

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 14/TT/2022

Coram:

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

Date of Order: 12.10.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of assets under "Eastern Region Strengthening Scheme-V (ERSS-V)" in Eastern Region.

And in the matter of:

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

....Petitioner

Vs.

1. Bihar State Power (Holding) Company Limited,
(Formerly Bihar State Electricity Board -BSEB),
Vidyut Bhavan, Bailey Road, Patna – 800 001.
2. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Calcutta - 700 091.
3. Grid Corporation of Orissa Limited,
Shahid Nagar, Bhubaneswar - 751 007.
4. Damodar Valley Corporation,
DVC Tower, Maniktala,
Civic Centre, VIP Road, Calcutta - 700 054.



5. Power Department,
Government of Sikkim,
Gangtok - 737 101.
6. Jharkhand State Electricity Board,
In Front of Main Secretariat,
Doranda, Ranchi – 834 002.
7. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Calcutta - 700 091.

...Respondents

For Petitioner : Shri S. S. Raju, PGCIL
Shri D. K. Biswal, PGCIL
Shri Ved Prakash Rastogi, PGCIL
Shri A. K. Verma, PGCIL

For Respondents : None

ORDER

The Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for truing-up of the transmission tariff of the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (herein referred to as the “the 2014 Tariff Regulations”) and determination of tariff of the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (herein after referred to as “the 2019 Tariff Regulations”) in respect of the following assets under “Eastern Region Strengthening Scheme-V (ERSS-V)” (hereinafter referred to as the “the transmission project”):

Asset-I: LILO of 400 kV S/C Subhasgram-Jeerat transmission line and associated bays at Rajarhat, 01 number 400/220 kV 500 MVA ICT (1st) and associated bays alongwith 04 numbers 220 kV line bays at Rajarhat GIS;



Asset-II: 02 numbers 400 kV 80 MVAR Switchable Line Reactors (charged as Bus Reactors) alongwith associated bays at 400 kV Purnea Sub-station;

Asset-III: 125 MVAR Bus Reactor (1st) and associated bay at Rajarhat GIS;

Asset-IV: 125 MVAR Bus Reactor (2nd) and associated bay at Rajarhat GIS.

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 9.1 and 10.0 above.

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

3) Admit the capital cost as claimed in the Petition and approve the Additional Capitalization projected to be incurred

4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff Regulations 2019 as per para 9.1 and 10.0 above for respective block.

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

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

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

8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.

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

10) Allow the petitioner to claimed IEDC as per actual expenditure.

11) Allow the petitioner FERV as claimed in the petition.



12) Allow the petitioner the Foreign Loan IDC as claimed in the petition.

13) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 10.7 above.

14) 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.

15) Condone the delay in filing of the instant truing up petition due to Covid-19 second wave. The delay in filing of the petition is due to prevailing lockdown situation due to COVID-19 pandemic, which is beyond the control of petitioner. Hence, the same may be condoned.

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

Backdrop of the case

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

- a) The Investment Approval (IA) in respect of the transmission project was accorded by Board of Directors of the Petitioner company in its 292nd meeting held on 23.10.2013 at an estimated cost of ₹136452 lakh including IDC of ₹5911 lakh based on August, 2013 price level (notified vide Memorandum Ref. No. C/CP/ERSS-V dated 31.10.2013).
- b) The Revised Cost Estimate (RCE) in respect of the transmission project was accorded by Board of Directors of the Petitioner company in its 339th meeting held on 29.3.2017 at an estimated cost of ₹189141 lakh including IDC of ₹13969 lakh based on December, 2016 price level (notified vide Memorandum Ref. No. C/CP/PA 1617-03-0AC-RCE017 dated 30.3.2017).
- c) The broad scope of works covered under the transmission project is as follows:

Transmission Line:

- i. Rajarhat - Purnea 400 kV D/C line (with triple snowbird conductor) with LILO of one circuit at Gokarna (WBSETCL) and other circuit at Farakka (NTPC).



- ii. LILO of Subhashgram - Jeerat 400 kV S/C line at Rajarhat.

Sub-stations:

- i. Establishment of new 400/220 kV, 2x500 MVA Gas insulated Sub-station at Rajarhat in West Bengal.
- ii. Extension of 400/220 kV Purnea (POWERGRID) Sub-station
- iii. Extension of 400 kV Gokarna ((WBSETCL), Farakka (NTPC) and Chaibasa (POWERGRID) Sub-stations.

Reactive Compensation:

Sl. No.	Transmission Line	From End	To End
1	Rajarhat- Farakka S/C	1x80 MVAR (Switchable)	1x80 MVAR (Switchable)
2	Rajarhat – Gokarna S/C	1x80 MVAR (Switchable)	0
3	Purnea – Gokarna S/C	1x80 MVAR (Switchable)	0
4	Purnea-Farakka S/C	1x80 MVAR (Switchable)	0

Bus Reactor:

- i. 2x125 MVAR at Rajarhat;
 - ii. 1x80 MVAR at Gokarna
- d) The details of the transmission assets covered in the transmission project and the petitions in which they are covered are as follows:

	Assets	Actual COD	Petition No.
1	Farraka-Gokarna Portion of 400 kV D/C Rajarhat-Purnea Line including LILO at Farakka and Gokarna and associated line bays (COD: 31.3.2017) {therein referred as Asset-I}	30.3.2017 (Effective-COD)	Covered in order dated 11.2.2021 in Petition No. 212/TT/2020 (tariff for 2014-19 tariff period was approved in Petition No. 44/TT/2017)
2	1X80 MVAR bus reactor alongwith associated bays at Gokarna Sub-station and 1X80 MVAR Switchable line reactor alongwith associated bays at Farakka Sub-Station (COD: 30.4.2017) {therein referred as Asset-II}		
3	02 Numbers of 400 kV Line bays for termination of LILO of 02 nd Ckt of Jamshedpur Rourkela 400 kV Line at Chaibasa Sub-station (COD:		



	22.11.2016) {therein referred as Asset-III}		
4	02 numbers 220 kV line bays at Rajarhat GIS {therein referred as Asset-I}	16.6.2019 (invoked)	Covered in Petition No. 255/TT/2021-order awaited
5	01 number 400/220 kV 500 MVA ICT (02nd) and associated bays at Rajarhat GIS {therein referred as Asset-II}	18.8.2019 (actual)	
6	Purnea - Farraka Portion of 400 kV D/C Rajarhat-Purnea Line {therein referred as Asset-III}	12.11.2019 (actual)	
7	Rajarhat - Gokarna Portion of 400 kV D/C Rajarhat-Purnea Line and associated bays alongwith 02x80 MVAR line reactors at Rajarhat GIS {therein referred as Asset-IV}	16.7.2020 (actual)	
8	Asset-I: LILO of 400 kV S/C Subhasgram – Jeerat transmission line and associated bays at Rajarhat, 01 number 400/220 kV 500 MVA ICT (1 st) and associated bays alongwith 04 numbers 220 kV line bays at Rajarhat GIS	3.2.2019 (actual)	Covered in instant petition (tariff for 2014-19 period was approved vide order dated 4.2.2021 in Petition No. 462/TT/2020)
9	Asset-II: 02 numbers 400 kV 80 MVAR Switchable Line Reactors (charged as Bus Reactors) alongwith associated bays at 400 kV Purnea Sub-station	1.11.2018 (actual)	
10	Asset-III: 125 MVAR Bus Reactor (1 st) and associated bay at Rajarhat GIS	24.3.2019 (actual)	
11	Asset-IV: 125 MVAR Bus Reactor (2 nd) and associated bay at Rajarhat GIS	31.3.2019 (actual)	

- e) The Annual Fixed Charges (AFC) for the 2018-19 period with respect to Asset-I to Asset-IV was approved by the Commission vide order dated 4.2.2021 in Petition No. 462/TT/2020 and the tried-up tariff claimed by the Petitioner in respect of the transmission assets for 2014-19 tariff period are as follows:



Particulars	(₹ in lakh)			
	Asset-I 2018-19 (Pro-rata for 57 days)	Asset-II 2018-19 (Pro-rata for 151 days)	Asset-III 2018-19 (Pro-rata for 8 days)	Asset-IV 2018-19 (Pro-rata for 1 day)
AFC approved vide order dated 4.2.2021 in Petition No. 462/TT/2020	462.29	323.83	7.80	0.98
AFC claimed by the Petitioner based on truing up in the instant petition	467.14	334.02	7.83	0.97

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. None of the Respondents have filed their replies in the matter.

