	180.04	186.37	192.92	199.70	206.70
Norm-220kV GIS bays (₹ lakh/bay)	15.757	16.31	16.884	17.472	18.088
No. of 220kV GIS bays	6	6	6	6	6
O&M	94.54	97.86	101.30	104.83	108.53
Total Sub-station	274.58	284.23	294.22	304.53	315.22
Transformers					
Norm-400kV ICT (₹ lakh/ MVA)	0.358	0.371	0.384	0.398	0.411
Capacity (MVA)	1000	1000	1000	1000	1000
O&M	358.00	371.00	384.00	398.00	411.00
Total O&M Expenses	666.67	690.52	714.75	740.35	765.36

Interest on Working Capital (IWC)

95. Regulations 34(1)(c), 34(3), 34(4) and 3(7) of the 2019 Tariff Regulations provide as under:

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

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

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

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

96. The Petitioner has submitted that it has computed interest on working capital for the 2019-24 period considering the bank rate as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of IWC considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, rate of IWC 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 have been worked as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	201-22	2022-23	2023-24
O & M Expenses	55.56	57.54	59.56	61.70	63.78
Maintenance Spares	100.00	103.58	107.21	111.05	114.80
Receivables	807.31	797.89	780.74	763.73	744.40
Total Working Capital	962.86	959.02	947.52	936.48	922.99
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on working capital	116.03	107.89	106.60	105.35	103.84

Annual Fixed Charges for the 2019-24 Tariff Period

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

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



Depreciation	1928.21	1944.84	1944.84	1944.84	1944.84
Interest on Loan	1712.84	1567.73	1405.69	1243.32	1079.61
Return on Equity	2142.36	2160.82	2160.82	2160.82	2160.82
Int. on Working Capital	116.03	107.89	106.60	105.35	103.84
Op. and Maintenance	666.67	690.52	714.75	740.35	765.36
Total	6566.10	6471.81	6332.70	6194.69	6054.47

Filing Fee and Publication Expenses

98. 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

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

Goods and Services Tax

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

Security Expenses

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

102. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. It is observed that the Petitioner has already filed 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

103. 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

104. The billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of Central Electricity Regulatory



Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

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

(₹ in lakh)					
Assets	Asset	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	Asset-1	184.53	5166.35	5512.69	5602.84
	Asset-2(a)	0.00	346.91	719.24	742.49
	Asset-2(b)	0.00	149.29	493.88	494.69

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

(₹ in lakh)					
Combined Asset	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	6566.10	6471.81	6332.70	6194.69	6054.47

107. This order disposes of Petition No. 99/TT/2020.

Sd/
(Arun Goyal)
Member

Sd/
(I. S. Jha)
Member

Sd/
(P. K. Pujari)
Chairperson



Annexure-I

Asset-1											
	Capital Expenditure as on COD (₹ in lakh)	Additional Capital Expenditure				Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations			
		2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)			2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Land	597.16	0.00	235.73	157.15	0.00	990.04	0.00	0.00	0.00	0.00	0.00
Building	468.60	0.00	510.10	297.80	0.00	1,276.50	3.34	0.60	24.17	37.66	42.64
Transmission Line	10469.92	349.94	921.91	1,142.85	0.00	12,884.62	5.28	21.50	595.63	650.14	680.31
Sub-Station	11640.28	0.00	2,745.96	194.18	781.34	15,361.76	5.28	23.51	687.10	764.72	790.47
PLCC	259.20	0.00	32.00	0.00	0.00	291.20	6.33	0.63	17.42	18.43	18.43
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00
IT Equipment and software	130.53	0.00	0.00	0.00	0.00	130.53	5.28	0.26	6.89	6.89	6.89
Total	23565.69	349.94	4,445.70	1,791.98	781.34	30,934.65		46.50	1331.21	1477.84	1538.74
Average Gross Block (₹ in lakh)								23740.66	26138.48	29257.32	30543.98
Weighted Average Rate of Depreciation (%)								5.12	5.09	5.05	5.04



Asset-2(a)									
	Capital Expenditure as on COD (₹ in lakh)	Additional Capital Expenditure			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations		
		2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)			2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Land	104.05	-	-	71.43	175.48	0.00	0.00	0.00	0.00
Building	86.97	1.20	115.26	101.43	304.87	3.34	1.43	4.87	8.49
Transmission Line	0.00	-	-	-	-	5.28	0.00	0.00	0.00
Sub-Station	3329.54	76.95	8.51	156.89	3,571.88	5.28	86.72	180.09	184.45
PLCC	0.00	-	-	-	-	6.33	0.00	0.00	0.00
Leasehold Land	0.00	-	-	-	-	3.34	0.00	0.00	0.00
IT Equipment and software	19.40	0.27	0.05	-	19.71	5.28	0.50	1.04	1.04
Total	3,539.96	78.42	123.82	329.75	4,071.95		88.65	186.00	193.98
						Average Gross Block (₹ in lakh)	3579.17	3680.29	3907.07
						Weighted Average Rate of Depreciation (%)	5.08	5.05	4.96



Asset-2(b)									
	Capital Expenditure as on COD (₹ in lakh)	Additional Capital Expenditure			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations		
		2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)			2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Land	50.69	-	-	35.71	86.40	0.00	0.00	0.00	0.00
Building	42.77	0.47	1.56	-	44.80	3.34	0.44	1.47	1.50
Transmission Line	0.00	-	-	-	-	5.28	0.00	0.00	0.00
Sub-Station	2287.13	170.14	29.77	56.76	2,543.80	5.28	38.78	130.53	132.81
PLCC	0.00	-	-	-	-	6.33	0.00	0.00	0.00
Leasehold Land	0.00	-	-	-	-	3.34	0.00	0.00	0.00
IT Equipment and software	12.91	0.14	0.10	-	13.15	5.28	0.21	0.69	0.69
Total	2,393.50	170.75	31.43	92.47	2,688.15		39.43	132.69	135.00
					Average Gross Block (₹ in lakh)		2478.88	2579.97	2641.92
					Weighted Average Rate of Depreciation (%)		5.14	5.14	5.11



Annexure-II

Combined Asset									
2019-24	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)
Land	1251.08	0.00	1251.08	0.00	0.00	0.00	0.00	0.00	0.00
Building	1625.47	69.04	1694.51	3.34	55.44	56.60	56.60	56.60	56.60
Transmission Line	12884.62	0.00	12884.62	5.28	680.31	680.31	680.31	680.31	680.31
Sub-Station	21447.41	586.45	22033.86	5.28	1147.91	1163.39	1163.39	1163.39	1163.39
PLCC	291.20	0.00	291.20	6.33	18.43	18.43	18.43	18.43	18.43
Leasehold Land	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00
IT Equipment and Software	163.22	0.00	163.22	15.00	24.48	24.48	24.48	24.48	24.48
TOTAL	37663.00	655.49	38318.49		1926.57	1943.21	1943.21	1943.21	1943.21
			Average Gross Block (₹ in lakh)		37990.75	38318.49	38318.49	38318.49	38318.49
			Weighted Average Rate of Depreciation (%)		5.07	5.07	5.07	5.07	5.07

