

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 159/TT/2023

Coram:

**Shri Jishnu Barua, Chairperson
Shri Arun Goyal, Member
Shri P.K. Singh, Member**

Date of order: 08.04.2024

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for truing up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for **Asset-1:** LILO of Gladni-Hiranagar 220 kV S/C line at 400/220 kV Samba Sub-station (the lines are to be terminated at existing 220 kV line bays at Samba Sub-station); **Asset-2:** LILO of 400 kV Amritsar-Hamirpur Line at Jalandhar (One circuit of Parbati Pooling Station-Amritsar Line); **Asset-3:** 2 numbers 220 kV line bays at Bhinmal Sub-station; **Asset-4:** LILO of Agra Bharatpur 220 kV S/C Line at Agra Sub-station along with line bays; **Asset-5:** Associated bays of "1X315 MVA 400/220 kV ICT" at Agra Sub-station (ICT shifted from Ballabgarh); **Asset-6:** Associated bays of "1X315 MVA 400/220 kV ICT" at Kaithal Sub-station (ICT shifted from Ballabgarh); **Asset-7:** 2 numbers 220 kV bays at Kaithal Sub-station; **Asset-8:** 1X315 MVA 400/220 kV ICT at Agra Sub-station (Only ICT shifted from Ballabgarh Sub-station covered under Rihand Transmission System); **Asset-9:** 1X315 MVA 400/220 kV ICT at Kaithal Sub-station (Only ICT shifted from Ballabgarh Sub-station covered under Rihand Transmission System) under "Northern Region System Strengthening Scheme XXXIV" in the Northern Region".

And in the matter of:

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

.....Petitioner

Vs

1. Ajmer Vidyut Vitran Nagam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017.
2. Jaipur Vidyut Vitran Nagam Limited,



- 132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017.
3. Jodhpur Vidyut Vitran Nagam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017.
 4. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004.
 5. Punjab State Power Corporation Limited,
The Mall, PESB Head Office,
Patiala-147001.
 6. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula-134109.
 7. Jammu Kashmir Power Corporation Limited,
220/66/33 kV Gladni Sub-station,
SLDC Building,
Narwal, Jammu.
 8. Uttar Pradesh Power Corporation Limited,
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001.
 9. BSES Yamuna Power Limited,
B-Block, Shanti Kiran Building,
Karkardooma 2nd Floor,
New Delhi-110092.
 10. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi-110019.
 11. Tata Power Delhi Distribution Limited,
NDPL House, Hudson Lines Kingsway Camp,
Delhi-110009.
 12. Chandigarh Administration,
Sector-9, Chandigarh.
 13. Uttarakhand Power Corporation Limited,
Urja Bhawan,
Kanwali Road, Dehradun.



14. North Central Railway,
Allahabad.
15. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.
16. Haryana Vidyut Prasaran Nigam Limited,
Shakti Bhawan, C-4, Sector-6,
Panchkula-134019.

...Respondent(s)

For Petitioner : Shri B. B. Rath, PGCIL
Shri Zafrul Hasan, PGCIL
Ms. Supriya Singh, PGCIL
Shri Vivek Singh, PGCIL

For Respondents : None

ORDER

Power Grid Corporation of India Limited has filed the instant petition for truing up of transmission tariff for the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and determination of transmission tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) for the 2019-24 tariff period in respect of the following assets under “Northern Region System Strengthening Scheme XXXIV” (hereinafter referred to as “the transmission project”) in the Northern Region:

Asset-1: LILO of Gladni-Hiranagar 220 kV S/C line at 400/220 kV Samba Sub-station (the lines are to be terminated at existing 220 kV line bays at Samba Sub-station);

Asset-2: LILO of 400 kV Amritsar-Hamirpur Line at Jalandhar (One circuit of Parbati Pooling Station-Amritsar Line) ;

Asset-3: 2 numbers 220 kV line bays at Bhinmal Sub-station;



Asset-4: LILO of Agra-Bharatpur 220 kV S/C Line at Agra Sub-station along with line bays;

Asset-5: Associated bays of “1X315 MVA 400/220 kV ICT” at Agra Sub-station (ICT shifted from Ballabgarh);

Asset-6: Associated bays of “1X315 MVA 400/220 kV ICT” at Kaithal Sub-station (ICT shifted from Ballabgarh);

Asset-7: 2 numbers 220 kV bays at Kaithal Sub-station;

Asset-8: 1X315 MVA 400/220 kV ICT at Agra Sub-station (Only ICT shifted from Ballabgarh Sub-station covered under Rihand Transmission System);

Asset-9: 1X315 MVA 400/220 kV ICT at kaithal Sub-station (Only ICT shifted from Ballabgarh Sub-station (hereinafter referred to as the “transmission assets”).

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

“1) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 8 and 9 above.

2) 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 8 and 9 above for respective block.

3) 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.

4) 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.

5) 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.



- 6) Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately as mentioned at para 9.10 above.
- 7) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 8) 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.
- 9) Allow the petitioner to recover FERV on the foreign loans deployed as provided under clause 50 of the Tariff Regulations, 2014.
- 10) Condone the delay in filing the present petition caused due to prevailing Covid-19 pandemic.
- 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 follows:

- a. The Investment Approval (IA) of the transmission project was accorded by the Board of Directors of the Petitioner's Company vide Memorandum No. C/CP/NRSS-34 dated 9.3.2015 at an estimated cost of ₹14876 lakh, including an IDC of ₹924 lakh based on December 2014 price level. The Board of Directors of the Petitioner's Company vide Memorandum No. C/CP/RCE/NRSSXXXIV/PA1718-08-0C-CE003 approved the Revised Cost Estimates (RCE) dated 29.8.2017 for ₹15332 lakh including IDC of ₹578 lakh based on April 2017 price level.
- b. The scope of the transmission project was agreed upon in the 32nd meeting of the Standing Committee on Power System Planning of the Northern Region held on 31.8.2013. The transmission project along with a detailed project report, was discussed and agreed upon in the 26th meeting of TCC and the 29th meeting of the Northern Regional Power Committee held on 12.9.2013 and 13.9.2013, respectively. The scope of the transmission project was further



discussed in the 33rd meeting of the Empowered Committee on Transmission held on 30.9.2014.

c. The scope of work covered in the transmission project is as follows:

Transmission Line

- (i) LILO of Agra-Bharatpur 220 kV S/C line at Agra (PGCIL) Sub-station;
- (ii) LILO of Gladini (Jammu)-Hiranagar 220 kV S/C line at 400/220 kV Samba (PGCIL) Sub-station (the lines are to be terminated at existing 220 kV line bays at Samba Sub-station);
- (iii) LILO of one circuit of Parbati Pooling Station Amritsar 400 kV D/C line at Jalandhar (PGCIL) Sub-station.

Sub-stations

(i) **Agra 400/220 kV Sub-station**

400 kV:

1X315 MVA, 400/220 kV ICT (ICT shall be provided from the spared ICTs available after replacement of ICTs at Ballabgarh/Mandola Sub-station and shall be refurbished before installation)

ICT bay: One

220 kV:

ICT bay: One

Line bays: Two

(ii) **Kaithal 400/220 kV Sub-station**

400 kV:

1X315 MVA, 400/220 kV ICT 1 number (ICT shall be provided from the spared ICTs available after replacement of ICTs at Ballabgarh/ Mandola Sub-station and shall be refurbished before installation)

ICT bay: One



220 kV:

ICT bay: One

Line bays: Two

(iii) Bhinmal 400/220 kV Sub-station

220 kV:

ICT bay: One

(iv) Jalandhar 400/220 kV Sub-station

400 kV:

Line bays: Two

- d. All the transmission assets of the transmission project have achieved their CODs and are covered in the instant petition. The details of the petitions wherein the Commission allowed tariff of the transmission assets from the COD to 31.3.2019 are as follows:

Sl. No.	Asset	COD	Petition No.
1.	Asset-1: LILO of Gladni-Hiranagar 220 kV S/C line at 400/220 kV Samba (PG) Sub-station (the lines are to be terminated at existing 220 kV line bays at samba Sub-station)	4.6.2016	92/TT/2016
2.	Asset-2: LILO of 400 kV Amritsar-Hamirpur Line at Jalandhar (One circuit of Parbati PS-Amritsar Line)**	14.2.2017	148/TT/2017
3.	Asset-3: 2 numbers of 220 kV Line bays at Bhinmal Sub-station	25.4.2017	
4.	Asset-4: LILO of Agra-Bharatpur 220 kV S/C Line at Agra (PGCIL) Sub-station along with line bays	7.2.2019	
5.	Asset-5: Associated bays of "1X315 MVA 400/220 kV ICT" at Agra Sub-station (ICT shifted from Ballabgarh Sub-station)	26.6.2017	105/TT/2020
6.	Asset-6: Associated bays of "1X315 MVA 400/220 kV ICT" at Kaithal Sub-station (ICT shifted from Ballabgarh)	4.11.2017	
7.	Asset-7: 2 numbers 220 kV bays at Kaithal Sub-station*	24.11.2017	
8.	Asset-8: 1X315 MVA 400/220 kV ICT at Agra Sub-station (Only ICT shifted from Ballabgarh Sub-station covered under Rihand Transmission System)	26.6.2017	
9.	Asset-9: 1X315 MVA 400/220 kV ICT at Kaithal Sub-station (Only ICT shifted from Ballabgarh Sub-station covered under Rihand Transmission System)	4.11.2017	



*COD of Asset-7 was approved as 24.11.2017 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations as the Petitioner was not able to put Asset-IV into regular use due to the non-commissioning of the associated downstream transmission assets under the scope of HVPNL

** LILO of Parbati Pooling Station - Amritsar was done at Hamirpur Sub-station and thereafter LILO was done at Jalandhar Sub-station. Further, associated bays at Jalandhar are included in this asset.

Assets 8 and 9 are ICTs (Shifted from Ballabgarh Sub-station under Rihand Transmission System) associated with Assets-5 and 6. Therefore, CODs of Assets-8 and 9 were considered as 26.6.2017 and 4.11.2017 respectively matching with CODs of Assets-5 and 6.

e. As per the IA, the transmission project was to be put into commercial operation within 28 months from the date of IA, and the scheduled date of completion was 4.7.2017. Accordingly, the COD and time over-run in the case of the transmission assets are as follows:

Assets	Asset Nomenclature in previous petition	Asset	COD	Time over-run
Asset-1	Asset covered in Petition No. 92/TT/2016	LILO of Gladni-Hiranagar 220 kV S/C line at 400/220 kV Samba (PGCIL) Sub-station (the lines are to be terminated at existing 220 kV line bays at Samba Sub-station)	4.6.2016	NIL
Asset-2	Asset-II covered in Petition No. 148/TT/2017	LILO of 400 kV Amritsar-Hamirpur Line at Jalandhar (One circuit of Parbati Pooling Station-Amritsar Line)	14.2.2017	NIL
Asset-3	Asset-V covered in Petition No. 148/TT/2017	Two 220 kV Line bays at Bhinmal Sub-station	25.4.2017	NIL
Asset-4	Asset-I covered in Petition No. 105/TT/2020	LILO of Agra-Bharatpur 220 kV S/C Line at Agra (PGCIL) Sub-station along with line bays	7.2.2019	NIL
Asset-5	Asset-II covered in Petition No. 105/TT/2020	Associated bays of "1X315 MVA 400/220 kV ICT" at Agra Sub-station (ICT shifted from Ballabgarh Sub-station)	26.6.2017	NIL
Asset-6	Asset-III covered in Petition No. 105/TT/2020	Associated bays of "1X315 MVA 400/220 kV ICT" at Kaithal Sub-station (ICT shifted from Ballabgarh)	4.11.2017	118 days (not condoned)
Asset-7	Asset-IV covered in Petition No. 105/TT/2020	Two 220 kV bays at Kaithal Sub-station	24.11.2017	138 days (not condoned)



Assets	Asset Nomenclature in previous petition	Asset	COD	Time over-run
Asset-8	105/TT/2020	1X315 MVA 400/220 kV ICT at Agra Sub-station (Only ICT shifted from Ballabgarh Sub-station covered under Rihand Transmission System)	26.6.2017	NA
Asset-9	105/TT/2020	1X315 MVA 400/220 kV ICT at Kaithal Sub-station (Only ICT shifted from Ballabgarh Sub-Station covered under Rihand Transmission System)	4.11.2017	NA

f. The complete scope of the work as per IA is covered in the instant petition.

The transmission assets have been collectively referred to as "transmission assets" in the 2014-19 tariff period. The transmission assets except for Asset-7 have been combined as on 1.4.2019 and are collectively referred to as the "Combined Asset" in the 2019-24 tariff period. The tariff for Asset-7 from its COD to 31.3.2019 is allowed separately as its transmission charges are to be borne by HVPNL as per the Commission's order dated 31.8.2021 in Petition No.105/TT/2020 .

g. The tariff for the 2014-19 period for Asset-1 was determined vide order dated 28.7.2016 in Petition No. 92/TT/2016; for Assets-2 and 3 vide order dated 23.7.2018 in Petition No. 148/TT/2017, and that for Assets-4 to 9 vide order dated 31.8.2021 in Petition No. 105/TT/2020.

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments/objections have been received



from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. None of the respondents have filed any reply in the matter.

6. This order is issued considering the submissions made by the Petitioner in the petition, RoP reply filed vide affidavits dated 20.9.2023 and 18.10.2023.

7. The hearing in this matter was held on 27.9.2023, and order was reserved.

8. Having heard the representatives of the Petitioner and after perusal of the materials on record, we proceed to dispose of the petition.

9. The Petitioner has submitted that there is a delay in filing of the instant petition due to the Covid-19 pandemic and has requested to condone the same as it was beyond its control.

10. We have considered the submissions of the Petitioner. The Petitioner filed Petition No. 331/MP/2019, under Regulation 76 'Power to Relax' and under Regulation 77 'Power to Remove Difficulty' of the 2019 Tariff Regulations to relax the provisions of Regulation 9(2) of the 2019 Tariff Regulations which required the Petitioner to file the tariff petitions of the existing assets by 31.10.2019. The Commission in its order dated 28.10.2019 in Petition No. 331/MP/2019, after examination of the submissions of the Petitioner, relaxed the provisions of Regulation 9(2) of the 2019 Tariff Regulations and permitted the Petitioner to file the tariff petitions of the truing up of the existing assets for the 2014-19 period and the determination of tariff for the 2019-24 period by 31.1.2020, where the final orders for the 2014-19 period had already been issued.

11. As regards the existing assets, the Commission at the time of passing said order for the 2014-19 period observed that truing of the 2014-19 tariff period and the



determination of tariff of the 2019-24 period shall be filed by the Petitioner within three months from the date of issue of the final order for the 2014-19 period.

12. Later, NTPC and NHPC made representations seeking further extension of time. Taking into consideration the representations of NTPC and NHPC, the outbreak of the Covid-19 pandemic and the subsequent declaration of the lockdown by the Central Government, the Commission extended the date of filing of the truing up petitions of the 2014-19 period in the case of the existing generating stations and transmission licensees up to 30.6.2020 vide suo-motu orders dated 6.7.2020 and 23.7.2020 in Petition No. 7/SM/2020. The period was further extended up to 30.9.2020 in the case of NHPC and Teesta Urja Limited, on an application filed by them, vide order dated 6.7.2020 in Petition No.7/SM/2020, and that in the case of Teesta Valley Power Transmission Limited vide order dated 23.7.2020 in Petition No.7/SM/2020.

13. Accordingly, the Commission granted extension of time up to 30.9.2020 in the cases where tariff orders had already been issued and 90 days from the date of issue of the order where tariff orders were then to be issued. The tariff for the 2014-19 period was approved vide order dated 28.7.2016 in Petition No. 92/TT/2016 for Asset-1, vide order dated 23.7.2018 in Petition No. 148/TT/2017 for Assets-2 and 3 and vide order dated 31.8.2021 in Petition No. 105/TT/2020 for Assets-4 to 9. As per the Commission's order dated 28.10.2019 in Petition No. 331/MP/2019, the Petitioner should have filed the truing up petition latest by 30.11.2021. However, the Petitioner has filed the instant petition on 7.3.2023. Thus, there is a delay of 462 days in filing of the instant petition. Taking into consideration, the Covid-19 Pandemic and the consequent lockdown, the delay of 462 days in the filing of the instant petition is hereby condoned.