6. The hearing in this matter was held on 1.8.2022 through video conference and the order was reserved.

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

8. The Petitioner has submitted that there is delay in filing of the instant petition due to second wave of covid-19 and the subsequent lockdown and has requested to condone the same as it was beyond the control of the Petitioner.



9. We have considered the submissions of the Petitioner. As per Regulation 9(2) of the 2019 Tariff Regulations, the Petitioner was required to file the truing up petition in case of the existing transmission system or element thereof by 31.10.2019. The Petitioner filed Petition No. 331/MP/2019 seeking extension of time by 180 days to file the tariff petition in case of the existing assets where orders have already been issued and 180 days extension in cases where final tariff orders for 2014-19 period are yet to be issued. The Commission, vide order dated 28.10.2019, granted time upto 31.1.2020 to file truing up petitions in cases where final orders have already been issued and three months from the date of issue of the final order, where final orders for 2014-19 period are yet to be issued. Later, NTPC and NHPC made representations seeking further extension of time. Taking into consideration their representations and the outbreak of Covid-19 pandemic and the subsequent declaration of lockdown by the Central Government, the Commission extended the date of filing of truing up petitions of 2014-19 period in case of the existing generating stations and transmission licensees up to 30.6.2020 vide suo-motu orders dated 6.7.2020 and 7.7.2020 in Petition No. 7/SM/2020. The period was further extended upto 30.9.2020 in case of NHPC and Teesta Urja Ltd., on an application filed by them, vide order dated 6.7.2020 in Petition No.7/SM/2020 and in case of Teesta valley Power Transmission Ltd. vide order dated 23.7.2020 in Petition No.7/SM/2020.

10. Accordingly, the Commission has already granted time upto 30.9.2020 in cases where tariff orders have already been issued and 180 days from the date of issue of the order where tariff orders are yet to be issued. The tariff for the instant transmission assets for the 2014-19 tariff period was approved vide order



4.2.2021 in Petition No. 462/TT/2020 and, accordingly, 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 by 31.7.2021. However, the Petitioner has filed the instant petition on 3.9.2021. Thus, there is a delay of 33 days in filing of the instant petition. Taking into consideration the Covid-19 Pandemic and the consequent lockdown, the delay of 33 days in filing of the instant petition is condoned.

TRUING-UP OF ANNUAL FIXED CHARGES FOR 2018-19 TARIFF PERIOD

11. The details of the transmission charges claimed by the Petitioner in respect of the transmission assets for 2018-19 period are as follows:

(₹ in lakh)				
	Asset-I	Asset-II	Asset-III	Asset-IV
Particulars	2018-19 (Pro-rata for 57 days)	2018-19 (Pro-rata for 151 days)	2018-19 (Pro-rata for 8 days)	2018-19 (Pro-rata for 1 day)
Depreciation	113.87	66.24	2.01	0.25
Interest on Loan	126.94	70.13	2.08	0.26
Return on Equity	149.37	73.92	2.25	0.28
O&M Expenses	65.59	113.70	1.29	0.16
Interest on Working Capital	11.37	10.03	0.20	0.02
Total	467.14	334.02	7.83	0.97

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

(₹ in lakh)				
	Asset-I	Asset-II	Asset-III	Asset-IV
Particulars	2018-19 (Pro-rata for 57 days)	2018-19 (Pro-rata for 151 days)	2018-19 (Pro-rata for 8 days)	2018-19 (Pro-rata for 1 day)
Maintenance Spares	35.00	22.90	4.89	4.89
O&M Expenses	63.00	41.23	8.81	8.81
Receivables	498.56	134.57	59.49	59.33
Total	596.56	198.70	73.19	73.03
Rate of Interest (in %)	12.20	12.20	12.20	12.20
Total	11.37	10.03	0.20	0.02



Date of Commercial Operation (“COD”)

13. The Commission vide order dated 4.2.2021 in Petition No. 462/TT/2020 has already approved the COD of the transmission assets. The relevant extract of the said order is as follows:

“21. Taking into consideration the CEA Energisation Certificates, RLDC Certificates and CMD Certificates, COD for instant assets are approved as follows:

S. N.	Name of Asset	Approved COD
1	Asset-I: LILO of 400kV S/C Subhasgram – Jeerat transmission line and associated bays at Rajarhat, 01 no. 400/220kV 500 MVA ICT (1 st) and associated bays alongwith 04 nos 220kV line bays at Rajarhat GIS	3.2.2019
2	Asset-II: 02 nos 400kV 80 MVAR Switchable Line Reactors (charged as Bus Reactors) alongwith associated bays at 400kV Purnea S/S	1.11.2018
3	Asset-III: 125 MVAR Bus Reactor (1 st) and associated bay at Rajarhat GIS	24.3.2019
4	Asset-IV: 125 MVAR Bus Reactor (2 nd) and associated bay at Rajarhat GIS	31.3.2019

Capital Cost

14. The Commission vide order dated 4.2.2021 in Petition No. 462/TT/2020 has approved the following capital cost and Additional Capital Expenditure (ACE) in respect of Asset-I to Asset-IV for 2018-19 period and the same is as follows:

Assets	FR apportioned approved cost	RCE apportioned approved cost	Admitted cost up to COD	ACE		Total cost as on 31.3.2019
				2017-18	2018-19	
Asset-I	16857.93	18667.49	15624.54	0.00	576.31	16200.85
Asset-II	2276.70	3822.94	2747.78	0.00	246.36	2994.14
Asset-III	1332.35	2175.23	1726.00	0.00	0.00	1726.00
Asset-IV	1332.35	2174.29	1740.88	0.00	0.00	1740.88
Total	21799.33	26839.95	21839.20	0.00	822.67	22661.87



15. The Petitioner vide Auditor's Certificate dated 7.7.2021 has submitted the capital cost up to COD along with ACE up to 31.3.2019. The details of the approved apportioned capital cost, capital cost as on COD and ACE incurred up to 31.3.2019 claimed by the Petitioner in respect of the transmission assets are as follows:

(₹ in lakh)

Assets	RCE apportioned approved cost	Capital Cost up to COD	ACE					Total Capital cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-I	18667.49	16262.80	0.00	0.00	0.00	0.00	553.75	16816.55
Asset-II	3822.94	2967.31	0.00	0.00	0.00	0.00	188.91	3156.22
Asset-III	2175.23	1797.54	0.00	0.00	0.00	0.00	0.00	1797.54
Asset-IV	2174.29	1799.23	0.00	0.00	0.00	0.00	0.00	1799.23
Total	26839.95	22826.88	0.00	0.00	0.00	0.00	742.66	23569.54

Cost over-run

16. The Petitioner has submitted that the justification for cost over-run was submitted in Petition No. 462/TT/2020 and the cost over-run in respect of Asset-I to Asset-IV was allowed by the Commission vide order dated 4.2.2021 in Petition No. 462/TT/2020 after due prudence check. The Petitioner has submitted that the RCE is filed in the instant petition just to provide that overall asset cost is within the RCE apportioned cost and there is no cost over-run.

17. We have considered the submissions of the Petitioner. Total capital cost of ₹23569.54 lakh as on 31.3.2019 is within the RCE apportion cost of ₹26839.95 lakh. Further, asset wise capital cost is within the RCE apportioned cost.

Time over-run

18. As per IA dated 23.10.2013, scheduled date of commercial operation (SCOD) of the transmission project was 30 months. Accordingly, the SCOD of the



transmission assets was 23.4.2016 against which Assets-I, Asset-II, Asset-III and Asset-IV were put into commercial operation on 3.2.2019, 1.11.2018, 24.3.2019 and 31.3.2019 after a time over-run of 1016 days, 922 days, 1065 days and 1072 respectively. The time over-run with respect to the transmission assets has already been fully condoned by the Commission vide order dated 4.2.2021 in Petition No. 462/TT/2020.

Assets	SCOD	COD	Time over-run	Time over-run condoned/ not condoned
Asset-I	23. 4.2016	3.2.2019	1016 days	condoned
Asset-II		1.11.2018	922 days	condoned
Asset-III		24.3.2019	1065 days	condoned
Asset-IV		31.3.2019	1072 days	condoned

Interest During Construction (“IDC”)

19. The Petitioner has claimed IDC in respect of the transmission assets and has submitted Auditor’s Certificates in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the IDC discharged.

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

21. It has been observed that in case of Asset-1 wherein IBRD loan has been deployed, the Commission in order dated 4.2.2021 in Petition No. 462/TT/2020 disallowed the IDC on IBRD loan due to non-submission of supporting documents



and directed the Petitioner to furnish computation of IDC claimed on IBRD loan, duly certified by the Auditor along with all details such as drawl dates, rate of interest, repayments at the time of true-up. The Petitioner has submitted the IDC computation of foreign loan i.e. IBRD-V in addition to domestic loans and IDC discharge statement along with the instant petition. Therefore, the same has been allowed after prudence check of IDC submitted on IBRD loan.

