

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 35/TT/2020

Coram:

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

Date of Order: 03.06.2020

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, truing-up of transmission tariff of 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of Asset I: 2 Nos. of 400 kV bays along with 1 X 63 MVAR (fixed) line reactor at Chaibasa Sub-station, Asset II: 1 X 63 MVAR (fixed) line reactor at Chaibasa Sub-station, Asset III: 2 Nos. of 400 kV line bays along with 2 X 50 MVAR (fixed) line reactor at Ranchi 765/400 kV Sub-station, Asset IV: 2 Nos. of 400 kV line bays at Kharagpur Sub-station, Asset V: 2 Nos. of 400 kV line bays at Purulia Sub-station under "Eastern Region Strengthening Scheme VII" 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 Ltd
(Formerly Bihar State Electricity Board -BSEB)
Vidyut Bhavan, Bailey Road, Patna – 800 001
(Bihar)
2. West Bengal State Electricity Distribution Company Limited
Bidyut Bhawan, Bidhan Nagar
Block DJ, Sector-II, Salt Lake City
Calcutta - 700 091
(West Bengal)
3. Grid Corporation of Orissa Ltd.
Shahid Nagar, Bhubaneswar - 751 007
(Odisha)



4. Jharkhand State Electricity Board
In Front of Main Secretariat
Doranda, Ranchi - 834002
(Jharkhand)
5. Damodar Valley Corporation
DVC Tower, Maniktala
Civic Centre, VIP road, Calcutta - 700 054
(West Bengal)
6. Power Department
Government of Sikkim, Gangtok - 737 101
(Sikkim)
7. Sterlite Power Grid Ventures Limited F-1,
Mira Corporate Suits, 1 & 2, Mathura Road,
Ishwar Nagar, New Delhi – 110065

...Respondents

For Petitioner : Shri A.K. Verma, PGCIL
Shri Mukesh Bhaskar, PGCIL
Shri Amit K. Jain, PGCIL
Shri Amit Yadav, PGCIL

For Respondents : Shri Abhishek Vikas, Advocate, BSPHCL
Shri Navin Prakash, Advocate, BSPHCL
Shri Umang Anand, Advocate, BSPHCL
Shri Jagat Bhushan Nidhi, Advocate, BSPHCL

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. (hereinafter referred to as “the Petitioner”) for truing up of transmission tariff of Asset I: 2 Nos. of 400 kV bays along with 1 X 63 MVAR (fixed) line reactor at Chaibasa Sub-station, Asset II: 1 X 63 MVAR (fixed) line reactor at Chaibasa Sub-station, Asset III: 2 Nos. of 400 kV line bays along with 2 X 50 MVAR (fixed) line reactor at Ranchi 765/400 kV Sub-station, Asset IV: 2 Nos. of 400 kV line bays at Kharagpur Sub-station, Asset V: 2 Nos. of 400 kV line bays at Purulia Sub-station (hereinafter referred to as “transmission assets”) under “Eastern Region Strengthening Scheme VII” (hereinafter referred to as “transmission



Scheme”) in Eastern Region for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and tariff determination for 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”).

2. The Petitioner has made the following prayers in this 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 10.2 and 11.0 above.*
- 2) *Approve the Completion cost and additional capitalization incurred during 2014-19 & 2019-24.*
- 3) *Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 10.2 and 11.0 above for respective block.*
- 4) *Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*
- 5) *Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 6) *Allow the Petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.*
- 7) *Allow the Petitioner to claimed initial spares project as whole.*
- 8) *Allow the Petitioner to file a separate petition before Hon’ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 11.6 above.*
- 9) *Allow the Petitioner to claim the capital spares at the end of tariff block as per actual.*



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

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

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

Background

4. The Investment Approval (IA) and expenditure sanction for the transmission project was accorded by the Board of Directors of the Petitioner vide Memorandum reference C/CP/ERSS-IV dated 24.3.2015 at an estimated capital cost of ₹7135 Lakh including IDC of ₹396 lakh based on December, 2014 price level.

5. The scope of the project covered under "Eastern Region Strengthening Scheme VII" is as under:-

- (i) 2 Nos. of 400 kV bays along with 1 X 63 MVAR (fixed) line reactor at Chaibasa Sub-station
- (ii) 1 X 63 MVAR (fixed) line reactor at Chaibasa Sub-station
- (iii) 2 Nos. of 400 kV line bays along with 2 X 50 MVAR (fixed) line reactor at Ranchi 765/400 kV Sub-station
- (iv) 2 Nos. of 400 kV line bays at Kharagpur Sub-station
- (v) 2 Nos. of 400 kV line bays at Purulia Sub-station



6. The Petitioner, in the instant petition, has submitted Revised Cost Estimates (RCE) approved by the Board of Directors of the Petitioner vide Memorandum reference C/CP/PA1718-07-0A-RCE001 dated 7.5.2017 at an estimated capital cost of ₹11964 lakh including IDC of ₹225 lakh for all the 5 assets. Details of apportioned approved capital cost claimed by the Petitioner is as under:

(₹ in lakh)		
Asset	FR Apportioned Approved Capital Cost	Revised apportioned capital cost as per RCE
Asset-I	1815.56	2712.91
Asset-II	612.44	1137.53
Asset-III	1892.11	3335.50
Asset-IV	1075.47	1062.13
Asset-V	1739.42	3715.93
Total	7135.00	11964.00

7. The project was scheduled to be put into commercial operation within 24 months from the date of the IA and accordingly the scheduled COD was 23.3.2017.

8. The details of the assets, their COD and the petitions under which the transmission tariff of the assets was determined are as under:-

Name of Asset	COD	Remark
Asset I - 2 Nos. of 400 kV bays alongwith 1 X 63 MVAR (fixed) line reactor at Chaibasa Sub-station (POWERGRID)	19.6.2016	Order dated 24.7.2017 in Petition No. 210/TT/2016
Asset II - 1 X 63 MVAR (fixed) line reactor at Chaibasa Sub-station (POWERGRID)	27.10.2016	
Asset III – 2 Nos. of 400 kV line bays along with 2 X 50 MVAR (fixed) line reactor at Ranchi 765/400 kV Sub-station (POWERGRID)	7.1.2017	
Asset IV – 2 Nos. of 400 kV line bays at Kharagpur Sub-station (POWERGRID)	14.11.2016	
Asset V – 2 Nos. of 400 kV line bays at Purulia Sub-station (POWERGRID)	26.07.2017	Order dated 3.12.2018 in Petition No. 63/TT/2018

9. There is no time over-run in case of Assets-I, II, III and IV. However, there is time over-run of 125 days in respect of Asset-V which was not condoned by the Commission in the order dated 3.12.2018 in Petition No. 63/TT/2018.

10. The Petitioner has served the petition on the Respondents and notice has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 (hereinafter referred to as "the Act"). No comments or suggestions have been received from the general public in response to the notices published in the newspapers by the Petitioner. The hearing in this matter was held on 26.2.2020.

11. During the hearing held on 26.2.2020, BSPHCL, Respondent No.1, prayed for some time to file reply to the instant petition and the same was granted. However, no reply has been filed by the BSP(H)CL within the time allowed.

12. None of the Respondents have filed their reply. Having heard the representatives of the Petitioner and having perused the material on record, we proceed to dispose of the petition.

13. The Petitioner has filed the instant petition for truing up of tariff of the 2014-19 tariff period in accordance with Regulation 8 of the 2014 Tariff Regulations.

14. In compliance to the direction issued in earlier order regarding the system study for interim arrangement for Kharagpur-Chaibasa line, the Petitioner has submitted that no specific system study was carried out because the same has already been approved in a CEA meeting dated 29.3.2016, SCM dated



13.6.2016 and ERPC Meetings dated 24th and 25th June 2016. The interim arrangement at Kharagpur Sub-station was removed on 12.11.2016.

Truing-up of Annual Fixed Charges for 2014-19 tariff period

15. The details of the transmission charges claimed by the Petitioner for the aforementioned assets are as under:

(₹ in lakh)

Asset-I			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	65.57	117.48	129.89
Interest on Loan	69.88	113.85	114.67
Return on Equity	70.21	127.30	141.56
Interest on working capital	9.76	14.78	15.61
O & M Expenses	100.88	133.02	137.42
Total	316.30	506.43	539.15

(₹ in lakh)

Asset-II			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	16.13	40.42	41.92
Interest on Loan	17.35	40.31	38.21
Return on Equity	18.05	45.25	47.06
Interest on working capital	1.12	2.75	2.77
O & M Expenses	0.00	0.00	0.00
Total	52.65	128.73	129.96

(₹ in lakh)

Asset-III			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	31.15	151.73	167.72
Interest on Loan	32.42	146.84	149.75
Return on Equity	34.23	165.29	183.67
Interest on working capital	3.69	17.07	18.11
O & M Expenses	29.62	133.02	137.42
Total	131.47	613.95	656.67

(₹ in lakh)

Asset-IV			
Particulars	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	9.63	50.15	54.12
Interest on Loan	10.17	49.90	49.65
Return on Equity	10.78	56.15	60.74



Interest on working capital	3.21	10.36	10.78
O & M Expenses	48.67	133.02	137.42
Total	82.46	299.58	312.71