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

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

(₹ in lakh)

Particulars	Asset-1		
	2016-17 (pro-rata 301 days)	2017-18	2018-19
Depreciation	30.74	43.23	48.31
Interest on Loan	33.53	42.64	44.08
Return on Equity	34.78	49.27	55.10
O&M Expenses	2.49	3.12	3.22
Interest on Working Capital	2.29	3.11	3.38
Total	103.83	141.37	154.09

(₹ in lakh)

Particulars	Asset-2		
	2016-17 (pro-rata 46 days)	2017-18	2018-19
Depreciation	18.25	163.57	180.51
Interest on Loan	19.55	162.17	163.51
Return on Equity	20.43	182.60	201.55
O&M Expenses	18.62	152.69	157.75
Interest on Working Capital	2.24	19.07	20.15
Total	79.09	680.10	723.47

(₹ in lakh)

Particulars	Asset-3		Asset-4
	2017-18 (pro-rata 341 days)	2018-19	2018-19 (pro-rata 53 days)
Depreciation	22.60	33.31	37.55
Interest on Loan	21.41	30.39	36.35
Return on Equity	25.07	37.10	41.98
O&M Expenses	86.98	96.20	15.82
Interest on Working Capital	5.96	7.12	3.19
Total	162.02	204.12	134.89

(₹ in lakh)

Particulars	Asset-5		Asset-6	
	2017-18 (pro-rata 279 days)	2018-19	2017-18 (pro-rata 148 days)	2018-19
Depreciation	24.81	46.49	17.94	55.41
Interest on Loan	23.73	42.41	17.97	54.10
Return on Equity	27.79	52.19	20.09	62.20



Particulars	Asset-5		Asset-6	
	2017-18 (pro-rata 279 days)	2018-19	2017-18 (pro-rata 148 days)	2018-19
O&M Expenses	86.42	116.81	45.85	116.81
Interest on Working Capital	6.08	9.04	3.56	9.70
Total	168.83	266.94	105.41	298.22

(₹ in lakh)

Particulars	Asset-7		Asset-8	
	2017-18 (pro-rata 128 days)	2018-19	2017-18 (pro-rata 279 days)	2018-19
Depreciation	9.01	33.38	0.00	0.00
Interest on Loan	9.11	28.40	0.00	0.00
Return on Equity	10.08	37.48	13.18	17.29
O&M Expenses	32.64	96.20	0.00	0.00
Interest on Working Capital	2.29	7.08	0.28	0.37
Total	63.13	202.54	13.46	17.66

(₹ in lakh)

Particulars	Asset-9	
	2017-18 (pro-rata 148 days)	2018-19
Depreciation	0.00	0.00
Interest on Loan	0.00	0.00
Return on Equity	6.99	17.29
O&M Expenses	0.00	0.00
Interest on Working Capital	0.15	0.37
Total	7.14	17.66

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

(₹ in lakh)

Particulars	Asset-1		
	2016-17 (pro-rata 301 days)	2017-18	2018-19
O&M Expenses	0.25	0.26	0.27
Maintenance Spares	0.45	0.47	0.48
Receivables	20.98	23.56	25.68
Total Working Capital	21.69	24.29	26.43
Rate of Interest (in %)	12.80	12.80	12.80
Interest on Working Capital	2.29	3.11	3.38



(₹ in lakh)

Particulars	Asset-2		
	2016-17 (pro-rata 46 days)	2017-18	2018-19
O&M Expenses	12.31	12.72	13.15
Maintenance Spares	22.17	22.90	23.66
Receivables	104.25	113.00	120.24
Total Working Capital	138.73	148.63	157.05
Rate of Interest (in %)	12.80	12.80	12.80
Interest on Working Capital	2.24	19.02	20.10

(₹ in lakh)

Particulars	Asset-3		Asset-4
	2017-18 (pro-rata 341 days)	2018-19	2018-19 (pro-rata 53 days)
O&M Expenses	7.76	8.02	9.08
Maintenance Spares	13.97	14.43	16.35
Receivables	28.16	33.29	154.36
Total Working Capital	49.89	55.73	179.79
Rate of Interest (in %)	12.80	12.80	12.20
Interest on Working Capital	5.87	7.02	3.19

(₹ in lakh)

Particulars	Asset-5		Asset-6	
	2017-18 (pro-rata 279 days)	2018-19	2017-18 (pro-rata 148 days)	2018-19
O&M Expenses	9.42	9.73	9.42	9.73
Maintenance Spares	16.96	17.52	16.96	17.52
Receivables	36.77	44.44	43.38	49.80
Total Working Capital	63.15	71.70	69.76	77.06
Rate of Interest (in %)	12.60	12.60	12.60	12.60
Interest on Working Capital	6.08	9.03	3.56	9.71

(₹ in lakh)

Particulars	Asset-7		Asset-8	
	2017-18 (pro-rata 128 days)	2018-19	2017-18 (pro-rata 279 days)	2018-19
O&M Expenses	7.76	8.02	0.00	0.00
Maintenance Spares	13.97	14.43	0.00	0.00
Receivables	30.06	33.83	2.94	2.94
Total Working Capital	51.78	56.28	2.94	2.94
Rate of Interest (in %)	12.60	12.60	12.60	12.60
Interest on Working Capital	2.29	7.09	0.28	0.37



(₹ in lakh)

Particulars	Asset-9	
	2017-18 (pro-rata 148 days)	2018-19
O&M Expenses	0.00	0.00
Maintenance Spares	0.00	0.00
Receivables	2.94	2.94
Total Working Capital	2.94	2.94
Rate of Interest (in %)	12.60	12.60
Interest on Working Capital	0.15	0.37

Capital Cost

16. The details of the capital cost considered as on COD and as on 31.3.2019, admitted vide order dated 28.7.2016 in Petition No. 92/TT/2016 for Asset-1, vide order dated 23.7.2018 in Petition No. 148/TT/2017 for Assets-2 and 3 and vide order dated 31.8.2021 in Petition No. 105/TT/2020 for Assets-4-9 are as follows:

(₹ in lakh)

Assets	FR apportioned approved cost	Apportioned approved cost (as per RCE-I)	Admitted cost as on 31.3.2014/ COD*	Admitted ACE			Total cost as on 31.3.2019*
				2016-17	2017-18	2018-19	
Asset-1	1655.46	1698.45	610.02	547.43	139.36	0.00	1296.81
Asset-2	5097.82	3669.55	2676.25	163.96	493.67	298.93	3632.81
Asset-3	614.76	1002.000	320.32	0.00	533.03	37.52	890.87
Asset-4	5369.03	5704.80	4826.28	0.00	0.00	92.78	4919.06
Asset-5	776.89	1100.94	410.96	0.00	365.93	0.00	776.89
Asset-6	743.24	1399.26	725.94	0.00	17.3	0.00	743.24
Asset-7	618.82	817.00	448.88	0.00	74.04	95.9	618.82
Total	14876.02	15392.00	10018.65	711.39	1623.33	525.13	12878.50
Asset-8			181.50	0.00	0.00	0.00	181.50
Asset-9			181.50	0.00	0.00	0.00	181.50

*After adjustment of accrued IDC discharged after COD

17. The Petitioner has submitted the capital cost incurred as on COD and actual ACE in the 2014-19 tariff period which are as follows:

(₹ in lakh)

Assets	Appor-tioned Approved Cost (FR)	Appor-tioned Approved Cost (RCE)	Actual cost as on 31.3.2014/ COD	Actual ACE					Total cost as on 31.3.2019
				2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-1	1655.46	1698.45	601.67	0.00	0.00	223.35	16.62	175.85	1017.49
Asset-2	5097.82	3669.55	2647.44	0.00	0.00	163.60	530.54	92.75	3434.33



Assets	Appor- tioned Approved Cost (FR)	Appor- tioned Approved Cost (RCE)	Actual cost as on 31.3.2014/ COD	Actual ACE					Total cost as on 31.3.2019
				2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-3	614.76	1002.000	293.58	0.00	0.00	0.00	266.90	77.10	637.58
Asset-4	5369.03	5704.80	4814.46	0.00	0.00	0.00	0.00	92.78	4907.24
Asset-5	776.89	1100.94	409.24	0.00	0.00	0.00	407.93	122.86	940.03
Asset-6	743.24	1399.26	728.83	0.00	0.00	0.00	222.50	203.20	1154.53
Asset-7	618.82	817.00	451.18	0.00	0.00	0.00	74.43	218.69	744.29
Total	14876.02	15392.00	9946.40	0	0	386.95	1518.92	983.23	12835.49
Asset-8			181.50	0.00	0.00	0.00	0.00	0.00	181.50
Asset-9			181.50	0.00	0.00	0.00	0.00	0.00	181.50

18. The Petitioner has submitted Auditor's Certificates dated 5.7.2022, 23.1.2022 and 19.9.2022, in respect of the capital cost, including additional capitalization in case of Assets-1 to 7. The details of the same are as follows:

(₹ in lakh)

Assets	Expenditure upto COD (without any disallowances)	Actual ACE				
		2014-15	2015-16	2016-17	2017-18	2018-19
Asset-1	624.35			223.23	14.15	175.85
Asset-2	2701.45			161.42	498.28	92.75
Asset-3	324.78				262.52	77.10
Asset-4	4925.70					72.27
Asset-5	421.28				398.12	122.52
Asset-6	752.11				219.47	203.20
Asset-7	463.00				73.15	218.69
Asset-8	181.50				0.00	0.00
Asset-9	181.50				0.00	0.00

19. The Commission, in its order dated 31.8.2021 in Petition No. 105/TT/2020, in the absence of clarity regarding the competent authority to approve the RCE, restricted the capital cost to the FR cost, subject to review of the same at the time of truing up. The relevant portion of the order dated 31.8.2021 is as follows:

"39. We have considered the submissions of the Petitioner and BRPL and noted that the estimated completion cost of the instant transmission assets exceeds the FR apportioned approved cost. However, the estimated completion cost of the instant transmission assets is within the RCE apportioned approved cost. The Petitioner has submitted the reasons of cost variation such as price variation, enhanced land



compensation and new additions etc. However, the submissions made by the Petitioner in response to the contention of BRPL regarding the approval of RCE by the competent authority do not provide any clarity. The Petitioner has not submitted who is the competent authority to approve RCE, once IA has been approved by the Board of Directors of the Petitioner. Accordingly, the capital cost claimed by the Petitioner is restricted to the FR cost, subject to review at the time of truing up.”

20. As per the above direction of the Commission, the Petitioner has submitted as follows:

a) In the instant transmission project, RCE is approved by the Chairman and Managing Director (CMD) of the Petitioner as the project cost is less than ₹1000 crore and the cost variation is less than 10%. It is further submitted that the Board of Directors of the Petitioner have authorized their CMD to exercise all or any of the powers which vest with the Board for the management and administration of the Company. The powers except RCE which are excluded from the delegation of powers to the CMD as follows:

i) Any upward variation in the cost of the Projects/Schemes with the original approved project cost up to ₹1000 crore, by more than 10% of the originally approved cost estimate with or without time over-run in the project, after excluding increase within the originally approved project time cycle due to change in statutory levies, foreign exchange rate variation, price escalation as per the terms of the contract, compensation for Right of Way (RoW) including towards diminution in the value of land, crop, tree, hut and forest etc. shall be approved by the Committee of Directors constituted for the purpose by the Board of Directors.



- ii) For the Projects/Schemes with an original approved project cost above ₹1000 crore, any upward variation in the cost of the Projects/Schemes up to 10% of the originally approved cost estimate with or without time over-run in the project, after excluding increase within originally approved project time cycle due to change in statutory levies, foreign exchange rate variation, price escalation as per the terms of the contract, compensation for RoW including towards diminution in the value of land, crop, tree, hut and forest, etc. shall be approved by a Committee of Directors constituted for the purpose by the Board of Directors.
- iii) Any such upward variation in the cost of the Projects/Schemes by more than 10% of the originally approved cost estimate shall be approved by the Board of Directors.

b) The summary of the above is as follows:

Particulars	Project Cost (As per FR/IA) up to ₹1000 crore	Project Cost (As per FR/IA) beyond ₹1000 crore
Competent Authority for Cost Variation up to 10% of the originally approved cost estimate	CMD	Committee on Investment on Project (CoIP)/Committee of Directors (COD) constituted by Board of Directors
Competent Authority for Cost Variation more than 10% of the originally approved cost estimate	Committee on Investment on Project (CoIP) / Committee of Directors (COD) constituted by Board of Directors	Board of Directors

21. We have considered the submissions of the Petitioner. The office order of the Petitioner dated 12.12.2020, indicates that the Board of Directors have delegated the powers to the CMD if the cost variation is less than 10% of the originally approved cost if the project cost is up to ₹1000 crore. The RCE approved project cost dated 29.8.2017 is ₹15932 lakh, which is approximately 3% higher than the FR approved cost of ₹14876 lakh. Thus, the RCE approved by the CMD is valid.



22. The Petitioner has attributed the cost variation to the increase in cost due to price variation, decrease in the variation of the quantities approved, increase in land and compensation, increase in cost due to new additions, and decrease in IDC and IEDC. The Petitioner has also submitted the detailed reasons for the same. It is observed that the estimated completion cost of Assets-1, 2, and 4 is within the FR apportioned approved cost. However, the estimated completion cost of Assets-3, 5, 6 and 7 is more than the FR apportioned approved cost, but it is within the RCE apportioned approved cost. As the apportioned approved cost of Assets-3, 5, 6, and 7 is within the RCE apportioned approved cost, we approve the estimated completion cost of Assets-3, 5, 6 and 7.

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

23. The Petitioner has claimed IDC for the following transmission assets and has submitted the statement showing IDC claim and discharge of IDC liability as on COD, which are as follows:

(₹ in lakh)

Assets	IDC as per Auditor's Certificate	IDC Discharged up to COD	IDC discharged during 2016-17	IDC discharged during 2017-18	IDC discharged during 2018-19	IDC discharged during 2019-20
Asset-1	5.80	3.16	0.12	2.52	0.00	0.00
Asset-2	91.82	57.38	2.18	32.26	0.00	0.00
Asset-3	8.24	3.78	0.00	4.46	0.00	0.00
Asset-4	556.26	462.21			20.51	73.53
Asset-5	13.30	2.98		9.81	0.51	0.00
Asset-6	34.67	24.84		3.57	6.26	0.00
Asset-7	23.65	15.80		5.92	1.92	0.00

24. The Petitioner has submitted an IDC computation statement, which contains the name of the loan, drawl date, loan amount, interest rate, and interest claimed. IDC is worked out based on the details given in the IDC statement submitted vide affidavit dated 20.9.2023. Further, the loan amount as on COD has been mentioned in Form-6 and Form-9C. On scrutiny of these documents, certain discrepancies have been noted



such as a mismatch in loan amount between IDC statement and Form-6 and Form-9C. The allowable IDC is worked out based on the information available on record and relying on the loan amount as per Form-9C. IDC considered as on COD, and the summary of discharge of IDC liability up to COD and thereafter for tariff determination are as follows:

(₹ in lakh)

Assets	IDC as per Auditor's Certificate	IDC disallowed due to computational difference	IDC disallowed due to time over-run not condoned	IDC Allowed	IDC discharged up to COD	IDC discharged during the year			
						2016-17	2017-18	2018-19	2019-20
Asset-1	5.80	0.05	0.00	5.75	3.16	0.12	2.47	0.00	0.00
Asset-2	91.82	0.00	0.00	91.82	57.38	2.18	32.26	0.00	0.00
Asset-3	8.24	0.08	0.00	8.16	3.78		4.38	0.00	0.00
Asset-4	556.26	6.39	0.00	549.87	456.90			20.51	72.45
Asset-5	13.30	0.17	0.00	13.13	2.98		9.81	0.34	0.00
Asset-6	34.67	0.00	16.41	18.26	18.26		0.00	0.00	0.00
Asset-7	23.65	0.00	10.53	13.12	13.12		0.00	0.00	0.00

25. The Petitioner has claimed IEDC for the following transmission assets as per the Auditor's Certificate and considered the IEDC disallowed due to a time over-run not condoned. The Petitioner has submitted that the IEDC mentioned in the Auditor's Certificate is on a cash basis and was paid up to COD.