22. The Petitioner was also directed to furnish the reasons for lesser utilisation of IBRD loan, which is 7% of the project cost as compared to 59% as per the DPR. The Petitioner vide affidavit dated 31.3.2022 has submitted that as per initial estimates, 59% of the project cost was to be funded through World Bank (i.e. Loan no. 7787-IN). The transmission line as well as sub-station packages (Rajarhat GIS) were to be funded through this loan and the loan closing date was June, 2015. However, during the Mid-Term Review of World Bank held during September, 2013, it was noticed that there were severe law and order issues relating to land acquisition due to new land acquisition policy and that it may lead to delay in works associated with sub-station package (i.e., for Rajarhat GIS). Therefore, it was agreed to include only transmission line packages of ERSS-V due to uncertainty regarding sub-station at Rajarhat GIS as the delay may lead to lapse of loan. Therefore, lesser amount of World Bank loan was deployed.

23. We have considered the submissions made by the Petitioner regarding lesser deployment of World Bank loan than envisaged in the instant transmission project. It was due to delay in works associated with sub-station package pertaining to Rajarhat GIS which was due to delay in land acquisition. Therefore, the deviation in the amount of World Bank loan for the instant transmission



project is allowed. Accordingly, based on the information filed by the Petitioner, IDC considered is as follows:

(₹ in lakh)

Particulars	IDC claimed by Petitioner (as per Auditor's Certificate)	IDC admissible	IDC disallowed due to computation difference	IDC Discharged as on COD	IDC Undischarged as on COD	IDC Discharge during	
						2018-19	2019-20
	A	B	C=A-B	D	E=B-D	F	G
Asset-I	1825.19	1795.28	29.91	1402.25	393.03	0.00	393.03
Asset-II	450.56	441.49	9.07	365.45	76.04	57.45	18.59
Asset-III	238.75	236.67	2.08	171.83	64.84	0.00	64.84
Asset-IV	240.44	238.72	1.72	185.44	53.28	0.00	53.28

Incidental Expenditure During Construction ("IEDC")

24. The Petitioner has claimed IEDC in respect of the transmission assets and submitted Auditors' Certificate in support of the same. The Petitioner has also submitted that entire IEDC has been discharged as on COD in respect of the transmission assets. Accordingly, IEDC is allowed as claimed. The details of IEDC claimed and allowed are as follows:

(₹ in lakh)

Particulars	IEDC claimed as per Auditor's Certificate	IEDC disallowed due to time overrun	IEDC allowed as on COD
	1	2	3=(1-2)
Asset-I	442.04	0.00	442.04
Asset-II	16.97	0.00	16.97
Asset-III	47.74	0.00	47.74
Asset-IV	47.74	0.00	47.74

Initial Spares

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



- “(d) *Transmission system*
(i) *Transmission line* – 1.00%
(ii) *Transmission Sub-station (Green Field)* – 4.00%
(iii) *Transmission Sub-station (Brown Field)* – 6.00%
(iv) *Series Compensation devices and HVDC Station* – 4.00%
(v) *Gas Insulated Sub-station (GIS)* – 5.00%
(vi) *Communication system* – 3.5%
.....”

26. The Petitioner has claimed Initial Spares in respect of the transmission assets and has also submitted Auditor’s Certificate dated 7.7.2021 with respect to Assets-I, Asset-III and Asset-IV and 13.3.2021 with respect to Asset-II, in support of its claim. The Petitioner has submitted details of year-wise ACE and Initial Spares discharged up to COD. The Petitioner has further submitted that the expenditure incurred towards Initial Spares up to COD have been considered in cost as on COD. The amount towards balance Initial Spares liabilities have been considered in ACE of the respective year and the Petitioner has prayed to allow the entire Initial Spares as claimed. The details of Initial Spares claimed by the Petitioner is as follows:

Assets	Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of civil works) (₹ in lakh)	Element (Sub-station/Transmission Line)	Spares claimed (Sub-station/Transmission Line) (₹ in lakh)	Limit (in %)	Allowable initial spares (Sub-station/Transmission Line) (₹ in lakh)
Asset-I	10030.31	Sub-station (GIS)	426.22	5.00%	505.48
	1865.27	Transmission Line	18.00	1.00%	18.66
Asset-II	2838.69	Sub-station (Brownfield)	153.57	6.00%	171.39
Asset-III	1731.55	Sub-station (GIS)	70.01	5.00%	87.45
Asset-IV	1730.05	Sub-station (GIS)	72.01	5.00%	87.27

27. Initial Spares discharge statement with respect to Asset-I to Asset-IV claimed are as follows:



(₹ in lakh)

Assets	Total Initial Spares in Auditor's Certificate		Spares Discharge					
			COD		2018-19		2019-20	
	TL	SS	TL	SS	TL	SS	TL	SS
Asset-I	18.00	426.22	17.28	392.12	0.00	22.56	0.72	11.54
Asset-II	0.00	153.57	0.00	28.28	0.00	0.00	0.00	125.29
Asset-III	0.00	70.01	0.00	65.12	0.00	0.00	0.00	4.89
Asset-IV	0.00	72.01	0.00	68.39	0.00	0.00	0.00	3.62

28. We have considered the submissions made by the Petitioner. Initial Spares claimed by the Petitioner is within ceiling limit specified in Regulation 13(d) of the 2014 Tariff Regulations. Initial Spares are allowed considering the plant and machinery cost excluding IDC, IEDC and land expenses up to 31.3.2019. Accordingly, Initial Spares allowed for the transmission assets are as follows:

Assets	Elements	Plant & Machinery cost considered as on cut-off date (₹ in lakh) (A)	Initial Spares claimed (₹ in lakh) (B)	Norms as per 2014 Tariff Regulations (in %) (C)	Initial Spares allowable as per 2014 Tariff Regulations	Initial Spares allowed (₹ in lakh) (E)	Discharge of Initial Spares (₹ in lakh)		
					(₹ in lakh) (D) = [(A-B)*C/(100%-C)]		COD	2018-19	2019-20
Asset-I	Sub-station (GIS)	10030.31	426.22	5.00%	505.48	426.22	392.12	22.56	11.54
	Transmission Line	1865.27	18.00	1.00%	18.66	18.00	17.28	0.00	0.72
Asset-II	Sub-station (Brown field)	2838.69	153.57	6.00%	171.39	153.57	28.28	0.00	125.29
Asset-III	Sub-station (GIS)	1731.55	70.01	5.00%	87.45	70.01	65.12	0.00	4.89
Asset-IV	Sub-station (GIS)	1730.05	72.01	5.00%	87.27	72.01	68.39	0.00	3.62

29. Further, the Petitioner has submitted that the discharge of Initial Spare has been included in the capital cost indicated in the Auditor's Certificate. Hence, further adjustment in capital cost in case of discharge of liability, if any, in respect of initial spare is not required.



Capital cost as on COD

30. Accordingly, capital cost allowed as on COD is as follows:

Particulars	Capital cost claimed as on COD	Less: IDC as on COD due to		Less: IEDC dis-allowed as on COD	Less: excess Initial Spares dis-allowed	(₹ in lakh)
		Computation difference	Un-discharged			Capital cost considered as on 1.4.2014 or COD whichever is later
	A	B	C	D	E	F=A-B-C-D-E
Asset-I	16262.80	29.91	393.03	0.00	0.00	15839.86
Asset-II	2967.31	9.07	76.04	0.00	0.00	2882.20
Asset-III	1797.54	2.08	64.84	0.00	0.00	1730.62
Asset-IV	1799.23	1.72	53.28	0.00	0.00	1744.23

Additional Capital Expenditure (“ACE”)

31. The Commission vide order dated 4.2.2021 in Petition No. 462/TT/2020 in respect of Asset-I to Asset-IV has approved ACE in respect of the transmission assets covered in the instant petition and the same is as follows:

Particulars	ACE* (₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	-	-	-	-	576.31
Asset-II	-	-	-	-	246.36
Asset-III	-	-	-	-	0.00
Asset-IV	-	-	-	-	0.00
Total	-	-	-	-	822.67

*Including IDC discharge after COD

32. The Petitioner has claimed the following ACE in respect of the transmission assets and submitted Auditor’s Certificate in support of its claim:

Particulars	(₹ in lakh)
	ACE
	2018-19
Asset-I	553.75
Asset-II	188.91
Asset-III	0.00
Asset-IV	0.00
Total	742.66



33. The Petitioner was directed to clarify whether ACE claimed within the cut-off date and beyond the cut-off date is within the original scope of work. In response, the Petitioner vide affidavit dated 31.3.2022 has submitted that ACE claimed for the transmission assets is within the cut-off date. Further, the works executed/ being executed are within the original scope of works of the instant project.