(₹ in lakh)

Asset-V		
Particulars	2017-18 (Pro-rata)	2018-19
Depreciation	103.23	181.45
Interest on Loan	102.03	170.30
Return on Equity	115.58	203.70
Interest on working capital	10.87	17.93
O & M Expenses	77.55	117.46
Total	409.26	690.87

16. The details of the interest on working capital claimed by the Petitioner are as under:-

(₹ in lakh)

Asset	Particulars	2016-17 (Pro-rata)	2017-18	2018-19
I	Approved Interest on Working Capital (IWC)	9.20	13.23	13.47
	Revised IWC based on truing up	9.76	14.78	15.61
II	Approved Interest on Working Capital (IWC)	0.94	2.15	2.09
	Revised IWC based on truing up	1.12	2.75	2.77
III	Approved Interest on Working Capital (IWC)	4.61	13.57	13.62
	Revised IWC based on truing up	3.69	17.07	18.11
IV	Approved Interest on Working Capital (IWC)	3.27	10.71	11.10
	Revised IWC based on truing up	3.21	10.36	10.78
V	Approved Interest on Working Capital (IWC)	-	10.38 (Pro-rata)	17.30
	Revised IWC based on truing up	-	10.87 (Pro-rata)	17.96

Capital Cost

17. The Commission vide order dated 24.7.2017 in Petition No. 210/TT/2016 and order dated 3.12.2018 in Petition No. 63/TT/2018 allowed capital cost as on COD and Additional Capital Expenditure in respect of the instant assets as under:



(₹ in lakh)

Asset	Apportioned approved capital cost as per FR	Expenditure up to DOCO (as admitted)	Additional capitalisation (Admitted)			Total capital cost as on 31.3.2019 (Allowed)
			2016-17	2017-18	2018-19	
Asset-I	1815.56	1028.60	651.51	96.77	0.00	1776.88
Asset-II	612.44	595.64	0.00	0.00	0.00	595.64
Asset-III	1892.11	1835.05	0.00	0.00	0.00	1835.05
Asset-IV	1075.47	75.80	847.46	139.84	0.00	1063.10
Asset-V	1739.42	2267.82	0.00	799.04	387.24	3454.10
Total	7135.00	5802.91	1498.97	1035.65	387.24	8724.77

18. The details of apportioned approved capital cost, capital cost as on COD and Additional Capital Expenditure incurred up to 31.3.2019 as claimed by the Petitioner for the instant transmission assets are as under:

(₹ in lakh)

Asset	Approved Capital Cost (Apportioned) as per FR	Revised apportionment of the capital cost in the instant petition as per RCE	Capital cost as on COD	Additional capitalisation (claimed)			Total capital cost as on 31.3.2019 (claimed)
				2016-17	2017-18	2018-19	
Asset-I	1815.56	2712.91	1059.59	912.44	362.89	106.8	2441.72
Asset-II	612.44	1137.53	675.78	77.67	23.98	33.01	810.44
Asset-III	1892.11	3335.50	2437.66	156.23	404.54	200.5	3198.93
Asset-IV	1075.47	1062.13	87.96	788.36	146.84	3.57	1026.73
Asset-V	1739.42	3715.93	2295.45	0.00	1141.08	0.00	3436.53
Total	7135.00	11964.00	6556.44	1934.7	2079.33	343.88	10914.35

Cost Over-run

19. The Commission, in respect of Assets I to IV, vide order dated 24.7.2017 in Petition No 210/TT/2016 held as under:

“21. We have considered the submissions of the petitioner regarding cost over-run. The petitioner has not submitted the RCE and has also not submitted any justification for going ahead with such high cost discovered in bids and not going for re-bidding. Accordingly, the capital cost of the instant assets is restricted to the apportioned approved cost of individual assets. The capital cost for Assets-I, II, III and IV have been restricted by ₹880.63 lakh, ₹525.09 lakh, ₹1270.80 lakh and ₹60.16 lakh respectively. However, the petitioner is directed to submit the detailed reasons for asset wise cost over-run alongwith the approval of cost over-run by the competent authority at the time of truing-up”

20. The Petitioner has now submitted the Revised Cost Estimates (RCE) for "Sub-station extension work associated with Eastern Region Strengthening Scheme - VII (ERSS-VII)" duly approved by the Board of Directors of Petitioner in



its 342nd meeting held on 29.6.2017 (Communicated vide memorandum no. C/CP/PA 1718-07-0A-RCE001). The Petitioner has further submitted that there is no cost over-run in case of the instant assets when compared to the RCE apportioned approved capital cost.

21. The Petitioner has submitted reasons for variation in capital cost estimate and the same are as under:

“Price Variation (PV) (Net increase of Rs. 38.80 crore)

There is an increase in the cost of the project by Rs. 38.80 crore on this account, which works out to 54.38 % of the approved cost.

In regard to PV from DPR to LOA, it is submitted that the Contracts for various packages under this project were awarded hereunder:

- a) Extension of 400/220 kV Chaibasa substation and 400 kV Ranchi substations were awarded by POWERGRID and*
- b) Extension of 400/220 kV Purulia PSPP GIS (new) and 400/220 kV Kharagpur substations were awarded by WBSETCL on behalf of POWERGRID on deposit work basis.*

Based on above award, a price variation of Rs. 30.65 crore has been incurred from the time of approval of project till award of various contracts (DPR to LOA) based on prices received as per competitive bidding.

Further, it may be submitted that a price variation Rs. 8.15 crore has been incurred/ likely to be incurred under contract on the basis of provision of respective contracts. The reasons for the same is attributable to inflationary trends prevalent during execution of project from March, 2015 (first OBD under the project) to August, 2016 (period of major supplies), as may be seen from the trend of variation in indices of various major raw materials as indicated below:

NAME OF INDICES	Feb' 15 (one month prior to first OBD)	March 2015	March 2016	August 2016	% Increase from first OBD
CRGO	226000	226050	226050	226050	0.02%
Zinc	156900	155600	143900	173300	10.45%
Ball Clay	3600	3600	4575	4575	27.08%
WPI	175.6	176.1	175.3	183.1	4.27%
High Speed Diesel	188.4	203.2	183.3	201.2	6.79%
Cement & Lime	174	177.7	175.7	177.1	1.78%
CPI	253	254	268	278	9.88%

Thus the price variation under the project is attributable to the inflationary trend prevailing during execution of project and also market forces prevailing at the time of bidding process of various packages.



Addition & deletion of Items (Net Increase of Rs. 15.86 Crore)

There is an increase in the cost of the project by **Rs. 15.86 crore** on this account, which works out to 22.24 % of the approved cost as per the details given hereunder:

Additional cost towards GIS bus duct and Tie bay at 400 kV Purulia PSPP (new), WBSETCL: Based on the requirement of West Bengal State Electricity Distribution Company Limited (WBSEDCL), the line take off point for 400 kV D/C Purulia PSPP (West Bengal) – Ranchi line was considered as Purulia PSPP, in the DPR, wherein the GIS switchyard was located about 75 meters from GIS building and the total duct length was about 500 meters. Further, WBSEDCL Purulia PSPP GIS switchyard is having double main bus arrangement. Accordingly, cost was worked out in the DPR.

Meanwhile termination of 400 kV D/C Ranchi (New) - Purulia PSPP (New) (West Bengal) being implemented under TCB, was changed from Purulia PSPP (WBSEDCL) switchyard to Purulia PSPP (new) GIS substation of WBSETCL. The space allocated for Ranchi bays at Purulia (WBSETCL) was at a distance of about 250 meters from GIS hall requiring about 1600 meters of bus duct. POWERGRID took up the issue with WBSETCL/CEA for changing the bay location, however CEA has taken a decision not to revise the termination point as considerable time was already elapsed in finalizing the same. Further, Purulia (WBSETCL) substation has a one and half breaker scheme which also required additional tie bay.

This has resulted in additional expenditure of about **Rs. 13.91 Crore**.

Addition of the few items in Shunt Reactor Unit: During implementation of the project, online dissolved gas, moisture analyzer and online insulating oil drying system has been procured for reactors which were not envisaged during DPR. This has resulted in additional cost of Rs. 2.35 Crore.

Deletion of Civil work: At the time of Preparation of DPR Rs 20 lakhs each for Purulia and Kharagpur substation was envisaged for miscellaneous civil works. However, during execution the same was reviewed and deleted at the time of Revised cost estimate. This has resulted in a decrease of about Rs. 0.40 Crore in the cost of the project.

On account of the above reasons, total cost of the project has increased by Rs 15.86 crore.”

22. The Petitioner in line with the direction issued in order dated 24.7.2017 in Petition No 210/TT/2016 has submitted reasons for asset wise cost (including that for Asset-V which was covered in order dated 3.12.2018 in Petition No.