26. There is a disallowance of IEDC in the case of Assets-6 and 7 due to time over-run not condoned. The IEDC considered as on COD for tariff determination is as follows:

(₹ in lakh)

Asset	IEDC as per Auditor's Certificate	IEDC disallowed due to time over-run not condoned	IEDC Allowed
Asset-1	15.88	0.00	15.88
Asset-2	48.30	0.00	48.30
Asset-3	0.00	0.00	0.00
Asset-4	175.73	0.00	175.73
Asset-5	22.05	0.00	22.05
Asset-6	58.46	7.41	51.05
Asset-7	18.80	2.71	16.09



Initial Spares

27. Regulation 13(d) of the 2014 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of plant and machinery cost up to the cut-off date, subject to the following ceiling norms:

“(d) Transmission System
Transmission line: 1.00%
Transmission sub-station (Green Field): 4.00%
Transmission sub-station (Brown Field): 6.00%
Gas Insulated sub-station :5.00%
Communication System: 3.5%”

28. The Initial Spares, as claimed by the Petitioner, are as follows:

							(₹ in lakh)
Assets	Type	Plant and Machinery Cost (excluding IDC and IEDC, land cost and cost of civil works)	Initial Spares Claimed	Initial Spares Allowed	Excess Initial Spares	Initial Spares ceiling as per Regulation (in %)	
Asset-1	Transmission Line	1018.7	30.03	9.99	20.04	1.00	
Asset-2	Transmission Line	2613.42	33.18	26.06	7.12	1.00	
	Sub-station	700.36	53.73	41.27	12.46	6.00	
Asset-3	Sub-station	690.91	66.59	39.85	26.74	6.00	
Asset-4	Transmission Line	3943.55	41.82	39.41	2.41	1.00	
	Sub-station	687.07	44.61	41.01	3.60	6.00	
Asset-5	Sub-station	1014.04	62.17	60.76	1.41	6.00	
Asset-6	Sub-station	1081.65	43.21	66.28	0.00	6.00	
Asset-7	Sub-station	745.12	24.86	45.97	0.00	6.00	
Total	Transmission Line	7575.67	105.03	75.46	29.57	1.00	
	Sub-station	4919.15	295.17	295.15	0.02	6.00	

29. The Petitioner vide affidavit dated 20.9.2023 has submitted the year-wise break-up of Initial Spares discharged, and it is as follows:

Asset-1:		(₹ in lakh)
Particulars	Transmission Line	
Total value of spares as per Auditor's Certificate	30.03	
Actual Expenditure Up to COD	30.03	
Actual Expenditure from 4.6.2016 to 31.3.2017	0.00	
Actual Expenditure 2017-18	0.00	
Actual Expenditure 2018-19 to 2023-24	0.00	



Asset-2:

(₹ in lakh)

Particulars	Transmission Line	Sub-station
Total value of spares as per Auditor's Certificate	33.18	53.73
Actual Expenditure Up to COD	33.18	0.00
Actual Expenditure 2016-17	0.00	0.00
Actual Expenditure 2017-18	0.00	22.81
Actual Expenditure 2018-19	0.00	30.92

Asset-3:

(₹ in lakh)

Particulars	Sub-station
Total value of spares as per Auditor's Certificate	66.59
Actual Expenditure up to COD	20.86
Actual Expenditure from COD to 31.3.2018	5.58
Actual Expenditure 2018-19	32.32
Actual Expenditure 2019-20	7.83

Asset-4:

(₹ in lakh)

Particulars	Amount	
	Transmission Line	Sub-station
Total value of spares as per Auditor's Certificate	41.82	44.61
Expenditure upto COD i.e. 6.2.2019	23.69	39.32
Expenditure from 7.2.2019 to 31.3.2019	0.00	0.00
Expenditure during 2019-20	0.00	5.29
Estimated Expenditure during 2020-21	18.13	0.00

Asset-5:

(₹ in lakh)

Particulars	Sub-station
Total value of spares as per Auditor's Certificate	62.17
Expenditure upto 25.6.2017 (upto COD)	8.81
Expenditure from 26.6.2017 to 31.3.2018	12.84
Expenditure from 1.4.2018 to 31.3.2019	29.14
Expenditure during 2019-20	0.00
Estimated Expenditure during 2020-21	11.38

Asset-6:

(₹ in lakh)

Particulars	Sub-station
Total value of spares as per Auditor's Certificate	43.21
Expenditure up to 3.11.2017 (up to COD)	6.25
Expenditure from 4.11.2017 to 31.3.2018	7.15
Expenditure from 1.4.2018 to 31.3.2019	29.81



Asset-7:**(₹ in lakh)**

Particulars	Sub-station
Total value of spares as per Auditor's Certificate	24.86
Expenditure up to 23.11.2017 (up to COD)	2.26
Expenditure from 24.11.2017 to 31.3.2018	10.35
Expenditure from 1.4.2018 to 31.3.2019	12.25
Expenditure from 1.4.2019 to 31.3.2020	0.00

30. The Petitioner has further submitted that the actual capital cost discharged against the Initial Spares is included in the capital cost shown in the Auditor's Certificate for the respective period i.e. cost discharged up to COD is included in the COD cost and cost discharged towards Initial Spares in the subsequent period is added in ACE.

31. We have considered the submissions of the Petitioner. The Initial Spares in respect of the transmission assets are allowed as per the respective percentage of the Plant and Machinery cost as on the cut-off date on an individual basis. Initial Spares allowed in respect of the transmission assets are as follows:

(₹ in lakh)

Assets	Type	Plant and Machinery Cost (excluding IDC and IEDC, land cost and cost of civil works)	Initial Spares Claimed	Norms as per the 2014 Tariff Regulations (in %)	Initial Spares Allowable	Excess Initial Spares disallowed	Initial Spares Allowed
Asset-1	Transmission Line	1018.7	30.03	1.00	9.99	20.04	9.99
Asset-2	Transmission Line	2613.42	33.18	1.00	26.06	7.12	26.06
	Sub-station	700.36	53.73	6.00	41.27	12.46	41.27
Asset-3	Sub-station	690.91	66.59	6.00	39.85	26.74	39.85
Asset-4	Transmission Line	3943.55	41.82	1.00	39.41	2.41	39.41
	Sub-station	687.07	44.61	6.00	41.01	3.60	41.01
Asset-5	Sub-station	1014.04	62.17	6.00	60.76	1.41	60.76
Asset-6	Sub-station	1081.65	43.21	6.00	66.28	0.00	43.21
Asset-7	Substation	745.12	24.86	6.00	45.97	0.00	24.86



Capital Cost as on COD

32. The details of the capital cost approved as on COD in respect of the transmission assets in the instant petition are as follows:

(₹ in lakh)

Assets	Capital cost claimed as on COD (A)	IDC disallowed (B)	Excess Initial Spares disallowed as on COD (C)	IEDC disallowed (D)	Undischarge d IDC as on COD (E)	Capital cost approved as on COD (F=A-B-C-D-E)
Asset-1	624.35	0.05	20.04	0.00	2.59	601.67
Asset-2	2701.45	0.00	7.12	0.00	34.44	2659.89
Asset-3	324.78	0.08	0.00	0.00	4.38	320.32
Asset-4	4925.70	6.39	0.00	0.00	92.96	4826.34
Asset-5	421.28	0.17	0.00	0.00	10.15	410.96
Asset-6	752.11	16.41	0.00	7.41	0.00	728.29
Asset-7	463.00	10.53	0.00	2.71	0.00	449.76
Asset-8	181.50					181.50
Asset-9	181.50					181.50

De-capitalization and Re-capitalization details of 315 MVA 400/220 kV replaced ICTs at Ballabgarh Sub-station (associated with Assets-4 and 5 of the instant petition)

33. The Petitioner has submitted that the shifted ICT at Agra Sub-station (Asset-8) and shifted ICT at Kaithal Sub-station (Asset-9) are associated with Assets-4 and 5, respectively. These ICTs are existing transmission assets and were earlier installed at Ballabgarh Sub-station under "Rihand Transmission System", and these ICTs were capitalized during the years 1988-89 and 1990-91, respectively. In view of the requirement of higher capacity ICTs at Ballabgarh Sub-station, these ICTs were de-capitalized on 12.2.2016 and 12.5.2017, from Ballabgarh Sub-station and decapitalization details along with Form-10B has been submitted in true-up Petition No. 78/TT/2021. Thereafter, these ICTs were shifted to Agra Sub-station and Kaithal Sub-station and are being re-utilised with effect from 26.6.2017 and 4.11.2017, respectively. The transmission tariff for these shifted ICTs at Agra Sub-station and Kaithal Sub-station (Assets-8 and 9) is being claimed separately due to different life



cycles and fund flow. The details of the gross block, cumulative depreciation and loan repayment considered for calculation of transmission tariff as per Form 10B submitted in Petition No. 78/TT/2021 as per order dated 30.4.2021 are as follows:

(₹ in lakh)

Sr. No.	Work/Equipment proposed to be Decapitalised	Year of capitalisation of asset/equipment being decapitalised	Year of Decapitalisation	Date of Re-capitalisation of asset	Original Book Value of the asset being decapitalised	Debt Equity ratio at the time of capitalisation	Cumulative Depreciation corresponding to decapitalisation	Cumulative Repayment of Loan corresponding to decapitalisation	Justification
1	315MVA ICT-I at Ballbgarh	1988	FY 2015-16 (12.02.2016)	26.06.2017	181.5	51.79:48.21	163.35	94.00	Equipment replaced and ICT upgraded to 500MVA in NRSS-XXXII and finally shifted to Agra SS under NRSS XXXIV
2	315MVA ICT-III at Ballbgarh	1991	FY 2017-18 (12.05.2017)	04.11.2017	181.5	51.79:48.21	163.35	94.00	Equipment replaced and ICT upgraded to 500MVA in NRSS-XXXII and finally shifted to Kaithal SS under NRSS XXXIV

34. We have considered the submissions of the Petitioner. The Commission in its order dated 27.3.2023 in Petition No. 78/TT/2021, has decapitalised two of the 315 MVA ICTs at Ballabgarh Sub-station on 12.2.2016 and 12.5.2017. The Petitioner has shifted these two ICTs. One 315 MVA ICT is installed at the Agra Sub-station, and another 315 MVA ICT is installed at the Kaithal Sub-station. Accordingly, the date of re-capitalization of 2X315 MVA ICTs at Agra Sub-station and Kaithal Sub-station is approved as 26.6.2017 and 4.11.2017, respectively.

Additional Capital Expenditure (ACE)

35. The Commission restricted the capital cost of Asset-1, vide order dated 28.7.2016 in Petition No. 92/TT/2016; for Assets-2 and 3 vide order dated 23.7.2018 in Petition No. 148/TT/2017, and that for Assets-4 to 9 vide order dated 31.8.2021 in Petition No. 105/TT/2020 to the FR apportioned approved cost. The ACE allowed with respect of the transmission assets for the 2014-19 tariff period is as follows:

(₹ in lakh)

Assets	Admitted ACE		
	2016-17	2017-18	2018-19
Asset-1	547.43	139.36	-
Asset-2	163.96	493.67	298.93
Asset-3		533.03	37.52
Asset-4			92.78



Assets	Admitted ACE		
	2016-17	2017-18	2018-19
Asset-5		365.93	0.00
Asset-6		17.30	0.00
Asset-7		74.04	95.90
Asset-8	0.00	0.00	0.00
Asset-9	0.00	0.00	0.00

36. The Petitioner has claimed the following ACE for the transmission assets and has submitted the Auditor's Certificates in support of the same:

(₹ in lakh)

Assets	ACE Claimed (as per Auditors Certificate)		
	2016-17	2017-18	2018-19
Asset-1	223.23	14.15	175.85
Asset-2	161.42	498.28	92.75
Asset-3		262.52	77.10
Asset-4			72.27
Asset-5		398.12	122.52
Asset-6		219.47	203.20
Asset-7		73.15	219.17
Asset-8	0.00	0.00	0.00
Asset-9	0.00	0.00	0.00

37. The Petitioner vide affidavit dated 18.10.2023 has submitted the following cut-off dates for the transmission assets:

Assets	COD	Cut-off date
Asset-1	4.6.2016	31.3.2019
Asset-2	14.2.2017	31.3.2020
Asset-3	25.4.2017	31.3.2020
Asset-4	7.2.2019	31.3.2022
Asset-5	26.6.2017	31.3.2020
Asset-6	4.11.2017	31.3.2020
Asset-7	24.11.2017	31.3.2020
Asset-8	26.6.2017	31.3.2020
Asset-9	4.11.2017	31.3.2020

38. The Petitioner has further submitted the details of ACE incurred/to be incurred after the cut-off date of Asset-1 and Assets-5 and 7. The details of the ACE with respect to the aforesaid transmission assets are as follows:



For Samba Sub-station:

Expenditure after the cut-off date

(₹ in lakh)

Particulars	Land	Transmission line	Total
Expenditure in 2019-20	184.88	42.85	227.73
Expenditure in 2020-21	0.00	0.00	0.00
Expenditure in 2021-22	288.53	0.00	288.53
Estimated expenditure in 2022-23	40.00	0.00	40.00

39. The payments made after the cut-off date are towards land acquisition due to the following reasons:

(i) The Collector, land acquisition, was earlier functioning from Narwal for the land acquisition of transmission lines being constructed by the Petitioner, in the Jammu region. The Collector, land acquisition was transferred and posted as Principal, Revenue Training Institute, Jammu, as per Government order 1401 GAD of 2017 dated 28.10.2017. Employees posted in the Office of the Collector, land acquisition on deputation from the J&K Government were also relieved and repatriated to their parent department vide order No. 121/2018 dated 2.5.2018.

(ii) LILO of 220 kV S/C Gladni-Hiranagar transmission line achieved COD in the year 2016. However, the land payments to the affected landowners remained incomplete in many locations of LILO of 220 kV S/C Gladni-Hiranagar transmission line till the time the Collector office was functional from Narwal, Jammu.

(iii) The Revenue Department, Civil Secretariat, Jammu, vide order No. Rev/LB/28/2004 dated 11.3.2019, directed that all the land acquisitions pertaining to the Petitioner would be dealt with by the concerned Collectors



viz. ADCs, ACRs and SDMs within whose jurisdiction the land is being acquired.

40. Therefore, all the cases of land acquisition towards the said transmission assets were re-routed through the concerned District Administration. The concerned District Administration constituted a Committee for various PNCs, which resulted in a delay in the release of payment to landowners. The Petitioner has made the following submissions in this regard:

a) An estimated expenditure of ₹40 lakh is kept for land compensation for 04 towers which is pending due to a dispute of land ownership title.

b) Payment of ₹42.85 lakh was made after the cut-off date against the transmission line. The transmission line package was awarded to M/s. Mohan Energy Corporation. After the COD, balance work, i.e. tower protection/revetment wall work towers, was completed within the cut-off date. However, the final financial reconciliation of retention payment for contract closing was done in October, 2019. This resulted in the release of the final balance/retention payment during contract closing, i.e. after the cut-off date.

For Asset-5 (Associated bays of “1X315 MVA 400/220 kV ICT” at Agra Sub-station [ICT shifted from Ballabgarh Sub-station]):

Expenditure after the cut-off date			(₹ in lakh)
Particulars	Sub-station	I.T. Equipment	Total
Expenditure in 2020-21	53.10	2.06	55.16

(i) LoA awarded to GE was a multi-region package for extension work at various sub-stations. The final balance/retention payment of ₹55.16 lakh to GE is pending due to contract closing.



For Asset-7 (2 numbers 220 kV bays at Kaithal Sub-station):

Expenditure after the cut-off date

Particulars	Sub-station	I.T. Equipment	(₹ in lakh)
			Total
Expenditure in 2020-21	0.00	0.00	0.00
Expenditure in 2021-22	18.58	0.00	18.58
Estimated Expenditure in 2022-23	4.05	0.00	4.05

- (i) COD for 2 nos. 220 kV line bays at Kaithal was declared on 7.10.2021 w.e.f. 24.11.2017 after approval of COD as per order dated 31.8.2021 in Petition No. 105/TT/2020. The payment of ₹18.58 lakh (including GST and TDS) was released during 2021-22 to GE. Further, the LoA awarded to GE was a multi-region package for extension work at various sub-stations. The final balance/retention payment of ₹4.05 lakh to GE is pending due to contract closing.

