

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 481/TT/2020

Coram:

**Shri P. K. Pujari, Chairperson
Shri Arun Goyal, Member
Shri P. K. Singh, Member**

Date of Order: 18.01.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of **Combined Asset** comprising of **Asset 1:** ± 300 MVAR STATCOM at 400 kV Aurangabad Sub-station, **Asset 2:** ± 200 MVAR STATCOM at 400 kV Gwalior Sub-station, **Asset 3:** ± 300 MVAR STATCOM at 400 kV Satna Sub-station and **Asset 4:** ± 300 MVAR STATCOM at 400 kV Solapur Sub-station under Installation of STATCOMs in Western Region.

And in the matter of:

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

.....Petitioner

Versus

1. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur,
Jabalpur-482008.
2. Madhya Pradesh Power Transmission Company Limited,
Shakti Bhawan, Rampur,
Jabalpur-482008.
3. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited,
3/54, Press Complex, Agra-Bombay Road,
Indore-452008.
4. Maharashtra State Electricity Distribution Company Limited,
Hongkong Bank Building, 3rd Floor, M.G. Road, Fort,
Mumbai-400001.



5. Maharashtra State Electricity Transmission Company Limited, Prakashganga, 6th Floor, Plot No. C-19, E-Block, Bandra Kurla Complex, Bandra (East), Mumbai-400051.
6. Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara-390007.
7. Electricity Department, Government of Goa, Vidyut Bhawan, Near Mandvi Hotel, Panaji, Goa-403001.
8. Electricity Department, Administration of Daman & Diu, Daman-396210.
9. DNH Power Distribution Corporation Limited, Vidyut Bhawan, 66 kV Road, Near Secretariat Amli, Silvassa-396230.
10. Chhattisgarh State Power Transmission Company Limited, State Load Despach Building, Dangania, Raipur-492013.
11. Chhattisgarh State Power Distribution Company Limited, P.O. Sunder Nagar, Dangania, Raipur, Chhattisgarh-492013.

.....Respondent(s)

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

For Respondents : Shri Anindya Khare, MPPMCL

ORDER

The Petitioner, Power Grid Corporation of India Limited, has filed the instant petition for truing up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under



the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following transmission assets forming part of **Combined Asset** under Installation of STATCOMs in Western Region (hereinafter referred to as “the transmission project”):

Asset 1: ±300 MVAR STATCOM at 400 kV Aurangabad Sub-station;

Asset 2: ±200 MVAR STATCOM at 400 kV Gwalior Sub-station;

Asset 3: ±300 MVAR STATCOM at 400 kV Satna Sub-station; and

Asset 4: ±300 MVAR STATCOM at 400 kV Solapur Sub-station.

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

- “1) Allow the Add cap for 2014-19 and 2019-24 tariff block as claimed as per Para 5.9 above.
- 2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 9.1 and 10.1 above.
- 3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 9.1 and 10.1 above for respective block.
- 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
- 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the beneficiaries in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- 6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.
- 7) Allow the petitioner to file a separate petition before Hon’ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 10.7 above.
- 8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.



- 9) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the beneficiaries, if GST on transmission is withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*

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

3. **Backdrop of the case**

a) The Petitioner was entrusted with implementation of the transmission project and its scope was discussed and agreed in the 36th meeting of Standing Committee on Power System Planning in Western Region and 24th meeting of Western Regional Power Committee held on 29.8.2013 and 9.10.2013 respectively.

b) Investment Approval (I.A.) for implementation of the transmission project was accorded by the Board of Directors of the Petitioner's company (in its 311th meeting held on 4.3.2015) at an estimated cost of ₹107124.00 lakh including IDC of ₹5768.00 lakh (based on October 2014 Price Level) with the broad scope of work as follows:

Sub-station	Mechanically Switched Compensation		Dynamic Compensation (STATCOM)
	Reactor x 125 MVAR	Capacitor x 125 MVAR	+/- MVAR
400 kV Aurangabad	2	1	300
400 kV Gwalior	2	1	200
400 kV Satna	2	1	300
400 kV Solapur	2	1	300

c) As per I.A. dated 4.3.2015, the scheduled COD of the transmission assets was 3.9.2017 against which COD of Asset 1, Asset 2, Asset 3 and Asset 4, as approved by the Commission vide order dated 1.11.2019 in Petition No. 111/TT/2018 was 1.4.2018, 26.12.2018, 31.3.2018 and 15.4.2018 respectively. Further, vide the said order, the time over-run of 210 days, 479 days, 209 days and 224 days in the respective commissioning of Asset 1, Asset 2, Asset 3 and Asset 4 was not condoned. Vide the same order, transmission tariff of Asset 1, Asset 2, Asset 3 and Asset 4 for the period from their respective COD to 31.3.2019 was determined.



d) The entire scope of work is complete as per I.A. and is covered in this petition.

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or objections have been received from the general public in response to the aforesaid notices. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No. 1, has filed its reply vide affidavit dated 5.6.2020 and has raised the issues of effective Income Tax rates for grossing up of Return on Equity (RoE) during the 2014-19 tariff period and effect of CGST. The Petitioner vide affidavit dated 1.9.2021 has filed rejoinder to MPPMCL's reply.

6. It has been placed before us that MPPMCL has been raising the same issues in other petitions as well despite clear findings of the Commission. The contentions of MPPMCL have been rejected by the Commission in other petitions including Petition No. 704/TT/2020. As MPPMCL has not challenged the findings, the same have attained finality. In view of these, the pleas raised by MPPMCL are rejected. Further, MPPMCL's submissions, Petitioner's clarifications thereto and the Commission's findings on the said issues have not been repeated herein for the sake of brevity.

7. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 13.1.2020, MPPMCL's reply filed vide affidavit dated 5.6.2020, the Petitioner's affidavit dated 1.7.2021 filed in reply to technical validation letter and the Petitioner's rejoinder filed vide affidavit dated 1.9.2021.



8. The hearing in this matter was held on 10.9.2021 through video conference and the order was reserved. Having heard the representatives of the Petitioner, MPPMCL and after perusal of the materials on record, we proceed to dispose of the petition.