63/TT/2018 and by then RCE was approved by the Board of Directors of the Petitioner) over-run vide affidavit dated 11.3.2020 and the same are as under:

“It is submitted that as already mentioned in instant petition there is price variation amounting to Rs. 3880.15 Lakh for all subject assets. The Assets wise bifurcation is tabulated below:

(₹ in lakh)			
Name of Asset	From DPR to LOA	PV as per contract provision	Total
Asset-I	677.86	342.21	1020.07
Asset-II	397.00	200.24	597.24
Asset-III	1133.42	257.26	1390.68
Asset-IV	132.63	8.68	141.31
Asset-V	724.09	6.76	730.85
Total	3065.00	815.15	3880.15

Further there is additional of equipment of Rs.1623.02 Lakh and deletion of civil work of Rs. 40.00 Lakh (deletion) asset wise bifurcation is tabulated below:

(₹ in lakh)			
Name of Asset	Addition in scope	Deletion in scope	Reduction in IDC/IEDC
Asset-I	65.00*	0	187.72
Asset-II	70.00*	0	142.15
Asset-III	100.00*	0	47.29
Asset-IV	0.00	20.00@	134.65
Asset-V	1391.00#	20.00@	125.39
Total	1626.00	40.00	637.20

***Addition of the few items in Shunt Reactor Unit:** During implementation of the project, online dissolved gas, moisture analyser and online insulating oil drying project has been procured for reactors which were not envisaged during DPR. This has resulted in additional cost of ₹ 235.00 Lakh.

Additional cost ₹ 1391.00 Lakh towards GIS bus duct and Tie bay at 400 kV Purulia PSPP (new), WBSETCL: Based on the requirement of West Bengal State Electricity Distribution Company Limited (WBSEDCL), the line take off point for 400 kV D/C Purulia PSPP (West Bengal) – Ranchi line was considered as Purulia PSPP, in the DPR, wherein the GIS switchyard was located about 75 meters from GIS building and the total duct length was about 500 meters. Further, WBSEDCL Purulia PSPP GIS switchyard is having double main bus arrangement. Accordingly, cost was worked out in the DPR.

Meanwhile, termination of 400 kV D/C Ranchi (New) - Purulia PSPP (New) (West Bengal) being implemented under TBCB, was changed from Purulia PSPP (WBSEDCL) switchyard to Purulia PSPP (new) GIS Sub-station of WBSETCL. The space allocated for Ranchi bays at Purulia (WBSETCL) was at a distance of about 250 meters from GIS hall requiring about 1600 meters of bus duct. POWERGRID took up the issue with WBSETCL/CEA for changing the bay location, however CEA has taken a decision not to revise the termination point as considerable time was already elapsed in finalizing the same. Further, Purulia (WBSETCL) Sub-station has a one and half breaker scheme which also required additional tie bay.

@Deletion of Civil work: At the time of Preparation of DPR ₹ 20 lakh each for Purulia and Kharagpur Sub-station was envisaged for miscellaneous civil works.



However, during execution the same was reviewed and deleted from the RCE. This has resulted in a decrease of about ₹ 40 Lakh in the cost of the project.”

23. We have considered the submissions of the petitioner. The total apportioned approved cost as per RCE in respect of assets covered under the instant petition as mentioned in the Table in Paragraph 11 above, the completion cost including additional capitalization is within the apportioned approved capital cost as per RCE. Therefore, there is no cost over-run in respect of the instant assets. Accordingly, components earlier disallowed are now allowed for respective assets and dealt with in the succeeding paragraphs of the order.

Interest During Construction (IDC)

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

25. The IDC allowed in the previous order dated 24.7.2017 in Petition No. 210/TT/2016 for Asset-I, Asset-II, Asset-III and Asset-IV was ₹6.11 lakh, ₹7.01 lakh, ₹19.02 lakh and ₹3.72 lakh respectively which was subject to review at the time of truing up after considering actual discharge of IDC. The IDC allowed in the previous order dated 3.12.2018 in Petition No. 63/TT/2018 for Asset-V was ₹65.44 lakh.

26. The allowable IDC has been worked out considering the information submitted by the Petitioner for the individual assets separately on cash basis. The loan details submitted in Form-9C for period 2014-19 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 (additional capital expenditure) during the year in which it has been discharged.

27. The Petitioner has also included certain Additional Capitalisation loans for calculation of IDC. The loan portfolio of calculation of IDC is restricted to loan value up to COD and additional capitalisation loans have not been considered for IDC calculation.

28. Certain discrepancies still subsist in IDC details submitted by the Petitioner in respect of Asset-III. Accordingly, IDC in respect of Asset-III has been considered based on the information contained in IDC calculation sheet and information provided in Form 7 as furnished by the Petitioner.

29. The IDC worked out based on the submissions of the Petitioner and previous orders is as under:

Asset	IDC approved in previous orders (A)	IDC Claimed by Petitioner (B)	IDC Admissible	IDC allowed as on COD on cash basis	Un-discharged IDC as on COD	
					Discharged in year 2016-17	Discharged in year 2017-18
					Asset-I	6.11
Asset-II	7.01	16.46	16.32	7.01	0.67	8.64
Asset-III	19.02	47.12	47.12	19.02	1.11	26.99
Asset-IV	3.72	3.93	3.93	3.71	0.20	0.02
Asset-V	65.44	109.49	65.85	47.94	-	17.91

Incidental Expenditure During Construction (IEDC)

30. The Petitioner has claimed IEDC of ₹37.01 lakh, ₹23.54 lakh, ₹113.30 lakh, ₹0.14 lakh and ₹0.01 lakh for Asset-I, Asset-II, Asset-III, Asset-IV and Asset-V respectively and submitted Auditor's certificate in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the instant assets. The IEDC claimed is within the



percentage of 10.75% on Hard Cost as indicated in the Abstract Cost Estimate, in respect of the instant assets. Hence, the IEDC claimed has been allowed.

Initial spares

31. The Petitioner has claimed the following Initial Spares for the instant assets and prayed to revise the Initial Spares allowed earlier for Asset-I, Asset-II, Asset-III and Asset-IV in order dated 24.7.2017 in Petition No. 210/TT/2016 and Asset-V in order dated 3.12.2018 in Petition No. 63/TT/2018 in light of the judgement of the Appellate Tribunal for Electricity (APTEL) dated 14.9.2019 in Appeal No.74 of 2017.

Assets	Plant & machinery cost up to cut-off date (excluding IDC and IEDC as per auditor certificate) (A) (₹ in lakh)	Initial Spares Claimed (B) (₹ in lakh)	Ceiling Limit (%) (C)	Allowable Initial Spares Worked out
				$D = [(A-B)*C / (100-C)]$ (₹ in lakh)
Asset-I	2390.91	135.57	6.00	143.96
Asset-II	782.57	40.64	6.00	47.36
Asset-III	3009.28	166.41	6.00	181.46
Asset-IV	1022.66	57.59	6.00	61.60
Asset-V	3482.58	309.39	6.00	202.54
TOTAL	10688.00	709.60	-	636.92

32. The Petitioner has also submitted that the Initial Spares claimed under Sub-station head are ₹709.60 lakh against which the initial spares worked out is ₹636.92 lakh. Accordingly, the excess spares of ₹72.68 lakh may be reduced from the capital cost of Asset-V.

33. We have considered the submissions of the Petitioner. The Initial Spares are allowable subject to ceiling limit specified in Regulation 13(d) of the 2014 Tariff Regulations. As per the APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017, the Initial Spares are to be allowed as a percentage of the project

cost as a whole as on the cut-off date. The details of the Initial Spares allowed are as under:-

Asset	Plant & Machinery Cost upto cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Initial Spares allowed in Petition Nos. 63/TT/2018 and 210/TT/2016 (₹ in lakh)	Norms as per 2014 Tariff Regulations (in %)	Initial Spares allowable as per Norms and judgement dated 14.9.2019 (₹ in lakh)	Initial Spares allowed (₹ in lakh)
Asset-I	2390.91	135.57	70.01	6.00	636.92	135.57
Asset-II	782.57	40.64	23.34	6.00		40.64
Asset – III	3009.28	166.41	71.54	6.00		166.41
Asset-IV	1022.66	57.59	42.38	6.00		57.59
Asset-V	3482.58	309.39	210.42	6.00		236.71
Total	10688.00	709.60	417.69	6.00	636.92	636.92

34. The excess Initial Spares to the tune of ₹72.68 lakh are adjusted from capital cost of Asset-V as per the Petitioner's submission.

35. The adjustment of excess of Initial Spares from Asset-V as claimed by Petitioner and as considered for tariff calculation is as below:

(₹ in lakh)		
Period	Adjustments as claimed	Adjustments as allowed
As on COD	41.77	72.68
2017-18	30.91	
Total	72.68	72.68

Capital cost as on COD

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

(₹ in lakh)					
Asset	Capital cost claimed as on COD as per Auditor's certificate (A)	Less: IDC disallowed due to computational difference (B)	Less: undischarged IDC as on COD	Less: Excess Initial Spares	Capital cost considered as on COD
Asset-I	1067.28	0.06	7.63	-	1059.59
Asset-II	685.23	0.14	9.31	-	675.78
Asset-III	2465.76	0.00	28.10	-	2437.66
Asset-IV	88.17	0.00	0.22	-	87.95
Asset-V	2398.22	43.64	17.91	72.68	2263.99



Additional Capital Expenditure (ACE)

37. The Petitioner has claimed the following Additional Capital Expenditure and submitted Auditor's Certificate in support of the same in respect of the instant assets:-

(₹ in lakh)

Asset	Additional capitalisation (claimed)		
	2016-17	2017-18	2018-19
Asset-I	912.44	362.89	106.8
Asset-II	77.67	23.98	33.01
Asset-III	156.23	404.54	200.5
Asset-IV	788.36	146.84	3.57
Asset-V	0.00	1141.08	0.00
Total	1934.7	2079.33	343.88

38. The Petitioner vide affidavit dated 25.2.2020 has submitted that the Additional Capitalization in the instant assets are mainly on account of balance and retention payments only. The Additional Capitalization for 2015-16, 2016-17, 2017-18 and 2018-19 period for the instant assets has been claimed under Regulation 14(1)(i) (Undischarged liabilities) of the 2014 Tariff Regulations and is within the cut-off the date.

