

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 33/TT/2020

Coram:

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

Date of Order : 01.02.2021

In the Matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of the 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Solapur STPP-Solapur (POWERGRID) 400 kV D/C (Quad) 2nd Transmission Line along with associated bays at Solapur (POWERGRID) Sub-station under "Transmission System associated with Solapur STPP (2x660 MW) Part-A" in the Western Region.

And in the Matter of:

Power Grid Corporation of India Ltd.,
SAUDAMINI, Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

.....Petitioner

Versus

1. Madhya Pradesh Power Management Company Ltd.,
Shakti Bhawan, Rampur, Jabalpur – 482008.
2. Madhya Pradesh Power Transmission Company Ltd.,
Shakti Bhawan, Rampur,
Jabalpur – 482008.
3. Madhya Pradesh Audyogik Kendra,
Vikas Nigam (Indore) Ltd.
3/54, Press Complex, Agra-Bombay Road, Indore – 452008.



4. Maharashtra State Electricity Distribution Company Ltd.
Hong Kong Bank Building, 3rd floor
M.G. Road, Fort, Mumbai - 400001.
5. Maharashtra State Electricity Transmission Company Ltd.
Prakashganga, 6th Floor, Plot No. C-19, E-block,
Bandra Kurla Complex, Bandra (East),
Mumbai – 400051.
6. Gujarat Urja Vikas Nigam Ltd.
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara – 390007.
7. Electricity Department,
Government of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa – 403001.
8. Electricity Department,
Administration of Daman and Diu,
Daman- 396210.
9. DNH Power Distribution Cooperation Ltd,
Vidyut Bhawan, 66 kV Road, Near Secretariat Amil,
Silvassa-396230.
10. Chhattisgarh State Power Transmission Company Ltd.
Office of the Executive Director (C&P),
State Load Despatch Building,
Dangania, Raipur-492103.
11. Chhattisgarh State Power Distribution Company Ltd.
P.O Sunder Nagar, Dangania, Raipur,
Chhattisgarh-492013.

...Respondent(s)

For Petitioner: Shri A.K. Verma, PGCIL
Shri S.S. Raju, PGCIL
Shri B. Dash, PGCIL
Shri Abhay Choudhary, PGCIL

For Respondents: None

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the Petitioner”) for truing up of 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 tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of Solapur STPP-Solapur (POWERGRID) 400 kV D/C (Quad) 2nd Transmission Line along with associated bays at Solapur (POWERGRID) Sub-station (hereinafter referred to as “the transmission asset”) under "Transmission System associated with Solapur STPP (2x660 MW) Part-A" in the Western Region (hereinafter referred to as “the transmission project”).

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

“1). Allow the additional capital expenditure for 2014-19 and FY 2019-24 tariff block as claimed as per Para 5 & 7 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 6 and 7 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 6 and 7 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 7.6 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 respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

Background

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

a) The Investment Approval and expenditure sanction to the transmission project was accorded by the Board of Directors of the Petitioner vide letter C/CP/Solapur-Part A dated 26.3.2015 at an estimated cost of ₹5052.00 lakh, which included IDC of ₹297.00 lakh (based on December 2014 price level). The Revised Cost Estimate (RCE) of the transmission project was approved by the Board of Directors of the Petitioner vide Memorandum No. C/CP/RCE Solapur Part-A dated 17.1.2017 for ₹6082.00 lakh including an IDC of ₹204.00 lakh (based on April 2016 price level). The transmission asset was put into commercial operation on 1.10.2017.

b) The complete scope of the transmission project is covered in the instant petition. The details are as under:

Sub-station

- i. Extension of 400/220 kV Solapur (Power Grid) Sub-station-2 nos. 400 kV line bays

Transmission Line

- ii. Solapur STPP- Solapur (Power Grid) 400 kV D/C (Quad) 2nd Line

c) As per the investment approval, the transmission asset was scheduled to be put into commercial operation within 24 months from the date of investment approval. As the investment approval was accorded on 26.3.2015, the scheduled date of commercial operation (SCOD) was 26.3.2017. However, the transmission asset was put into commercial operation on 1.10.2017 and there is a time over-run of 189 days and it has already been condoned when tariff was allowed for



the transmission asset from 1.10.2017 to 31.3.2019 vide order dated 9.10.2018 in Petition No. 59/TT/2017.

d) The details of the transmission tariff allowed for the 2014-19 tariff period in order dated 9.10.2018 in Petition No. 59/TT/2017 and the trued-up tariff claimed by the Petitioner for the transmission asset for the 2014-19 tariff period are as under:

Particulars	₹ in lakh	
	2017-18 (pro rata)	2018-19
Annual Fixed Charges (AFC) approved vide order dated 9.10.2018 in Petition No. 59/TT/2017	484.34	1080.79
AFC claimed based on truing up in the instant petition	451.68	966.01

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. General Notice dated 14.1.2020 directing the beneficiaries/ Respondents to file reply in the matter was also posted on the Commission's website. Madhya Pradesh Power Management Company Ltd. (MPPMCL), Respondent No.1 has filed reply vide affidavit dated 6.2.2020 and has raised issues of Return on Equity and Additional Capital Expenditure (ACE). Maharashtra State Electricity Distribution Company Ltd. (MSEDCL), Respondent No. 4, has filed reply vide affidavit dated 7.2.2020 and has raised issues of Return on Equity (RoE), ACE and GST and additional taxes. The Petitioner vide affidavits dated 14.8.2020 and 13.8.2020 has filed rejoinder to the reply filed by MPPMCL and MSEDCL respectively. The issues raised



by Respondents and the clarifications given by the Petitioner are dealt in the relevant portions of this order.

6. The hearing in this matter was held on 24.8.2020 through video conference and the order was reserved and the Petitioner was directed to submit certain information and the same was filed by the Petitioner vide affidavit dated 18.9.2020.

7. This order is issued considering the submissions made in the petition dated 19.11.2019 and Petitioner's affidavits dated 8.6.2020 and 18.9.2020, reply filed by MPPMCL and MSEDCL and the Petitioner's rejoinder to the reply of MPPMCL and MSEDCL.