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

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

(₹ in lakh)

Particulars	Asset 1	Asset 2	Asset 3		Asset 4
	2018-19	2018-19 (Pro-rata for 96 days)	2017-18 (Pro-rata for 1 day)	2018-19	2018-19 (Pro-rata for 351 days)
Depreciation	1015.58	231.029	2.42	959.88	897.41
Interest on Loan	1030.30	230.82	2.38	926.29	891.35
Return on Equity	1148.86	252.79	2.65	1058.75	1013.69
Interest on Working Capital	73.15	16.37	0.18	70.24	64.75
O&M Expenses	137.42	30.89	0.36	137.42	132.15
Total	3405.31	761.89	7.99	3152.58	2999.35

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

(₹ in lakh)

Particulars	Asset 1	Asset 2	Asset 3		Asset 4
	2018-19	2018-19 (Pro-rata for 96 days)	2017-18 (Pro-rata for 1 day)	2018-19	2018-19 (Pro-rata for 351 days)
O&M Expenses	11.45	9.79	11.09	11.45	11.45
Maintenance Spares	20.61	17.62	19.95	20.61	20.61
Receivables	567.55	482.80	486.24	525.43	519.83
Total Working Capital	599.61	510.21	517.28	557.49	551.89
Rate of Interest (in %)	12.20	12.20	12.60	12.60	12.20
Interest on Working Capital	73.15	16.37	0.18	70.24	64.75

Capital Cost

11. The details of the capital cost with respect to the transmission assets as allowed by the Commission vide order dated 1.11.2019 in Petition No. 111/TT/2018 are as follows:



(₹ in lakh)

Asset	Apportioned Cost (as per FR)	Admitted Cost (up to COD)	Admitted Additional Capital Expenditure (ACE)	Admitted total Cost (as on 31.3.2019)
			2018-19	
Asset 1	26967.00	17991.76	2193.95	20185.71
Asset 2	24101.00	13488.18	1337.98	14826.16
Asset 3	27952.00	15916.84	3229.54	19146.38
Asset 4	28104.00	16621.90	3109.15	19731.05

12. The Petitioner has submitted Auditor's Certificates dated 18.8.2019 and 22.11.2019 wherein the details of capital cost as on COD and ACE up to 31.3.2019 has been mentioned. The details of capital cost as on COD and as on 31.3.2019 (including ACE incurred up to 31.3.2019) as claimed by the Petitioner in respect of the transmission assets are as follows:

(₹ in lakh)

Asset	Capital Cost (as on COD)	ACE	Total Capital Cost (as on 31.3.2019)
		2018-19	
Asset 1	18674.00	1886.72	20560.72
Asset 2	14311.87	4564.90	18876.77
Asset 3	16543.34	2999.91	19543.25
Asset 4	17107.45	1798.38	18905.83

13. We have considered the submissions and claims of the Petitioner regarding capital cost and ACE and have given our findings on the same in the relevant portions of this order.

Cost Over-run

14. The Petitioner has claimed capital cost as on COD of ₹18674.00 lakh, ₹14311.87 lakh, ₹16543.34 lakh and ₹17107.45 lakh for Asset 1, Asset 2, Asset 3 and Asset 4 respectively.

15. We have considered the claim of the Petitioner and observe that the total completion cost (including ACE up to 31.3.2019) with respect to the transmission assets covered in the instant petition is ₹77886.57 lakh, which is within the apportioned cost as per FR of ₹107124.00 lakh. Therefore, there is no cost over-run.



Time Over-run

16. As per I.A. dated 4.3.2015, the scheduled COD of the transmission assets was 3.9.2017 against which COD of Asset 1, Asset 2, Asset 3 and Asset 4, as approved by the Commission vide order dated 1.11.2019 in Petition No. 111/TT/2018 was 1.4.2018, 26.12.2018, 31.3.2018 and 15.4.2018 respectively. Further, vide the same order, time over-run of 210 days, 479 days, 209 days and 224 days in commissioning of Asset 1, Asset 2, Asset 3 and Asset 4 was not condoned.

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

17. The Petitioner has submitted that cost as on COD has been reduced due to dis-allowance of IDC and IEDC and shifting of IDC from cost on COD to ACE as per cash IDC statement. Further, the Commission has calculated IDC tentatively based on loan details from Form-9C and had directed to submit the IDC statement matching with loan deployed as per Form-9C. Consequent to this, there was an overall deduction of ₹1966.00 lakh and ₹366.00 lakh towards IDC and IEDC respectively by the Commission. In this petition, IDC has been calculated based upon latest IDC statements matching with Form-9C, considering pro-rata IDC dis-allowance towards time over-run.

18. The Petitioner has submitted that tariff calculation has been done considering dis-allowance of IDC/ IEDC due to time over-run not condoned and actual IDC discharged up to COD and IDC accrued on COD and discharged thereafter. Further, the details of accrual IDC adjustment for the transmission assets have been given in this petition.

19. The Petitioner has claimed IEDC of ₹291.32 lakh, ₹587.92 lakh, ₹231.72 lakh and ₹331.95 lakh for Asset 1, Asset 2, Asset 3 and Asset 4 respectively and has submitted Auditor's Certificates in support of the same. The Petitioner has also



submitted that the entire IEDC has been discharged as on COD in respect of the transmission assets.

20. We have considered the submissions and claims of the Petitioner and note that the Petitioner has claimed IDC for the transmission assets and has submitted Auditor's Certificates dated 18.8.2019 and 22.11.2019 in support of the same. The Petitioner has also submitted the computation of IDC along with year-wise details of the IDC discharged.

21. In view of the foregoing, IDC allowed has been worked out considering the information submitted by the Petitioner for the transmission assets separately on cash basis. Further, the loan details submitted in Form-9C for the 2014-19 tariff period and the IDC computation sheet have been considered for the purpose of IDC calculation on cash and accrued basis. Also, the un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged and, accordingly, based on the information furnished by the Petitioner, the IDC considered, is summarized as follows:

(₹ in lakh)

Asset	IDC as per Auditor's Certificates	IDC admissible	IDC dis-allowed due to time over-run	IDC discharged as on COD	IDC un-discharged as on COD	IDC discharge during
						2018-19
	A	B	C=A-B	D	E=B-D	F
Asset 1	965.87	392.21	573.66	341.74	50.46	50.46
Asset 2	515.10	24.04	491.06	24.04	0.00	0.00
Asset 3	741.88	238.85	503.03	162.32	76.53	76.53
Asset 4	798.64	405.16	393.48	378.74	26.42	26.42

22. We further note that vide order dated 1.11.2019 in Petition No. 111/TT/2018, IEDC amounting to ₹54.69 lakh, ₹202.59 lakh, ₹43.33 lakh and ₹65.63 lakh had been dis-allowed on account of time over-run for the period of 210 days, 479 days, 209 days and 224 days for Asset 1, Asset 2, Asset 3 and Asset 4 respectively. Accordingly, the same IEDC as allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018 for ₹236.63 lakh, ₹385.33 lakh, ₹188.39 lakh and ₹266.32 lakh



respectively has been allowed for Asset 1, Asset 2, Asset 3 and Asset 4.