39. The cut-off date for Asset-I, Asset-II and Asset-IV works out to be 31.3.2019 and for Asset III and V, it works out to be 31.3.2020 and thus the claimed additional capitalisation is within the cut-off date.

40. The Petitioner has included the IDC disallowed (to be discharged post COD) in order dated 3.12.2018 in Petition No. 63/TT/2018 as part of additional capitalisation for 2015-16 to 2018-19 period for Asset-V.

41. The Petitioner has claimed Additional Capitalization including the accrual IDC discharged during 2015-16 to 2018-19 period. It is observed that total

estimated completion cost including Additional Capitalization for 2015-16 to 2018-19 period for Asset-I, Asset-II, Asset-III, Asset-IV and Asset-V is within the approved apportioned cost as per RCE.

42. We have considered the submissions of the Petitioner including asset wise reasons for cost escalation as highlighted in Para 21 along with the RCE submitted with the instant petition. The ACE claimed for the period 2015-16 to 2018-19 is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations. Accordingly, ACE admitted for tariff calculation in respect of Asset-I, Asset-II, Asset-III and Asset-IV is as under:

(₹ in lakh)

Asset	Additional capitalization		
	2016-17	2017-18	2018-19
Asset-I	912.45	362.83	106.80
Asset-II	77.67	23.84	33.01
Asset-III	156.22	404.54	200.50
Asset-IV	788.36	146.85	3.57

43. The ACE claimed for Asset-V and approved is as below:

(₹ in lakh)

Description	As claimed	As approved	Remarks
Add cap from DOCO to 31.3.18 as per Auditor certificate	1153.71	1153.71	As per Auditor certificate
Add: Accrual IDC discharge in 2017 -18	44.61	17.91	As per IDC computation
Less: IDC Disallowed due to time over run	26.33	-	
Less: Disallowed in initial spares	30.91	-	Disallowance of initial spares has been considered in DOCO cost as discussed under para 26
Total Add cap in 2017-18	1141.08	1171.62	

44. Accordingly, the capital cost considered for the tariff period 2014-19 is as follows:-

(₹ in lakh)

Asset I: Capital cost as per revised approved apportionment: ₹2712.91 lakh					
Asset-I	Capital cost as on COD (on cash basis)	Additional Capitalization			Total capital cost including Additional Capitalization as on 31.3.2019
		2016-17	2017-18	2018-19	
Allowed earlier in order dated 24.7.2017 in Petition No. 210/TT/2016	1028.60	651.51	96.77	0.00	1776.88
As claimed	1059.59	912.45	362.89	106.80	2441.73
Approved in this order	1059.59	912.45	362.83	106.80	2441.67

(₹ in lakh)

Asset II: Capital cost as per revised approved apportionment: ₹1137.53 lakh					
Asset-II	Capital cost as on COD (on cash basis)	Additional Capitalization			Total capital cost including Additional Capitalization as on 31.3.2019
		2016-17	2017-18	2018-19	
Allowed earlier in order dated 24.7.2017 in Petition No. 210/TT/2016	595.64	0.00	0.00	0.00	595.64
As claimed	675.78	77.67	23.98	33.01	810.44
Approved in this order	675.78	77.67	23.84	33.01	810.30

(₹ in lakh)

Asset III: Capital cost as per revised approved apportionment: ₹3335.50 lakh					
Asset-III	Capital cost as on COD (on cash basis)	Additional Capitalization			Total capital cost including Additional Capitalization as on 31.3.2019
		2016-17	2017-18	2018-19	
Allowed earlier in order dated 24.7.2017 in Petition No. 210/TT/2016	1835.05	0.00	0.00	0.00	1835.05
As claimed	2437.66	156.23	404.54	200.50	3198.93
Approved in this order	2437.66	156.23	404.54	200.50	3198.93

(₹ in lakh)

Asset IV: Capital cost as per revised approved apportionment: ₹1062.13 lakh					
Asset-IV	Capital cost as on COD (on cash basis)	Additional Capitalization			Total capital cost including Additional Capitalization as on 31.3.2019
		2016-17	2017-18	2018-19	

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Allowed earlier in order dated 24.7.2017 in Petition No. 210/TT/2016	75.80	847.46	139.84	0.00	1063.10
As claimed	87.96	788.36	146.84	3.57	1026.73
Approved in this order	87.96	788.36	146.85	3.57	1026.73

(₹ in lakh)

Asset V: Capital cost as per revised approved apportionment: ₹3715.93 lakh					
Asset-V	Capital cost as on COD (on cash basis)	Additional Capitalization			Total capital cost including Additional Capitalization as on 31.3.2019
		2016-17	2017-18	2018-19	
Allowed earlier in order dated 3.12.2018 in Petition No. 63/TT/2018	2267.82	0.00	799.04	387.24	3454.10
As claimed	2295.45	0.00	1141.08	0.00	3436.53
Approved in this order	2263.99	-	1171.62	-	3435.61

45. The difference between the earlier allowed total capital cost including additional capitalization as on 31.3.2019 and approved in this order is on account of submission of Revised Cost Estimates by the Petitioner. The additional capital expenditure was restricted in previous order due to absence of Revised Cost Estimate. The difference in claimed total capital cost including additional capitalization as on 31.3.2019 and approved in this order is also on account of IDC partly disallowed in the instant order.

Debt-Equity Ratio

46. The Petitioner has considered debt-equity ratio as 70:30 as on COD and for ACE. The debt-equity ratio of 70:30 (as claimed by Petitioner in Form 6) has been considered for capital cost as on COD and ACE during 2015-16 to 2018-19 period as provided under Regulation 19 of the 2014 Tariff Regulations. The



details of the debt-equity as on the COD and 31.3.2019 considered for the purpose of tariff computation for the 2014-19 tariff period is as follows:-

Asset-I	As on COD		As on 31.3.2019	
	Capital cost (₹ in lakh)	(%)	Capital cost (₹ in lakh)	(%)
Debt	741.72	70.00	1709.18	70.00
Equity	317.87	30.00	732.49	30.00
Total	1059.59	100.00	2441.67	100.00

Asset-II	As on COD		As on 31.3.2019	
	Capital cost (₹ in lakh)	(%)	Capital cost (₹ in lakh)	(%)
Debt	473.05	70.00	567.21	70.00
Equity	202.73	30.00	243.09	30.00
Total	675.78	100.00	810.30	100.00

Asset-III	As on COD		As on 31.3.2019	
	Capital cost (₹ in lakh)	(%)	Capital cost (₹ in lakh)	(%)
Debt	1706.36	70.00	2239.26	70.00
Equity	731.30	30.00	959.67	30.00
Total	2437.66	100.00	3198.93	100.00

Asset-IV	As on COD		As on 31.3.2019	
	Capital cost (₹ in lakh)	(%)	Capital cost (₹ in lakh)	(%)
Debt	61.57	70.00	718.88	70.02
Equity	26.38	30.00	307.84	29.98
Total	87.95	100.00	1026.73	100.00

Asset-V	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	1584.79	70.00	2404.93	70.00
Equity	679.20	30.00	1030.68	30.00
Total	2263.99	100.00	3435.61	100.00

Interest on Loan (IoL)

47. IoL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The Petitioner has prayed that change in interest rates prevailing as on 1.4.2019 for respective loans shall be applicable and that the



change in interest rate due to floating rate of interest applicable for the project to be claimed/ adjusted over 5 year period directly from/ with the beneficiaries.

48. We have considered the submissions of the Petitioner. Accordingly, IoL has been worked out based on weighted average rate of interest computed from actual interest paid on various loans as per the compendium.