41. We have considered the submissions of the Petitioner. ACE claimed towards the balance and retention payments within the cut-off date have been allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations. The un-discharged IDC and Initial Spares as on COD have been allowed as ACE during the year of their discharge. The ACE allowed with respect to the transmission assets for the 2014-19 period is as follows:

Asset-1:

Particulars	(₹ in lakh)		
	2016-17	2017-18	2018-19
ACE allowed as per Regulation 14(1)(i) of the 2014 Tariff Regulations	223.23	14.15	175.85
Add: IDC Discharged	0.12	2.47	0.00
ACE allowed in the instant order	223.35	16.62	175.85



Asset-2:

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
ACE allowed as per Regulation 14(1)(i) of the 2014 Tariff Regulations	161.42	498.28	92.75
Add: IDC Discharged	2.18	32.26	0.00
Less: Excess Initial Spares disallowed	0.00	0.00	12.46
ACE allowed in the instant order	163.60	530.54	80.29

Asset-3:

(₹ in lakh)

Particulars	2017-18	2018-19
ACE allowed as per Regulation 14(1)(i) of the 2014 Tariff Regulations	262.52	77.10
Add: IDC Discharged	4.38	0.00
Less: Excess Initial Spares disallowed	0.00	18.91
ACE allowed in the instant order	266.90	58.19

Asset-4:

(₹ in lakh)

Particulars	2018-19
ACE allowed as per Regulation 14(1)(i) and of the 2014 Tariff Regulations	72.27
Add: IDC Discharged	20.51
ACE allowed in the instant order	92.78

Asset-5:

(₹ in lakh)

Particulars	2017-18	2018-19
ACE allowed as per Regulation 14(1)(i) of the 2014 Tariff Regulations	398.12	122.52
Add: IDC Discharged	9.81	0.34
ACE allowed in the instant order	407.93	122.86

Asset-6:

(₹ in lakh)

Particulars	2017-18	2018-19
ACE allowed as per Regulation 14(1)(i) of the 2014 Tariff Regulations	219.47	203.20
Add: IDC Discharged	0.00	0.00
ACE allowed in the instant order	219.47	203.20



Asset-7:

Particulars	(₹ in lakh)	
	2017-18	2018-19
ACE allowed as per Regulation 14(1)(i) of the 2014 Tariff Regulations	73.15	218.69
Add: IDC Discharged	0.00	0.00
ACE allowed in the instant order	73.15	218.69

42. Accordingly, the capital cost considered for truing up of the transmission assets for the 2014-19 tariff period is as follows:

Name of Asset	FR apportioned approved cost	RCE apportioned approved cost	Cost as on COD	ACE during 2014-19			Total cost as on 31.3.2019
				2016-17	2017-18	2018-19	
Asset-1	1655.46	1698.45	601.67	223.35	16.62	175.85	1017.49
Asset-2	5097.82	3669.55	2659.89	163.60	530.54	80.29	3434.33
Asset-3	614.76	1002.000	320.32		266.90	58.19	645.41
Asset-4	5369.03	5704.80	4826.34			92.78	4919.12
Asset-5	776.89	1100.94	410.96		407.93	122.86	941.75
Asset-6	743.24	1399.26	728.29		219.47	203.20	1150.96
Asset-7	618.82	817.00	449.76		73.15	218.69	741.60
Asset-8			181.50	0.00	0.00	0.00	181.50
Asset-9			181.50	0.00	0.00	0.00	181.50

Debt-Equity ratio

43. The debt-equity ratio has been considered and allowed in respect of the transmission assets as per Regulation 19 of the 2014 Tariff Regulations. The details of the debt-equity ratio as on 1.4.2014 and 31.3.2019 are as follows:

Asset-1						
Funding	Capital Cost as on 1.4.2014	(in %)	ACE 2014-19	(in %)	Capital Cost as on 31.3.2019	(in %)
	(₹ in lakh)		(₹ in lakh)		(₹ in lakh)	
Debt	421.17	70.00	291.08	70.00	712.24	70.00
Equity	180.50	30.00	124.75	30.00	305.25	30.00
Total	601.67	100.00	415.82	100.00	1017.49	100.00



Asset-2						
Funding	Capital Cost as on COD	(in %)	ACE 2014-19	(in %)	Capital Cost as on 31.3.2019	(in %)
	(₹ in lakh)		(₹ in lakh)		(₹ in lakh)	
Debt	1861.93	70.00	542.10	70.00	2404.03	70.00
Equity	797.97	30.00	232.33	30.00	1030.30	30.00
Total	2659.89	100.00	774.43	100.00	3434.33	100.00

Asset-3						
Funding	Capital Cost as on COD	(in %)	ACE 2014-19	(in %)	Capital Cost as on 31.3.2019	(in %)
	(₹ in lakh)		(₹ in lakh)		(₹ in lakh)	
Debt	224.22	70.00	227.57	70.00	451.79	70.00
Equity	96.10	30.00	97.53	30.00	193.62	30.00
Total	320.32	100.00	325.09	100.00	645.41	100.00

Asset-4						
Funding	Capital Cost as on COD	(in %)	ACE 2014-19	(in %)	Capital Cost as on 31.3.2019	(in %)
	(₹ in lakh)		(₹ in lakh)		(₹ in lakh)	
Debt	3378.44	70.00	64.95	70.00	3443.39	70.00
Equity	1447.90	30.00	27.83	30.00	1475.74	30.00
Total	4826.34	100.00	92.78	100.00	4919.12	100.00

Asset-5						
Funding	Capital Cost as on COD	(in %)	ACE 2014-19	(in %)	Capital Cost as on 31.3.2019	(in %)
	(₹ in lakh)		(₹ in lakh)		(₹ in lakh)	
Debt	287.67	70.00	371.55	70.00	659.22	70.00
Equity	123.29	30.00	159.24	30.00	282.52	30.00
Total	410.96	100.00	530.79	100.00	941.75	100.00

Asset-6						
Funding	Capital Cost as on COD	(in %)	ACE 2014-19	(in %)	Capital Cost as on 31.3.2019	(in %)
	(₹ in lakh)		(₹ in lakh)		(₹ in lakh)	
Debt	509.81	70.00	295.87	70.00	805.68	70.00
Equity	218.49	30.00	126.80	30.00	345.29	30.00
Total	728.29	100.00	422.67	100.00	1150.96	100.00



Asset-7						
Funding	Capital Cost as on COD	(in %)	ACE 2014-19	(in %)	Capital Cost as on 31.3.2019	(in %)
	(₹ in lakh)		(₹ in lakh)		(₹ in lakh)	
Debt	314.83	70.00	204.29	70.00	519.12	70.00
Equity	134.93	30.00	87.55	30.00	222.48	30.00
Total	449.76	100.00	291.84	100.00	741.60	100.00

Asset-8				
Funding	Capital Cost as on 1.4.2014	(in %)	Capital Cost as on 31.3.2019	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	94.00	51.79	94.00	51.79
Equity	87.50	48.21	87.50	48.21
Total	181.50	100.00	181.50	100.00

Asset-9				
Funding	Capital Cost as on 1.4.2014	(in %)	Capital Cost as on 31.3.2019	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	94.00	51.79	94.00	51.79
Equity	87.50	48.21	87.50	48.21
Total	181.50	100.00	181.50	100.00

Depreciation

44. The Petitioner's claim for depreciation in this petition was found higher than the depreciation allowed vide order dated 28.7.2016 in Petition No. 92/TT/2016 for Asset-1, vide order dated 23.7.2018 in Petition No. 148/TT/2017 for Assets-2 and 3 and vide order dated 31.8.2021 in Petition No. 105/TT/2020 for Assets-4 to 9. The Petitioner has not given any justification for claiming higher depreciation but has made any specific prayer for allowing higher depreciation in this petition. A similar issue was dealt with in order dated 9.5.2020 Petition No. 19/TT/2020. The relevant portion of the order dated 9.5.2020 is as follows:

"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"

45. In line with the above decision, depreciation @ 5.28% has been considered for IT equipment as part of the sub-station up to 31.3.2019 while truing up the capital expenditure for the 2014-19 tariff period. During the 2019-24 tariff period, the IT equipment is considered separately, and depreciation has been allowed @15% for the balance depreciable value of IT equipment in accordance with Regulation 33 of the 2019 Tariff Regulations. The Gross Block during the 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD at Annexure-I is worked out after taking into account the depreciation rates of the transmission assets as specified in the 2014 Tariff Regulations, and depreciation allowed during the 2014-19 tariff period is as follows:



(₹ in lakh)

Asset-1				
	Particulars	2016-17 (pro-rata 301 days)	2017-18	2018-19
	Depreciation			
A	Opening Gross Block	601.67	825.02	841.64
B	Additional Capitalisation	223.35	16.62	175.85
C	Closing Gross Block (A+B)	825.02	841.64	1017.49
D	Average Gross Block (A+C)/2	713.34	833.33	929.56
E	Weighted Average Rate of Depreciation (in %)	5.23	5.19	5.20
F	Aggregate Depreciable Value	642.01	750.00	836.61
G	Balance useful life of the asset at the beginning of the year (Year)	35	35	34
H	Lapsed useful life at the beginning of the year (Year)	0	0	1
I	Depreciation during the year	30.74	43.22	48.30
J	Cumulative depreciation	30.74	73.96	122.27
K	Remaining Depreciable Value (F- J)	611.27	676.03	714.34

(₹ in lakh)

Asset-2				
	Particulars	2016-17 (pro-rata 46 days)	2017-18	2018-19
	Depreciation			
A	Opening Gross Block	2659.89	2823.49	3354.03
B	Additional Capitalisation	163.60	530.54	80.29
C	Closing Gross Block (A+B)	2823.49	3354.03	3434.33
D	Average Gross Block (A+C)/2	2741.69	3088.76	3394.18
E	Weighted Average Rate of Depreciation (in %)	5.28	5.30	5.31
F	Aggregate Depreciable Value	2467.52	2779.89	3054.76
G	Balance useful life of the asset at the beginning of the year (Year)	34	34	33
H	Lapsed useful life at the beginning of the year (Year)	0	0	1
I	Depreciation during the year	18.26	163.56	180.18
J	Cumulative depreciation	18.26	181.82	362.00
K	Remaining Depreciable Value (F-J)	2449.27	2598.07	2692.76

(₹ in lakh)

Asset-3			Asset-4	
	Particulars	2017-18 (pro-rata 341 days)	2018-19	2018-19 (pro-rata 53 days)
	Depreciation			
A	Opening Gross Block	320.32	587.22	4826.34
B	Additional Capitalisation	266.90	58.19	92.78



		Asset-3		Asset-4
	Particulars	2017-18 (pro-rata 341 days)	2018-19	2018-19 (pro-rata 53 days)
C	Closing Gross Block (A+B)	587.22	645.41	4919.12
D	Average Gross Block (A+C)/2	453.77	616.32	4872.73
E	Weighted Average Rate of Depreciation (in %)	5.33	5.32	5.30
F	Aggregate Depreciable Value	408.39	554.68	33
G	Balance useful life of the asset at the beginning of the year (Year)	22.22	22.22	0
H	Lapsed useful life at the beginning of the year (Year)	0.00	0.00	4385.46
I	Depreciation during the year	22.60	32.80	37.51
J	Cumulative depreciation	22.60	55.40	37.51
K	Remaining Depreciable Value (F- J)	385.79	499.28	4347.95

(₹ in lakh)

		Asset-5		Asset-6	
	Particulars	2017-18 (pro-rata 279 days)	2018-19	2017-18 (pro-rata 148 days)	2018-19
	Depreciation				
A	Opening Gross Block	410.96	818.89	728.29	947.76
B	Additional Capitalisation	407.93	122.86	219.47	203.20
C	Closing Gross Block (A+B)	818.89	941.75	947.76	1150.96
D	Average Gross Block (A+C)/2	614.93	880.32	838.03	1049.36
E	Weighted Average Rate of Depreciation (in %)	5.28	5.28	5.28%	5.28%
F	Aggregate Depreciable Value	553.43	792.29	754.23	944.43
G	Balance useful life of the asset at the beginning of the year (Year)	24.29	24.29	23.46	23.46
H	Lapsed useful life at the beginning of the year (Year)	0.00	0.00	0.00	0.00
I	Depreciation during the year	24.82	46.48	17.94	55.41
J	Cumulative depreciation	24.82	71.30	17.94	73.35
K	Remaining Depreciable Value (F-J)	528.61	720.99	736.29	871.08

(₹ in lakh)

		Asset-7		Asset-8	
	Particulars	2017-18 (pro-rata 128 days)	2018-19	2017-18 (pro-rata 279 days)	2018-19
	Depreciation				
A	Opening Gross Block	449.76	522.91	181.50	181.50



Asset-7			Asset-8		
	Particulars	2017-18 (pro-rata 128 days)	2018-19	2017-18 (pro-rata 279 days)	2018-19
B	Additional Capitalisation	73.15	218.69	0.00	0.00
C	Closing Gross Block (A+B)	522.91	741.60	181.50	181.50
D	Average Gross Block (A+C)/2	486.33	632.25	181.50	181.50
E	Weighted Average Rate of Depreciation (in %)	5.28	5.28	5.28	5.28
F	Aggregate Depreciable Value	437.70	569.03	163.35	163.35
G	Balance useful life of the asset at the beginning of the year (Year)	22.45	22.45	25	25
H	Lapsed useful life at the beginning of the year (Year)	0.00	0.00	0	0
I	Depreciation during the year	9.01	33.38	0.00	0.00
J	Cumulative depreciation	9.01	42.39	163.35	163.35
K	Remaining Depreciable Value (F-J)	428.69	526.64	0.00	0.00

(₹ in lakh)

Asset-9			
	Particulars	2017-18 (pro-rata 148 days)	2018-19
	Depreciation		
A	Opening Gross Block	181.50	181.50
B	Additional Capitalisation	0.00	0.00
C	Closing Gross Block (A+B)	181.50	181.50
D	Average Gross Block (A+C)/2	181.50	181.50
E	Weighted Average Rate of Depreciation (in %)	5.28	5.28
F	Aggregate Depreciable Value	163.35	163.35
G	Balance useful life of the asset at the beginning of the year (Year)	25	25
H	Lapsed useful life at the beginning of the year (Year)	0	0
I	Depreciation during the year	0.00	0.00
J	Cumulative depreciation	163.35	163.35
K	Remaining Depreciable Value (F-J)	0.00	0.00

46. The details of depreciation allowed by the Commission vide order dated 28.7.2016 in Petition No. 92/TT/2016 for Asset-1; vide order dated 23.7.2018 in Petition No. 148/TT/2017 for Assets-2 and 3, and vide order dated 31.8.2021 in Petition No. 105/TT/2020 for Assets-4 to 9, and that the depreciation claimed by the Petitioner in the instant petition and tried-up in the instant order are as follows:



(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
Asset-1			
Allowed <i>vide</i> order dated 28.7.2016 in Petition No. 92/TT/2016	38.48	64.79	68.47
Claimed by the Petitioner in the instant petition	30.74	43.34	48.31
Approved after true-up in this order	30.74	43.22	48.30
Asset-2			
Allowed <i>vide</i> order dated 23.7.2018 in Petition No. 148/TT/2017	18.37	163.36	184.74
Claimed by the Petitioner in the instant petition	18.25	163.57	180.51
Approved after true-up in this order	18.26	163.56	180.18
Asset-3			
Allowed <i>vide</i> order dated 23.7.2018 in Petition No. 148/TT/2017		28.13	44.09
Claimed by the Petitioner in the instant petition		22.60	33.31
Approved after true-up in this order		22.60	32.80
Asset-4			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020			37.51
Claimed by the Petitioner in the instant petition			37.55
Approved after true-up in this order			37.51
Asset-5			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		23.97	41.02
Claimed by the Petitioner in the instant petition		24.81	46.49
Approved after true-up in this order		24.82	46.48
Asset-6			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		15.73	39.24
Claimed by the Petitioner in the instant petition		17.94	55.41
Approved after true-up in this order		17.94	55.41
Asset-7			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		11.05	36.00
Claimed by the Petitioner in the instant petition		9.01	33.38
Approved after true-up in this order		9.01	33.38

Interest on Loan (IoL)

47. The Petitioner has claimed the Weighted Average Rate of IoL based on its actual loan portfolio and rate of interest. IoL has been calculated based on actual interest rate submitted by the Petitioner in accordance with Regulation 26 of the 2014



Tariff Regulations. The trued-up IoL allowed in respect of the transmission assets is as follows:

(₹ in lakh)

	Particulars	Asset-1		
		2016-17 (pro-rata 301 days)	2017-18	2018-19
	Interest on Loan			
A	Gross Normative Loan	421.17	577.51	589.15
B	Cumulative Repayments upto Previous Year	0.00	30.74	73.96
C	Net Loan-Opening (A-B)	421.17	546.77	515.18
D	Additions	156.35	11.64	123.10
E	Repayment during the year	30.74	43.22	48.30
F	Net Loan-Closing (C+D-E)	546.77	515.18	589.98
G	Average Loan (C+F)/2	483.97	530.98	552.58
H	Weighted Average Rate of Interest on Loan (in %)	8.4017	8.0297	7.9771
H	Interest on Loan (G*H)	33.53	42.64	44.08

(₹ in lakh)

	Particulars	Asset-2		
		2016-17 (pro-rata 46 days)	2017-18	2018-19
	Interest on Loan			
A	Gross Normative Loan	1861.93	1976.45	2347.82
B	Cumulative Repayments upto Previous Year	0.00	18.26	181.82
C	Net Loan-Opening (A-B)	1861.93	1958.19	2166.00
D	Additions	114.52	371.38	56.21
E	Repayment during the year	18.26	163.56	180.18
F	Net Loan-Closing (C+D-E)	1958.19	2166.00	2042.03
G	Average Loan (C+F)/2	1910.06	2062.10	2104.02
H	Weighted Average Rate of Interest on Loan (in %)	8.1230	7.8642	7.7558
H	Interest on Loan (G*H)	19.55	162.17	163.18

(₹ in lakh)

	Particulars	Asset-3		Asset-4
		2017-18 (pro-rata 341 days)	2018-19	2018-19 (pro-rata 53 days)
	Interest on Loan			
A	Gross Normative Loan	224.22	411.05	3378.44
B	Cumulative Repayments upto	0.00	22.60	0.00