Initial Spares

23. The Petitioner has submitted the details of Initial Spares under the transmission project in this petition. Further, the Petitioner has submitted that the cost of Initial Spares is within specified limit under Regulation 13, Chapter 4 of the 2014 Tariff Regulations.

24. In view of above, the Petitioner has claimed Initial Spares as follows:

Asset	Plant & Machinery Cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Ceiling Limit (in %)
Sub-station			
Asset 1	19055.05	995.46	6.00
Asset 2	18360.69	1100.66	6.00
Asset 3	18439.62	420.51	6.00
Asset 4	19659.20	995.82	6.00

25. We have considered the submissions and claims of the Petitioner and observe that in this case, the transmission assets were put into commercial operation during the 2014-19 tariff period and, hence, the 2014 Tariff Regulations are applicable with respect to transmission assets. We further observe that as per the Petitioner's submission, asset-wise Initial Spares claimed are within the ceiling as provided under the 2014 Tariff Regulations. Accordingly, the Initial Spares computed and allowed are as follows:

Sub-stations

Asset	Capital Cost/ P&M cost considered (as on cut-off date) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2014 Tariff Regulations (in %)	Initial Spares allowable as per the 2014 Tariff Regulations (₹ in lakh)	Initial Spares allowed (₹ in lakh)	Initial Spares discharged as on COD (₹ in lakh)
Asset 1	19055.05	995.46	6.00	1152.74	995.46	995.46
Asset 2	18360.69	1100.66	6.00	1101.70	1100.66	1100.66
Asset 3	18439.62	420.51	6.00	1150.16	420.51	420.51
Asset 4	19659.20	995.82	6.00	1191.28	995.82	995.82



Capital Cost allowed as on COD

26. Accordingly, the details of the capital cost approved as on COD after adjustment of IDC, IEDC and Initial Spares are as follows:

(₹ in lakh)

Asset	Capital Cost (as on COD as per Auditor's Certificates)	Less: IDC (as on COD)		Less: IEDC dis-allowed (due to time over-run)	Capital Cost (as on COD) (on cash basis)
		IDC dis-allowed due to time over-run	Un-discharged IDC		
	1	2	3	4	5=(1-2-3-4)
Asset 1	18674.00	573.66	50.46	54.69	17995.18
Asset 2	14311.87	491.06	0.00	202.59	13618.22
Asset 3	16543.34	503.03	76.53	43.33	15920.45
Asset 4	17107.45	393.48	26.42	65.63	16621.92

Additional Capital Expenditure

27. The Petitioner vide Auditor's Certificates dated 18.8.2019 and 22.11.2019 has claimed the actual ACE with respect to the transmission assets during the 2014-19 tariff period as follows:

(₹ in lakh)

Asset	ACE
	2018-19
Asset 1	1886.72
Asset 2	4564.9
Asset 3	2999.91
Asset 4	1798.38

28. The Petitioner has submitted that the admissibility of ACE incurred after COD and up to cut-off date is to be dealt in accordance with Regulation 14(1)(i) of the 2014 Tariff Regulations and the admissibility of ACE incurred after cut-off date is to be dealt in accordance with Regulation 14(2)(iv) of the 2014 Tariff Regulations.

29. The Petitioner vide affidavit dated 1.7.2021 has submitted that ACE claimed whether within the cut-off date (31.3.2021) or beyond the cut-off date is within the original scope of work. Further, ACE incurred is on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date. Further, ACE claimed during the 2014-15 to 2018-19 has been submitted by the Petitioner in the format wherein head-wise/ party-wise,



year of actual capitalization, outstanding liability as on COD, discharge and reversal (year-wise), additional liability recognized and outstanding liability as on 31.3.2019 has been mentioned.

30. We have considered the submissions and claims of the Petitioner. ACE incurred with respect to the transmission assets is on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date and, accordingly, ACE incurred after COD and up to cut-off date for the transmission assets is allowed under Regulations 14(1)(i) and (ii) of 2014 Tariff Regulations.

Capital Cost for the 2014-19 tariff period

31. In view of the above, the details of the allowed capital cost as on COD, as on 31.3.2019 and ACE during the 2014-19 tariff period in respect of the transmission assets are as follows:

(₹ in lakh)				
Asset	Particulars	Capital cost as on COD on cash basis	ACE allowed In 2018-19	Capital cost as on 31.3.2019
Asset 1	Allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018	17991.76	2193.95	20185.71
	Claimed by the Petitioner in the instant petition	18438.87	1886.72	20325.59
	Approved in the instant order	17995.18	1937.18*	19932.37
Asset 2	Allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018	13488.18	1337.98	14826.16
	Claimed by the Petitioner in the instant petition	13932.16	4564.90	18497.06
	Approved in the instant order	13618.22	4564.90	18183.12
Asset 3	Allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018	15916.84	3229.54	19146.38
	Claimed by the Petitioner in the instant petition	16361.94	2999.91	19361.85
	Approved in the instant order	15920.45	3076.44*	18996.89
Asset 4	Allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018	16621.90	3109.15	19731.05
	Claimed by the Petitioner in the instant petition	16884.62	1798.38	18683.00
	Approved in the instant order	16621.92	1824.80*	18446.72

*includes IDC discharged



Debt-Equity Ratio

32. The Petitioner has claimed debt-equity ratio of 70:30 as on COD and for ACE post COD. Debt-equity ratio has been considered in accordance with Regulation 19 of the 2014 Tariff Regulations. The details of the debt-equity as on COD and 31.3.2019 in respect of the transmission assets considered for the purpose of truing up of tariff for the 2014-19 tariff period is as follows:

Funding	Capital Cost (as on COD) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)
Asset 1				
Debt	12596.63	70.00	13952.66	70.00
Equity	5398.55	30.00	5979.71	30.00
Total	17995.18	100.00	19932.37	100.00
Asset 2				
Debt	9532.75	70.00	12728.18	70.00
Equity	4085.47	30.00	5454.94	30.00
Total	13618.22	100.00	18183.12	100.00
Asset 3				
Debt	11144.31	70.00	13297.82	70.00
Equity	4776.13	30.00	5699.07	30.00
Total	15920.45	100.00	18996.89	100.00
Asset 4				
Debt	11635.34	70.00	12912.70	70.00
Equity	4986.57	30.00	5534.02	30.00
Total	16621.92	100.00	18446.72	100.00

Depreciation

33. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018. The Petitioner has neither given any justification for claiming higher depreciation than that was allowed earlier nor made any specific prayer for allowing higher depreciation in this petition. It is observed that vide order dated 1.11.2019 in Petition No. 111/TT/2018, the depreciation for IT equipment was allowed @ 5.28%. The Petitioner now at the time of truing-up of the tariff of the 2014-19 period has segregated the IT equipment cost from the sub-station cost and has considered depreciation rate for IT Equipment @15% and the salvage value for IT Equipment is



NIL as per the 2014 Tariff Regulations. A similar issue had come up in Petition No. 19/TT/2020 which was dealt by the Commission vide order dated 9.5.2020.