49. IoL has been worked out as per the considerations as under: -

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

50. IoL has been worked out as follows:-

(₹ in lakh)

Asset-I			
Particular	2016-17 (Pro-rata)	2017-18	2018-19
Gross Normative Loan	741.72	1380.44	1634.42
Cumulative Repayments up to Previous Year	0.00	65.56	183.03
Net Loan-Opening	741.72	1314.88	1451.39
Addition due to Additional Capitalization	638.72	253.98	74.76
Repayment during the year	63.17	114.41	126.81
Net Loan-Closing	1,317.27	1456.84	1404.78
Average Loan	1,029.49	1387.05	1430.81
Weighted Average Rate of Interest on Loan (%)	8.67	8.23	8.05
Interest on Loan	69.96	114.16	115.23

(₹ in lakh)

Asset-II			
Particular	2016-17 (Pro-rata)	2017-18	2018-19
Gross Normative Loan	473.05	527.42	544.10
Cumulative Repayments up to Previous Year	0.00	16.13	56.54
Net Loan-Opening	473.05	511.29	487.57
Addition due to Additional Capitalization	54.37	16.69	23.11
Repayment during the year	16.13	40.41	41.91



Net Loan-Closing	511.29	487.57	468.76
Average Loan	492.17	499.43	478.16
Weighted Average Rate of Interest on Loan (%)	8.24	8.06	7.99
Interest on Loan	17.35	40.30	38.21

(₹ in lakh)

Asset-III			
Particular	2016-17 (Pro-rata)	2017-18	2018-19
Gross Normative Loan	1706.36	1815.73	2098.91
Cumulative Repayments up to Previous Year	-	30.85	179.73
Net Loan-Opening	1706.36	1784.88	1919.18
Addition due to Additional Capitalization	109.37	283.18	140.35
Repayment during the year	30.85	148.87	164.85
Net Loan-Closing	1784.88	1919.18	1894.68
Average Loan	1745.62	1852.03	1906.93
Weighted Average Rate of Interest on Loan (%)	8.07	7.94	7.87
Interest on Loan	32.42	147.00	150.14

(₹ in lakh)

Asset-IV			
Particular	2016-17 (Pro-rata)	2017-18	2018-19
Gross Normative Loan	61.57	613.42	716.21
Cumulative Repayments up to Previous Year	0.00	9.62	59.77
Net Loan-Opening	61.57	603.80	656.44
Addition due to Additional Capitalization	551.85	102.79	2.67
Repayment during the year	9.62	50.15	54.12
Net Loan-Closing	603.80	656.44	604.99
Average Loan	332.68	630.12	630.72
Weighted Average Rate of Interest on Loan (%)	8.08	7.92	7.87
Interest on Loan	10.17	49.90	49.65

(₹ in lakh)

Asset-V		
Particular	2017-18 (Pro-rata)	2018-19
Gross Normative Loan	1584.79	2404.93
Cumulative Repayments up to Previous Year	0.00	102.65
Net Loan-Opening	1584.79	2302.28
Addition due to Additional Capitalization	820.13	0.00
Repayment during the year	102.65	181.40
Net Loan-Closing	2302.28	2120.88
Average Loan	1943.54	2211.58
Weighted Average Rate of Interest on Loan (%)	7.65	7.70
Interest on Loan	101.45	170.29



Return on Equity (ROE)

51. The Petitioner is entitled for Return on equity for the instant assets in terms of Regulation 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that they are liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 tariff period:

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

52. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates for the Petitioner and the same is given in the table below. The same MAT rates are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations.

Year	MAT Rate (%)	Grossed up ROE [Base Rate/(1-t)] (%)
2014-15	20.9605	19.610
2015-16	21.3416	19.705
2016-17	21.3416	19.705
2017-18	21.3416	19.705
2018-19	21.5488	19.758

53. Accordingly, the RoE allowed for the instant assets is as follows:-

(₹ in lakh)

Asset-I			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Opening Equity	317.87	591.60	700.45
Addition due to Additional Capitalization	273.73	108.85	32.04
Closing Equity	591.60	700.45	732.49
Average Equity	454.74	646.03	716.47



Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT rate for the respective Financial year (%)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (%)	19.705	19.705	19.758
Return on Equity (Pre-tax)	70.21	127.30	141.56

(₹ in lakh)

Asset-II			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Opening Equity	202.73	226.03	233.18
Addition due to Additional Capitalization	23.30	7.15	9.90
Closing Equity	226.03	233.18	243.09
Average Equity	214.38	229.61	238.14
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT rate for the respective Financial year (%)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (%)	19.705	19.705	19.758
Return on Equity (Pre-tax)	18.06	45.25	47.05

(₹ in lakh)

Asset-III			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Opening Equity	731.30	778.16	899.52
Addition due to Additional Capitalization	46.86	121.36	60.15
Closing Equity	778.16	899.52	959.67
Average Equity	754.73	838.84	929.60
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT rate for the respective Financial year (%)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (%)	19.705	19.705	19.758
Return on Equity (Pre-tax)	34.23	165.30	183.67

(₹ in lakh)

Asset-IV			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Opening Equity	26.38	262.89	306.94
Addition due to Additional Capitalization	236.51	44.05	0.90
Closing Equity	262.89	306.94	307.84
Average Equity	144.64	284.92	307.39
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT rate for the respective Financial year (%)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (%)	19.705	19.705	19.758
Return on Equity (Pre-tax)	10.78	56.14	60.73



(₹ in lakh)

Asset-V		
Particulars	2017-18 (Pro- rata)	2018-19
Opening Equity	679.20	1030.68
Addition due to Additional Capitalization	351.49	0.00
Closing Equity	1030.68	1030.68
Average Equity	854.94	1030.68
Return on Equity (Base Rate) (%)	15.500	15.500
MAT rate for the respective Financial year (%)	21.342	21.549
Rate of Return on Equity (Pre-tax) (%)	19.705	19.758
Return on Equity (Pre-tax)	114.93	203.64

Depreciation

54. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed for the Asset-I and Asset-III in order dated 24.7.2017 in Petition No. 210/TT/2016. The Petitioner has neither given any justification for claiming higher depreciation than that was allowed earlier in order nor made any specific prayer for allowing higher depreciation in this petition.

55. Subsequently, it was identified that in Petition No. 210/TT/2016 for tariff determination of the instant assets for 2014-19 tariff block, the Petitioner has submitted capital cost of IT equipment in Sub-station cost and therefore depreciation for IT equipment was allowed @ 5.28% of corresponding capital cost.

56. The Petitioner now at the time of truing up for the 2014-19 period has segregated the IT equipment cost from Sub-station cost and has considered depreciation rate for IT Equipment @ 15% and the salvage value as NIL as per the 2014 Tariff Regulations.

57. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2014-19 period and the tariff from



the respective CODs to 31.3.2019 was allowed vide orders dated 24.7.2017 in Petition No. 210/TT/2016 and order dated 3.12.2018 in Petition No. 63/TT/2018. It is pertinent to point out that the Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said petitions where tariff for the instant assets for the 2014-19 period was allowed even though there was a clear provision in the 2014 Tariff Regulations providing depreciation @ 15% for IT Equipment. Having failed to make a claim as per the 2014 Tariff Regulations, the Petitioner has now, at the time of truing up of the tariff of the 2014-19 period, apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other Petitions listed along with the instant Petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @ of 15% at the time of truing up of the tariff of the 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's request for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the Sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been



considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations.

58. The depreciation for 2014-19 period is trued up for the instant assets as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations as follows:-

(₹ in lakh)

Asset-I			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Opening Gross Block	1059.59	1972.04	2334.87
Addition during 2014-19 due to Additional Capitalisation	912.45	362.83	106.80
Closing Gross Block	1972.04	2334.87	2441.67
Average Gross Block	1515.82	2153.46	2388.27
Average Gross Block (90% depreciable assets)	1484.45	2121.98	2356.69
Average Gross Block (100% depreciable assets)	31.37	31.48	31.58
Rate of Depreciation (%)	5.32	5.31	5.31
Depreciable Value (excluding IT equipment and software)	1336.01	1909.78	2121.02
Depreciable value of IT equipment and software	31.37	31.48	31.58
Total Depreciable value	1367.37	1941.26	2152.60
Remaining Depreciable Value	1367.37	1878.09	1975.02
Depreciation	63.17	114.41	126.81

(₹ in lakh)

Asset-II			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Opening Gross Block	675.78	753.45	777.29
Addition during 2014-19 due to Additional Capitalisation	77.67	23.84	33.01
Closing Gross Block	753.45	777.29	810.30
Average Gross Block	714.62	765.37	793.80
Average Gross Block (90% depreciable assets)	714.62	765.37	793.80
Average Gross Block (100% depreciable assets)	0.00	0.00	0.00

Rate of Depreciation (%)	5.28	5.28	5.28
Depreciable Value (excluding IT equipment and software)	643.15	688.83	714.42
Depreciable value of IT equipment and software	0.00	0.00	0.00
Total Depreciable Value	643.15	688.83	714.42
Remaining Depreciable Value	643.15	672.71	657.88
Depreciation	16.13	40.41	41.91

(₹ in lakh)

Asset-III			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Opening Gross Block	2437.66	2593.88	2998.43
Addition during 2014-19 due to Additional Capitalisation	156.22	404.55	200.50
Closing Gross Block	2593.88	2998.43	3198.93
Average Gross Block	2515.77	2796.16	3098.68
Average Gross Block (90% depreciable assets)	2486.63	2766.84	3069.20
Average Gross Block (100% depreciable assets)	29.15	29.32	29.48
Rate of Depreciation (%)	5.33	5.32	5.32
Depreciable Value (excluding IT equipment and software)	2237.96	2490.16	2762.28
Depreciable value of IT equipment and software	29.15	29.32	29.48
Total Depreciable value	2267.11	2519.47	2791.76
Remaining Depreciable Value	2267.11	2488.62	2612.03
Depreciation	30.85	148.87	164.85

(₹ in lakh)