	Particulars	Asset-3		Asset-4
		2017-18 (pro-rata 341 days)	2018-19	2018-19 (pro-rata 53 days)
	Previous Year			
C	Net Loan-Opening (A-B)	224.22	388.45	3378.44
D	Additions	186.83	40.73	64.95
E	Repayment during the year	22.60	32.80	37.51
F	Net Loan-Closing (C+D-E)	388.45	396.39	3405.88
G	Average Loan (C+F)/2	306.34	392.42	3392.16
H	Weighted Average Rate of Interest on Loan (in %)	7.4807	7.6187	7.3714
H	Interest on Loan (G*H)	21.41	29.90	36.31

(₹ in lakh)

	Particulars	Asset-5		Asset-6	
		2017-18 (pro-rata 279 days)	2018-19	2017-18 (pro-rata 148 days)	2018-19
	Interest on Loan				
A	Gross Normative Loan	287.67	573.22	509.81	663.44
B	Cumulative Repayments upto Previous Year	0.00	24.82	0.00	17.94
C	Net Loan-Opening (A-B)	287.67	548.40	509.81	645.49
D	Additions	285.55	86.00	153.63	142.24
E	Repayment during the year	24.82	46.48	17.94	55.41
F	Net Loan-Closing (C+D-E)	548.40	587.92	645.49	732.33
G	Average Loan (C+F)/2	418.04	568.16	577.65	688.91
H	Weighted Average Rate of Interest on Loan (in %)	7.427	7.464	7.6710	7.8529
H	Interest on Loan (G*H)	23.73	42.41	17.97	54.10

(₹ in lakh)

	Particulars	Asset-7		Asset-8	
		2017-18 (pro-rata 128 days)	2018-19	2017-18 (pro-rata 279 days)	2018-19
	Interest on Loan				
A	Gross Normative Loan	314.83	366.04	94.00	94.00
B	Cumulative Repayments upto Previous Year	0.00	9.01	94.00	94.00
C	Net Loan-Opening (A-B)	314.83	357.03	0.00	0.00
D	Additions	51.21	153.08	0.00	0.00
E	Repayment during the year	9.01	33.38	0.00	0.00
F	Net Loan-Closing (C+D-E)	357.03	476.73	0.00	0.00
G	Average Loan (C+F)/2	335.93	416.88	0.00	0.00
H	Weighted Average Rate of Interest on Loan (in %)	7.7325	6.8125	0.00	0.00
H	Interest on Loan (G*H)	9.11	28.40	0.00	0.00



(₹ in lakh)

	Particulars	Asset-9	
		2017-18 (pro-rata 148 days)	2018-19
	Interest on Loan		
A	Gross Normative Loan	94.00	94.00
B	Cumulative Repayments upto Previous Year	94.00	94.00
C	Net Loan-Opening (A-B)	0.00	0.00
D	Additions	0.00	0.00
E	Repayment during the year	0.00	0.00
F	Net Loan-Closing (C+D-E)	0.00	0.00
G	Average Loan (C+F)/2	0.00	0.00
H	Weighted Average Rate of Interest on Loan (in %)	0.0000	0.0000
H	Interest on Loan (G*H)	0.00	0.00

48. The details of IoL approved vide order dated 28.7.2016 in Petition No. 92/TT/2016 for Asset-1; vide order dated 23.7.2018 in Petition No. 148/TT/2017 for Assets-2 and 3 and vide order dated 31.8.2021 in Petition No. 105/TT/2020 for Assets-4, to 9 and IOL claimed by the Petitioner in the instant petition and that true-up in the instant order with respect to the transmission assets are as follows:

(₹ in lakh)

Particulars	2016-17	2017-18	2018-19
	Asset-1		
Allowed vide order dated 28.7.2016 in Petition No. 92/TT/2016	42.66	68.02	66.47
Claimed by the Petitioner in the instant petition	33.53	42.64	44.08
Approved after true-up in this order	33.53	42.64	44.08
	Asset-2		
Allowed vide order dated 23.7.2018 in Petition No. 148/TT/2017	19.67	167.36	175.85
Claimed by the Petitioner in the instant petition	19.55	162.17	163.51
Approve after true-up in this order	19.55	162.17	163.18
	Asset-3		
Allowed vide order dated 23.7.2018 in Petition No. 148/TT/2017		27.38	41.38
Claimed by the Petitioner in the instant petition		21.41	30.39
Approved after true-up in this order		21.41	29.90



Particulars	2016-17	2017-18	2018-19
Asset-4			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020			39.23
Claimed by the Petitioner in the instant petition			36.35
Approved after true-up in this order			36.31
Asset-5			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		22.86	36.99
Claimed by the Petitioner in the instant petition		23.73	42.41
Approved after true-up in this order		23.73	42.41
Asset-6			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		15.79	37.30
Claimed by the Petitioner in the instant petition		17.97	54.10
Approved after true-up in this order		17.97	54.10
Asset-7			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		9.09	28.72
Claimed by the Petitioner in the instant petition		9.11	28.40
Approved after true-up in this order		9.11	28.40

Return on Equity (RoE)

49. The Petitioner has claimed RoE for the transmission assets in accordance with Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that they are liable to pay income tax at MAT rates and has claimed the following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax rate (in %)	Grossed up ROE [[Base Rate)/(1-t)] (in %)
2014-15	21.018	19.625
2015-16	21.382	19.715
2016-17	21.338	19.705
2017-18	21.337	19.705
2018-19	21.549	19.758



50. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 had arrived at the effective tax rate for the Petitioner based on the notified MAT rates, and the same are as follows:

Year	Notified MAT rates (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

51. Trued-up RoE is approved based on the MAT rates applicable in the respective years for the 2014-19 tariff period, and it is as follows:

(₹ in lakh)

	Particulars	Asset-1		
		2016-17 (pro-rata 301 days)	2017-18	2018-19
	Return on Equity			
A	Opening Equity	180.50	247.50	252.49
B	Additions	67.01	4.99	52.76
C	Closing Equity (A+B)	247.50	252.49	305.25
D	Average Equity (A+C)/2	214.00	250.00	278.87
E	Return on Equity (Base Rate) (%)	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.705	19.705	19.758
H	Return on Equity (D*G)	34.78	49.26	55.10

(₹ in lakh)

	Particulars	Asset-2		
		2016-17 (pro-rata 46 days)	2017-18	2018-19
	Return on Equity			
A	Opening Equity	797.97	847.05	1006.21
B	Additions	49.08	159.16	24.09
C	Closing Equity (A+B)	847.05	1006.21	1030.30
D	Average Equity (A+C)/2	822.51	926.63	1018.25
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.705	19.705	19.758
H	Return on Equity (D*G)	20.43	182.59	201.19



(₹ in lakh)

	Particulars	Asset-3		Asset-4
		2017-18 (pro-rata 341 days)	2018-19	2018-19 (pro-rata 53 days)
	Return on Equity			
	Opening Equity	96.10	176.17	1447.90
	Additions	80.07	17.46	27.83
	Closing Equity (A+B)	176.17	193.62	1475.74
	Average Equity (A+C)/2	136.13	184.89	1461.82
	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
	MAT Rate for respective year (in %)	21.342	21.549	21.549
	Rate of Return on Equity (in %)	19.705	19.758	19.758
	Return on Equity (D*G)	25.06	36.53	41.94

(₹ in lakh)

	Particulars	Asset-5		Asset-6	
		2017-18 (pro-rata 279 days)	2018-19	2017-18 (pro-rata 148 days)	2018-19
	Return on Equity				
A	Opening Equity	123.29	245.67	218.49	284.33
B	Additions	122.38	36.86	65.84	60.96
C	Closing Equity (A+B)	245.67	282.52	284.33	345.29
D	Average Equity (A+C)/2	184.48	264.10	251.41	314.81
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	21.342	21.549	21.342	21.549
G	Rate of Return on Equity (in %)	19.705	19.758	19.705	19.758
H	Return on Equity (D*G)	27.79	52.18	20.09	62.20

(₹ in lakh)

	Particulars	Asset-7		Asset-8	
		2017-18 (pro-rata 128 days)	2018-19	2017-18 (pro-rata 279 days)	2018-19
	Return on Equity				
A	Opening Equity	134.93	156.87	87.50	87.50
B	Additions	21.95	65.61	0.00	0.00
C	Closing Equity (A+B)	156.87	222.48	87.50	87.50
D	Average Equity (A+C)/2	145.90	189.68	87.50	87.50
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	21.342	21.549	21.342	21.549
G	Rate of Return on Equity (in %)	19.705	19.758	19.705	19.758
H	Return on Equity (D*G)	10.08	37.48	13.18	17.29

(₹ in lakh)

	Particulars	Asset-9	
		2017-18 (pro-rata 148 days)	2018-19
	Return on Equity		
A	Opening Equity	87.50	87.50



	Particulars	Asset-9	
		2017-18 (pro-rata 148 days)	2018-19
B	Additions	0.00	0.00
C	Closing Equity (A+B)	87.50	87.50
D	Average Equity (A+C)/2	87.50	87.50
E	Return on Equity (Base Rate) (in %)	15.500	15.500
F	MAT Rate for respective year (in %)	21.342	21.549
G	Rate of Return on Equity (in %)	19.705	19.758
H	Return on Equity (D*G)	6.99	17.29

52. The details of RoE allowed vide order dated 28.7.2016 in Petition No. 92/TT/2016 for Asset-1, vide order dated 23.7.2018 in Petition No. 148/TT/2017 for Assets-2 and 3 and vide order dated 31.8.2021 in Petition No. 105/TT/2020 for Assets-4 to 9, RoE claimed by the Petitioner in the instant petition and true-up RoE allowed for the transmission assets in the instant order for the 2014-19 period are as follows:

Particulars	(₹ in lakh)		
	2016-17	2017-18	2018-19
Asset-1			
Allowed vide order dated 28.7.2016 in Petition No. 92/TT/2016	42.88	72.19	76.29
Claimed by the Petitioner in the instant petition	34.78	49.27	55.10
Approved after true-up in this order	34.78	49.26	55.10
Asset-2			
Allowed vide order dated 23.7.2018 in Petition No. 148/TT/2017	20.45	181.61	204.93
Claimed by the Petitioner in the instant petition	20.43	182.60	201.55
Approved after true-up in this order	20.43	182.59	201.19
Asset-3			
Allowed vide order dated 23.7.2018 in Petition No. 148/TT/2017		32.25	51.31
Claimed by the Petitioner in the instant petition		25.07	37.10
Approved after true-up in this order		25.06	36.53
Asset-4			
Allowed vide order dated 31.8.2021 in Petition No. 105/TT/2020			41.94
Claimed by the Petitioner in the instant petition			41.98
Approved after true-up in this order			41.94



Particulars	2016-17	2017-18	2018-19
Asset-5			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		26.84	46.05
Claimed by the Petitioner in the instant petition		27.79	52.19
Approved after true-up in this order		27.79	52.18
Asset-6			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		17.61	44.05
Claimed by the Petitioner in the instant petition		20.09	62.20
Approved after true-up in this order		20.09	62.20
Asset-7			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		10.07	33.84
Claimed by the Petitioner in the instant petition		10.08	37.48
Approved after true-up in this order		10.08	37.48
Asset-8			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		13.20	17.32
Claimed by the Petitioner in the instant petition		13.18	17.29
Approved after true-up in this order		13.18	17.29
Asset-9			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		7.00	17.32
Claimed by the Petitioner in the instant petition		6.99	17.29
Approved after true-up in this order		6.99	17.29

Operation & Maintenance Expenses (O&M Expenses)

53. The O&M Expenses claimed by the Petitioner for the transmission assets for the 2014-19 period are as follows:

Particulars	Asset-1		
	2016-17 (pro-rata 301 days)	2017-18	2018-19
Transmission Lines			
(i) LILO of 220 kV S/C Gladini-Hiranagar at Samba			
S/C 1 conductors (km)	14	14	14
Norms (₹ lakh/km)	0.216	0.223	0.23
Total O&M Expense (₹ in lakh)	2.49	3.12	3.22



Particulars	Asset-2		
	2016-17 (pro-rata 46 days)	2017-18	2018-19
Transmission Lines			
(i) 400 kV Amritsat-Hamirpur Line at Jalandhar			
Bays			
(i) NR2-Jalandhar: Amritsar Bay II			
(ii) NR2-Jalandhar : Hamirpur Bay			
400 kV Bays	2	2	2
Norms (₹ lakh/Bay)	64.37	66.51	68.71
D/C 4 conductors (km)	16.8	16.8	16.8
Norms (₹ lakh/km)	1.133	1.171	1.21
Total O&M Expense (₹ in lakh)	18.62	152.69	157.75

Particulars	Asset-3	
	2017-18 (pro-rata 341 days)	2018-19
Bays		
(i) NR1-Jetpur / Bhinamal: Sayala-1-Bhinmal		
(ii) NR 1-Jetpur /Bhinmal: Sayala-2-Bhinmal		
220 kV Bays	2	2
Norms (₹ lakh/Bay)	46.55	48.1
Total O&M Expense (₹ in lakh)	86.98	96.20

Particulars	Asset-4
	2018-19 (pro-rata 53 days)
Transmission Line	
(i) LILO of Agra-Bharatpur 220 kV S/C Line at agra	
Bays	
(i) NR3-Agra: 220 kV Bharatpur Bay	
(ii) NR3-Agra: 220 kV Sikandra Bay	
220 kV Bays	2
Norms (₹ lakh/Bay)	48.10
S/C Single conductors (km)	55.63
Norms (₹ lakh/km)	0.23
Total O&M Expense (₹ in lakh)	15.83

Particulars	Asset-5	
	2017-18 (pro-rata 279 days)	2018-19
Bays		
(i) NR3-Agra: 400 kV ICTT – II Bay – Agra		
(ii) NR3-Agra:220 kV ICT II Bay - Agra		
220 kV Bays	1	1
Norms (₹ lakh/Bay)	46.55	48.1
400 kV Bays	1	1
Norms (₹ lakh/Bay)	66.51	68.71



Particulars	Asset-5	
	2017-18 (pro-rata 279 days)	2018-19
Total O&M Expense (₹ in lakh)	86.42	116.81

Particulars	Asset-6	
	2017-18 (pro-rata 148 days)	2018-19
Bays:		
(i) NR2-Kaithal: ICT III bay (400 kV)		
(ii) NR2-Kaithal: ICT III Bay (220 kV)		
220 kV Bays	1	1
Norms (₹ lakh/Bay)	46.55	48.1
400 kV Bays	1	1
Norms (₹ lakh/Bay)	66.51	68.71
Total O&M Expense (₹ in lakh)	45.84	116.81

Particulars	Asset-7	
	2017-18 (pro-rata 128 days)	2018-19
Bays:		
(i) NR 2-Kaithal: 220 kV Line Bay at Kaithal		
(ii) NR 2-Kaithal : 220 kV Line Bay at Kaithal		
220 kV Bays	1	1
Norms (₹ lakh/Bay)	46.55	48.1
Total O&M Expense (₹ in lakh)	32.65	96.20

54. The applicable norms for the O&M Expenses as per the 2014 Tariff Regulations are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
D/C Bundled Conductor with four or more sub conductors					
Norms (₹ lakh/km)	1.062	1.097	1.133	1.171	1.21
D/C Twin/Triple Conductor					
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
D/C Single Conductor					
Norms (₹ lakh/km)	0.303	0.313	0.324	0.334	0.346
S/C Bundled Conductor with four sub conductors					
Norms (₹ lakh/km)	0.606	0.627	0.647	0.669	0.691
765 kV Bays					
Norms (₹ lakh/Bay)	84.42	87.22	90.12	93.11	96.20



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV Bays					
Norms (₹ lakh/Bay)	60.3	62.30	64.37	66.51	68.71
220 kV Bays					
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.1

55. We have considered the submissions of the Petitioner. The O&M Expenses approved for the transmission assets as per the norms specified in the 2014 Tariff Regulations are as follows:

Particulars	Asset-1		
	2016-17 (pro-rata 301 days)	2017-18	2018-19
Transmission Lines			
(i) LILO of 220 kV S/C Gladini-Hiranagar at Samba			
S/C 1 conductors (km)	14	14	14
Norms (₹ lakh/km)	0.216	0.223	0.23
Total O&M Expenses (₹ in lakh)	2.49	3.12	3.22

Particulars	Asset-2		
	2016-17 (pro-rata 46 days)	2017-18	2018-19
Transmission Lines			
(i) 400 kV Amritsat-Hamirpur Line at Jalandhar			
Bays			
(ii) NR2-Jalandhar: Amritsar Bay II			
(iii) NR2-Jalandhar : Hamirpur Bay			
400 kV Bays	2	2	2
Norms (₹ lakh/Bay)	64.37	66.51	68.71
D/C 4 conductors (km)	16.8	16.8	16.8
Norms (₹ lakh/km)	1.133	1.171	1.21
Total O&M Expenses (₹ in lakh)	18.62	152.69	157.75