34. In response to another query with regard to claim of ACE, the Petitioner has submitted that ACE incurred/ projected for 2018-19 period has been claimed mainly on account of balance/ retention payments and shall be governed by Regulation 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations. Further, no ACE has been projected beyond cut-off date for the said period and has prayed to allow the same as claimed.

35. We have considered the submissions of the Petitioner. ACE in respect of Asset-I to Asset-IV claimed by the Petitioner is allowed under Regulation 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations as it is towards balance and retention payments and works deferred for execution. The undischarged IDC as on COD has been allowed as ACE. The details of ACE allowed are as follows:

Particulars	(₹ in lakh)			
	Asset-I 2018-19	Asset-II 2018-19	Asset-III 2018-19	Asset-IV 2018-19
ACE to the extent of balance & retention payments and work deferred for execution/	553.75	188.91	0.00	0.00
ACE to the extent of unexecuted work	0.00	0.00	0.00	0.00
Add: IDC Discharged	0.00	57.4	0.00	0.00
Total ACE allowed	553.75	246.36	0.00	0.00

Capital Cost for 2014-19 tariff period



36. Accordingly, capital cost in respect of the transmission assets considered for 2014-19 tariff period is as follows:

(₹ in lakh)

Assets	RCE Appor-tioned Approved Capital Cost	Capital Cost as on COD on cash basis	ACE					Total Capital Cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-I	18667.49	15839.86	0.00	0.00	0.00	0.00	553.75	16393.61
Asset-II	3822.94	2882.20	0.00	0.00	0.00	0.00	246.36	3128.56
Asset-III	2175.23	1730.62	0.00	0.00	0.00	0.00	0.00	1730.62
Asset-IV	2174.29	1744.23	0.00	0.00	0.00	0.00	0.00	1744.23
Total	26839.95	22196.91	0.00	0.00	0.00	0.00	800.11	22997.02

Debt-Equity Ratio

37. The Petitioner has considered debt-equity ratio of 70:30 as on COD and ACE post COD. Debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during 2014-19 period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of debt-equity ratio in respect of the transmission assets as on COD and as on 31.3.2019 is as follows:

Asset- I	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)
Debt	11087.90	70.00	11475.53	70.00
Equity	4751.96	30.00	4918.08	30.00
Total	15839.86	100.00	16393.61	100.00
Asset- II	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)
Debt	2017.55	70.00	2190.00	70.00
Equity	864.65	30.00	938.56	30.00
Total	2882.20	100.00	3128.56	100.00
Asset- III	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)
Debt	1211.45	70.00	1211.45	70.00
Equity	519.17	30.00	519.17	30.00
Total	1730.62	100.00	1730.62	100.00



Asset- IV	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	1220.96	70.00	1220.96	70.00
Equity	523.27	30.00	523.27	30.00
Total	1744.23	100.00	1744.23	100.00

Depreciation

38. Depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations considering capital expenditure as on 1.4.2014 and approved ACE during 2018-19 period. The Gross Block during 2018-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD). WAROD at Annexure-I has been worked out considering the depreciation rates of the transmission assets as prescribed in the 2014 Tariff Regulations. The trued-up depreciation allowed in respect of the transmission assets for 2014-19 tariff period are as follows:

		(₹ in lakh)			
	Particulars	Asset-I 2018-19 (Pro-rata for 57 days)	Asset-II 2018-19 (Pro-rata for 151 days)	Asset-III 2018-19 (Pro-rata for 8 days)	Asset-IV 2018-19 (Pro-rata for 1 day)
A	Opening Gross Block	15839.86	2882.20	1730.62	1744.23
B	ACE	553.75	246.36	0.00	0.00
C	Closing Gross Block (A+B)	16393.61	3128.56	1730.62	1744.23
D	Average Gross Block (A+C)/2	16116.73	3005.38	1730.62	1744.23
E	Free hold Land	1949.92	0.00	0.00	0.00
F	Average Gross Block (90% depreciable assets)	14166.81	3005.38	1730.62	1744.23
G	Depreciable value (F*90%)	12750.13	2704.84	1557.56	1569.81
H	Weighted Average Rate of Depreciation (WAROD) (in %)	4.52	5.31	5.28	5.28
I	Lapsed useful life at the beginning of the year (Year)	0.00	0.00	0.00	0.00
I	Balance useful life at the beginning of the year (Year)	24.00	25.00	25.00	25.00
J	Depreciation during the	113.72	66.05	2.00	0.25



	year (D*H)				
L	Aggregate Cumulative Depreciation at the end of the year	113.72	66.05	0.62	0.25
M	Remaining Aggregate Depreciable Value at the end of the year(G-L)	12636.41	2638.79	1555.56	1569.56

39. The details of depreciation allowed in respect of the transmission assets vide order dated 4.2.2021 in Petition No. 462/TT/2020, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

		(₹ in lakh)
Assets	Particulars	2018-19
Asset-I	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	112.97
	Claimed by the Petitioner in the instant petition	113.87
	Approved after true-up in this order	113.72
Asset-II	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	63.11
	Claimed by the Petitioner in the instant petition	66.24
	Approved after true-up in this order	66.05
Asset- III	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	2.00
	Claimed by the Petitioner in the instant petition	2.01
	Approved after true-up in this order	2.00
Asset- IV	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	0.25
	Claimed by the Petitioner in the instant petition	0.25
	Approved after true-up in this order	0.25

Interest on Loan (“IoL”)

40. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2019 for respective loans. We have considered the submissions of the Petitioner. IoL is allowed based on actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations considering the following:

- (i) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition.



(ii) The repayment during 2018-19 has been considered to be equal to the depreciation allowed for that period.

41. The details of the trued up IoL for the transmission assets are as follows:

		(₹ in lakh)			
	Particulars	Asset-I 2018-19 (Pro-rata for 57 days)	Asset-II 2018-19 (Pro-rata for 151 days)	Asset-III 2018-19 (Pro-rata for 8 days)	Asset-IV 2018-19 (Pro-rata for 1 day)
A	Gross Normative Loan	11087.90	2017.55	1211.46	1220.96
B	Cumulative Repayments up to Previous Year	0.00	0.00	0.00	0.00
C	Net Loan-Opening (A-B)	11087.90	2017.55	1211.46	1220.96
D	Addition due to Additional Capitalization	387.63	172.45	0.00	0.00
E	Repayment during the year	113.72	66.05	2.00	0.25
F	Net Loan-Closing (C+D-E)	11361.81	2123.95	1209.45	1220.71
G	Average Loan (A+F)/2	11224.85	2070.75	1210.45	1220.84
H	Weighted Average Rate of Interest on Loan (in %)	7.2326	8.1662	7.8345	7.823
I	Interest on Loan (GxH)	126.78	69.96	2.08	0.26

42. The details of IoL allowed in respect of the transmission assets vide order dated 4.2.2021 in Petition No. 462/TT/2020, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

		(₹ in lakh)
Assets	Particulars	2018-19
Asset-I	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	125.17
	Claimed by the Petitioner in the instant petition	126.94
	Approved after true-up in this order	126.78
Asset-II	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	63.11
	Claimed by the Petitioner in the instant petition	70.13
	Approved after true-up in this order	69.96
Asset- III	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	2.07



	Claimed by the Petitioner in the instant petition	2.08
	Approved after true-up in this order	2.08
Asset- IV	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	0.25
	Claimed by the Petitioner in the instant petition	0.26
	Approved after true-up in this order	0.26

Return on Equity (“RoE”)

43. The Petitioner has claimed RoE in respect of the transmission assets in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that the Income Tax Assessment has been completed and assessment order has been issued by the Income Tax Department in case of 2014-15 and 2015-16 and that the Income Tax Return have been filed with Income Tax Department for the years 2016-17 and 2017-18 and Income Tax Return for 2018-19 will be filed in due course of time and has claimed the following effective tax rates for 2014-19 tariff period:

Year	Claimed effective tax (in %)	Grossed-up RoE [(Base Rate)/(1-t)] (in %)
2014-15	21.0177	19.625
2015-16	21.3819	19.716
2016-17	21.3384	19.705
2017-18	21.3371	19.704
2018-19	21.5488	19.758

44. 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 is as follows:

Year	Notified MAT rates (Inclusive of surcharge & cess) (in %)	Effective tax (in %)
2014-15	20.961	20.961
2015-16	21.342	21.342
2016-17	21.342	21.342



Year	Notified MAT rates (Inclusive of surcharge & cess) (in %)	Effective tax (in %)
2017-18	21.342	21.342
2018-19	21.549	21.549

45. MAT rates as considered in the above-mentioned order in Petition No. 274/TT/2019 are considered for the purpose of grossing up of the rate of RoE for truing up of the tariff of 2018-19 period in terms of the provisions of the 2014 Tariff Regulations and the same is as follows:

Year	Notified MAT rates (Inclusive of surcharge & cess) (in %)	Base rate of RoE (in %)	Grossed-up RoE [(Base Rate)/(1-t)] (in %)
2018-19	21.549	15.50	19.758

46. Accordingly, the trued-up RoE in respect of the transmission assets is as follows:

(₹ in lakh)					
		Asset-I	Asset-II	Asset-III	Asset-IV
	Particulars	2018-19 (Pro-rata for 57 days)	2018-19 (Pro-rata for 151 days)	2018-19 (Pro-rata for 8 days)	2018-19 (Pro-rata for 1 day)
A	Opening Equity	4751.96	864.65	519.17	523.27
B	Additions	166.12	73.91	0.00	0.00
C	Closing Equity (A-B)	4918.08	938.56	519.17	523.27
D	Average Equity (A+B)/2	4835.02	901.60	519.17	523.27
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	21.549	21.549	21.549	21.549
G	Rate of Return on Equity (in %)	19.758	19.758	19.758	19.758
H	Return on Equity (DxG)	149.18	73.70	2.25	0.28

47. The details of RoE allowed in respect of the transmission assets vide order dated 4.2.2021 in Petition No. 462/TT/2020, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:



(₹ in lakh)

Assets	Particulars	2018-19
Asset-I	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	147.30
	Claimed by the Petitioner in the instant petition	149.37
	Approved after true-up in this order	149.18
Asset-II	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	70.40
	Claimed by the Petitioner in the instant petition	73.92
	Approved after true-up in this order	73.70
Asset- III	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	2.24
	Claimed by the Petitioner in the instant order	2.25
	Approved after true-up in this order	2.25
Asset- IV	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	0.28
	Claimed by the Petitioner in the instant petition	0.28
	Approved after true-up in this order	0.28

Operation & Maintenance Expenses (“O&M Expenses”)

48. O&M Expenses claimed by the Petitioner in respect of the transmission assets are as follows:

(₹ in lakh)

Asset-I				
Transmission lines				
Sl. No.	Name of Line	Single Circuit / Double Circuit	Number of Sub-Conductors	Line Length (km)
1	Lilo of 400 kV S/C Subhasgram-Jeerat Line at Rajarhat	Double Circuit	2	4.150
Sub-station				
Sl. No.	400 kV GIS Sub-station bay			
1	Rajarhat: 1 number 400 kV bay for ICT-1			
2	2 numbers of 400 kV line bays (GIS) for LILO of Subhashgram-Jeerat at Rajarhat			
Sl. No.	220 kV GIS Sub-station bay			
1	Rajarhat: 4 numbers 220 kV line bays			
2	Rajarhat: 1 number 220 kV bay for ICT-I			
O&M Expenses				
			2018-19	
Sub-station				
220 kV GIS				
Number of bays			5	
400 kV GIS				



Number of bays	3
Transmission lines	
D/C with two Conductors (km)	4.150
Total O&M Expenses (₹ in lakh)	65.59

(₹ in lakh)

Asset-II	
Sub-station	
Sl. No.	400 kV Sub-station bay
1	Purnea:02 Numbers Line Bays for 400 kV D/C Rajarhat - Purnea Line
2	Purnea:80 MVAR SLR-I and SLR-II Bay
O&M Expenses	
2018-19	
Sub-station	
400 kV	
Number of bays	4
Total O&M Expenses (₹ in lakh)	113.70

(₹ in lakh)

Asset-III	
Sub-station	
Sl. No.	400 kV GIS Sub-station bay
1	Rajarhat: 1 number of 400 kV bay for Bus Reactor-I bay (GIS) at Rajarhat
O&M Expenses	
2018-19	
Sub-station	
400kV GIS	
Number of bays	1
Total O&M Expenses (₹ in lakh)	1.29

(₹ in lakh)

Asset-IV	
Sub-station	
Sl. No.	400 kV GIS Substation bay
1	Rajarhat: 1 no. of 400 kV bay for Bus Reactor-II bay (GIS) at Rajarhat
O&M Expenses	
2018-19	
Sub-station	
400 kV GIS	



Number of bays	1
Total O&M Expense (₹ in lakh)	0.16

49. Regulation 29(4)(a) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The norms in respect of the elements covered in the transmission assets are as follows:

Asset-I		
Elements	UoM	Norms for 2018-19
400 kV GIS Sub-station	₹ lakh/bay	58.73
200 kV GIS Sub-station	₹ lakh/bay	48.10
D/C Twin/Triple conductor	₹ lakh/km	0.806

Asset-II		
Element	UoM	Norms for 2018-19
400 kV Sub-station	₹ lakh/bay	68.71

Asset-III		
Element	UoM	Norms for 2018-19
400 kV GIS Sub-station	₹ lakh/bay	58.73

Asset-IV		
Element	UoM	Norms for 2018-19
400 kV GIS Sub-station	₹ lakh/bay	58.73

50. O&M Expenses allowed for the transmission assets under Regulation 29(3) of the 2014 Tariff Regulations are as follows:

(₹ in lakh)	
Asset – I	2018-19 (Pro-rata for 57 days)
3 Number of 400 kV GIS Sub-station	176.19



bays	
5 Number of 220 kV GIS Sub-station bays	240.50
4.150 km D/C with two conductors transmission line	3.34
Total O&M Expenses	420.03
Pro-rata O&M Expenses	65.59

(₹ in lakh)

Asset – II	2018-19 (Pro-rata for 151 days)
1 Number of 400 kV GIS Sub-station bays	274.84
Total O&M Expenses	274.84
Pro-rata O&M Expenses	113.70

(₹ in lakh)

Asset – III	2018-19 Pro-rata for 8 days)
1 Number of 400 kV GIS Sub-station bays	58.73
Total O&M Expenses	58.73
Pro-rata O&M Expenses	1.29

(₹ in lakh)

Asset – IV	2018-19 Pro-rata for 1 days)
1 Number of 400 kV GIS Sub-station bays	58.73
Total O&M Expenses	58.73
Pro-rata O&M Expenses	0.16

51. The details of O&M Expenses allowed in respect of the transmission assets vide order dated 4.2.2021 in Petition No. 462/TT/2020, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

		(₹ in lakh)
Assets	Particulars	2018-19
Asset-I	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	65.59
	Claimed by the Petitioner in the instant petition	65.69
	Approved after true-up in this order	65.69
Asset-II	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	113.70
	Claimed by the Petitioner in the instant petition	113.70
	Approved after true-up in this order	113.70
Asset- III	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	1.29
	Claimed by the Petitioner in the instant petition	1.29



	Approved after true-up in this order	1.29
Asset- IV	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	0.16
	Claimed by the Petitioner in the instant petition	0.16
	Approved after true-up in this order	0.16

Interest on Working Capital (“IWC”)

52. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations.