8. Having heard the representatives of the Petitioner and perused the material 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 asset are as under:

Particulars	₹ in lakh	
	2017-18 (pro-rata 182 days)	2018-19
Depreciation	118.95	259.69
Interest on Loan	116.72	242.33
Return on Equity	131.00	287.22
Interest on Working Capital	11.64	24.76
O & M Expenses	73.37	152.01
Total	451.68	966.01

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

Particulars	₹ in lakh	
	2017-18 (pro-rata 182 days)	2018-19
O&M Expenses	12.26	12.67
Maintenance Spares	22.07	22.80
Receivables	150.97	161.00



Particulars	2017-18 (pro-rata 182 days)	2018-19
Total Working Capital	185.30	196.47
Rate of Interest (%)	12.60	12.60
Total	11.64	24.76

Capital Cost

11. The Commission vide order dated 9.10.2018 in Petition No. 59/TT/2017 had approved the transmission tariff for the transmission asset for the 2014-19 tariff period based on the approved capital cost of ₹4304.23 lakh as on 1.10.2017 (after subtracting accrual IDC as on COD) and projected ACE of ₹1432.86 lakh during 2017-19 as shown under:

Capital Cost as on COD	Additional Capital Expenditure		Capital Cost as on 31.3.2019
	2017-18	2018-19	
4304.23*	1108.54	324.32	5737.09

*After adjustment of accrual IDC discharged after COD

12. The Petitioner, in the instant petition, has claimed capital cost as under:

Actual Cost as on COD*	Additional Capital Expenditure		Total cost as on 31.3.2019
	2017-18	2018-19	
4304.22	280.16	522.40	5106.78

*After adjustment of accrual IDC discharged after COD

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

13. There was time over-run of 189 days in the execution of the transmission asset and the Commission vide order dated 9.10.2018 in Petition No. 59/TT/2017 condoned the time over-run. Accordingly, COD of the transmission asset was approved as 1.10.2017. The Petitioner has claimed IDC for the transmission asset and has submitted the statement showing IDC claim, discharge of IDC liability as on date of commercial operation and thereafter as follows:



(₹ in lakh)

IDC as per Auditor Certificate	IDC Discharged upto COD	IDC discharged during 2017-18	IDC discharged during 2015-16	Undischarged IDC upto COD
188.64	132.62	16.72	39.30	56.02

14. The allowable IDC has been worked out considering the information submitted by the Petitioner. The loan details submitted in Form-9C for the 2014-19 tariff period and date of drawl submitted in IDC statement has been considered for the purpose of calculating IDC for the asset. Accordingly, IDC allowed is as under:

(₹ in lakh)

IDC as per Auditor Certificate	IDC upto COD as worked out	IDC disallowed due to computation difference	Un-discharged portion of IDC as on COD	IDC allowed upto COD on cash basis	IDC discharged during 2017-18	IDC discharged during 2018-19
A	B	C	D	E=B-D		
188.64	188.64	-	56.08	132.56	16.72	39.36

15. The Petitioner has submitted that IEDC of ₹90.96 lakh mentioned in the Auditor certificate is on cash basis and is paid up to COD for the transmission asset. The Petitioner has claimed IEDC as on date of commercial operation, which is within the percentage of hard cost as indicated in the abstract cost estimate. Hence, the entire amount of IEDC claimed has been allowed.

Initial Spares

16. The Petitioner has claimed the following Initial Spares with respect to the transmission asset:

(₹ in lakh)

Initial Spares claimed by the Petitioner						
Asset type	Plant and Machinery Cost (₹ in lakh)	Spares claimed (₹ in lakh)	Limit (in %)	Allowed in Petition No. 59/TT/2017 (₹ in lakh)	Initial Spares Worked out (₹ in lakh)	Excess Initial Spares (₹ in lakh)
	A	B	C	D	E=(A-B)*C/100-C	F=B-E



Initial Spares claimed by the Petitioner						
Asset type	Plant and Machinery Cost (₹ in lakh)	Spares claimed (₹ in lakh)	Limit (in %)	Allowed in Petition No. 59/TT/2017 (₹ in lakh)	Initial Spares Worked out (₹ in lakh)	Excess Initial Spares (₹ in lakh)
Sub-station	798.37	53.81	6.00	53.81	47.53	6.28
Transmission Line	4010.24	16.17	1.00	16.17	40.34	0.00

17. The Petitioner has reduced the excess Initial Spares of ₹6.28 lakh from the capital cost of the transmission asset as per actual discharge from ACE claimed in 2017-18.

18. The Petitioner vide affidavit dated 8.6.2020 has submitted the discharge details pertaining to initial spares as under:

(₹ in lakh)

Asset type	Total Initial Spares claimed	Initial Spares discharged up to COD	Initial Spares discharged in 2017-18	Initial Spares discharged in 2018-19
Transmission line	16.17	0.00	0.00	16.17
Sub-station	53.81	0.00	53.81	0.00

19. We have considered the submissions of the Petitioner. The transmission asset was put into commercial operation in the 2014-19 tariff period. Accordingly, the 2014 Tariff Regulations are applicable for the transmission asset. Regulation 13(d) of the 2014 Tariff Regulations specifies the norms for the Initial Spares for the transmission systems as under:

“(d) Transmission system

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



20. The Initial Spares are allowed for the transmission asset as a percentage of the capital expenditure as on the cut-off date as specified in Regulation 13(d) of the 2014 Tariff Regulations and the same are as under:

Asset type	Plant and Machinery Cost (₹ in lakh)	Spares claimed (₹ in lakh)	Limit (in %)	Allowable (₹ in lakh)	Allowed in Petition No. 59/TT/2017 (₹ in lakh)	Excess Initial Spares (₹ in lakh)	Allowed in instant order
	A	B	C	$D=(A-B)*C/(100-C)$	E	B-D	
Sub-station	798.37	53.81	6.00	47.53	53.81	6.28	47.53
Transmission Line	4010.24	16.17	1.00	40.34	16.17	0.00	16.17