Particulars	Asset-3	
	2017-18 (pro-rata 341 days)	2018-19
Bays		
(i) NR1-Jetpur / Bhinamal: Sayala-1		
(ii) NR 1-Jetpur /Bhinmal: Sayala-2		
220 kV Bays	2	2
Norms (₹ lakh/Bay)	46.55	48.1
Total O&M Expenses (₹ in lakh)	86.98	96.20



Particulars	Asset-4	
	2018-19 (pro-rata 53 days)	
Transmission Line		
(i) LILO of Agra-Bharatpur 220 kV S/C Line at Agra		
Bays		
(ii) NR3-Agra: 220 kV Bharatpur Bay		
(iii) NR3-Agra: 220 kV Sikandra Bay		
220 kV Bays	2	
Norms (₹ lakh/Bay)	48.10	
S/C Single conductors (km)	55.63	
Norms (₹ lakh/km)	0.23	
Total O&M Expenses (₹ in lakh)	15.83	

Particulars	Asset-5	
	2017-18 (pro-rata 279 days)	2018-19
Bays		
(i) NR3-Agra: 400 kV ICTT-II Bay-Agra		
(ii) NR3-Agra:220 kV ICT-II Bay-Agra		
220 kV Bays	1	1
Norms (₹ lakh/wBay)	46.55	48.1
400 kV Bays	1	1
Norms (₹ lakh/Bay)	66.51	68.71
Total O&M Expenses (₹ in lakh)	86.42	116.81

Particulars	Asset-6	
	2017-18 (pro-rata 148 days)	2018-19
Bays:		
(i) NR2-Kaithal: ICT III bay (400 kV)		
(ii) NR2-Kaithal: ICT III Bay (220 kV)		
220 kV Bays	1	1
Norms (₹ lakh/Bay)	46.55	48.1
400 kV Bays	1	1
Norms (₹ lakh/Bay)	66.51	68.71
Total O&M Expenses (₹ in lakh)	45.84	116.81

Particulars	Asset-7	
	2017-18 (pro-rata 128 days)	2018-19
Bays:		
(i) NR 2-Kaithal: 220 kV Line Bay at Kaithal		
(ii) NR 2-Kaithal : 220 kV Line Bay at Kaithal		



Particulars	Asset-7	
	2017-18 (pro-rata 128 days)	2018-19
220 kV Bays	1	1
Norms (₹ lakh/Bay)	46.55	48.1
Total O&M Expenses (₹ in lakh)	32.65	96.20

56. The details of O&M Expenses allowed vide order dated 28.7.2016 in Petition No. 92/TT/2016 for Asset-1, vide order dated 23.7.2018 in Petition No. 148/TT/2017 for Assets-2 and 3 and vide order dated 31.8.2021 in Petition No. 105/TT/2020 for Assets-4 to 9, O&M Expenses claimed by the Petitioner in the instant petition and trued-up O&M Expenses allowed in the instant order with respect to the transmission assets are as follows:

Particulars	(₹ in lakh)		
	2016-17	2017-18	2018-19
Asset-1			
Allowed vide order dated 28.7.2016 in Petition No. 92/TT/2016	2.49	3.12	3.22
Claimed by the Petitioner in the instant petition	2.49	3.12	3.22
Approved after true-up in this order	2.49	3.12	3.22
Asset-2			
Allowed vide order dated 23.7.2018 in Petition No. 148/TT/2017	18.62	152.69	157.75
Claimed by the Petitioner in the instant petition	18.62	152.69	157.75
Approved after true-up in this order	18.62	152.69	157.75
Asset-3			
Allowed vide order dated 23.7.2018 in Petition No. 148/TT/2017		86.98	96.20
Claimed by the Petitioner in the instant petition		86.98	96.20
Approved after true-up in this order		86.98	96.20
Asset-4			
Allowed vide order dated 31.8.2021 in Petition No. 105/TT/2020			15.83
Claimed by the Petitioner in the instant petition			15.82
Approved after true-up in this order			15.83
Asset-5			
Allowed vide order dated 31.8.2021 in Petition No. 105/TT/2020		86.37	116.81
Claimed by the Petitioner in the instant		86.42	116.81



Particulars	2016-17	2017-18	2018-19
petition			
Approved after true-up in this order		86.42	116.81
Asset-6			
Allowed vide order dated 31.8.2021 in Petition No. 105/TT/2020		45.84	116.81
Claimed by the Petitioner in the instant petition		45.85	116.81
Approved after true-up in this order		45.84	116.81
Asset-7			
Allowed vide order dated 31.8.2021 in Petition No. 105/TT/2020		32.65	96.20
Claimed by the Petitioner in the instant petition		32.64	96.20
Approved after true-up in this order		32.65	96.20

Interest on Working Capital (IWC)

57. The IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations, the details of which are as follows:

(₹ in lakh)

	Particulars	Asset-1		
		2016-17 (pro-rata 301 days)	2017-18	2018-19
	Interest on Working Capital			
A	Working Capital for O&M Expenses (O&M Expenses for 1 month)	0.25	0.26	0.27
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	0.45	0.47	0.48
C	Working Capital for Receivables (equivalent to 2 months of Annual Fixed Charges/Annual Transmission Charges)	20.98	23.56	25.68
D	Total Working Capital (A+B+C)	21.69	24.29	26.43
E	Rate of Interest (in %)	12.80	12.80	12.80
F	Interest of Working Capital (D*E)	2.29	3.11	3.38

(₹ in lakh)

	Particulars	Asset-2		
		2016-17 (pro-rata 46 days)	2017-18	2018-19
	Interest on Working Capital			
A	Working Capital for O&M Expenses (O&M Expenses for 1 month)	12.31	12.72	13.15
B	Working Capital for Maintenance Spares	22.17	22.90	23.66



	Particulars	Asset-2		
		2016-17 (pro-rata 46 days)	2017-18	2018-19
	(15% of O&M Expenses)			
C	Working Capital for Receivables (equivalent to 2 months of Annual Fixed Charges/Annual Transmission Charges)	104.61	113.35	120.40
D	Total Working Capital (A+B+C)	139.09	148.98	157.21
E	Rate of Interest (in %)	12.80	12.80	12.80
F	Interest of Working Capital (D*E)	2.24	19.07	20.12

(₹ in lakh)

	Particulars	Asset-3		Asset-4
		2017-18 (pro-rata 341 days)	2018-19	2018-19 (pro-rata 53 days)
	Interest on Working Capital			
A	Working Capital for O&M Expenses (O&M Expenses for 1 month)	7.76	8.02	9.08
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	13.97	14.43	16.35
C	Working Capital for Receivables (equivalent to 2 months of Annual Fixed Charges/Annual Transmission Charges)	28.90	33.75	154.69
D	Total Working Capital (A+B+C)	50.63	56.20	180.12
E	Rate of Interest (in %)	12.60	12.60	12.20
F	Interest of Working Capital (D*E)	5.96	7.08	3.19

(₹ in lakh)

	Particulars	Asset-5		Asset-6	
		2017-18 (pro-rata 279 days)	2018-19	2017-18 (pro-rata 148 days)	2018-19
	Interest on Working Capital				
A	Working Capital for O&M Expenses (O&M Expenses for 1 month)	9.42	9.73	9.42	9.73
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	16.96	17.52	16.96	17.52
C	Working Capital for Receivables (equivalent to 2 months of Annual Fixed Charges/Annual Transmission Charges)	36.81	44.49	43.32	49.70
D	Total Working Capital (A+B+C)	63.20	71.74	69.70	76.96
E	Rate of Interest (in %)	12.60	12.60	12.60	12.60
F	Interest of Working Capital (D*E)	6.09	9.04	3.56	9.70

(₹ in lakh)



	Particulars	Asset-7		Asset-8	
		2017-18 (pro-rata 128 days)	2018-19	2017-18 (pro-rata 279 days)	2018-19
	Interest on Working Capital				
A	Working Capital for O&M Expenses (O&M Expenses for 1 month)	7.76	8.02	0.00	0.00
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	13.97	14.43	0.00	0.00
C	Working Capital for Receivables (equivalent to 2 months of Annual Fixed Charges/Annual Transmission Charges)	30.00	33.76	2.94	2.94
D	Total Working Capital (A+B+C)	51.73	56.20	2.94	2.94
E	Rate of Interest (in %)	12.60	12.60	12.60	12.60
F	Interest of Working Capital (D*E)	2.29	7.08	0.28	0.37

(₹ in lakh)

	Particulars	Asset-9	
		2017-18 (pro-rata 148 days)	2018-19
	Interest on Working Capital		
A	Working Capital for O&M Expenses (O&M Expenses for 1 month)	0.00	0.00
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	0.00	0.00
C	Working Capital for Receivables (equivalent to 2 months of Annual Fixed Charges/Annual Transmission Charges)	2.94	2.94
D	Total Working Capital (A+B+C)	2.94	2.94
E	Rate of Interest (in %)	12.60	12.60
F	Interest of Working Capital (D*E)	0.15	0.37

58. The details of IWC allowed vide order dated 28.7.2016 in Petition No. 92/TT/2016 for Asset-1, vide order dated 23.7.2018 in Petition No. 148/TT/2017 for Assets-2 and 3 and vide order dated 31.8.2021 in Petition No. 105/TT/2020 for Assets-4 to 9, IWC claimed by the Petitioner in the instant petition and trued-up IWC in the instant order with respect to the transmission assets are as follows:

Particulars	(₹ in lakh)		
	2016-17	2017-18	2018-19
	Asset-1		
Allowed vide order dated 28.7.2016 in Petition No. 92/TT/2016	2.83	4.63	4.77



Particulars	2016-17	2017-18	2018-19
Claimed by the Petitioner in the instant petition	2.29	3.11	3.38
Approved after true-up in this order	2.29	3.11	3.38
Asset-2			
Allowed <i>vide</i> order dated 23.7.2018 in Petition No. 148/TT/2017	2.25	19.16	20.58
Claimed by the Petitioner in the instant petition	2.24	19.07	20.15
Approved after true-up in this order	2.24	19.07	20.12
Asset-3			
Allowed <i>vide</i> order dated 23.7.2018 in Petition No. 148/TT/2017		6.36	7.89
Claimed by the Petitioner in the instant petition		5.96	7.12
Approved after true-up in this order		5.96	7.08
Asset-4			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020			3.25
Claimed by the Petitioner in the instant petition			3.19
Approved after true-up in this order			3.19
Asset-5			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		6.03	8.67
Claimed by the Petitioner in the instant petition		6.08	9.04
Approved after true-up in this order		6.09	9.04
Asset-6			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		3.41	8.60
Claimed by the Petitioner in the instant petition		3.56	9.70
Approved after true-up in this order		3.56	9.70
Asset-7			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		2.33	7.07
Claimed by the Petitioner in the instant petition		2.29	7.08
Approved after true-up in this order		2.29	7.08
Asset-8			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		0.28	0.37
Claimed by the Petitioner in the instant petition		0.28	0.37
Approved after true-up in this order		0.28	0.37
Asset-9			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		0.15	0.37
Claimed by the Petitioner in the instant petition		0.15	0.37



Particulars	2016-17	2017-18	2018-19
Approved after true-up in this order		0.15	0.37

Approved Annual Fixed Charges for the 2014-19 Tariff Period

59. The trued-up AFC in respect to the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

	Particulars	Asset-1		
		2016-17 (pro-rata 301 days)	2017-18	2018-19
	Annual Transmission Charges			
A	Depreciation	30.74	43.22	48.30
B	Interest on Loan	33.53	42.64	44.08
C	Return on Equity	34.78	49.26	55.10
D	O&M Expenses	2.49	3.12	3.22
E	Interest on Working Capital	2.29	3.11	3.38
F	Total (A+B+C+D+E)	103.83	141.35	154.08

(₹ in lakh)

	Particulars	Asset-2		
		2016-17 (pro-rata 46 days)	2017-18	2018-19
	Annual Transmission Charges			
A	Depreciation	18.26	163.56	180.18
B	Interest on Loan	19.55	162.17	163.18
C	Return on Equity	20.43	182.59	201.19
D	O&M Expenses	18.62	152.69	157.75
E	Interest on Working Capital	2.24	19.07	20.12
F	Total (A+B+C+D+E)	79.10	680.08	722.42

(₹ in lakh)

	Particulars	Asset-3		Asset-4
		2017-18 (pro-rata 341 days)	2018-19	2018-19 (pro-rata 53 days)
	Annual Transmission Charges			
A	Depreciation	22.60	32.80	37.51
B	Interest on Loan	21.41	29.90	36.31
C	Return on Equity	25.06	36.53	41.94
D	O & M Expenses	86.98	96.20	15.83
E	Interest on Working Capital	5.96	7.08	3.19
F	Total (A+B+C+D+E)	162.01	202.51	134.78

(₹ in lakh)



Particulars	Asset-5		Asset-6	
	2017-18 (pro-rata 279 days)	2018-19	2017-18 (pro-rata 148 days)	2018-19
Annual Transmission Charges				
Depreciation	24.82	46.48	17.94	55.41
Interest on Loan	23.73	42.41	17.97	54.10
Return on Equity	27.79	52.18	20.09	62.20
O & M Expenses	86.42	116.81	45.84	116.81
Interest on Working Capital	6.09	9.04	3.56	9.70
Total (A+B+C+D+E)	168.85	266.92	105.40	298.22

(₹ in lakh)

Particulars	Asset-7		Asset-8	
	2017-18 (pro-rata 128 days)	2018-19	2017-18 (pro-rata 279 days)	2018-19
Annual Transmission Charges				
A Depreciation	9.01	33.38	0.00	0.00
B Interest on Loan	9.11	28.40	0.00	0.00
C Return on Equity	10.08	37.48	13.18	17.29
D O & M Expenses	32.65	96.20	0.00	0.00
E Interest on Working Capital	2.29	7.08	0.28	0.37
F Total (A+B+C+D+E)	63.14	202.54	13.46	17.66

(₹ in lakh)

Particulars	Asset-9	
	2017-18 (pro-rata 148 days)	2018-19
Annual Transmission Charges		
A Depreciation	0.00	0.00
B Interest on Loan	0.00	0.00
C Return on Equity	6.99	17.29
D O & M Expenses	0.00	0.00
E Interest on Working Capital	0.15	0.37
F Total (A+B+C+D+E)	7.14	17.66

60. The details of AFC approved vide order dated 28.7.2016 in Petition No. 92/TT/2016 for Asset-1, vide order dated 23.7.2018 in Petition No. 148/TT/2017 for Assets-2 and 3 and vide order dated 31.8.2021 in Petition No. 105/TT/2020 for Assets-4 to 9, AFC claimed by the Petitioner in the instant petition and tried-up AFC in the instant order in respect of the transmission assets are as follows:



Particulars	2016-17	2017-18	2018-19
Asset-1			
Allowed <i>vide</i> order dated 28.7.2016 in Petition No. 92/TT/2016	129.34	212.76	219.23
Claimed by the Petitioner in the instant petition	103.83	141.37	154.09
Approved after true-up in this order	103.83	141.35	154.08
Asset-2			
Allowed <i>vide</i> order dated 23.7.2018 in Petition No. 148/TT/2017	79.36	684.18	743.84
Claimed by the Petitioner in the instant petition	79.09	680.10	723.47
Approved after true-up in this order	79.10	680.08	722.42
Asset-3			
Allowed <i>vide</i> order dated 23.7.2018 in Petition No. 148/TT/2017		181.11	240.87
Claimed by the Petitioner in the instant petition		162.02	204.12
Approved after true-up in this order		162.01	202.51
Asset-4			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020			137.75
Claimed by the Petitioner in the instant petition			134.89
Approved after true-up in this order			134.78
Asset-5			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		166.07	249.54
Claimed by the Petitioner in the instant petition		168.83	266.94
Approved after true-up in this order		168.85	266.92
Asset-6			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		98.38	246.01
Claimed by the Petitioner in the instant petition		105.41	298.22
Approved after true-up in this order		105.40	298.22
Asset-7			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		65.20	201.83
Claimed by the Petitioner in the instant petition		63.13	202.54
Approved after true-up in this order		63.14	202.54
Asset-8			
Allowed <i>vide</i> order dated 31.8.2021 in Petition No. 105/TT/2020		13.48	17.69
Claimed by the Petitioner in the instant petition		13.46	17.66
Approved after true-up in this order		13.46	17.66
Asset-9			



Particulars	2016-17	2017-18	2018-19
Allowed vide order dated 31.8.2021 in Petition No. 105/TT/2020		7.15	17.69
Claimed by the Petitioner in the instant petition		7.14	17.66
Approved after true-up in this order		7.14	17.66