Asset-IV			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Opening Gross Block	87.96	876.32	1023.17
Additional Capitalisation Expenditure	788.36	146.85	3.57
Closing Gross Block	876.32	1023.17	1026.74
Average Gross Block	482.14	949.75	1024.96
Average Gross Block (90% depreciable assets)	482.14	949.75	1024.96
Average Gross Block (100% depreciable assets)	0.00	0.00	0.00
Rate of Depreciation (%)	5.28	5.28	5.28
Depreciable Value (excluding IT equipment and software)	433.93	854.77	922.46
Depreciable value of IT equipment and software	0.00	0.00	0.00
Total Depreciable Value	433.93	854.77	922.46
Remaining Depreciable Value	433.93	845.15	862.69
Depreciation	9.62	50.15	54.12



(₹ in lakh)

Asset-V		
Particulars	2017-18 (Pro-rata)	2018-19
Opening Gross Block	2263.98	3435.60
Additional Capitalisation Expenditure	1171.62	0.00
Closing Gross Block	3435.60	3435.60
Average Gross Block	2849.79	3435.60
Average Gross Block (90% depreciable assets)	2849.79	3435.60
Average Gross Block (100% depreciable assets)	0.00	0.00
Rate of Depreciation (%)	5.28	5.28
Depreciable Value (excluding IT equipment and software)	2564.81	3092.04
Depreciable value of IT equipment and software	0.00	0.00
Total Depreciable Value	2564.81	3092.04
Remaining Depreciable Value	2564.81	2989.39
Depreciation	102.65	181.40

Operation & Maintenance Expenses (O&M Expenses)

59. The O&M Expenses as claimed by Petitioner and computed by Commission as per Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of tariff are as under:

(₹ in lakh)

Asset-I			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Norm (₹ lakh/bay)			
400 kV Bay (AIS)	64.37	66.51	68.71
400 kV Bay (GIS)	55.02	56.84	58.73
Number of bays			
400 kV Bay (AIS)	2	2	2
400 kV Bay (GIS)			
Total O&M Expense (Claimed)	100.88	133.02	137.42
Total O&M Expense (Approved)	100.88	133.02	137.42

(₹ in lakh)

Asset-II			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Norm (₹ lakh/bay)			
400 kV Bay (AIS)	64.37	66.51	68.71
400 kV Bay (GIS)	55.02	56.84	58.73
Number of bays			
400 kV Bay (AIS)			



400 kV Bay (GIS)			
Total O&M Expense (Claimed)	-	-	-
Total O&M Expense (Approved)	-	-	-

(₹ in lakh)

Asset-III			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Norm (₹ lakh/bay)			
400 kV Bay (AIS)	64.37	66.51	68.71
400 kV Bay (GIS)	55.02	56.84	58.73
Number of bays			
400 kV Bay (AIS)	2	2	2
400 kV Bay (GIS)			
Total O&M Expense (Claimed)	29.63	133.02	137.42
Total O&M Expense (Approved)	29.63	133.02	137.42

(₹ in lakh)

Asset-IV			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Norm (₹ lakh/bay)			
400 kV Bay (AIS)	64.37	66.51	68.71
400 kV Bay (GIS)	55.02	56.84	58.73
Number of bays			
400 kV Bay (AIS)	2	2	2
400 kV Bay (GIS)			
Total O&M Expense (Claimed)	48.67	133.02	137.42
Total O&M Expense (Approved)	48.67	133.02	137.42

(₹ in lakh)

Asset-V		
Particulars	2017-18 (Pro-rata)	2018-19
Norm (₹ lakh/bay)		
400 kV Bay (AIS)	66.51	68.71
400 kV Bay (GIS)	56.84	58.73
Number of bays		
400 kV Bay (AIS)		
400 kV Bay (GIS)	1	1
Total O&M Expense (Claimed)	77.55	117.46
Total O&M Expense (Approved)	77.55	117.46



Interest of Working Capital (“IWC”)

60. The Petitioner is entitled to claim interest on working capital as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under:-

(i) **Maintenance spares:**

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

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

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

(iii) **Receivables:**

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

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

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

61. The Interest on Working Capital allowed for the instant assets is as under:-

(₹ in lakh)

Particulars	Asset-I		
	2016-17 (Pro-rata)	2017-18	2018-19
O & M Expenses	10.73	11.09	11.45
Maintenance Spares	19.31	19.95	20.61
Receivables	66.77	83.94	89.43
Total	96.81	114.97	121.49
Rate of Interest on Working Capital (%)	12.80	12.80	12.80
Interest on working capital	9.71	14.72	15.55

(₹ in lakh)

Asset-II			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
O & M Expenses	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00
Receivables	20.53	21.45	21.66
Total	20.53	21.45	21.66
Rate of Interest on Working Capital (%)	12.80	12.80	12.80
Interest on working capital	1.12	2.75	2.77

(₹ in lakh)

Asset-III			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
O & M Expenses	10.73	11.09	11.45
Maintenance Spares	19.31	19.95	20.61
Receivables	94.73	101.87	109.02
Total	124.77	132.91	141.09
Rate of Interest on Working Capital (%)	12.80	12.80	12.80
Interest on working capital	3.68	17.01	18.06

(₹ in lakh)

Asset-IV			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
O & M Expenses	10.73	11.09	11.45
Maintenance Spares	19.31	19.95	20.61
Receivables	36.35	49.93	52.12
Total	66.39	80.97	84.18
Rate of Interest on Working Capital (%)	12.80	12.80	12.80
Interest on working capital	3.21	10.36	10.78

(₹ in lakh)

Asset-V		
Particulars	2017-18 (Pro-rata)	2018-19
O & M Expenses	9.47	9.79
Maintenance Spares	17.05	17.62
Receivables	99.54	115.13
Total	126.62	142.53
Rate of Interest on Working Capital (%)	12.60	12.60
Interest on working capital	10.84	17.96

Annual Transmission Charges 2014-19

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



a. **Asset-I**

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
	63.17	114.41	126.81
Interest on Loan	69.96	114.16	115.23
Return on Equity	70.21	127.30	141.56
Interest on Working Capital	9.71	14.72	15.55
O&M Expenses	100.88	133.02	137.42
Total	313.93	503.61	536.57

The annual transmission charges allowed in earlier order for 2014-19 period, claimed in instant petition as true up for 2014 -19 period and allowed after true up of 2014-19 period is as under:

(₹ in lakh)

Asset-I			
Particulars	2016-17	2017-18	2018-19
Allowed earlier in order dated 24.7.2017 in Petition No. 210/TT/2016	290.22	434.03	439.04
As claimed by the Petitioner in instant petition	316.30	506.43	539.15
Allowed after truing Up	313.93	503.61	536.57

b. **Asset-II**

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	16.13	40.41	41.91
Interest on Loan	17.35	40.30	38.21
Return on Equity	18.06	45.25	47.05
Interest on Working Capital	1.12	2.75	2.77
O&M Expenses	0.00	0.00	0.00
Total	52.65	128.70	129.94

The annual transmission charges allowed in earlier order for 2014-19 period, claimed in instant petition as true up for 2014 -19 period and allowed after true up of 2014-19 period is as under:

(₹ in lakh)

Asset-II			
Particulars	2016-17	2017-18	2018-19
Allowed earlier in order dated 24.7.2017 in Petition No. 210/TT/2016	43.84	100.68	98.02
As claimed by the Petitioner in instant petition	52.65	128.73	129.96
Allowed after truing Up	52.65	128.70	129.94

c. **Asset-III**

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	30.85	148.87	164.85
Interest on Loan	32.42	147.00	150.14
Return on Equity	34.23	165.30	183.67
Interest on Working Capital	3.68	17.01	18.06
O&M Expenses	29.63	133.02	137.42
Total	130.81	611.21	654.14

The annual transmission charges allowed in earlier order for 2014-19 period, claimed in instant petition as true up for 2014 -19 period and allowed after true up of 2014-19 period is as under:

(₹ in lakh)

Asset-III			
Particulars	2016-17	2017-18	2018-19
Allowed earlier in order dated 24.7.2017 in Petition No. 210/TT/2016	174.72	449.65	446.11
As claimed by the Petitioner in instant petition	131.47	613.95	656.67
Allowed after truing Up	130.81	611.21	654.14

d. **Asset-IV**

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	9.62	50.15	54.12
Interest on Loan	10.17	49.90	49.65
Return on Equity	10.78	56.14	60.73
Interest on Working Capital	3.21	10.36	10.78
O&M Expenses	48.67	133.02	137.42
Total	82.46	299.58	312.70

The annual transmission charges allowed in earlier order for 2014-19 period, claimed in instant petition as true up for 2014 -19 period and allowed after true up of 2014-19 period is as under:

(₹ in lakh)

Asset-IV			
Particulars	2016-17	2017-18	2018-19
Allowed earlier in order dated 24.7.2017 in Petition No. 210/TT/2016	85.11	315.71	327.81
As claimed by the Petitioner in instant petition	82.46	299.58	312.71
Allowed after truing Up	82.46	299.58	312.70



e. Asset-V

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata)	2018-19
Depreciation	102.65	181.40
Interest on Loan	101.45	170.29
Return on Equity	114.93	203.64
Interest on Working Capital	10.84	17.96
O&M Expenses	77.55	117.46
Total	407.42	690.75

The annual transmission charges allowed in earlier order for 2014-19 period, claimed in instant petition as true up for 2014 -19 period and allowed after true up of 2014-19 period is as under:

(₹ in lakh)		
Asset-V		
Particulars	2017-18	2018-19
Allowed earlier in order dated 3.12.2018 in Petition No. 63/TT/2018	385.91	659.17
As claimed by the Petitioner in instant petition	409.26	690..87
Allowed after truing Up	407.42	690.75

63. The difference between the earlier allowed total capital cost including additional capitalization as on 31.3.2019 and that approved in this order is on account of submission of Revised Cost Estimates by the Petitioner. The additional capital expenditure was restricted in previous order due to non-production of Revised Cost Estimates. The difference in claimed total capital cost including additional capitalization as on 31.3.2019 and approved in this order is also on account of IDC disallowed partly in the instant order.