53. The trued up IWC in respect of the transmission assets is as follows:

		(₹ in lakh)			
	Particulars	Asset-I 2018-19 (Pro-rata for 57 days)	Asset-II 2018-19 (Pro-rata for 151 days)	Asset-III 2018-19 (Pro-rata for 8 days)	Asset-IV 2018-19 (Pro-rata for 1 day)
A	Working Capital for O&M Expenses (one month of O&M Expenses)	35.00	22.90	4.89	4.89
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	63.01	41.23	8.81	8.81
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	498.01	134.33	59.46	59.06
D	Total Working Capital (A+B+C)	596.02	198.46	73.17	72.77
E	Rate of Interest (in %)	12.20	12.20	12.20	12.20
F	Interest on Working Capital (DxE)	11.36	10.02	0.20	0.02

54. The details of IWC Expenses allowed in respect of the transmission assets vide order dated 4.2.2021 in Petition No. 462/TT/2020, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)



Assets	Particulars	2018-19
Asset-I	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	11.27
	Claimed by the Petitioner in the instant petition	11.37
	Approved after true-up in this order	11.36
Asset-II	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	9.82
	Claimed by the Petitioner in the instant petition	10.03
	Approved after true-up in this order	10.02
Asset- III	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	0.20
	Claimed by the Petitioner in the instant petition	0.20
	Approved after in this order	0.20
Asset- IV	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	0.02
	Claimed by the Petitioner in the instant petition	0.02
	Approved after true-up in this order	0.02

Approved Annual Fixed Charges for 2018-19 period

55. Accordingly, the trued up Annual Fixed Charges (AFC) for the 2018-19 period in respect of the transmission assets are as follows:

(₹ in lakh)				
	Asset-I	Asset-II	Asset-III	Asset-IV
Particulars	2018-19 (Pro-rata for 57 days)	2018-19 (Pro-rata for 151 days)	2018-19 (Pro-rata for 8 days)	2018-19 (Pro-rata for 1 day)
Depreciation	113.72	66.05	2.00	0.25
Interest on Loan	126.78	69.96	2.08	0.26
Return on Equity	149.18	73.70	2.25	0.28
O&M Expenses	65.59	113.70	1.29	0.16
Interest on Working Capital	11.36	10.02	0.20	0.02
Total	466.63	333.43	7.82	0.97

56. The details of AFC allowed in respect of the transmission assets vide order dated 4.2.2021 in Petition No. 462/TT/2020, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)		
Assets	Particulars	2018-19
Asset-I	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	462.29
	Claimed by the Petitioner in the instant petition	467.14



Assets	Particulars	2018-19
	Approved after true-up in this order	466.63
Asset-II	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	323.83
	Claimed by the Petitioner in the instant petition	334.02
	Approved after true-up in this order	333.43
Asset- III	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	7.80
	Claimed by the Petitioner in the instant petition	7.83
	Approved after true-up in this order	7.82
Asset- IV	Allowed vide order dated 4.2.2021 in Petition No. 462/TT/2020	0.98
	Claimed by the Petitioner in the instant order	0.97
	Approved after true-up in this order	0.97

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

57. The Petitioner has combined the transmission assets into one single asset and has claimed combined tariff and has also submitted the tariff forms for the Combined Asset.

58. Accordingly, as per proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations, combined tariff has been worked out for the 2019-24 tariff period in respect of Asset-I, Asset-II, Asset-III, and Asset-IV.

59. The Petitioner has claimed the following transmission charges in respect of the Combined Asset for 2019-24 tariff period as follows:

Particulars	Combined asset				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1113.66	1145.25	1187.06	1212.15	1212.15
Interest on Loan	1151.49	1106.14	1072.84	1012.53	923.58
Return on Equity	1313.53	1357.71	1419.85	1453.74	1453.74
O&M Expenses	502.59	520.44	538.73	557.85	576.97
Interest on Working Capital	75.72	77.13	78.99	79.81	79.12
Total	4156.99	4206.67	4297.47	4316.08	4245.56



60. The details of IWC claimed by the Petitioner are as follows:

(₹ in lakh)

Particulars	Combined Asset				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	41.88	43.37	44.89	46.49	48.08
Maintenance Spares	75.39	78.07	80.81	83.68	86.55
Receivables	511.11	518.63	529.83	532.12	522.00
Total	628.38	640.07	655.53	662.29	656.63
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	75.72	77.13	78.99	79.81	79.12

Effective Date of Commercial Operation (“E-COD”)

61. The Petitioner has claimed E-COD of the Combined Asset as 29.1.2019. Accordingly, based on the trued-up admitted capital cost and actual COD of all the assets, E-COD of Asset-I to Asset-IV has been worked out as follows:

Computation of E-COD						
Assets	Actual COD	Admitted Capital Cost as on 31.3.2019	Weight of the cost (in %)	No. of Days from last COD	Weighted Days	E-COD (Latest COD – Total weighted Days)
Asset-I	3.2.2019	16393.61	71.29	56.00	39.92	29.1.2019
Asset-II	1.11.2018	3128.56	13.60	150.00	20.41	
Asset-III	24.3.2019	1730.62	7.53	7.00	0.53	
Asset-IV	31.3.2019	1744.23	7.58	0.00	0.00	
Total		22997.02	100.00		60.86	

62. E-COD is used to determine the lapsed life of the project as a whole, which works out to be less than 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”)

63. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of WAL.

64. Combined Asset may have multiple elements such as land, building, transmission line, Sub-station and PLCC and each element may have different



span of life. Therefore, the concept of WAL has been used as the useful life of the project as a whole.

65. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 26 years and the same is as follows:

Admitted Capital Cost as on 31.3.2019				
Particulars	Combined Asset Cost (₹ in lakh) (1)	Life as per 2019 Tariff Regulations (Years) (2)	Weighted Cost (3)=(1)x(2)	Weighted Average Life of Asset (in years) (4)=(3)/(1)
Building	1170.36	25	29258.00	
Transmission Line	2294.28	35	80299.80	
Sub-station Equipment	17366.56	25	434164.00	
PLCC	143.78	15	2156.70	
Leasehold land	0.00	25	0.00	
IT equipment and software	72.13	7	504.91	
Total	21047.11		546383.41	25.96 rounded off to 26 years

66. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed in the preceding paragraphs, E-COD of the Combined Asset is 29.1.2019 and the lapsed life of the project as a whole, works out as Zero (0) years as on 1.4.2019 (i.e. the number of



completed years as on 1.4.2019 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 26 years.

Capital Cost

67. Regulations 19 of the 2019 Tariff Regulations provide 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 Asset-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 ash disposal and utilization including handling and transportation facility;
- d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”

(4) The capital cost in case of existing or new hydro generating station shall also include:

- a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
- b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.

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

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

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

Provided further that unless shifting of an Asset-from one project



to another is of permanent nature, there shall be no de-capitalization of the concerned asset.

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.”

68. The Petitioner has claimed capital cost of individual assets which has been added to arrive at the capital cost claimed during 2019-24 period in respect of the Combined Asset as follows:

Assets	RCE apportioned approved capital cost	Capital cost claimed as on 31.3.2019	ACE			Estimated completion cost as on 31.3.2024
			2019-20	2020-21	2021-22	
Asset-I	18667.49	16413.62	404.16*	597.04	1043.00	18457.82
Asset-II	3822.94	3137.63	42.50*	126.09	0.00	3306.22
Asset-III	2175.23	1732.46	65.08*	140.50	80.00	2018.04
Asset-IV	2174.29	1745.69	53.54*	139.00	80.00	2018.23
Total	26839.95	23029.40	565.28	1002.63	1203.00	25800.31

*Remarks:

Asset-I	ACE 2019-20 includes IDC discharge of ₹402.93 lakh
Asset-II	ACE 2019-20 includes IDC discharge of ₹18.59 lakh
Asset-III	ACE 2019-20 includes IDC discharge of ₹65.08 lakh
Asset-IV	ACE 2019-20 includes IDC discharge of ₹53.54 lakh

69. The trued-up capital cost as on 31.3.2019 in respect of the transmission Asset-I, Asset-II, Asset-III, and Asset-IV has been considered as capital cost as on 31.3.2019 for the Combined Asset. Capital cost has been dealt in accordance with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, sub-station and PLCC) as admitted by the Commission as on 31.3.2019 in respect of the transmission assets are



clubbed together and has been considered as capital cost of the Combined Asset as on 1.4.2019 and the same is as follows:

Elements	Asset-I	Asset-II	Asset-III	Asset- IV	(₹ in lakh)
					Capital Cost of the Combined Asset as on 31.3.2019
Free hold land	1949.92	0.00	0.00	0.00	1949.92
Building	1170.36	0.00	0.00	0.00	1170.36
Transmission Line	2294.28	0.00	0.00	0.00	2294.28
Sub-station Equipment	10869.53	3034.50	1724.48	1738.05	17366.56
PLCC	49.72	94.06	0.00	0.00	143.78
Leasehold land	0.00	0.00	0.00	0.00	0.00
IT equipment and software	59.80	0.00	6.14	6.18	72.12
Total	16393.61	3128.56	1730.62	1744.23	22997.02

70. The trued-up capital cost of ₹22997.02 lakh of Combined Asset as on 31.3.2019 is considered as opening capital cost as on 1.4.2019 for the purpose of determination of tariff for 2019-24 tariff period.

Additional Capital Expenditure (“ACE”)

71. Regulation 24 and Regulation 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 ACE 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.”