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

61. All transmission assets except for Asset-7 have been combined into Combined Asset w.e.f. 1.4.2019. The Petitioner has claimed the following transmission charges in respect of the Combined Asset and Asset 7 for the 2019-24 tariff period:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	691.55	710.92	725.88	731.87	732.54
Interest on Loan	580.25	544.98	506.41	459.92	403.63
Return on Equity	729.29	751.45	770.25	780.04	781.17
O&M Expenses	528.96	547.74	567.03	587.20	607.24
Interest on Working Capital	53.14	54.16	54.93	55.35	55.30
Total	2583.19	2609.25	2624.50	2614.38	2579.88

(₹ in lakh)

Asset-7					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	45.28	45.55	46.04	46.63	46.74
Interest on Loan	35.90	32.53	29.30	26.17	22.60
Return on Equity	42.07	42.36	42.88	43.52	43.63
O&M Expenses	3.82	3.85	3.89	3.93	3.95
Interest on Working Capital	45.02	46.60	48.24	49.92	51.68
Total	172.09	170.89	170.35	170.17	168.60

62. The details of the IWC claimed by the Petitioner in respect of the Combined Asset and Asset-7 for the 2019-24 tariff period are as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for 1 month)	44.08	45.65	47.25	28.93	50.60
Working Capital for Maintenance Spares (15% of O&M Expenses)	79.34	82.16	85.05	88.08	91.09
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	317.61	321.69	323.57	322.32	317.20



Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Total Working Capital	441.03	449.50	455.87	459.33	458.89
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	53.14	54.16	54.93	55.35	55.30

(₹ in lakh)

Asset-7					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for 1 month)	44.08	45.65	47.25	28.93	50.60
Working Capital for Maintenance Spares (15% of O&M Expenses)	79.34	82.16	85.05	88.08	91.09
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	317.61	321.69	323.57	322.32	317.20
Total Working Capital	441.03	449.50	455.87	459.33	458.89
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	53.14	54.16	54.93	55.35	55.30

Effective Date of Commercial Operation (E-COD)

63. The Petitioner has submitted that the E-COD of the Combined Asset except for Asset-7 works out to be 18.12.2017. E-COD of the Combined Asset has been worked out as 18.12.2017, based on the trued-up capital cost and dates of commercial operation of the individual assets, which are as follows:

Asset	Trued-up Capital Cost as on 31.3.2019 (₹ in lakh)	COD	No. of days from the last COD of the Project	Weight of cost (in %)	Weighted days
Asset 1	1017.49	4.6.2016	978	8.16	79.79
Asset 2	3434.33	14.2.2017	723	27.54	199.09
Asset 3	645.41	25.4.2017	653	5.17	33.79
Asset 4	4919.12	7.2.2019	0	39.44	0.00
Asset 5	941.75	26.6.2017	591	7.55	44.63
Asset 6	1150.96	4.11.2017	460	9.23	42.45
Asset 8	181.50	26.6.2017	591	1.46	8.60
Asset 9	181.50	4.11.2017	460	1.46	6.69
Total	12472.07			1.00	415.04
Effective COD (latest COD-total weighted days)					18.12.2017



64. The E-COD is used to determine the lapsed life of the transmission project as a whole, which works out as 1 (one) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (WAL) of the Project

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

66. The Combined Asset may have multiple elements, such as land, buildings, transmission lines, sub-station and PLCC. Each element may have a different span of life. Therefore, the concept of WAL has been used as the useful life of the transmission project as a whole.

67. The WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as specified in the 2019 Tariff Regulations. The element-wise life as defined in the regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, the WAL of all the transmission assets achieving COD during the 2014-19 tariff period has been worked out as 31 years. The details of the same are as follows:

Particulars	Life (in years) (1)	Capital cost as on 31.3.2019 (₹ in lakh) (2)	Weighted cost (₹ in lakh) (3) = (1) * (2)	Weighted Avg. Life of Asset (in years) (4) = (3) / (2)
Building Civil Works & Colony	25.00	0.00	0.00	30.743 years (rounded off to 31 years)
Transmission Line	35.00	7736.99	270794.73	
Sub Station	25.00	4266.62	106665.40	
PLCC	15.00	225.61	3384.13	
I.T. Equipment	6.67	202.81	1352.06	
Total		12432.03	382196.32	



68. The WAL as on 1.4.2019, as determined above, is applicable prospectively (i.e. for the 2019-24 tariff period onwards), and no retrospective adjustment of depreciation in the previous tariff period is required to be done. As discussed above, the effective COD of the transmission assets is 5.12.2017, and the elapsed life of the project as a whole works out as 1 year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from Effective COD). Accordingly, the WAL has been used to determine the remaining useful life as on 31.3.2019 to be 30 years.

Capital Cost

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

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

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

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other*



- appurtenant cost paid to the railway;*
- (k) *Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
 - (l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
 - (m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
 - (n) *Expenditure on account of change in law and force majeure events; and*
 - (o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (3) *The Capital cost of an existing project shall include the following:*
- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
 - (b) *Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
 - (c) *Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;*
 - (d) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
 - (e) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
 - (f) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (4) *The capital cost in case of existing or new hydro generating station shall also include:*
- (a) *cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
 - (b) *cost of the developer's 10% contribution towards Rajiv Gandhi Grameen 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.”*

70. The Petitioner has claimed a capital cost of ₹12509.10 lakh as on 31.3.2019 for the Combined Assets except for Asset-7. The capital cost of ₹12472.07 lakh has been considered as the opening capital cost as on 31.3.2019, for the determination of transmission tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

71. The Petitioner has claimed a capital cost of ₹741.61 lakh as on 31.3.2019 for Asset-7. The capital cost of ₹741.60 lakh has been considered as the opening capital cost as on 31.3.2019 for the determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Initial Spares

72. Initial Spares are to be allowed based on the overall project cost as per the APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017. Accordingly, Initial Spares can only be allowed when the assets covered in the transmission project are combined and the overall project cost is arrived at. In the instant case, the tariff for Asset-7 is being computed separately as stated earlier in the order. Therefore, the transmission assets covered in the project are not combined in the 2019-24 tariff period. Since the transmission assets are not combined, the overall project cost is not arrived at. Accordingly, the Initial Spares are not allowed on the basis of the overall project cost as per the APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017.



The Initial Spares shall be considered on the basis of the said judgement at the time of truing up of the transmission tariff for the 2019-24 tariff period.

Additional Capital Expenditure (ACE)

73. Regulations 24 and 25 of the 2019 Tariff Regulations provide as follows:

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

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

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

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

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

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

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission.”

74. The Petitioner has further submitted that the ACE projected to be incurred during the 2019-24 tariff period is on account of undischarged liability towards the final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date. The Petitioner has submitted the following ACE for the Combined Asset for the 2019-24 tariff period:

(₹ in lakh)

Particulars	Projected ACE			
	2019-20	2020-21	2021-22	2022-23
Combined Asset	427.11	359.59	307.53	40.00

75. The Petitioner has submitted the following ACE for Asset-7 for the 2019-24 period:

(₹ in lakh)

Particulars	Projected ACE			
	2019-20	2020-21	2021-22	2022-23
Asset-7	10.09	0.00	18.58	4.05

76. We have considered the submissions made by the Petitioner. The ACE claimed by the Petitioner has been allowed under Regulation 24(1)(a), Regulation 24(1)(b) and Regulation 25(1)(d) of the 2019 Tariff Regulations on account of liabilities for works executed prior to the cut-off date, subject to true-up as per actuals and on submission of documentary evidence. The ACE allowed is summarised as follows:



(₹ in lakh)

Assets	Regulations	Projected ACE			
		2019-20	2020-21	2021-22	2022-23
Asset-1	Regulation 24(1)(a), Regulation 24(1)(b) and Regulation 25(1)(d) of the 2019 Tariff Regulations	227.73	0.00	288.53	40.00
Asset-3	Regulation 24(1)(a), Regulation 24(1)(b) and Regulation 25(1)(d) of the 2019 Tariff Regulations	34.75	0.00	0.00	0.00
Asset-4	Regulation 24(1)(a), Regulation 24(1)(b) and Regulation 25(1)(d) of the 2019 Tariff Regulations	38.79	306.84	19.00	0.00
Asset-5	Regulation 24(1)(a), Regulation 24(1)(b) and Regulation 25(1)(d) of the 2019 Tariff Regulations	52.31	55.16	0.00	0.00
Combined Asset		353.58	362.00	307.53	40.00

77. The ACE claimed by the Petitioner for Asset-7 has been allowed under Regulation 24(1)(a), Regulation 24(1)(b) and Regulation 25(1)(d) of the 2019 Tariff Regulations on account of liabilities for works executed prior to the cut-off date, subject to true-up as per actuals and on submission of documentary evidence.

78. Accordingly, the capital cost considered for the Combined Asset for the 2019-24 tariff period is as follows:

(₹ in lakh)

Particulars	Capital cost as on 1.4.2019	ACE 2019-24				Capital cost as on 31.3.2024
		2019-20	2020-21	2021-22	2022-23	
Combined Asset	12472.07	412.19 [*]	360.59 [#]	307.53	40.00	13592.38
Asset-7	741.60	10.09	0.00	18.58	4.05	774.32

^{*}Disallowed excess Initial Spares of ₹7.83 lakh (Asset-3) and ₹6.01 lakh (Asset-4)

[^]Allowed IDC discharge of ₹72.45 lakh (Asset-4)

[#]Disallowed excess Initial Spares of ₹1.41 lakh (Asset-5)

Debt-Equity ratio

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

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

Provided that:



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

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

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

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

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

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

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

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

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation.”

80. The debt-equity considered for computation of the tariff for the 2019-24 tariff period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The debt-



equity considered for computation of tariff for the 2019-24 period in respect of the Combined Asset and Asset -7 is as follows:

Combined Asset

Funding	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	ACE 2019-24 (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	8730.45	70.00	784.22	70.00	9514.67	70.00
Equity	3741.62	30.00	336.09	30.00	4077.71	30.00
Total	12472.07	100.00	1120.31	100.00	13592.38	100.00

Asset-7

Funding	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	ACE 2019-24 (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	519.12	70.00	22.90	70.00	542.02	70.00
Equity	222.48	30.00	9.82	30.00	232.30	30.00
Total	741.60	100.00	32.72	100.00	774.32	100.00

Depreciation

81. Regulation 33 of the 2019 Tariff Regulations provides as follows:

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

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

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

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

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

Provided further that in case of hydro generating stations, the salvage value shall



be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

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

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

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

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

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

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

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

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

(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.

(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of-

a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or



- b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or
- c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”

82. The IT equipment has been considered as part of the Gross Block and depreciated using WAROD (as placed in Annexure-II). WAROD has been worked out after taking into account the depreciation rates of the IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of the IT equipment has been considered as NIL, i.e. the IT asset has been considered 100 percent depreciable. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed for the Combined Asset and Asset-7 is as follows:

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Depreciation					
A	Opening Gross Block	12472.07	12884.26	13244.85	13552.38	13592.38
B	ACE	412.19	360.59	307.53	40.00	0.00
C	Closing Gross Block (A+B)	12884.26	13244.85	13552.38	13592.38	13592.38
D	Average Gross Block (A+C)/2	12678.16	13064.55	13398.61	13572.38	13592.38
E	Weighted average rate of Depreciation (WAROD) (in %)	5.44	5.42	5.40	5.37	5.37
F	Balance useful life of the asset (Year)	30	29	28	27	26
G	Elapsed life at the beginning of the year (Year)	1	2	3	4	5
H	Aggregate Depreciable Value	11430.84	11778.91	12079.67	12236.06	12254.06
I	Depreciation during the year	689.19	708.20	723.16	729.15	729.82
J	Cumulative Depreciation at the end of the year	1737.72	2445.92	3169.08	3898.24	4628.06
K	Remaining Depreciable Value at the end of the year	9693.12	9332.99	8910.58	8337.82	7626.00

Asset-7

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Depreciation					
A	Opening Gross Block	741.60	751.69	751.69	770.27	774.32



	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
B	ACE	10.09	0.00	18.58	4.05	0.00
C	Closing Gross Block (A+B)	751.69	751.69	770.27	774.32	774.32
D	Average Gross Block (A+C)/2	746.64	751.69	760.98	772.29	774.32
E	Weighted average rate of Depreciation (WAROD) (in %)	6.06	6.06	6.05	6.04	6.04
F	Balance useful life of the asset (Year)	23	22	21	20	19
G	Elapsed life at the beginning of the year (Year)	1	2	3	4	5
H	Aggregate Depreciable Value	678.01	682.55	690.91	701.09	702.91
I	Depreciation during the year	45.29	45.55	46.04	46.64	46.74
J	Cumulative Depreciation at the end of the year	87.68	133.23	179.27	225.91	272.65
K	Remaining Depreciable Value at the end of the year	590.33	549.32	511.64	475.18	430.27

Interest on Loan (IoL)

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

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

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

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

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

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

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

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

(5a) *The rate of interest on loan for installation of emission control system shall be the*



weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company 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.”

84. The Weighted Average Rate of IoL has been considered based on the prevailing rate as on 1.4.2019. Accordingly, the floating rate of interest, if any, shall be considered at the time of truing-up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the 2019-24 tariff period for the Combined Asset and Asset-7 is as follows:

Combined Asset

		(₹ in lakh)				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Loan					
A	Gross Normative Loan	8730.45	9018.98	9271.40	9486.67	9514.67
B	Cumulative Repayments upto Previous Year	909.82	1599.02	2307.22	3030.38	3759.53
C	Net Loan-Opening (A-B)	7820.63	7419.97	6964.18	6456.29	5755.13
D	Additions	288.53	252.41	215.27	28.00	0.00
E	Repayment during the year	689.19	708.20	723.16	729.15	729.82
F	Net Loan-Closing (C+D-E)	7419.97	6964.18	6456.29	5755.13	5025.31
G	Average Loan (C+F)/2	7620.30	7192.07	6710.23	6105.71	5390.22
H	Weighted Average Rate of Interest on Loan (in %)	7.6517	7.6142	7.5895	7.5828	7.5486
I	Interest on Loan (G*H)	583.08	547.62	509.27	462.98	406.88

Asset-7

		(₹ in lakh)				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Loan					
A	Gross Normative Loan	519.12	526.18	526.18	539.19	542.02
B	Cumulative Repayments upto Previous Year	42.39	87.68	133.23	179.27	225.91
C	Net Loan-Opening (A-B)	476.73	438.51	392.96	359.92	316.12
D	Additions	7.06	0.00	13.01	2.84	0.00
E	Repayment during the year	45.29	45.55	46.04	46.64	46.74
F	Net Loan-Closing (C+D-E)	438.51	392.96	359.92	316.12	269.38
G	Average Loan (C+F)/2	457.62	415.73	376.44	338.02	292.75



	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
H	Weighted Average Rate of Interest on Loan (in %)	7.8439	7.8240	7.7826	7.7410	7.7198
I	Interest on Loan (G*H)	35.89	32.53	29.30	26.17	22.60

Return on Equity (RoE)

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

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

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

Provided that return on equity in respect of additional capitalization after cutoff date beyond the original scope, excluding additional capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

Provided further that:

- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;*
- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;*
- iii. in case of a thermal generating station, with effect from 1.4.2020:*
 - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;*
 - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:*

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



(3) The return on equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one-year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (ODe) occurs plus 350 basis point, subject to ceiling of 14%.”

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 the MAT rate is applicable to it. Accordingly, the MAT rate applicable in the 2019-20 has been considered for the purpose of RoE which shall be trued up with the actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. Therefore, RoE allowed for the Combined Asset and Asset-7 is as follows:

Combined Asset

		(₹ in lakh)				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Return on Equity					
A	Opening Equity	3741.62	3865.28	3973.45	4065.71	4077.71
B	Additions	123.66	108.18	92.26	12.00	0.00
C	Closing Equity (A+B)	3865.28	3973.45	4065.71	4077.71	4077.71
D	Average Equity (A+C)/2	3803.45	3919.37	4019.58	4071.71	4077.71
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity (D*G)	714.36	736.14	754.96	764.75	765.88

Asset-7

		(₹ in lakh)				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Return on Equity					
A	Opening Equity	222.48	225.51	225.51	231.08	232.30
B	Additions	3.03	0.00	5.57	1.22	0.00
C	Closing Equity (A+B)	225.51	225.51	231.08	232.30	232.30
D	Average Equity (A+C)/2	223.99	225.51	228.29	231.69	232.30
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for the respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity (D*G)	42.07	42.35	42.88	43.52	43.63

Operation & Maintenance Expenses (O&M Expenses)

87. The O&M Expenses claimed by the Petitioner for the Combined Asset and Asset-7 for the 2019-24 period are as follows:



Particulars	Combined Asset				
	2019-20	2020-21	2021-22	2022-23	2023-24
400 kV Bays	4	4	4	4	4
220 kV Bays	6	6	6	6	6
S/C (Single Conductor) (km)	69.63	69.63	69.63	69.63	69.63
(D/C (Bundle Conductor- 4 sub-conductor)	16.80	16.80	16.80	16.80	16.80
400 kV (MVA)	2	2	2	2	2
Total O&M Expense (₹ in lakh)	528.96	547.74	568.03	587.20	607.20

Particulars	Asset-7				
	2019-20	2020-21	2021-22	2022-23	2023-24
220 kV Bays	2	2	2	2	2
Total O&M Expense (₹ in lakh)	45.02	46.60	48.24	49.92	51.68

88. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations provide that:

“35. Operation and Maintenance Expenses:

...