34. In terms of the order dated 9.5.2020 in Petition No. 19/TT/2020, depreciation has been considered for IT Equipment @ 5.28% as part of the sub-station up to 31.3.2019 while truing up the capital expenditure for the 2014-19 period. However, for the 2019-24 tariff period, IT Equipment has been considered separately and depreciation has been allowed @15% for balance depreciable value of IT Equipment in accordance with Regulation 33 of the 2019 Tariff Regulations.

35. The Gross Block during the 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD at Annexure-I has been worked out after taking into consideration the depreciation rates of assets as specified in the 2014 Tariff Regulations and trued-up depreciation allowed in respect of the transmission assets during the 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)				
	Asset 1 2018-19	Asset 2 2018-19 (Pro-rata for 96 days)	Asset 3		Asset 4 2018-19 (Pro-rata for 351 days)
			2017-18 (Pro-rata for 1 day)	2018-19	
Opening Gross Block	17995.18	13618.22	15920.45	15920.45	16621.92
ACE	1937.18	4564.90	0.00	3076.44	1824.80
Closing Gross Block	19932.37	18183.12	15920.45	18996.89	18446.72
Average Gross Block	18963.77	15900.67	15920.45	17458.67	17534.32
Weighted average rate of Depreciation (WAROD) (in %)	5.21	5.24	5.28	5.27	5.22
Elapsed useful life of the Asset-at the beginning of the year (Year)	0.00	0.00	0.00	0.00	0.00
Balance useful life of the Asset-at the beginning of the year (Year)	25.00	25.00	25.00	25.00	25.00
Aggregated Depreciable Value	17067.40	14310.60	14328.40	15712.80	15780.88
Combined Depreciation during the year	988.95	219.33	2.30	919.47	880.33
Cumulative depreciation at the end of the year	988.95	219.33	2.30	921.77	880.33
Remaining Depreciable Value at the end of the year	16078.45	14091.27	14326.10	14791.03	14900.55

36. Depreciation in respect of the transmission assets as allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018, claimed by the Petitioner in the instant petition



and trued-up in the instant order is as follows:

Particulars	(₹ in lakh)				
	Asset 1 2018-19	Asset 2 2018-19 (Pro-rata for 96 days)	Asset 3		Asset 4 2018-19 (Pro-rata for 351 days)
			2017-18 (Pro-rata for 1day)	2018-19	
Allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018	994.68	195.11	2.30	921.36	913.11
Claimed by the Petitioner in the instant petition	1015.58	231.02	2.42	959.88	897.41
Approved after true-up in this order	988.95	219.33	2.30	919.47	880.33

Interest on Loan (IoL)

37. The Petitioner has claimed Weighted Average Rate of Interest (WAROI) on loan based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rates in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed in respect of the transmission assets for the 2014-19 tariff period is as follows:

Particulars	(₹ in lakh)				
	Asset 1 2018-19	Asset 2 2018-19 (Pro-rata for 96 days)	Asset 3		Asset 4 2018-19 (Pro-rata for 351 days)
			2017-18 (Pro-rata for 1 day)	2018-19	
Gross Normative Loan	12596.63	9532.75	11144.31	11144.31	11635.34
Cumulative Repayments up to Previous Year	0.00	0.00	0.00	2.30	0.00
Net Loan-Opening	12596.63	9532.75	11144.31	11142.01	11635.34
Addition due to Additional Capitalization	1356.03	3195.43	0.00	2153.51	1277.36
Repayment during the year	988.95	219.33	2.30	919.47	880.33
Net Loan-Closing	12963.70	12508.85	11142.01	12376.05	12032.37
Average Loan	12780.17	11020.80	11143.16	11759.03	11833.86
Weighted Average Rate of Interest on Loan (in %)	7.89	7.81	7.57	7.71	7.72
Interest on Loan	1008.24	226.42	2.31	906.11	879.01

38. IoL in respect of the transmission asset as allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:



(₹ in lakh)

Particulars	Asset 1	Asset 2	Asset 3		Asset 4
	2018-19	2018-19 (Pro-rata for 96 days)	2017-18 (Pro-rata for 1 day)	2018-19	2018-19 (Pro-rata for 351 days)
Allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018	1016.25	211.84	2.38	920.90	912.80
Claimed by the Petitioner in the instant petition	1030.30	230.82	2.38	926.29	891.35
Allowed after true-up in this order	1008.24	226.42	2.31	906.11	879.01

Return on Equity

39. The Petitioner has claimed RoE in respect of the transmission assets in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at Minimum Alternate Tax (MAT) rates and has claimed the effective tax rates for the 2014-19 tariff period as follows:

Year	Claimed effective tax (in %)	Grossed up RoE (in %) [(Base Rate)/(1-t)]
2014-15	21.018	19.625
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

40. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 had arrived at the effective tax rates based on the notified MAT rates for the Petitioner which are as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Effective tax (in %)
2014-15	20.961	20.961
2015-16	21.342	21.342
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

41. MAT rates considered in order dated 27.4.2020 for the purpose of grossing up of rate of RoE for trueing up of the tariff of the 2014-19 tariff period, in terms of the provisions of the 2014 Tariff Regulations, have been considered in the instant case which are as follows:



Year	MAT Rate (%)	Grossed up RoE (%) [(Base Rate)/(1-t)]
2014-15	20.961	19.610
2015-16	21.342	19.705
2016-17	21.342	19.705
2017-18	21.342	19.705
2018-19	21.549	19.758

42. In view of the above, RoE is trued-up on the basis of the MAT rates applicable in the respective years and is allowed in respect of the transmission assets for the 2014-19 tariff period as follows:

Particulars	(₹ in lakh)				
	Asset 1 2018-19	Asset 2 2018-19 (Pro-rata for 96 days)	Asset 3 2017-18 (Pro-rata for 1 day)		Asset 4 2018-19 (Pro-rata for 351 days)
Opening Equity	5398.55	4085.47	4776.13	4776.13	4986.57
Addition due to Additional Capitalization	581.16	1369.47	0.00	922.93	547.44
Closing Equity	5979.71	5454.94	4776.13	5699.07	5534.02
Average Equity	5689.13	4770.20	4776.13	5237.60	5260.29
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	21.549	21.549	21.342	21.549	21.549
Rate of Return on Equity (Pre-tax)	19.758	19.758	19.705	19.758	19.758
Return on Equity (Pre-tax)	1124.06	247.89	2.58	1034.85	999.46

43. RoE in respect of the transmission assets as allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

Particulars	(₹ in lakh)				
	Asset 1 2018-19	Asset 2 2018-19 (Pro-rata for 96 days)	Asset 3 2017-18 (Pro-rata for 1 day)		Asset 4 2018-19 (Pro-rata for 351 days)
Allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018	1093.59	215.75	2.44	985.41	997.67
Claimed by the Petitioner in the instant petition	1148.86	252.79	2.65	1058.75	1013.69
Approved after true-up in this order	1124.06	247.89	2.58	1034.85	999.46

Operation & Maintenance Expenses (O&M Expenses)

44. O&M Expenses in respect of the various elements covered under the transmission assets as claimed by the Petitioner in this petition are within the norms



specified in Regulation 29(4)(a) of the 2014 Tariff Regulations and the allowable O&M

Expenses are as follows:

(₹ in lakh)

Asset 1	
Particulars	2018-19
Sub-station Bays	
Aurangabad:400 kV +/- 300 MVAR STATCOM at 765/400 kV Aurangabad Sub-station	2
Norm (₹ lakh/bay)	
400 kV	68.71
Total Sub-station O&M	137.42
Total O&M Expenses	137.42

(₹ in lakh)

Asset 2	
Particulars	2018-19 (Pro-rata for 96 days)
Sub-station Bays	
400 kV GIS : Gwalior:400 kV +/- 2X100 MVAR STATCOM (Dynamic Compensation)	2
Norm (₹ lakh/bay)	
400 kV (GIS)	58.73
Total Sub-station O&M	117.46
Total O&M Expenses	30.89

(₹ in lakh)

Asset 3		
Particulars	2017-18 (Pro-rata for 1 day)	2018-19
Sub-station Bays		
Satna:400 kV +/- 2X150 MVAR STATCOM (Dynamic Compensation)	2	2
Norm (₹ lakh/bay)		
400 kV	66.51	68.71
Total Sub-station O&M	133.02	137.42
Total O&M Expenses	0.36	137.42

(₹ in lakh)

Asset 4	
Particulars	2018-19 (Pro-rata for 351 days)
Sub-station Bays	
Solapur: 400 kV +/- 300 MVAR STATCOM at 765/400 kV Solapur Sub-station	2
Norm (₹ lakh/bay)	
400 kV	68.71
Total Sub-station O&M	137.42
Total O&M Expenses	132.15

45. O&M Expenses in respect of the transmission assets as allowed vide order



dated 1.11.2019 in Petition No. 111/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows :

Particulars	(₹ in lakh)				
	Asset 1 2018-19	Asset 2 2018-19 (Pro-rata for 96 days)	Asset 3 2017-18 (Pro-rata for 1 day)		Asset 4 2018-19 (Pro-rata for 351 days)
Allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018	137.42	36.14	0.36	137.42	132.14
Claimed by the Petitioner in the instant petition	137.42	30.89	0.36	137.42	132.15
Approved after true-up in this order	137.42	30.89	0.36	137.42	132.15

Interest on Working Capital

46. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations. The details of the trued-up IWC approved in respect of the transmission assets for the 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)				
	Asset 1 2018-19	Asset 2 2018-19 (Pro-rata for 96 days)	Asset 3 2017-18 (Pro-rata for 1 day)		Asset 4 2018-19 (Pro-rata for 351 days)
Working Capital for O&M Expenses (O&M expenses for 1 month)	11.45	9.79	11.09	11.45	11.45
Working Capital for Maintenance Spares (15% of O&M expenses)	20.61	17.62	19.95	20.61	20.61
Working Capital for Receivables (Equivalent to 2 months of annual fixed cost / annual transmission charges)	555.05	469.22	470.31	511.05	512.11
Total of Working Capital	587.11	496.63	501.34	543.11	544.17
Rate of Interest (in %)	12.20	12.20	12.60	12.60	12.20
Interest of Working Capital	71.63	15.94	0.17	68.43	63.84

47. IWC in respect of the transmission assets as allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:



(₹ in lakh)

Particulars	Asset 1	Asset 2	Asset 3		Asset 4
	2018-19	2018-19 (Pro-rata for 96 days)	2017-18 (Pro-rata for 1 day)	2018-19	2018-19 (Pro-rata for 351 days)
Allowed vide order dated 1.11.2019 in Petition No.111/TT/2018	71.28	14.72	0.17	67.73	65.19
Claimed by the Petitioner in the instant petition	73.15	16.37	0.18	70.24	64.75
Approved after true-up in this order	71.63	15.94	0.17	68.43	63.84

Approved Annual Fixed Charges for the 2014-19 Tariff Period

48. The trued-up Annual Fixed Charges (AFC) in respect of the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	Asset 1	Asset 2	Asset 3		Asset 4
	2018-19	2018-19 (Pro-rata for 96 days)	2017-18 (Pro-rata for 1 day)	2018-19	2018-19 (Pro-rata for 351days)
Depreciation	988.95	219.33	2.30	919.47	880.33
Interest on Loan	1008.24	226.42	2.31	906.11	879.01
Return on Equity	1124.06	247.89	2.58	1034.85	999.46
O&M Expenses	137.42	30.89	0.36	137.42	132.15
Interest on Working Capital	71.63	15.94	0.17	68.43	63.84
Total	3330.30	740.47	7.73	3066.27	2954.80

49. Accordingly, the Annual Transmission Charges as allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Particulars	Asset 1	Asset 2	Asset 3		Asset 4
	2018-19	2018-19 (Pro-rata for 96 days)	2017-18 (Pro-rata for 1 day)	2018-19	2018-19 (Pro-rata for 351 days)
Allowed vide order dated 1.11.2019 in Petition No. 111/TT/2018	3313.21	673.57	7.66	3032.82	3020.91
Claimed by the Petitioner in the instant petition	3405.31	761.89	7.99	3152.58	2999.35
Approved after true-up in this order	3330.30	740.47	7.73	3066.27	2954.80

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

50. The Petitioner has submitted the tariff forms for the Combined Asset comprising of Asset 1, Asset 2, Asset 3 and Asset 4. Accordingly, as provided under Regulation 8(1) of the 2019 Tariff Regulations, single tariff for the Combined Asset



has been worked out for the 2019-24 tariff period in succeeding paragraphs.