21. The Initial Spares claimed in the case of transmission line is as per the norms specified in the 2014 Tariff Regulations and hence it is allowed. However, in the case of sub-station, the Initial Spares claimed is more than the norms by ₹6.28 lakh and hence it is reduced from the cost of the transmission asset as per actual discharge from ACE claimed in 2017-18. The capital cost allowed in respect of the transmission asset as on COD is summarised as under:

(₹ in lakh)		
Capital Cost claimed in Auditor Certificate as on COD (A)	Un-discharged IDC as on COD (B)	Capital Cost allowed as on COD (C) = (A-B)
4360.25	56.08	4304.17

Additional Capital Expenditure (ACE)

22. The Commission vide order dated 9.10.2018 in Petition No. 59/TT/2017 had allowed ACE of ₹1432.86 lakh for the transmission asset in 2014-19 towards un-discharged liabilities. The Petitioner has claimed actual ACE of ₹280.16 lakh and ₹522.40 lakh during 2017-18 and 2018-19 respectively based on cash discharge. The ACE claimed in the instant petition is lower than that approved vide order dated 9.10.2018 in Petition No. 59/TT/2017. In response to a query in this regard, the



Petitioner vide affidavit dated 8.6.2020 has submitted that ACE claimed earlier were based on projections since contracts were not closed, and the liabilities were not finalized at the time. ACE claimed in the instant petition is on the basis of actual payments made to the contractors after receipt of final invoices. The details of ACE claimed by Petitioner are as under:

(₹ in lakh)

Particulars	Regulation		
		2017-18	2018-19
Balance and retention payments for liabilities other than IDC	14(1)(i)	163.39	212.92
Works deferred for execution	14(1)(ii)	100.05	270.19
IDC Discharged after COD	14(1)(i)	16.72	39.29
Total ACE		280.16	522.40

23. Further, the Petitioner vide affidavit dated 8.6.2020 has submitted the following liability flow statement:

(₹ in lakh)

Vendor Name	Nature of Work/ Particulars	Out-standing liability as on COD	Discharge			Out-standing liability as on 31.3.2019
			2017-18	2018-19	Total 2014-19	
KEC	400 kV Solapur (NTPC)-Solapur (PG) 2 nd TL Package	274.02	118.46	155.56	274.02	-
TECHNO	400 kV Solapur Sub-station Extension Package	105.16	44.95	57.37	102.32	2.84
Total		379.18	163.41	212.93	376.34	2.84

24. MSEDCL has submitted that the Petitioner has claimed ACE of ₹841.40 lakh. The Petitioner has projected expenditure of ₹122.48 lakh towards Power Line Carrier Communication (PLCC). MSEDCL has further submitted that PLCC is used for data communication between the sending and receiving end using the existing infrastructure and PLCC is for better operation of the transmission system which is



built and maintained by the Petitioner, thus the expenditure on PLCC should also be borne by the Petitioner itself and should not be transferred to the Respondents.

25. In response, the Petitioner vide affidavit dated 13.8.2020, has submitted that PLCC/communication system installed under the transmission project is used for telemetry and protection purpose only and not meant for optical fibre communication and the same has been accordingly claimed under PLCC.

26. We have considered the submissions of the Petitioner and MSEDCL. ACE claimed by the Petitioner is within the cut-off date of 31.3.2020. The Petitioner has submitted that ACE incurred during the year 2017-18 and 2018-19 is on account of balance and retention payments and works deferred for execution and has claimed the same under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations. Based on the submissions of the Petitioner, we have considered ACE claimed for the 2014-19 tariff period. The capital cost claimed by the Petitioner as on 31.3.2019 including ACE in the 2014-19 tariff period is ₹5106.78 lakh which is within RCE of ₹6082.00 lakh. Further, ACE claimed is lower than that approved vide order dated 9.10.2018 in Petition No. 59/TT/2017. Hence, considering the Petitioner’s submissions, ACE is allowed under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations is as follows:

(₹ in lakh)

Particulars	Regulation		
		2017-18	2018-19
Balance and retention payments for liabilities other than IDC	14(1)(i)	163.39*	212.92
Works deferred for execution	14(1)(ii)	100.05	270.19
IDC Discharged after COD	14(1)(i)	16.72	39.36
Total ACE		280.16	522.47

* The Petitioner has reduced the excess Initial Spares of ₹6.28 lakh from the cost of the transmission asset from ACE claimed in 2017-18 and the same has been considered.



27. Accordingly, the capital cost considered for the 2014-19 tariff period after computation of IDC discharge is as follows:

(₹ in lakh)

RCE Approved Cost	Capital Cost allowed as on COD	ACE allowed		Capital Cost allowed as on 31.3.2019
		2017-18	2018-19	
6082.00	4304.17	280.16	522.47	5106.80

Debt-Equity ratio

28. The Petitioner has claimed the debt-equity ratio of 70:30 as on COD and for ACE in respect of the transmission asset. The debt-equity ratio has been considered in accordance with Regulation 19 of the 2014 Tariff Regulations. The debt-equity ratio of 70:30 has been considered for the opening capital cost as on COD and ACE allowed during the 2017-19 in accordance with Regulation 19(1) of the 2014 Tariff Regulations. The details of debt and equity as on COD and 31.3.2019 for the transmission asset considered for the 2014-19 period is as follows:

Funding	Capital Cost as on COD (₹ in lakh)	(%)	ACE during 2014-19 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	3012.92	70.00	561.84	70.00	3574.76	70.00
Equity	1291.25	30.00	240.79	30.00	1532.04	30.00
Total	4304.17	100.00	802.63	100.00	5106.80	100.00

Interest on Loan (IoL)

29. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest.