Determination of Annual Fixed Charges for 2019-24 tariff period

64. The Petitioner has submitted the tariff forms combining the Assets-I, Asset-II, Asset-III, Asset-IV and Asset-V wherein the COD has been achieved prior to 1.4.2019, as a single asset. Accordingly, as per proviso (i) of Regulation



8(1) of the 2019 Tariff Regulations, single tariff for the combined asset has been worked out for the 2019-24 tariff period.

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	591.33	598.49	598.49	598.49	590.76
Interest on Loan	498.17	457.78	412.80	368.31	319.95
Return on Equity	622.62	630.26	630.26	630.26	630.26
Interest on Working Capital	36.28	36.34	36.04	35.76	35.24
Operation and Maintenance	241.64	250.00	258.66	267.61	276.86
Total	1990.04	1972.87	1936.25	1900.43	1853.07

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	201-22	2022-23	2023-24
O&M expenses	20.14	20.83	21.56	22.30	23.07
Maintenance Spares	36.25	37.50	38.80	40.14	41.53
Receivables	244.68	243.23	238.72	234.30	227.84
Total	301.07	301.56	299.08	296.74	292.44
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	36.28	36.34	36.04	35.76	35.24

Effective Date of Commercial Operation (E-COD)

67. The Petitioner has submitted that E-COD of the combined assets works out to 14.1.2017. Based on the trued up admitted capital cost and actual COD of all the assets, the E-COD has been worked out as shown below:-

Computation of Effective COD						
Assets	Actual COD	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Weight of the cost (in %)	No. of days from last COD	Weighted days	Effective COD (latest COD – Total weighted days)
Asset-I	19.6.2016	2441.67	22.37	402.00	89.94	14.1.2017
Asset-II	27.10.2016	810.30	7.42	272.00	20.20	
Asset-III	7.1.2017	3198.92	29.31	200.00	58.62	
Asset-IV	14.11.2016	1026.73	9.41	254.00	23.90	
Asset-V	26.7.2017	3435.61	31.48	0.00	0.00	
Total		10913.24	100			

68. The E-COD has been used to determine the lapsed life of the project as a whole, which works out as 2 (two) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (WAL)

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

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

71. The Weighted Average Life (WAL) has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The element-wise life as it was defined in the 2014 Tariff Regulations prevailing at the time of actual COD of the individual assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL.



Accordingly, the Weighted Average Life (WAL) of the combined asset has been worked out as 25 years as shown below:-

Admitted Capital Cost as on 31-03-2019			
Particulars	Combined capital Cost (₹ in lakh) (a)	Life as per 2019 Regulation (Years) (b)	Weight (a) x (b)
Land	0.00	0.00	0.00
Building	0.00	25.00	0.00
Transmission Line	0.00	35.00	0.00
Sub Station	1665.87	25.00	266646.78
PLCC	186.31	15.00	2794.65
Leasehold Land	0.00	25.00	0.00
IT Equipment and software	61.06	6.67	407.07
	10913.24		269848.49
Total			
WAL = Total Weight/ Capital cost of the project			25

72. It is assumed that the Weighted Average Life 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. Accordingly, the WAL has been used to determine the remaining useful life as on 31.3.2019 to be 23 years.

Capital Cost

73. Regulation 19(3) and 19(5) of the 2019 Tariff Regulations provide as under: -

“19. Additional Capitalization

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

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

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

(c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;

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

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

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

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

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

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

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

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

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

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

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

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



(₹ in lakh)

Assets	Apportioned Approved capital Cost (RCE)	Capital Cost claimed as on 31.3.2019	ACE claimed in 2019-20	Estimated Completion Capital Cost
Asset-I	2712.91	2441.72	219.00**	2660.72
Asset-II	1137.53	810.44	12.13	822.57
Asset-III	3335.50	3198.93	0.00	3198.93
Asset-IV	1062.13	1026.73	0.00	1026.73
Asset-V	3715.93	3436.53	40.15	3476.68
Total	11964.00	10914.35	271.28	11185.63

**Represents Transmission charges to be paid to TBCB line of 400 kV D/C Khargapur-Chaibasa TL (Sterlite)

Cost over-run

75. Against the overall apportioned approved capital cost (as per RCE) of ₹11964.00 lakh, the estimated completion capital cost including additional capital expenditure is ₹11185.63 lakh. The individual capital cost of each asset is also within the respective RCE apportioned cost. Therefore, there is no cost over-run as per RCE.

76. The capital cost has been dealt with in line with clause (3) of Regulation 19 of the 2019 Tariff Regulations. The element wise capital cost (i.e. Land, Building, Transmission Line, Sub-station and PLCC) as admitted by the Commission as on 31.3.2019 for the instant assets are clubbed together and the combined capital cost has been considered as capital cost for combined asset as on 1.4.2019, as per the following details:-

(₹ in lakh)

Element	Asset-I	Asset-II	Asset-III	Asset-IV	Asset-V
Free hold Land	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00
Transmission Line	2342.21	2342.21	3051.02	1026.74	3435.60
Sub-Station Equipment	67.88	0.00	118.43	0.00	0.00
PLCC	0.00	0.00	0.00	0.00	0.00
IT Equipment and Software	31.58	0.00	29.48	0.00	0.00
Total	2441.67	810.30	3198.93	1026.74	3435.60



(₹ in lakh)

Particulars	Combined capital Cost as on 1.4.2019
Freehold Land	0.00
Leasehold Land	0.00
Building & Other Civil Works	0.00
Transmission Line	10665.87
Sub-Station Equipment	186.31
PLCC	0.00
IT Equipment and Software	61.06
TOTAL	10913.24

77. The trued-up capital cost of ₹10913.2 lakh for combined asset is considered as admitted capital cost as on 1.4.2019 for working out tariff for 2019-24 tariff period.

Additional Capital Expenditure (ACE)

78. Regulation 24 and 25 of the 2019 Tariff Regulations provides as under: -

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

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

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

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

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

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

(1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the



original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:

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

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

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

79. The Petitioner has claimed projected Additional Capital Expenditure of ₹271.28 lakh for 2019-24 tariff block for the assets covered under the instant petition. The breakup of Additional Capital Expenditure across assets as submitted by the Petitioner is as follows:

(₹ in lakh)		
Assets	Projected Additional capital expenditure (2019-20)	Reason for additional capital expenditure
Asset-I	219.00	Transmission charges to be paid to TBCB Line of 400 kV DIC Kharagpur-Chaibasa TL (Sterlite)
Asset-II	12.13	The expenditure is beyond cut-off and covered under Regulation 25(1)(d) of 2019 Tariff Regulations
Asset-III	0.00	
Asset-IV	0.00	
Asset-V	40.15	Within the cut-off dated and covered under Regulation 24(a) of 2019 Tariff Regulations
Total	271.28	

80. The Petitioner has submitted the reasons for additional capital expenditure of ₹219 lakh in respect of Asset-I as under:

- 1) *“It is relevant to mention here that corresponding TBCB line bays at Chaibasa Sub-station (POWERGRID) have been put under commercial operation with in time schedule. Thus the line bays were put under commercial operation in its time schedule hence the Petitioner is not liable to pay of such mismatch charges (line along with bays). According, the transmission charges to be paid to TBCB line is claimed as an additional capitalisation FY 2019-20. It is prayed the same may allowed by Hon’ble as the part of IEDC (as part of capital cost).*
- 2) *It is further mentioned that APPEAL is filed against Hon’ble commission order 110/MP/2019 and the outcome of same is still pending.”*

81. We have considered the submissions of the Petitioner with regard to additional capital expenditure in case of Asset-I. The Petitioner was directed to pay the transmission charges to Purulia and Kharagpur Transmission Company Ltd for the period of mismatch between the COD of transmission line of Purulia and Kharagpur Transmission Company Ltd. and the associated Bays executed by the Petitioner, i.e. from 20.5.2017 to 18.6.2017 in order dated 3.4.2018 in Petition No.110/MP/2016. The Petitioner has claimed the transmission charges as additional capital expenditure of ₹219 lakh in case of Asset-I during 2019-20. In a similar case of mismatch, Dharbhanga Motihari Transmission Company Limited (DMTCL) was directed to pay the Petitioner the cost of mismatch in order dated 1.9.2017 in Petition No.290/TT/2018. DMTCL in Petition No.238/MP/2017 claimed the cost of mismatch that was directed to be paid to PGCIL. The Commission rejected DMTCL’s claim vide order dated 29.3.2019 against which DMTCL filed a Review Petition No. 8/RP/2019, which was also rejected vide order dated 13.1.2020. The Commission is of the consistent view that the cost of the mismatch in COD of the assets under its scope has to be borne by the defaulter and it cannot be claimed as part of the transmission charges. Accordingly, the Petitioner’s claim of the transmission charges paid/payable to



Purulia and Kharagpur Transmission Company Ltd. as additional capital expenditure during 2019-24 is rejected. During the course of the hearing, the Petitioner has submitted that it has preferred an appeal against the order dated 3.4.2018. Therefore, non-consideration of transmission charges payable to Purulia and Kharagpur Transmission Company Ltd. as additional capital expenditure shall be subject to the outcome of the said appeal.