72. The Petitioner has claimed the following ACE in respect of the Combined Asset during 2019-24 in accordance with Regulation 25(1)(d) of the 2019 Tariff Regulations:

(₹ in lakh)

Assets	ACE (as per Auditor's Certificate)		
	2019-20*	2020-21	2021-22
Asset-I	404.16	597.04	1043.00



Asset-II	42.50	126.09	-
Asset-III	65.08	140.50	80.00
Asset-IV	53.54	139.00	80.00
TOTAL	565.28	1002.63	1203.00

**Remarks:*

Asset-I	ACE 2019-20 includes IDC discharge of ₹402.93 lakh
Asset-II	ACE 2019-20 includes IDC discharge of ₹18.59 lakh
Asset-III	ACE 2019-20 includes IDC discharge of ₹65.08 lakh
Asset-IV	ACE 2019-20 includes IDC discharge of ₹53.54 lakh

73. In response to the query regarding justification for ACE claimed during 2019-24 period, the Petitioner has submitted that package-wise and vendor-wise details of ACE claimed in 2019-24 period in respect of the Combined Asset has been submitted vide affidavit dated 31.3.2022 and ACE incurred/ projected has been claimed before cut-off date and is mainly on account of balance/ retention payments covered under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations. Further, no ACE has been projected beyond cut-off date and accordingly, prayed to allow the same.

74. In response to another query, the Petitioner vide affidavit dated 31.3.2022 has submitted that no 'previously recognized liabilities' remains as on date to be discharged beyond 2019-24 period.

75. We have considered the submissions of the Petitioner. ACE claimed for 2019-20 towards balance and retention and unexecuted work is allowed under Regulation 24(1)(a), Regulation 24(1)(b) and Regulation 25(1)(d) of the 2019 Tariff Regulations which is subject to true-up. The undischarged IDC as on COD has been allowed as ACE for 2019-20. The details of ACE allowed are as follows:



(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2019-20	2019-20	2019-20	2019-20
ACE to the extent of Balance & Retention Payments and work deferred for execution/	1.23	23.91	0.00	0.00
ACE to the extent of unexecuted work	0.00	0.00	0.00	0.00
Add: IDC Discharged	393.03	18.59	64.83	53.28
Total ACE allowed	394.26	42.50	64.83	53.28

76. ACE allowed in respect of the Combined Asset under Regulation 24(1)(a), Regulation 24(1)(b) and Regulation 25(1)(d) of the 2019 Tariff Regulations is as follows:

(₹ in lakh)

Assets	Admitted ACE		
	2019-20	2020-21	2021-22
Asset-I	394.26	597.04	1043.00
Asset-II	42.50	126.09	0.00
Asset-III	64.83	140.50	80.00
Asset-IV	53.28	139.00	80.00
Combined Asset	554.87	1002.63	1203.00

Capital Cost for 2019-24 tariff period

77. Accordingly, capital cost of the Combined Asset considered for 2019-24 tariff period are as follows:

(₹ in lakh)

Capital cost as on 1.4.2019	ACE					Total estimated completion cost (up to 31.3.2024)
	2019-20	2020-21	2021-22	2022-23	2023-24	
22997.02	554.87	1002.63	1203.00	0.00	0.00	25757.52

78. Against the overall RCE apportioned approved capital cost of ₹26839.95 lakh, the estimated completion cost of the Combined Asset as on 31.3.2024 is ₹25757.52 lakh which is within the RCE apportioned approved cost as per RCE.

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 details of debt-equity ratio considered for the purpose of tariff for 2019-24 tariff period are as follows:

Combined Asset	(₹ in lakh)			
	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	16097.95	70.00	18030.30	70.00
Equity	6899.07	30.00	7727.22	30.00
Total	22997.02	100.00	25757.52	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. We have considered the submissions of the Petitioner. IT equipment has been considered as part of the Gross Block and depreciated using Weighted Average Rate of Depreciation (WAROD). WAROD has been worked out and placed as Annexure-II considering the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e., IT asset has been considered as 100% depreciable. Depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. Depreciation allowed in respect of the Combined Asset is as follows:

(₹ in lakh)						
Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	22997.02	23551.88	24554.51	25757.51	25757.51
B	ACE	554.87	1002.63	1203.00	0.00	0.00
C	Closing Gross Block (A+B)	23551.88	24554.51	25757.51	25757.51	25757.51
D	Average Gross Block (A+C)/2	23274.45	24053.20	25156.01	25757.51	25757.51
E	Freehold Land	1949.92	2128.81	2307.70	2307.70	2307.70
F	Average Gross Block (90% depreciable assets)	21251.35	21850.16	22774.08	23375.58	23375.58
G	Average Gross Block (100% depreciable assets)	73.18	74.23	74.23	74.23	74.23
H	Depreciable value (excluding IT equipment and software) (F*90%)	19126.22	19665.14	20496.67	21038.02	21038.02
I	Depreciable value of IT equipment and software (E*100%)	73.18	74.23	74.23	74.23	74.23
J	Total Depreciable Value (H+I)	19199.40	19739.37	20570.91	21112.26	21112.26
K	Weighted Average Rate of Depreciation (WAROD) (in %)	4.78	4.75	4.71	4.70	4.70
L	Lapsed useful life at the beginning of the year (Year)	0.00	1.00	2.00	3.00	4.00
M	Balance useful life at the beginning of the year (Year)	26.00	25.00	24.00	23.00	22.00



N	Depreciation during the year (D*K)	1111.69	1143.01	1184.83	1209.91	1209.91
O	Aggregate Cumulative Depreciation at the end of the year	1293.72	2436.73	3621.55	4831.47	6041.38
P	Remaining Aggregate Depreciable Value at the end of the year(J-O)	17905.68	17302.65	16949.35	16280.79	15070.87

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 interest of IoL has been considered on the basis of the rates prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. In view of the above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the Combined Asset is follows:

(₹ in lakh)

		Combined Asset				
Particulars		2019-20	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	16097.95	16486.36	17188.20	18030.30	18030.30
B	Cumulative Repayments upto Previous Year	182.03	1293.72	2436.73	3621.55	4831.47
C	Net Loan-Opening (A-B)	15915.92	15192.64	14751.47	14408.74	13198.83
D	Additions	388.41	701.84	842.10	0.00	0.00
E	Repayment during the year	1111.69	1143.01	1184.83	1209.91	1209.91
F	Net Loan-Closing (C+D-E)	15192.64	14751.47	14408.74	13198.83	11988.92
G	Average Loan (A+F)/2	15554.28	14972.06	14580.11	13803.79	12593.88
H	Weighted Average Rate of Interest on Loan (in %)	7.391	7.375	7.346	7.323	7.322
I	Interest on Loan (GxH)	1149.64	1104.19	1071.05	1010.92	922.13

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 7 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. RoE considered in respect of the Combined Asset under Regulation 30 of the 2019 Tariff Regulations is as follows:

(₹ in lakh)						
Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	6899.07	7065.53	7366.32	7727.22	7727.22
B	Addition due to ACE	166.46	300.79	360.90	0.00	0.00
C	Closing Equity (A+B)	7065.53	7366.32	7727.22	7727.22	7727.22
D	Average Equity (A+C)/2	6982.30	7215.93	7546.77	7727.22	7727.22
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Applicable RoE Rate (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity for the year (D*G)	1311.42	1355.30	1417.43	1451.33	1451.33



Operation & Maintenance Expenses (“O&M Expenses”)

87. O&M Expenses claimed by the Petitioner in respect of the Combined Asset are as follows:

(₹ in lakh)

Combined Asset					
Transmission lines					
Sl. No.	Name of Line	Single Circuit / Double Circuit	Number. of Sub-Conductors	Line Length (km)	
1	LILO of 400 kV S/C Subhasgram-Jeerat Line at Rajarhat	Double Circuit	2	4.150	
Sub-station					
Sl. No.	400 kV Sub-station bay				
1	Purnea: 02 Numbers Line Bays for 400 kV D/C Rajarhat - Purnea Line				
2	Purnea: 80 MVAR SLR-I and SLR-II Bay				
Sl. No.	400 kV GIS Sub-station bay				
1	Rajarhat: ICT-I 400 kV Bay				
2	Rajarhat: 02 Numbers Bays for LILO				
3	Rajarhat: Bus Reactor-I Bay				
4	Rajarhat: Bus Reactor II Bay				
Sl. No.	400 kV Sub-station ICT				
1	Rajarhat: 01 Number 400/220 kV 500 MVA ICT IST				
Sl. No.	220 kV GIS Sub-station bay				
1	Rajarhat: 04 Numbers Downstream Line Bays for WBSETCL				
2	Rajarhat: ICT-I 220 kV Bay				
O&M Expenses					
	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station					
220 kV GIS					
Number of bays	5	5	5	5	5
400 kV					
Number of bays	4	4	4	4	4
400 kV ICT					
Number of bays	1	1	1	1	1
400 kV GIS					
Number of bays	5	5	5	5	5
Transmission lines					
D/C with two Conductors (km)	4.150	4.150	4.150	4.150	4.150
Total O&M Expenses (₹ in lakh)	502.57	520.43	538.71	557.86	576.96



88. Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations specifies the norms for O&M Expenses for the transmission system as follows:

“35. Operation and Maintenance Expenses:

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

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



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<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. The O&M norms in respect of the elements covered in the Combined Asset are as follows:

Elements	UoM	Norms for 2019-20	Norms for 2020-21	Norms for 2021-22	Norms for 2022-23	Norms for 2023-24
220 kV GIS Sub-station	₹ lakh/bay	15.76	16.31	16.88	17.47	18.09
400 kV Sub-station	₹ lakh/bay	32.15	33.28	34.45	35.66	36.91
400 kV ICT	₹ lakh/bay	0.36	0.37	0.38	0.40	0.41
400 kV GIS Sub-station	₹ lakh/bay	22.51	23.30	24.12	24.96	25.84
Double Circuit (Twin & Triple Conductor)	₹ lakh/km	0.881	0.912	0.944	0.977	1.011

90. We have considered the submissions of the Petitioner. O&M Expenses have been worked out as per the norms in the 2019 Tariff Regulations and the same is as follows:

(₹ in lakh)					
Combined Asset	2019-20	2020-21	2021-22	2022-23	2023-24
5 Numbers of 220 kV GIS Sub-station bays	78.79	81.55	84.42	87.36	90.44
4 Number of 400 kV Sub-station bays	128.60	133.12	137.80	142.64	147.64
1 Number of 400 kV Sub-station ICT	179.00	185.50	192.00	199.00	205.50
5 Numbers of 400 kV GIS Sub-station bays	112.53	116.48	120.58	124.81	129.19
4.150 km D/C two Conductor transmission line	3.66	3.78	3.92	4.05	4.20
Total	502.57	520.43	538.71	557.86	576.96

Interest on Working Capital (“IWC”)



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

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

.....

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

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

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

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

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

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

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

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

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

92. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21 and 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-22 and 10.50% (SBI 1 year MCLR applicable as on 1.4.2022 of



7.00% plus 350 basis points) for 2022-24. The components of the working capital and interest allowed thereon in respect of the Combined Asset is as follows:

(₹ in lakh)

Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (Equivalent to annualized O&M Expenses for one month)	41.88	43.37	44.89	46.49	48.08
B	Working Capital for Maintenance Spares (Equivalent to 15% of O&M Expenses)	75.38	78.07	80.81	83.68	86.54
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	510.36	517.16	527.75	530.06	519.97
D	Total Working Capital (A+B+C)	627.63	638.60	653.45	660.22	654.59
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
F	Interest on Working Capital (DxE)	75.63	71.84	68.61	69.32	68.73

Annual Fixed Charges for 2019-24 Tariff Period

93. The details of AFC approved in respect of the Combined Asset for 2019-24 tariff period is as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	1111.69	1143.01	1184.83	1209.91	1209.91
Interest on Loan	1149.64	1104.19	1071.05	1010.92	922.13
Return on Equity	1311.42	1355.30	1417.43	1451.33	1451.33
O&M Expenses	502.57	520.43	538.71	557.86	576.96
Interest on Working Capital	75.63	71.84	68.61	69.32	68.73
Total	4150.95	4194.77	4280.63	4299.34	4229.06

Filing Fee and Publication Expenses

94. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 70(1) of the 2019 Tariff Regulations. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the



beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

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

Good and Service Tax

96. 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 Respondents to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

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

Security Expenses

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



99. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for 2019-24 tariff period on the basis of 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

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

Sharing of Transmission Charges

101. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission system was governed by the provisions of the 2010 Sharing Regulations. However, with effect from 1.11.2020, sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 ("the 2020 Sharing Regulations"). The COD of the transmission assets is approved as 3.2.2019, 1.11.2018, 24.3.2019 and 31.3.2019. Therefore, the transmission charges from COD to 31.10.2020 shall be governed by the 2010 Sharing Regulations and from 1.11.2020 shall be governed by the 2020 Sharing Regulations. Accordingly, the liabilities of the DICs for arrears of the transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of



respective Tariff Regulation and Sharing Regulations and shall be recovered from the concerned DICs through bill under Regulation 15(2)(b) of the 2020 Sharing Regulations.

102. To summarise:

- a) Trued-up AFC allowed in respect of the transmission assets for 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)			
	Asset-I 2018-19 (Pro-rata for 57 days)	Asset-II 2018-19 (Pro-rata for 151 days)	Asset-III 2018-19 (Pro-rata for 8 days)	Asset-IV 2018-19 (Pro-rata for 1 day)
AFC	466.63	333.43	7.82	0.97

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset	4150.95	4194.77	4280.63	4299.34	4229.06

103. Annexures-I and Annexure-II given hereinafter form part of the order.

104. This order disposes of Petition No. 14/TT/2022 in terms of the above discussion and findings.

sd/
(P. K. Singh)
Member

sd/
(Arun Goyal)
Member

sd/
(I. S. Jha)
Member



Annexure-I

Asset-I	Admitted Capital Cost as on COD (₹ in lakh)	ACE 2019-24	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations
		2018-19			2018-19
Freehold land	1949.92	0.00	1949.92	0.00	0.00
Building	920.36	250.00	1170.36	3.34	34.91
Transmission line	2294.28	0.00	2294.28	5.28	121.14
Sub Station	10575.78	293.75	10869.53	5.28	566.16
PLCC	39.72	10.00	49.72	6.33	2.83
Leasehold Land	0.00	0.00	0.00	3.34	0.00
IT equipment and software	59.80	0.00	59.80	5.28	3.16
Total	15839.86	553.75	16393.61		728.20
Weighted Average Rate of Depreciation (in %)					4.52
Average Gross Block (₹ in lakh)					16116.72



Asset-II	Admitted Capital Cost as on COD (₹ in lakh)	ACE 2014-19	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations
		2018-19			2018-19
Sub Station	2789.98	244.52	3034.50	5.28	153.77
PLCC	92.22	1.84	94.06	6.33	5.90
Total	2882.20	246.36	3128.56		159.66
Weighted Average Rate of Depreciation (in %)					5.31
Average Gross Block (₹ in lakh)					3005.38



Asset-III	Admitted Capital Cost as on COD (₹ in lakh)	ACE 2014-19	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations
		2018-19			2018-19
Sub Station	1724.48	0.00	1724.48	5.28	91.05
IT equipment and software	6.14	0.00	6.14	5.28	0.32
Total	1730.62	0.00	1730.62		91.38
Weighted Average Rate of Depreciation (in %)					5.28
Average Gross Block (₹ in lakh)					1730.62



Asset-IV	Admitted Capital Cost as on COD (₹ in lakh)	ACE 2014-19	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations
		2018-19			2018-19
Sub Station	1738.05	0.00	1738.05	5.28	91.77
IT equipment and software	6.18	0.00	6.18	5.28	0.33
Total	1744.23	0.00	1744.23		92.10
Weighted Average Rate of Depreciation (in %)					5.28
Average Gross Block (₹ in lakh)					1744.43



Annexure-II

Combined Asset	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
		2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23	2023-24
Freehold land	1949.92	0.00	357.78	0.00	0.00	0.00	2307.70	0.00	0.00	0.00	0.00	0.00	0.00
Building	1170.36	26.04	40.00	688.00	0.00	0.00	1924.40	3.34	39.52	40.63	52.79	64.27	64.27
Transmission line	2294.28	66.14	89.26	0.00	0.00	0.00	2449.68	5.28	122.88	126.99	129.34	129.34	129.34
Sub Station	17366.56	443.36	497.43	515.00	0.00	0.00	18822.35	5.28	928.66	953.50	980.22	993.82	993.82
PLCC	143.78	17.21	18.16	0.00	0.00	0.00	179.15	6.33	9.65	10.77	11.34	11.34	11.34
IT equipment and software	72.13	2.11	0.00	0.00	0.00	0.00	74.23	15.00	10.98	11.13	11.13	11.13	11.13
Total	22997.02	554.87	1002.63	1203.00	0.00	0.00	25757.51		1111.69	1143.01	1184.83	1209.91	1209.91
Weighted Average Rate of Depreciation (in %)									4.78	4.75	4.71	4.70	4.70
Average Gross Block (₹ in lakh)									23274.45	24053.19	25156.01	25757.51	25757.51