30. We have considered the submissions made by the Petitioner. IoL has been calculated based on actual interest rate submitted by the Petitioner in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL worked out and allowed in this order is as follows:



(₹ in lakh)

Particulars	2017-18 (pro-rata 182 days)	2018-19
Interest on Loan		
Gross Normative Loan	3012.92	3209.03
Cumulative repayments up to Previous Year	-	117.05
Net Loan-Opening	3012.92	3091.97
Additions	196.11	365.73
Repayment during the year	117.05	255.88
Net Loan-Closing	3091.97	3201.82
Average Loan	3052.45	3146.90
Weighted Average Rate of Interest on Loan (%)	7.67	7.70
Interest on Loan	234.15	242.62
Pro rate Interest on Normative Loan	116.75	242.62

31. The details of IoL approved vide order dated 9.10.2018 in Petition No. 59/TT/2017, claimed by the Petitioner in the instant petition and true up IoL allowed in respect of the transmission asset is as under:

(₹ in lakh)

Particular	2017-18 (pro-rata 182 days)	2018-19
Approved vide order dated 9.10.2018 in Petition No. 59/TT/2017	128.21	279.37
Claimed by the Petitioner in the instant petition	116.72	242.33
Allowed after true-up in this order	116.75	242.62

Return on Equity (RoE)

32. The Petitioner has claimed Return on Equity for the transmission asset in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax rate (in %)	Grossed up ROE (Base Rate/1-t) (in %)
2014-15	-	-
2015-16	-	-
2016-17	-	-



Year	Claimed effective tax rate (in %)	Grossed up ROE (Base Rate/1-t) (in %)
2017-18	21.337	19.705
2018-19	21.548	19.758

33. MPPMCL has submitted that the Petitioner has grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 and has not placed on record the assessment orders for 2016-17 and 2017-18. For 2018-19, it has grossed up RoE and has not claimed the effective tax rate based on actual taxes paid for 2018-19. MPPMCL has submitted that the Petitioner has neither submitted copy of assessment order for the 2014-15 and 2015-16 nor the audited accounts in respect of actual taxes paid for 2016-17 and 2017-18 has been enclosed in the instant petition. MPPMCL has further submitted that in absence of these documents, it is not possible to scrutinize the claim of the Petitioner in a proper way. In response, the Petitioner has submitted that the effective rates of tax considered for 2014-15, 2015-16 and 2016-17 are based on assessment orders issued by the Income Tax authorities, for the purpose of grossing up of RoE rate and that the effective rate of tax considered for 2017-18 and 2018-19, are based on the Income-tax returns filed, for the purpose of grossing up of RoE rates of the respective. The basis of year-wise effective tax rate has been mentioned in the petition and grossed up ROE has been trued up accordingly for the 2014-19 period. The Petitioner has further submitted that a copy of the assessment orders for 2014-15 and 2015-16 have already been submitted in Petition No. 20/TT/2020 and it has also placed on record a copy of the assessment order for the year 2016-17.

34. MSEDCL has submitted that the Petitioner has submitted grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18. The Petitioner has neither



submitted the assessment order for the 2014-15, 2015-16, 2016-17 period nor the audited accounts in respect of actual taxes paid during 2016-17 and 2017-18. For 2018-19, the claimed grossed up RoE is not on the basis of actual taxes paid for the year. In response, the Petitioner has clarified that it has submitted effective tax rates for all the years of the 2014-19 tariff period. The Income Tax assessment of the Petitioner has been completed and assessment orders have been issued by the Income Tax Department for the years 2014-15, 2015-16 and 2016-17 and that the Income Tax returns have been filed with the Income Tax Department for 2017-18 and 2018-19. The basis of year-wise effective tax rate and grossed up RoE for the 2014-19 period had already been submitted as a part of the instant petition. Further, assessment order of 2014-15 and 2015-16 had already been submitted in reply to TV (Technical Validation) letter in Petition No. 20/TT/2020 and a copy of the assessment order for the financial year 2016-17 has been submitted along with the rejoinder.

35. We have considered the submissions of the Petitioner, MPPMCL and MSEDCL. It is observed that the effective rates of tax considered for the years 2014-15, 2015-16, 2016-17 for the purpose of grossing up of RoE rate are based on assessment orders issued by the Income Tax authorities and that the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income-tax returns filed by the Petitioner. We are satisfied with the clarifications given by the Petitioner and the Petitioner has complied with the provisions of the Income Tax Act, 1961 and the provisions of the tariff regulations.

36. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 had arrived at the effective tax rate for the Petitioner based on the notified MAT rates and



the same is given in the table below. The relevant portion of the order dated 27.4.2020 is as under:

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

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

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

”

37. The same MAT rates as considered in order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations and the same are as under:

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



38. The Petitioner has claimed RoE for the 2014-19 tariff period after grossing up RoE of 15.50% with Effective Tax rates (based on MAT rates) each year. RoE is trued up on the basis of the MAT rate applicable in the respective years and is allowed as under:

Particulars	(₹ in lakh)	
	2017-18 (pro-rata 182 days)	2018-19
Return on Equity		
Opening Equity	1291.25	1375.30
Additions	84.05	156.74
Closing Equity	1375.30	1532.04
Average Equity	1333.27	1453.67
Return on Equity (Base Rate) (%)	15.500	15.500
MAT Rate for respective year (%)	21.342	21.549
Rate of Return on Equity (%)	19.705	19.758
Return on Equity	262.73	287.21
Pro rate return on Equity	131.00	287.21

39. The details of RoE approved vide order dated 9.10.2018 in Petition No. 59/TT/2017, claimed by the Petitioner in the instant petition and trued up RoE allowed in respect of the transmission asset is shown in the table below:

Particular	(₹ in lakh)	
	2017-18 (pro-rata 182 days)	2018-19
Approved vide order dated 9.10.2018 in Petition No. 59/TT/2017	142.52	327.97
Claimed by Petitioner in the instant petition	131.00	287.22
Allowed after true-up in this order	131.00	287.21

Depreciation

40. The transmission asset was put into commercial operation during 2017-18 and the tariff from the date of commercial operation to 31.3.2019 was allowed vide order dated 9.10.2018 in Petition No. 59/TT/2017. The Petitioner has, now at the time of truing up of the tariff allowed for the 2014-19 tariff period, apportioned a part of the capital expenditure to "IT Equipment". It is observed that the Petitioner has for the first



time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 tariff period.