82. The Petitioner vide its affidavit dated 25.2.2020 has submitted the details of Additional Capital Expenditure of ₹12.13 lakh in respect of Asset-II as under:

(₹ in lakh)				
Asset	Party name	LoA details	Package	Balance and retention amount (2019-20)
Asset II	Empowertrans Pvt. Ltd.	CC-CS/394-ERI/SS-2484/3/G5/R/CA-I/5353/5354 dt. 30.4.2015	Sub-station supply & service	12.13

83. The Petitioner has submitted the following in respect of Asset-II:

- 1) *“Since the contract is not yet closed hence the retention money is not released yet for the same.*
- 2) *It is further submitted that current petition having included all the balance and retention payments as on date. There is no balance and retention payments proposed to be made in future other than above mentioned table. It is relevant to mention here that the additional capitalisation and balance and retention payments pertaining to Sub-stations only.”*

84. The Additional Capital Expenditure has also been captured by the Auditor in its certificate for capital cost for Asset-II.

85. The Additional Capital Expenditure proposed for Asset-II is considered for tariff computation for 2019-24 period subject to true up. The Petitioner is directed to submit details of contract, scope, original liability and undischarged liability as



on 31.3.2019 with Regulation under which such Additional Capitalization is claimed at the time of true up of 2019-24 period.

86. The Additional Capital Expenditure claimed in respect of Asset-V is within the cut-off date and has also been captured by the auditor in its certificate for capital cost for Asset-V. The same is considered for tariff computation for 2019-24 period subject to true up. The Petitioner is directed to submit details of contract, scope, original liability and undischarged liability as on 31.3.2019 with Regulation under which such Additional Capitalization is claimed at the time of true up of 2019-24 period.

87. The Additional Capital Expenditure considered for tariff computation (subject to true up) for 2019-24 period is as below:

(₹ in lakh)

Assets	Admitted additional capital expenditure (2019-20)
	0.00
Asset-I	12.13
Asset-II	0.00
Asset-III	0.00
Asset-IV	40.15
Asset-V	52.28

Capital Cost for the 2019-24 Tariff Period

88. Accordingly, the capital cost of the combined asset, considered for the tariff period 2019-24, subject to truing up, is as follows:-

(₹ in lakh)

Capital Cost allowed as on 1.4.2019	ACE allowed for the year 2019-20	Total Estimated Completion capital Cost up to 31.3.2024
10913.24	52.28	10965.52

Debt-Equity Ratio

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

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

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

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

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

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

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

Combined Asset	Capital Cost as on 1.4.2019 (₹ lakh)	(%)	Total Capital Cost as on 31.3.2024 (₹ lakh)	(%)
Debt	7639.46	70.00	7676.06	70.00
Equity	3273.78	30.00	3289.46	30.00
Total	10913.24	100.00	10965.52	100.00

Return on Equity (RoE)

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

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

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission project including communication project and run-of-river hydro generating station, and at the base rate of 16.50% for the storage



*type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:
Provided that return on equity in respect of Additional Capitalization after cut-off date beyond the original scope excluding Additional Capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission project;*

Provided further that:

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

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

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

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

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

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

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

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

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

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

Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.

(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.”

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

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	3273.78	3289.46	3289.46	3289.46	3289.46
Addition due to Additional Capitalization	15.68	0.00	0.00	0.00	0.00
Closing Equity	3289.46	3289.46	3289.46	3289.46	3289.46
Average Equity	3281.62	3289.46	3289.46	3289.46	3289.46
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax) (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	616.34	617.81	617.81	617.81	617.81

Interest on Loan (IoL)

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

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



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

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

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year. (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

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

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

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

(₹ in lakh)

Particular	Combined Assets				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	7639.46	7676.05	7676.05	7676.05	7676.05
Cumulative Repayments up to Previous Year	1145.37	1730.86	2317.73	2904.60	3491.47
Net Loan-Opening	6494.10	5945.20	5358.33	4771.46	4184.59
Addition due to Additional Capitalization	36.60	0.00	0.00	0.00	0.00
Repayment during the year	585.49	586.87	586.87	586.87	586.87
Net Loan-Closing	5945.20	5358.33	4771.46	4184.59	3597.72
Average Loan	6219.65	5651.77	5064.90	4478.03	3891.16
Weighted Average Rate of Interest on Loan (%)	7.93	7.92	7.97	8.04	8.03
Interest on Loan	493.50	447.75	403.63	359.99	312.27

Depreciation

95. Clause (1), (2) and (5) of Regulation 33 of the 2019 Tariff Regulations provide as under: -

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

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

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

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

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



96. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed for the Combined Asset is as follows:-

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	10913.24	10965.52	10965.52	10965.52	10965.52
Addition during 2019-24 due to Projected Additional Capitalisation	52.28	0.00	0.00	0.00	0.00
Closing Gross Block	10965.52	10965.52	10965.52	10965.52	10965.52
Average Gross Block	10939.38	10965.52	10965.52	10965.52	10965.52
Average Gross Block Other Assets (90% depreciable assets)	10878.32	10904.46	10904.46	10904.46	10904.46
Average Gross Block IT Assets (100% depreciable assets)	61.06	61.06	61.06	61.06	61.06
Rate of Depreciation	5.35%	5.35%	5.35%	5.35%	5.35%
Elapsed Life	2	3	4	5	6
Balance Useful life of the asset	23	22	21	20	19
Depreciable Value (excluding IT equipment and software) - 90%	9790.49	9814.02	9814.02	9814.02	9814.02
Depreciable value of IT equipment and software - 100%	61.06	61.06	61.06	61.06	61.06
Depreciation during the year	585.49	586.87	586.87	586.87	586.87
Remaining Depreciable Value Other Assets	8653.27	8094.57	7510.97	6927.36	6343.76
Remaining Depreciable Value IT Assets	52.92	49.65	46.38	43.11	39.85
Remaining Depreciable Value Total	8706.18	8144.22	7557.35	6970.48	6383.61

Operation & Maintenance Expenses (O&M Expenses)

97. Clause (3) of Regulation 35 of the 2019 Tariff Regulations specify the norms for O&M Expenses for the transmission project as

“(3) Transmission system:

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



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

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

(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.”

98. The total O&M Expenses claimed and admitted under instant petition are as follows:-

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses (Claimed)	241.64	250.00	258.86	267.61	276.86
O&M expenses (Approved)	241.64	250.00	258.86	267.61	276.86

Interest on Working Capital (IWC)

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

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

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

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

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

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

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



Provided that in case of 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;”

100. The Petitioner has submitted that it has computed interest on working capital for 2019-24 period considering the bank rate as on 1.4.2019. The rate of interest on working capital considered is 12.05%.

101. The interest on working capital is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of interest on working capital considered is 12.05%. The components of the working capital and interest thereon have been worked as follows: -

(₹ in lakh)					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
O & M Expenses	20.14	20.83	21.55	22.30	23.07
Maintenance Spares	36.25	37.50	38.80	40.14	41.53
Receivables	242.58	238.96	234.56	230.25	224.84
Total	298.96	297.30	294.91	292.69	289.44
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on working capital	36.02	35.82	35.54	35.27	34.88

Annual Fixed Charges for the 2019-24 Tariff Period

102. The detailed computation of the various components of the annual fixed charges for the combined transmission asset for the tariff period 2019-24 is summarized below:-



Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	585.49	586.87	586.87	586.67	586.67
Interest on Loan	493.50	447.75	403.63	359.99	312.27
Return on Equity	616.34	617.81	617.81	617.81	617.81
Interest on Working Capital	36.02	35.82	35.54	35.27	34.88
Operation and Maintenance	241.64	250.00	258.66	267.61	276.86
Total	1972.99	1938.25	1902.51	1867.55	1828.69

Filing Fee and Publication Expenses

103. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Clause (1) of Regulation 70 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 Clause (1) of Regulation 70 of the 2019 Tariff Regulations.

Licence Fee and RLDC Fees and Charges

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

Goods and Services Tax

105. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if at any time GST on transmission is withdrawn from negative list in future. We have considered the submission of the



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

Security Expenses

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

Capital Spares

107. 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

108. The billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

109. This order disposes of Petition No. 35/TT/2020.

**sd/-
(I.S. Jha)
Member**

**sd/-
(P. K. Pujari)
Chairperson**