51. The details of the transmission charges for Combined Asset for the 2019-24 tariff period as claimed by the Petitioner in this petition are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	4189.20	4325.72	4350.74	4350.74	4350.74
Interest on Loan	3978.17	3778.33	3471.72	3134.77	2781.47
Return on Equity	4444.69	4585.83	4613.44	4613.44	4613.44
Interest on Working Capital	243.85	247.51	245.65	242.61	238.84
O&M Expenses	1243.44	1287.13	1332.22	1379.06	1427.39
Total	14099.35	14224.52	14013.77	13720.62	13411.88

52. The details of IWC for Combined Asset for the 2019-24 tariff period as claimed by the Petitioner in this petition are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	103.62	107.26	111.02	114.92	118.95
Maintenance Spares	186.52	193.07	199.83	206.86	214.11
Receivables	1733.53	1753.71	1727.73	1691.58	1649.00
Total Working Capital	2023.67	2054.04	2038.58	2013.36	1982.06
Rate of Interest	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	243.85	247.51	245.65	242.61	238.84

Effective Date of Commercial Operation (E-COD)

53. The Petitioner has claimed E-COD of Combined Asset as 8.6.2018. Based on the trued-up capital cost and COD of the individual assets, E-COD has been worked out as follows:

Computation of Effective COD					
Asset	COD	Allowed Capital Cost (as on 31.3.2019) (₹ in lakh)	Weightage of cost (in %)	Number of days from last COD	Weighted Days
Asset 1	1.4.2018	19932.37	26.38	269.00	70.96
Asset 2	26.12.2018	18183.12	24.06	0.00	0.00
Asset 3	31.3.2018	18996.89	25.14	270.00	67.88
Asset 4	15.4.2018	18446.72	24.41	255.00	62.25
Total		75559.10	100.00		201.10
E-COD (Latest COD - Total Weighted Days) 8.6.2018					

54. E-COD is used to determine the lapsed life of the transmission project as a whole, which works out as Zero (0) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).



Weighted Average Life (WAL)

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

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

57. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as specified in the 2019 Tariff Regulations. Accordingly, WAL of Combined Asset has been worked out as 25 years as follows:

Particulars	Capital Cost (as on 31.3.2019) (₹ in lakh) (1)	Life (in Years) (2)	Weighted Cost (3)=(1) x (2) (₹ in lakh)	WAL (in years) (4)=(3)/(1)
Building	2003.49	25	50087.19	24.86 years
Sub-station Equipment	72967.00	25	1824175.01	(rounded off to 25 years)
IT Equipment and Software	588.61	6.67	3924.05	
Total	75559.10		1878186.25	

58. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed, E-COD of Combined Asset is 8.6.2018 and the lapsed life of the transmission project as a whole works out as zero (0) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 25 years.

Capital Cost

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

“19. Capital Cost: (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check



in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.

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

- (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;*
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) Adjustment of revenue earned by the transmission licensee by using the Asset before the date of commercial operation;*
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) Expenditure on account of change in law and force majeure events; and*
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

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

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
- (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*



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

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

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

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

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

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

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

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

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

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

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

60. The Petitioner has claimed capital cost of ₹20560.72 lakh, ₹18876.77 lakh, ₹19543.25 and ₹18905.83 for Assets-1, 2, 3 and 4 respectively. Against the overall apportioned approved capital cost (as per FR) of ₹107124.00 lakh, the estimated completion cost including ACE is ₹81876.95 lakh. The individual capital cost of each asset is also within the respective FR apportioned capital cost.

61. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, substation and PLCC) as admitted by the Commission as on 31.3.2019 in this order with respect to the transmission assets has been clubbed together and the resulting



capital cost has been considered as capital cost for Combined Asset as on 1.4.2019 as follows:

(₹ in lakh)					
Element	Asset 1	Asset 2	Asset 3	Asset 4	Capital Cost for Combined Asset (as on 1.4.2019)
Building and Other Civil Works	836.59	321.30	242.18	603.42	2003.49
Sub-station Equipment	19048.24	17568.78	18554.58	17795.41	72967.00
IT Equipment and Software	47.54	293.05	200.13	47.88	588.61
Total	19932.37	18183.12	18996.89	18446.72	75559.10

62. The trued-up capital cost of ₹75559.10 lakh for Combined Asset is considered as admitted capital cost as on 1.4.2019 for working out tariff for the 2019-24 tariff period.

Additional Capital Expenditure

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

“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 ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cutoff 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.
-”

64. The Petitioner has claimed projected ACE for the 2019-24 period on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date. The details of the projected ACE claim as per the Auditor's Certificates are as follows:

Asset	ACE (as per Auditor's Certificates)	
	(₹ in lakh)	
	2019-20	2020-21
Asset 1	483.31	266.16
Asset 2	1253.50	0.00
Asset 3	580.10	0.00
Asset 4	1712.42	713.96
Total	4029.33	980.12

65. Further, ACE claimed during 2019-20 and 2020-21 has been submitted by the Petitioner vide affidavit dated 1.7.2021 in the format wherein head-wise/ party-wise, year of actual capitalization, outstanding liability as on COD, discharge and reversal (year wise), additional liability recognized and outstanding liability has been mentioned.

66. We have considered the submissions and claims of the Petitioner. ACE claimed is on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date and the same is allowed under the 2019 Tariff Regulations, subject to true-up as follows:



(₹ in lakh)

Asset	ACE (as per Auditor's Certificates)	
	2019-20	2020-21
Asset 1	483.31	266.16
Asset 2	1253.50	0.00
Asset 3	580.10	0.00
Asset 4	1712.42	713.96
Total	4029.33	980.12

Capital Cost considered for the 2019-24 tariff period

67. In view of the above, the capital cost of Combined Asset considered for the 2019-24 tariff period subject to truing-up is as follows:

(₹ in lakh)

Capital Cost (as on 1.4.2019)	Admitted ACE		Capital Cost (as on 31.3.2024)
	2019-20	2020-21	
75559.10	4029.33	980.12	80568.55

Debt-Equity Ratio

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

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

Provided that:

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

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

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



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

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

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

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

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

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

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

Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	52891.37	70.00	56397.98	70.00
Equity	22667.73	30.00	24170.56	30.00
Total	75559.10	100.00	80568.55	100.00