41. We have considered the submissions of the Petitioner. Similar issue had come up in Petition No. 19/TT/2020 wherein the Commission vide order dated 9.5.2020 decided as under:

"31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012 and 9.5.2013 in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014- 19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations(the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the substation 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."

42. It is further observed that the Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including ACE, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already



admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @15% from 1.4.2014 onwards. Further, in line with above order of the Commission, 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 tariff 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. Accordingly, the depreciation for 2014-19 period is trued up for the transmission asset as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations (as placed in Annexure I and 2).

43. The Gross Block during the tariff period 2014-19 has been depreciated at Weighted Average Rate of Depreciation (WAROD) (as placed in Annexure-1). The Gross Block during the tariff period 2014-19 has been depreciated at WAROD. WAROD has been worked out after taking into account the depreciation rate of the transmission asset as prescribed in the 2014 Tariff Regulations and the trued up depreciation allowed for the transmission asset during the 2014-19 tariff period is as under:

(₹ in lakh)		
Particulars	2017-18 (pro-rata 182 days)	2018-19
Depreciation		
Opening Gross Block	4304.17	4584.33
Additional Capitalisation	280.16	522.47
Closing Gross Block	4584.33	5106.80
Average Gross Block	4444.25	4845.56
Weighted Average Rate of Depreciation (%)	5.28	5.28



Particulars	2017-18 (pro-rata 182 days)	2018-19
Balance useful life of the asset	33	33
Elapsed life at the beginning of the year	0	0
Aggregated Depreciable Value	3999.82	4361.00
Combined Depreciation during the year	117.05	255.88
Aggregate Cumulative Depreciation	117.05	372.93
Remaining Aggregate Depreciable Value	3882.77	3988.07

44. The details of the depreciation approved vide order 9.10.2018 in Petition No. 59/TT/2017, claimed by the Petitioner in the instant petition and true up depreciation allowed in respect of the transmission asset is shown in the table below:

(₹ in lakh)

Particulars	2017-18 (pro-rata 182 days)	2018-19
Approved vide order dated 9.10.2018 in Petition No. 59/TT/2017	127.92	294.27
Claimed by the Petitioner in the instant petition	118.95	259.69
Allowed after true-up in this order	117.05	255.88

Operation & Maintenance Expenses (O&M Expenses)

45. The O&M Expenses claimed by the Petitioner for the transmission asset are as under:

(₹ in lakh)

O&M Expenses	2017-18 (pro-rata 182 days)	2018-19
Particulars		
Transmission Line - Solapur(PG)-Solapur(NTPC)		
400 kV Double Circuit (Bundle Conductor with Four Sub-Conductors)		
Line Length (km)	12.060	12.060
Norms (₹ lakh/km)	1.171	1.210
400 kV Solapur (NTPC) Sub-station bays 3&4		
No. of bays	2	2
Norms (₹ lakh/Bay)	66.51	68.71
Total O&M Expense (₹ in lakh)	73.37	152.01



46. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. Norms specified in respect of the transmission asset are as under:

Particulars	2017-18	2018-19
O&M Expenses		
Sub-Station		
400 kV		
Norms (₹ lakh/Bay)	66.51	68.71
Transmission line Double Circuit (Bundle Conductor with Four Sub-Conductors)		
Norms (₹ lakh/km)	1.171	1.210

47. We have considered the submission of the Petitioner. The O&M Expenses are allowed for the transmission asset as per the norms specified in the 2014 Tariff Regulations and are as under:

Particulars	2017-18 (pro-rata 182 days)	2018-19
Transmission Line - Solapur(PG)-Solapur(NTPC)		
400 kV Double Circuit (Bundle Conductor with Four Sub-Conductors)		
Line Length (Km)	12.060	12.060
Norms (₹ lakh/Bay)	1.171	1.210
O&M Expense of Transmission Line (₹ in lakh) (A)	14.12	14.59
400 kV Solapur (NTPC) Sub-station bays 3&4		
No. of bays	2	2
Norms (₹ lakh/Bay)	66.51	68.71
O&M Expense of Sub-Station (₹ in lakh) (B)	133.02	137.42
Total O&M Expense (₹ in lakh) (A+B)	147.14	152.01
Pro-rata O&M Expenses	73.37	152.01

48. The details of the O&M Expenses approved vide earlier order dated 9.10.2018 in Petition No. 59/TT/2017, claimed by the Petitioner in the instant petition and trued up O&M Expenses allowed in respect of transmission asset is shown in the table under:

Particulars	(₹ in lakh)	
	2017-18 (pro-rata 182 days)	2018-19
Approved vide order dated 9.10.2018 in Petition	73.36	152.01



Particulars	2017-18 (pro-rata 182 days)	2018-19
No. 59/TT/2017		
Claimed by the Petitioner in the instant petition	73.37	152.01
Allowed after true-up in this order	73.37	152.01

Interest on Working Capital (IWC)

49. The Petitioner is entitled to claim IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations. The components of the working capital and the Petitioner's entitlement to interest thereon are discussed hereunder:

(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 IWC:

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

50. Trued-up IWC has been worked out as per the methodology provided in the Regulation 28 of the 2014 Tariff Regulations for the transmission asset and allowed as under:

Particulars	(₹ in lakh)	
	2017-18 (pro-rata 182 days)	2018-19
Interest on Working Capital		
O&M Expenses	12.26	12.67
Maintenance Spares	22.07	22.80
Receivables	150.34	160.40
Total Working Capital	184.67	195.87
Rate of Interest (%)	12.60	12.60
Interest on working capital	11.60	24.68



51. The details of IWC approved vide order dated 9.10.2018 in Petition No. 59/TT/2017, claimed by the Petitioner in the instant petition and trued up IWC allowed in the instant order in respect of the transmission asset is as under:

(₹ in lakh)		
Particulars	2017-18 (pro-rata 182 days)	2018-19
Approved vide order dated 9.10.2018 in Petition No. 59/TT/2017	12.33	27.17
Claimed by the Petitioner in the instant petition	11.64	24.76
Allowed after true-up in this order	11.60	24.68

Approved Annual Fixed Charges for the 2014-19 Tariff Period

52. The trued up annual fixed charges allowed for the transmission asset for the 2014-19 period is as under:

(₹ in lakh)		
Particulars	2017-18 (pro-rata 182 days)	2018-19
Depreciation	117.05	255.88
Interest on Loan	116.75	242.62
Return on Equity	131.00	287.21
Interest on Working Capital	11.60	24.68
O & M Expenses	73.37	152.01
Total	449.78	962.40

53. The Annual Transmission Charges approved vide order dated 9.10.2018 in Petition No. 59/TT/2017, claimed by the Petitioner in the instant petition and approved after truing up in the instant order in respect of the transmission asset is as under:

(₹ in lakh)		
Particulars	2017-18 (pro-rata 182 days)	2018-19
Approved vide order dated 9.10.2018 in Petition No. 59/TT/2017	484.34	1080.79
Claimed by the Petitioner in the instant petition	451.68	966.01
Allowed after true-up in this order	449.78	962.40



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

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	274.46	275.45	275.45	275.45	275.45
Interest on Loan	238.30	217.93	196.49	175.04	153.58
Return on Equity	288.84	289.93	289.93	289.93	289.93
Interest on Working Capital	15.66	15.54	15.35	15.16	14.93
O&M Expenses	82.69	85.51	88.43	91.45	94.57
Total	899.95	884.36	865.65	847.03	828.46

55. The details of the IWC claimed by the Petitioner in respect of the transmission asset for the 2019-24 tariff period are as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	6.89	7.13	7.37	7.62	7.88
Maintenance Spares	12.40	12.83	13.26	13.72	14.19
Receivables	110.65	109.03	106.72	104.43	101.86
Total Working Capital	129.94	128.99	127.35	125.77	123.93
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	15.66	15.54	15.35	15.16	14.93

Capital Cost

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

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

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

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*



- (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
- (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
- (n) Expenditure on account of change in law and force majeure events; and
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

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

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
- (c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

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

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



Yojana (DDUGJY) project in the affected area.

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

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

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

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

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

57. The admitted capital cost of ₹5106.80 lakh as on 31.3.2019 as trued up in above paragraphs is considered as the capital cost as on 1.4.2019 for the purpose of determination of tariff for the 2019-24 tariff period in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

58. As per the liability flow statement submitted by the Petitioner there is outstanding liability of ₹2.84 lakh as on 31.3.2019 as follows:

(₹ in lakh)

Vendor Name	Nature of Work/ Particulars	Outstanding Liability as on COD	Discharge	Outstanding liability as on 31.3.2019
			Total 2014-19	
Liability Flow Statement				
KEC	400 kV Solapur (NTPC)-Solapur	274.02	274.02	-



(₹ in lakh)

Vendor Name	Nature of Work/ Particulars	Outstanding Liability as on COD	Discharge	Outstanding liability as on 31.3.2019
			Total 2014-19	
	(PG) 2 nd Transmission Line Package			
TECHNO	400 kV Solapur Sub-station Extension Package	105.16	102.32	2.84
Total		379.18	376.34	2.84

59. The Petitioner has claimed ACE of ₹38.83 lakh in 2019-20. The details submitted are as under:

Particulars	Party	Amount (₹ in lakh)	Reasons
Land compensation	-	30.00	Delay in crop compensation assessment order issued by the concerned authorities
Transmission line package	KEC	5.99	Minor variation in civil works. Payments made after reconciliations.
Sub-station extension package	TECHNO	2.84	Balance and retention payment
Total		38.83	

60. MPPMCL and MSEDCL have submitted that the proposed ACE is not supported by proper documents, details and justifications. In response, the Petitioner vide affidavits dated 14.8.2020 and 13.8.2020, respectively, has submitted that the estimated ACE is to be incurred for balance and retention payment and works deferred for execution under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations.

61. We have considered the submissions of the Petitioner, MPPMCL and MSEDCL. ACE claimed is within the cut-off date and is allowed as per Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. Further, the total capital cost as on 31.3.2024 claimed by the Petitioner after considering ACE claimed



in the 2019-24 tariff period is ₹5145.63 lakh, which is within RCE of ₹6082 lakh. Accordingly, the capital cost as on 31.3.2024 for the transmission asset is considered as under:

(₹ in lakh)		
Capital Cost as on 1.4.2019	Admitted ACE 2019-20	Capital Cost as on 31.3.2024
5106.80	38.83	5145.63

Debt-Equity ratio

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

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

Provided that:

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

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

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

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

63. The details of the debt and equity considered for the purpose of tariff for the 2019-24 tariff period are as under:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	ACE for 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	3574.76	70.00	27.18	70.00	3601.94	70.00
Equity	1532.04	30.00	11.65	30.00	1543.69	30.00
Total	5106.80	100.00	38.83	100.00	5145.63	100.00

Return on Equity (RoE)

64. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations specify 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 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 cut-off date beyond the original scope shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system

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.”

Regulation 31 of the 2019 Tariff Regulations provides as under:

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

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

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

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

Illustration-

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

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



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

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;

(d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

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

65. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. MSEDCL has submitted that the Petitioner, while calculating RoE has considered MAT at the rate of 18.5% for the period under consideration but it has already been declared that for 2019-20, the MAT rate is @15%. Thus, it would change the Effective Tax Rate. This would, in turn, affect the Grossed up RoE rate and thereby the entire truing up for the period under consideration. In response, the Petitioner has submitted that as evident from the Form-8 submitted along with the instant petition for the 2019-24 period, RoE has been correctly calculated @ 18.782% after grossing up RoE with MAT rate of 17.472% (i.e. using the reduced Base MAT Rate of 15% + Surcharge 12% + Cess 4%) based on the formula given in Regulation 31(2) of the 2019 Tariff Regulations.