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Double Circuit (Single Conductor)</i>	0.377	0.391	0.404	0.419	0.433
<i>Multi Circuit (Bundled Conductor with four or more sub-conductor)</i>	2.319	2.401	2.485	2.572	2.662
<i>Multi Circuit (Twin & Triple Conductor)</i>	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
<i>HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)</i>	834	864	894	925	958
<i>Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)</i>	1,666	1,725	1,785	1,848	1,913
<i>500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)</i>	2,252	2,331	2,413	2,498	2,586
<i>±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)</i>	2,468	2,555	2,645	2,738	2,834
<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)</i>	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

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



normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and

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

89. We have considered the submissions of the Petitioner. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations for the Combined Asset and Asset-7 which are as follows:

Particulars	Combined Asset				
	2019-20	2020-21	2021-22	2022-23	2023-24
400 kV Bays	4	4	4	4	4
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
O&M Expense (₹ in lakh)	128.60	133.12	137.80	142.64	147.64
220 kV Bays	6	6	6	6	6
Norms (₹ lakh/km)	22.51	23.30	24.12	24.96	25.84
O&M Expense (₹ in lakh)	135.06	139.80	144.72	149.76	155.04
S/C (Single Conductor) (km)	69.63	69.63	69.63	69.63	69.63
Norms (₹ lakh/km)	0.252	0.26	0.27	0.279	0.289
O&M Expense (₹ in lakh)	17.55	18.10	18.80	19.43	20.12
(D/C (Bundle Conductor- 4 sub-conductor)	16.80	16.80	16.80	16.80	16.80
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
O&M Expense (₹ in lakh)	22.21	22.98	23.79	24.63	25.49
400 kV (2X315 MVA)	2	2	2	2	2



Particulars	Combined Asset				
	2019-20	2020-21	2021-22	2022-23	2023-24
Norms (₹ lakh/MVA)	0.358	0.371	0.384	0.398	0.411
O&M Expense (₹ in lakh)	225.54	233.74	241.92	250.74	258.94
Total O&M Expense (₹ in lakh)	528.96	547.74	567.03	587.20	607.22

Particulars	Asset-7				
	2019-20	2020-21	2021-22	2022-23	2023-24
220 kV Bays	2	2	2	2	2
Norms (₹ lakh/km)	22.51	23.30	24.12	24.96	25.84
Total O&M Expense (₹ in lakh)	45.02	46.60	48.24	49.92	51.68

Interest on Working Capital (IWC)

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

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

.....

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

- (i) Receivables equivalent to 45 days of annual fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and

Operation and maintenance expenses, including security expenses for one month.

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

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

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

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

‘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;”



91. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21 and from 2021-22 onwards it has been considered as 10.50% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon for the Combined Asset and Asset-7 are as follows:

Combined Asset

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Working Capital					
A	Working Capital for O&M Expenses (O&M Expenses for 1 month)	44.08	45.64	47.25	48.93	50.60
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	79.34	82.16	85.05	88.08	91.08
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	315.80	319.31	320.79	319.56	314.47
D	Total Working Capital	439.22	447.12	453.10	456.58	456.16
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
F	Interest on Working Capital	52.93	50.30	47.58	47.94	47.90

Asset-7

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Working Capital					
A	Working Capital for O&M Expenses (O&M Expenses for 1 month)	3.75	3.88	4.02	4.16	4.31
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	6.75	6.99	7.24	7.49	7.75
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	21.16	21.04	20.94	20.92	20.67
D	Total Working Capital	31.66	31.91	32.20	32.57	32.72



	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
F	Interest on Working Capital	3.82	3.59	3.38	3.42	3.44

Annual Fixed Charges for the 2019-24 Tariff Period

92. The transmission charges allowed for the 2019-24 tariff period for the Combined Asset and Asset-7 are summarised as follows:

(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Annual Transmission Charges					
A	Depreciation	689.19	708.20	723.16	729.15	729.82
B	Interest on Loan	583.08	547.62	509.27	462.98	406.88
C	Return on Equity	714.36	736.14	754.96	764.75	765.88
D	Interest on Working Capital	52.93	50.30	47.58	47.94	47.90
E	O&M Expenses	528.96	547.74	567.03	587.20	607.22
F	Total (A+B+C+D+E)	2568.52	2589.99	2602.00	2592.02	2557.70

93. The transmission charges allowed for the 2019-24 period for Asset-7 are as follows:

(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Annual Transmission Charges					
A	Depreciation	45.29	45.55	46.04	46.64	46.74
B	Interest on Loan	35.89	32.53	29.30	26.17	22.60
C	Return on Equity	42.07	42.35	42.88	43.52	43.63
D	Interest on Working Capital	3.82	3.59	3.38	3.42	3.44
E	O&M Expenses	45.02	46.60	48.24	49.92	51.68
F	Total (A+B+C+D+E)	172.09	170.62	169.84	169.67	168.09

Filing Fee and the Publication Expenses

94. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses.

95. We have considered the submissions of the Petitioner. 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 a pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

96. The Petitioner shall be entitled to reimbursement of the 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 to recovery of RLDC fees and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

Goods and Services Tax

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

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

Security Expenses

99. The Petitioner has submitted that security expenses for the transmission assets are not claimed in the instant petition and it would file a separate petition to claim the overall security expenses and consequential IWC.

100. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses on a projected basis for the 2019-24 tariff



period based on actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission vide order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

101. The Petitioner has sought reimbursement of capital spares at the end of the 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

102. The Commission vide order dated 31.8.2021 in Petition No.105/TT/2020 approved the COD of Asset-7 as 24.11.2017 under Regulation 4(3)(ii) of the 2014 Tariff Regulations as the associated transmission line (i.e. 220 kV Kaithal (PG)-Neemwala (HVPNL) D/C) under the scope of HVPNL was not ready. Accordingly, the transmission charges of Asset-7 were levied on HVPNL from 24.11.2017 till the COD of the downstream system. The associated downstream system, i.e. 220 kV Kaithal (PG)-Neemwala (HVPNL) Circuits 1 & 2, was charged on 10.2.2021, and power flow started on the same day. Thus, the transmission charges of Asset-7 are to be borne by HVPNL from 24.11.2017 to 9.2.2021 and from 9.2.2021, onwards the transmission charges of Asset-7 shall be included in the common pool.

103. With effect from 1.7.2011, the sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. With effect from 1.11.2020, the 2010 Sharing Regulations has been repealed, and the sharing of transmission charges is governed by the provisions of the



2020 Sharing Regulations. Accordingly, the trued-up transmission charges approved for Assets-1 to 6 and Assets 8 and 9 from their respective COD to 31.3.2019 and the transmission charges approved for the Combined Asset for the 2019-24 in this order shall be governed as per the applicable Sharing Regulations as provided in Regulation 43 of the 2014 Tariff Regulations and Regulation 57 of the 2019 Tariff Regulations.

104. To summarize:

- a) The trued-up AFC allowed for the 2014-19 tariff period with respect to the transmission assets are as follows:

(₹ in lakh)			
Assets	2016-17	2017-18	2018-19
Asset-1	103.83	141.35	154.08
Asset-2	79.10	680.08	722.42
Asset-3		162.01	202.51
Asset-4			134.78
Asset-5		168.85	266.92
Asset-6		105.40	298.21
Asset-7		63.14	202.54
Asset-8		13.46	17.66
Asset-9		7.14	17.66

- b) AFC allowed for the 2019-24 tariff period in this order for the Combined Asset and Asset are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset	2568.52	2589.99	2602.00	2592.02	2557.70
Asset-7	172.09	170.62	169.84	169.67	168.09

105. The Annexures to this order form part of this order.

106. This order disposes of Petition No. 159/TT/2023 in terms of the above discussion and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(Jishnu Barua)
Chairperson



Asset-1

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	ACE (₹ in lakh)				Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)		
		2016-17	2017-18	2018-19	Total			2016-17	2017-18	2018-19
Land - Leasehold	-	40.04	-	-	40.04	40.04	3.34%	0.67	1.34	1.34
Transmission Line	601.67	183.31	16.62	175.85	375.78	977.45	5.28%	36.61	41.89	46.97
Total	601.67	223.35	16.62	175.85	415.82	1017.49	Total	37.28	43.22	48.30
Average Gross Block (₹ in lakh)								713.34	833.33	929.56
Weighted Average Rate of Depreciation								5.23%	5.19%	5.20%



Asset-2

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	ACE (₹ in lakh)				Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)		
		2016-17	2017-18	2018-19	Total			2016-17	2017-18	2018-19
Transmission Line	2428.88	6.82	269.71	25.48	302.01	2730.88	5.28%	128.42	135.73	143.52
Sub Station	219.76	156.77	187.36	34.61	378.74	598.50	5.28%	15.74	24.83	30.69
PLCC	8.76	0.01	73.45	20.20	93.65	102.41	6.33%	0.55	2.88	5.84
IT Equipment (Incl. Software)	2.50	0.00	0.03	0.00	0.03	2.53	5.28%	0.13	0.13	0.13
Total	2659.89	163.60	530.54	80.29	774.43	3434.33	Total	144.85	163.56	180.18
Average Gross Block (₹ in lakh)								2741.69	3088.76	3394.18
Weighted Average Rate of Depreciation								5.28%	5.30%	5.31%



Asset-3

2014-19		ACE (₹ in lakh)			Depreciation as per Regulations			
Capital Cost	Capital Cost as on 1.4.2014 / COD (₹ in lakh)	2017-18	2018-19	Allowed ACE (₹ in lakh)	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depn.	2017-18	2018-19
Sub Station	264.16	259.18	49.26	308.44	572.61	5.28%	20.79	28.93
PLCC	19.68	4.89	0.48	5.37	25.05	6.33%	1.40	1.57
IT Equipment (Incl. Software)	36.48	2.83	8.45	11.28	47.76	15.00%	2.00	2.30
Total	320.32	266.90	58.19	325.09	645.41	Total	24.19	32.80
					Average Gross Block (₹ in lakh)		453.77	616.32
					Weighted Average Rate of Depreciation		5.33%	5.32%



2014-19		ACE (₹ in lakh)							Depreciation as per Regulations		
Capital Cost	Capital Cost as on 1.4.2014 / COD (₹ in lakh)	2014- 19	2015-16	2016- 17	2017- 18	2018- 19	Allowed ACE (₹ in lakh)	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depn.	2017- 18	2018- 19
Sub Station	264.19	0.00	0.00	0.00	259.18	49.26	308.44	572.63	5.28%	20.7 9	28.9 3
PLCC	19.68	0.00	0.00	0.00	4.89	0.48	5.37	25.05	6.33%	1.40	1.57
IT Equipment (Incl. Software)	36.49	0.00	0.00	0.00	2.83	8.45	11.28	47.76	15.00%	2.00	2.30
Total	320.35	0.00	0.00	0.00	266.90	58.19	325.09	645.44	Total	24.1 9	32.8 0
									Average Gross Block (₹ in lakh)	453. 80	616. 35
									Weighted Average Rate of Depreciation	5.33 %	5.32 %



Asset-4

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)
		2018-19	Total			2018-19
Transmission Line	3939.65	89.01	89.01	4028.66	5.28%	210.36
Sub Station	730.76	3.11	3.11	733.86	5.28%	38.67
PLCC	97.74	0.42	0.42	98.15	6.33%	6.20
IT Equipment (Incl. Software)	58.20	0.25	0.25	58.45	5.28%	3.08
Total	4826.34	92.78	92.78	4919.12	Total	258.31
Average Gross Block (₹ in lakh)						4872.73
Weighted Average Rate of Depreciation						5.30%



Asset-5

2014-19	Claimed Additional Capitllisation					Depreciation as per Regulations			
Capital Cost	Capital Cost as on 1.4.2014 / COD (₹ in lakh)	2017-18	2018-19	Allowed ACE (₹ in lakh)	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depn.	2017-18	2018-19	
Sub Station	395.59	392.67	118.27	510.94	906.53	5.28%	31.25	44.74	
IT Equipment (Incl. Software)	15.37	15.26	4.59	19.85	35.22	15.00%	1.21	1.74	
Total	410.96	407.93	122.86	530.79	941.75	Total	32.47	46.48	
							Average Gross Block (₹ in lakh)	614.93	880.32
							Weighted Average Rate of Depreciation	5.28%	5.28%



Asset-6

2014-19		ACE (₹ in lakh)				Depreciation as per Regulations		
Capital Cost	Capital Cost as on 1.4.2014 / COD (₹ in lakh)	2017-18	2018-19	Allowed ACE (₹ in lakh)	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depn.	2017-18	2018-19
Sub Station	669.45	219.47	203.20	422.67	1092.12	5.28%	41.14	52.30
IT Equipment (Incl. Software)	58.85	0.00	0.00	0.00	58.85	15.00%	3.11	3.11
Total	728.29	219.47	203.20	422.67	1150.96	Total	44.25	55.41
						Average Gross Block (₹ in lakh)	838.03	1049.36
						Weighted Average Rate of Depreciation	5.28%	5.28%



Asset-7

2014-19	ACE (₹ in lakh)				Depreciation as per Regulations			
Capital Cost	Capital Cost as on 1.4.2014 / COD (₹ in lakh)	2017-18	2018-19	Allowed ACE (₹ in lakh)	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depn.	2017-18	2018-19
Sub Station	389.47	73.15	218.69	291.84	681.31	5.28%	22.50	30.20
IT Equipment (Incl. Software)	60.28	0.00	0.00	0.00	60.28	15.00%	3.18	3.18
Total	449.76	73.15	218.69	291.84	741.60	Total	25.68	33.38
Average Gross Block (₹ in lakh)							486.33	632.25
Weighted Average Rate of Depreciation							5.28%	5.28%



Asset-8

2014-19	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)	
Capital Expenditure				2017-18	2018-19
Sub Station	181.50	181.50	5.28%	9.58	9.58
Total	181.50	181.50	Total	9.58	9.58
Average Gross Block (₹ in lakh)				181.50	181.50
Weighted Average Rate of Depreciation				5.28%	5.28%

Asset-9

2014-19	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)	
Capital Expenditure				2017-18	2018-19
Sub Station	181.50	181.50	5.28%	9.58	9.58
Total	181.50	181.50	Total	9.58	9.58
Average Gross Block (₹ in lakh)				181.50	181.50
Weighted Average Rate of Depreciation				5.28%	5.28%



Annexure-II

Combined Asset

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)					
		2019-20	2020-21	2021-22	2022-23	Total			2019-20	2020-21	2021-22	2022-23	2023-24	
Land - Leasehold	40.04	184.88	-	288.53	40.00	513.41	553.45	3.34%	4.42	7.51	12.33	17.82	18.49	
Transmission Line	7736.99	124.47	266.10	19.00	-	409.57	8146.57	5.28%	411.80	422.11	429.64	430.14	430.14	
Sub Station	4266.62	86.26	87.81	-	-	174.07	4440.68	5.28%	227.55	232.15	234.47	234.47	234.47	
PLCC	225.61	12.26	4.62	-	-	16.88	242.49	6.33%	14.67	15.20	15.35	15.35	15.35	
IT Equipment (Incl. Software)	202.81	4.32	2.06	-	-	6.38	209.19	15.00%	30.75	31.22	31.38	31.38	31.38	
Total	12472.07	412.19	360.59	307.53	40.00	1120.31	13592.38		689.19	708.20	723.16	729.15	729.82	
									Average Gross Block (₹ in lakh)	12678.16	13064.55	13398.61	13572.38	13592.38
									Weighted Average Rate of Depreciation	5.44%	5.42%	5.40%	5.37%	5.37%



Asset-7

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)					
		2019-20	2020-21	2021-22	2022-23	Total			2019-20	2020-21	2021-22	2022-23	2023-24	
Sub Station	681.31	10.09	0.00	18.58	4.05	32.72	714.03	5.28%	36.24	36.51	37.00	37.59	37.70	
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00	0.00	0.00	
IT Equipment (Incl. Software)	60.28	0.00	0.00	0.00	0.00	0.00	60.28	15.00%	9.04	9.04	9.04	9.04	9.04	
Total	741.60	10.09	0.00	18.58	4.05	32.72	774.32		45.28	45.55	46.04	46.64	46.74	
									Average Gross Block (₹ in lakh)	746.642	751.687	760.977	772.292	774.317
									Weighted Average Rate of Depreciation	6.06%	6.06%	6.05%	6.04%	6.04%