Depreciation

70. Regulations 33(1), 33(2) and 33(5) of the 2019 Tariff Regulations provide as follows:

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



computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

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

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

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

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

71. Depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The IT equipment has been considered as a part of the Gross Block and depreciated using WAROD. WAROD at Annexure-II has been worked out after considering the depreciation rates of IT and non-IT assets as specified in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100% depreciable. The depreciation allowed for Combined Asset for the 2019-24 tariff period is as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	75559.10	79588.43	80568.55	80568.55	80568.55
Addition during the year 2019-24 due to projected Additional Capitalisation	4029.33	980.12	0.00	0.00	0.00
Closing Gross Block	79588.43	80568.55	80568.55	80568.55	80568.55
Average Gross Block	77573.76	80078.49	80568.55	80568.55	80568.55
Weighted average rate of Depreciation (WAROD) (in %)	5.31	5.31	5.31	5.31	5.31
Elapsed useful life at the beginning of the year (Year)	0.00	1.00	2.00	3.00	4.00
Balance useful life at the beginning of the year (Year)	25.00	24.00	23.00	22.00	21.00
Aggregated Depreciable Value	69889.56	72158.13	72599.18	72599.18	72599.18



Combined Depreciation during the year	4119.38	4255.90	4280.91	4280.91	4280.91
Cumulative Depreciation at the end of the year	7129.76	11385.66	15666.57	19947.47	24228.38
Remaining Aggregate Depreciable Value at the end of the year	62759.80	60772.47	56932.61	52651.71	48370.80

Interest on Loan

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

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

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

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

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

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

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

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

(5a) *The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.*

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

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

73. WAROI on loan 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 the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for Combined Asset for the 2019-24 tariff period is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	52891.37	55711.90	56397.98	56397.98	56397.98
Cumulative Repayments up to Previous Year	3010.39	7129.76	11385.66	15666.57	19947.47
Net Loan-Opening	49880.98	48582.13	45012.32	40731.41	36450.51
Addition due to Additional Capitalization	2820.53	686.08	0.00	0.00	0.00
Repayment during the year	4119.38	4255.90	4280.91	4280.91	4280.91
Net Loan-Closing	48582.13	45012.32	40731.41	36450.51	32169.60
Average Loan	49231.56	46797.23	42871.87	38590.96	34310.06
Weighted Average Rate of Interest on Loan (in %)	7.95	7.95	7.98	8.00	7.99
Interest on Loan	3915.74	3721.48	3420.22	3088.69	2741.08

Return on Equity

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

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

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

Provided that return on equity in respect of additional capitalization after cutoff date beyond the original scope, excluding additional capitalization on 7 account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

Provided further that:

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



dispatch centre or protection system based on the report submitted by the respective RLDC;

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

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

- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

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

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

Rate of pre-tax return on equity = Base rate / (1-t)

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

Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

Rate of return on equity = $15.50 / (1 - 0.2155) = 19.758\%$



(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;*
- (b) Estimated Advance Tax for the year on above is Rs 240 crore;*
- (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;*
- (d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.*

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”

75. The Petitioner has submitted that it is liable to pay Income Tax at MAT rate specified under the Taxation laws (Amendment) Ordinance 2019. Further, RoE has been calculated @18.782% after grossing up RoE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given in Regulation 31(2) of the 2019 Tariff Regulations for 2019-24 tariff period. As per Regulation 31(3) of the 2019 Tariff Regulations, the grossed-up rate of RoE at the end of every financial year shall be trued up 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 IT authorities pertaining to 2019-24 tariff period on actual gross income. However, if any penalty arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the Petitioner. Any under-recovery or over-recovery of grossed-up rate on RoE after truing up shall be recovered or refunded to beneficiaries or the long-term customers on yearly basis. The Petitioner has further submitted that any adjustment due to additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable/ adjustable during 2019-24 tariff period on yearly



basis on receipt of Income Tax assessment order.

76. We have considered the submissions of the Petitioner. MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which will be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations.

RoE allowed for Combined Asset for the 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	22667.73	23876.53	24170.56	24170.56	24170.56
Addition due to Additional Capitalization	1208.80	294.04	0.00	0.00	0.00
Closing Equity	23876.53	24170.56	24170.56	24170.56	24170.56
Average Equity	23272.13	24023.55	24170.56	24170.56	24170.56
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	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)	4370.97	4512.10	4539.72	4539.72	4539.72

Operation & Maintenance Expenses

77. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as follows:

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

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



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
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					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme



(2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);

- iv. the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

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

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

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

78. The Petitioner has considered the capital cost ₹82896.00 lakh for claiming O&M Expenses for the transmission assets which are Static Synchronous Compensators (STATCOMs). The O&M Expenses claimed by the Petitioner for Combined Asset for the 2019-24 period are as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
STATCOM in Western Region					
Original Project Cost (₹ lakh)	82896.00	82896.00	82896.00	82896.00	82896.00
Norms (in %)	1.50	1.5527	1.6071	1.6636	1.7219
Total O&M Expenses (₹ in lakh)	1243.44	1287.13	1332.22	1379.06	1427.39

79. We have considered the claim of the Petitioner and note that clause (vi) of the second proviso to Regulation 35(3)(a) of the 2019 Tariff Regulations provides for O&M Expenses @ 1.5% of the “original project cost” of the STATCOM as on COD. Also, the “Original Project Cost” as defined in Regulation 3(46) of the 2019 Tariff Regulations is as follows:



“3(46) ‘Original Project Cost’ means the capital expenditure incurred by the generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cut-off date, and as admitted by the Commission;”

80. In view of the foregoing, we observe that while “Original Project Cost” as mentioned above covers capital expenditure/ cost within the original scope of the project up to the cut-off date and clause (vi) of the second proviso to Regulation 35(3)(a) as mentioned above refers to the “original project cost” of the STATCOM as on COD for the purpose of determining O&M Expenses.

81. We further observe that “Original Project Cost” includes components of IDC, IEDC, land cost and cost of civil works. However, as per Regulation 3(45) of the 2019 Tariff Regulations (extracted below), the O&M Expenses are allowed for operation and maintenance of the project or part thereof and includes the expenditure towards manpower, maintenance, repairs etc. but excludes IDC, IEDC, land cost and cost of civil works:

“(45) ‘Operation and Maintenance Expenses’ or ‘O&M expenses’ means the expenditure incurred for operation and maintenance of the project, or part thereof, and includes the expenditure on manpower, maintenance, repairs and maintenance spares, consumables, insurance and overheads and fuel other than used for generation of electricity;”

82. Accordingly, we are of the view that determination of O&M Expenses on the basis of project cost (including IDC, IEDC Land cost and Cost of civil works) will not be consistent with the provisions of the 2019 Tariff Regulations as extracted above.