66. We have considered the submission of the Petitioner and MSEDCL. Regulation 30 read with Regulation 31 of the 2019 Tariff Regulations provides for grossing up of ROE with the effective tax rate for the purpose of RoE. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax



(MAT), the MAT rate including surcharge and cess will be considered for the grossing up of RoE. The MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the transmission asset is as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	1532.04	1543.69	1543.69	1543.69	1543.69
Additions	11.65	-	-	-	-
Closing Equity	1543.69	1543.69	1543.69	1543.69	1543.69
Average Equity	1537.86	1543.69	1543.69	1543.69	1543.69
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	288.83	289.93	289.93	289.93	289.93

Interest on Loan (IoL)

67. Regulation 32 of the 2019 Tariff Regulations provides that:

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

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

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

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

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

Provided that if there is no actual loan for a particular year but normative loan is



still outstanding, the last available weighted average rate of interest shall be considered;

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

(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.”

68. MSEDCL has submitted that while calculating the interest on loan, weighted average rate of interest (WAROI) should be considered but the Petitioner has considered the rate of interest on loan on annual basis for the period under consideration. MSEDCL has submitted that it has major effect on the tariff and requested to check the same while determining IoL. In response, the Petitioner has submitted that for computing IoL in Form 9E, the weighted average rate of interest on loan as computed in Form 9C has been used. The Petitioner has submitted that the weighted average interest on loan is computed, in Form 9C, considering the sum total of interest on all the loans deployed during the particular year divided by the sum total of average loans deployed during that year. The Petitioner has further submitted that MSEDCL's submission that interest has been computed considering the rate of loan on annual basis is incorrect and baseless and requested to allow the cost and tariff as claimed.

69. We have considered the submission of the Petitioner and MSEDCL. The weighted average rate of IoL has been considered on the basis of 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 may be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true



up. In view of above, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations and the same is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	3574.76	3601.94	3601.94	3601.94	3601.94
Cumulative Repayments upto Previous Year	372.93	647.40	922.86	1198.33	1473.79
Net Loan-Opening	3201.82	2954.54	2679.07	2403.61	2128.15
Additions	27.18	-	-	-	-
Repayment during the year	274.47	275.46	275.46	275.46	275.46
Net Loan-Closing	2954.54	2679.07	2403.61	2128.15	1852.68
Average Loan	3078.18	2816.81	2541.34	2265.88	1990.41
Weighted Average Rate of Interest on Loan (%)	7.75	7.75	7.74	7.74	7.73
Interest on Loan	238.74	218.37	196.93	175.48	154.01

Depreciation

70. Regulation 33 of the 2019 Tariff Regulations provides that:

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

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

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

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

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

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State



Government for development of the generating station:

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

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

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

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

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

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

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

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

71. The IT equipment has been considered as a part of the Gross Block and depreciated using WAROD (as placed in Annexure-2). WAROD has been worked out after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100 percent depreciable. The calculation of WAROD for the 2019-24 tariff period is placed in Annexure-2. The depreciation has been worked out considering the admitted capital expenditure and



accumulated depreciation up to 31.3.2019. The depreciation allowed for the transmission asset is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	5106.80	5145.63	5145.63	5145.63	5145.63
Additional Capitalisation	38.83	0.00	0.00	0.00	0.00
Closing Gross Block	5145.63	5145.63	5145.63	5145.63	5145.63
Average Gross Block	5126.21	5145.63	5145.63	5145.63	5145.63
Weighted Average Rate of Depreciation (WAROD) (%)	5.35%	5.35%	5.35%	5.35%	5.35%
Balance useful life of the asset	32	31	30	29	28
Elapsed life at the beginning of the year	1	2	3	4	5
Aggregate Depreciable value	4617.53	4635.00	4635.00	4635.00	4635.00
Depreciation during the year	274.47	275.46	275.46	275.46	275.46
Aggregate Cumulative Depreciation	647.40	922.86	1198.33	1473.79	1749.26
Remaining Depreciable Value at the end of the year	3970.13	3712.14	3436.67	3161.21	2885.74

Operation & Maintenance Expenses (O&M Expenses)

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

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (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	0.755	0.781	0.809	0.837	0.867



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>four sub-conductors)</i>					
<i>Single Circuit (Twin & Triple Conductor)</i>	0.503	0.521	0.539	0.558	0.578
<i>Single Circuit (Single Conductor)</i>	0.252	0.260	0.270	0.279	0.289
<i>Double Circuit (Bundled conductor with four or more sub-conductors)</i>	1.322	1.368	1.416	1.466	1.517
<i>Double Circuit (Twin & Triple Conductor)</i>	0.881	0.912	0.944	0.977	1.011
<i>Double Circuit (Single Conductor)</i>	0.377	0.391	0.404	0.419	0.433
<i>Multi Circuit (Bundled Conductor with four or more sub-conductor)</i>	2.319	2.401	2.485	2.572	2.662
<i>Multi Circuit (Twin & Triple Conductor)</i>	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
<i>HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)</i>	834	864	894	925	958
<i>Gazuwaka HVDC Back-to-Back station (Rs. Lakh per 500 MW)</i>	1,666	1,725	1,785	1,848	1,913
<i>500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)</i>	2,252	2,331	2,413	2,498	2,586
<i>±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)</i>	2,468	2,555	2,645	2,738	2,834
<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh)(3000 MW)</i>	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2500 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;*
- v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole*



scheme; and

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

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

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

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

(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”