83. We also note that Regulation 76 of the 2019 Tariff Regulations provides for relaxation of any of the provisions of the 2019 Tariff Regulations by recording the reasons for the same. The said Regulation provides as follows:

“76. Power to Relax: The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person.”

84. Further, to address above issues arising out of the difference in the way in which “original project cost” has been considered in clause (vi) of the second proviso



to Regulation 35(3)(a) and Regulation 3(46) of the 2019 Tariff Regulations, we find it appropriate to relax clause (vi) of the second proviso to Regulation 35(3)(a) of the 2019 Tariff Regulations under the said Regulation 76 and, accordingly, allow O&M Expenses for the transmission assets @1.5% of the Plant and Machinery cost (excluding IDC, IEDC, Land cost and cost of Civil works) of the STATCOM as on the cut-off date. The same has been escalated at the rate of 3.51% to work out the O&M Expenses for the 2019- 24 tariff period.

85. In view of the above observations and notings, the O&M Expenses allowed for Combined Asset are as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
STATCOM in Western Region					
Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of Civil Works (₹ lakh)	75514.57	75514.57	75514.57	75514.57	75514.57
Norms (in %)	1.50	1.5527	1.6071	1.6636	1.7219
Total O&M Expenses (₹ in lakh)	1132.72	1172.48	1213.63	1256.23	1300.32

Interest on Working Capital

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

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

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

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

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

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

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



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

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

“3. Definitions ...

(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;”

87. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, for 2020-21 has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) whereas 2021-22 onwards has been considered as 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon for Combined Asset for the 2019-24 tariff period is as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M expenses for 1 month)	94.39	97.71	101.14	104.69	108.36
Working Capital for Maintenance Spares (15% of O&M expenses)	169.91	175.87	182.04	188.43	195.05
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	1693.62	1711.89	1684.24	1648.28	1606.05
Total of Working Capital	1957.92	1985.47	1967.42	1941.40	1909.46
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest of Working Capital	235.93	223.36	206.58	203.85	200.49

Annual Fixed Charges of the 2019-24 Tariff Period

88. The transmission charges allowed for Combined Asset for the 2019-24 tariff period are as follows:



(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	4119.38	4255.90	4280.91	4280.91	4280.91
Interest on Loan	3915.74	3721.48	3420.22	3088.69	2741.08
Return on Equity	4370.97	4512.10	4539.72	4539.72	4539.72
Interest on Working Capital	235.93	223.36	206.58	203.85	200.49
O&M Expenses	1132.72	1172.48	1213.63	1256.23	1300.32
Total	13774.74	13885.32	13661.05	13369.39	13062.52

Filing Fee and Publication Expenses

89. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

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

Goods and Services Tax

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

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



Security Expenses

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

94. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission asset owned by it on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved security expenses from 1.4.2019 to 31.3.2024. Therefore, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. Accordingly, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

95. 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

96. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the



2020 Sharing Regulations. Billing, collection and disbursement of the transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

97. To summarise:

- a) The trued-up AFC approved for the transmission assets for the 2014-19 tariff period are as follows:

(₹ in lakh)

Asset 1	Asset 2	Asset 3		Asset 4
2018-19	2018-19	2017-18	2018-19	2018-19
	(Pro-rata for 96 days)	(Pro-rata for 1 day)		(Pro-rata for 351 days)
3330.30	740.47	7.73	3066.27	2954.80

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

(₹ in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
13774.74	13885.32	13661.05	13369.39	13062.52

98. Annexure-I and Annexure-II given hereinafter shall form part of the order.

99. This order disposes of Petition No. 481/TT/2020 in terms of the above discussions and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(P. K. Pujari)
Chairperson



Asset 1**Annexure-I**

2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per the 2014 Tariff Regulations					
		2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)	
Capital Expenditure as on COD										
Building	435.14	401.45	836.59	3.34						21.24
Sub Station	17512.64	1535.60	19048.24	5.28						965.21
IT Equipment and Software	47.41	0.13	47.54	5.28						2.51
TOTAL	17995.18	1937.18	19932.37							988.95
			Average Gross Block ₹ in lakh)		Not Applicable					18963.77
			Weighted Average Rate of Depreciation (in %)							5.21



Asset 2

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per the 2014 Tariff Regulations					
		2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)	
Building	260.00	61.30	321.30	3.34	Not Applicable					
Sub Station	13089.03	4479.75	17568.78	5.28						
IT Equipment and Software	269.20	23.85	293.05	5.28						
TOTAL	13618.22	4564.90	18183.12							
			Average Gross Block (₹ in lakh)							9.71
			Weighted Average Rate of Depreciation (in %)							809.37
										14.84
										833.92
										15900.67
										5.24



Asset 3

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per the 2014 Tariff Regulations						
		2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)		
Building	0.00	242.18	242.18	3.34	Not Applicable						
Sub Station	15736.42	2818.16	18554.58	5.28							
IT Equipment and Software	184.03	16.10	200.13	5.28							
TOTAL	15920.45	3076.44	18996.89							840.60	919.47
			Average Gross Block (₹ in lakh)							15920.45	17458.67
			Weighted Average Rate of Depreciation (in %)		5.28	5.27					



Asset 4

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD	ACE	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation	Annual Depreciation as per the 2014 Tariff Regulations				
	(₹ in lakh)	(₹ in lakh)		(%)	2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
		2018-19							
Building	465.41	138.01	603.42	3.34					17.85
Sub Station	16108.70	1686.72	17795.41	5.28					895.07
IT Equipment and Software	47.80	0.08	47.88	5.28					2.53
TOTAL	16621.92	1824.80	18446.72						915.44
			Average Gross Block (₹ in lakh)		Not Applicable				17534.32
			Weighted Average Rate of Depreciation (in %)						5.22



Combined Asset										
2019-24	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
Capital Expenditure as on 1.4.2019		2019-20	2020-21			2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Building	2003.49	904.74	89.28	2997.51	3.34	82.03	98.63	100.12	100.12	100.12
Sub Station	72967.00	2838.31	890.84	76696.15	5.28	3927.59	4026.04	4049.56	4049.56	4049.56
IT Equipment and Software	588.61	286.28	0.00	874.89	15.00	109.76	131.23	131.23	131.23	131.23
TOTAL	75559.10	4029.33	980.12	80568.55		4119.38	4255.90	4280.91	4280.91	4280.91
				Average Gross Block (₹ in lakh)		77573.76	80078.49	80568.55	80568.55	80568.55
				Weighted Average Rate of Depreciation (in %)		5.31	5.31	5.31	5.31	5.31