73. The O&M Expenses claimed by the Petitioner for the transmission asset for the 2019-24 tariff period are as under:

O&M Expenses	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line – Solapur (PG)-Solapur (NTPC) Double Circuit (Bundle Conductor with Four Sub-Conductors)					
Length in km	12.06	12.06	12.06	12.06	12.06
O&M expenses Claimed for Transmission Line (₹ in lakh)	15.94	16.50	17.08	17.68	18.30
400 kV Solapur (NTPC) Sub-station bays 3&4					
No. of bays	2.00	2.00	2.00	2.00	2.00
O&M expenses for Claimed Sub-stations (₹ in lakh)	64.30	66.56	68.90	71.32	73.82
O& M Expenses for the Communication System					
The original project cost / Asset related to the communication system (₹ in lakh)	122.48	122.48	122.48	122.48	122.48
O&M expenses Claimed for PLCC(₹ in lakh)	2.45	2.45	2.45	2.45	2.45
Total O&M expenses (₹ in lakh)	82.69	85.51	88.43	91.45	94.57



74. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station have been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The relevant portions of the order dated 24.1.2021 in Petition No.126/TT/2020 are extracted hereunder:

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

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

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



petitions given in Annexure-3 and also make revised claim of O&M Expenses for PLCC as part of the sub-station at the time of truing up of the tariff allowed for 2019-24 period in respective petitions.”

75. The O&M Expenses allowed as per the norms specified in the 2019 Tariff Regulations for the transmission asset is as follows:

O&M Expenses	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line – Solapur (PG)-Solapur (NTPC) Double Circuit (Bundled Conductor with Four Sub-Conductors)					
Normative Rate of O&M as per Regulation (₹ in lakh per km)	1.322	1.368	1.416	1.466	1.517
Length in km	12.06	12.06	12.06	12.06	12.06
O&M expenses Claimed for Transmission Line (₹ in lakh)	15.94	16.50	17.08	17.68	18.30
400 kV Solapur (NTPC) Sub-station bays 3&4					
Normative Rate of O&M as per Regulation (₹ in lakh per bay)	32.15	33.28	34.45	35.66	36.91
No. of bays	2.00	2.00	2.00	2.00	2.00
O&M expenses for Claimed Sub-stations (₹ in lakh)	64.30	66.56	68.90	71.32	73.82
Total O&M expenses (₹ in lakh)	80.24	83.06	85.98	89.00	92.12

Interest on Working Capital (IWC)

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

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

(a) For Coal-based/lignite-fired thermal generating stations:

- (i) Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;
- (ii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;
- (iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;
- (iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;
- (v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and
- (vi) Operation and maintenance expenses, including water charges and



security expenses, for one month.

(b) For Open-cycle Gas Turbine/Combined Cycle thermal generating stations:

- (i) Fuel cost for 30 days corresponding to the normative annual plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;
- (ii) Liquid fuel stock for 15 days corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;
- (iii) Maintenance spares @ 30% of operation and maintenance expenses including water charges and security expenses;
- (iv) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel; and
- (v) Operation and maintenance expenses, including water charges and security expenses, for one month.

(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.

(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:

Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.

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

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

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



working capital from any outside agency.”

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

(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;”

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	6.69	6.92	7.16	7.42	7.68
Maintenance Spares	12.04	12.46	12.90	13.35	13.82
Receivables	110.39	108.64	106.34	104.04	101.48
Total Working Capital	129.11	128.02	126.40	124.81	122.97
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	15.56	14.40	14.22	14.04	13.83

Annual Fixed Charges for the 2019-24 Tariff Period

78. The transmission charges allowed for the transmission asset for the 2019-24 tariff period are summarised as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	274.47	275.46	275.46	275.46	275.46
Interest on Loan	238.74	218.37	196.93	175.48	154.01
Return on Equity	288.83	289.93	289.93	289.93	289.93
Interest on Working Capital	15.56	14.40	14.22	14.04	13.83
O & M Expenses	80.24	83.06	85.98	89.00	92.12
Total	897.84	881.22	862.52	843.92	825.35



Filing Fee and the Publication Expenses

79. 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

80. The Petitioner has requested to allow it 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 in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner shall also be entitled for recovery of RLDC fee and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

Security Expenses

81. The Petitioner has submitted that security expenses for the transmission asset are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 will 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 the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

82. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. It is observed that the Petitioner has already filed the Petition No.260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

Goods and Services Tax

83. 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 & billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Govt. / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

84. MSEDCL has submitted that the Petitioner has prayed to bill and recover GST on transmission charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, Petitioner has prayed that any taxes including GST and duties including cess etc. imposed by any statutory/ Government/ Municipal authorities shall be allowed to be recovered from the beneficiaries. MSEDCL has submitted that the demand of the Petitioner at this stage is pre-mature. In response, the Petitioner has submitted that currently transmission of electricity by an electric transmission utility is exempted from GST hence the transmission charges currently



charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately.

85. We have considered the submissions of the Petitioner and MSEDCL. GST is not levied on transmission service at present and hence we are of the view that the Petitioner's prayer is premature.

Capital Spares

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

Sharing of Transmission Charges

87. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

88. To summarise, the trued-up Annual Fixed Charges allowed for the transmission asset for the 2014-19 tariff period are as under:

(₹ in lakh)		
Particulars	2017-18 (pro-rata for 182 days)	2018-19
Annual Fixed Charges	449.78	962.40



89. The Annual Fixed Charges allowed for the transmission asset for the 2019-24 tariff period in this order are as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	897.84	881.22	862.52	843.92	825.35

90. This order disposes of Petition No. 33/TT/2020

Sd/
(Arun Goyal)
Member

Sd/
(I. S. Jha)
Member

Sd/
(P. K. Pujari)
Chairperson



ANNEXURE-1**DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION FOR THE 2014-19 PERIOD**

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014 / COD (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)	
		2017-18	2018-19			2017-18	2018-19
Land - Freehold	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	0.00	3.34%	0.00	0.00
Building Civil Works & Colony	45.06	10.33	10.74	66.13	3.34%	1.68	2.03
Transmission Line	3570.39	204.93	435.66	4210.98	5.28%	193.93	210.84
Sub Station	554.52	51.55	61.77	667.84	5.28%	30.64	33.63
PLCC	95.34	13.20	13.94	122.48	6.33%	6.45	7.31
IT Equipment (Incl. Software)	38.86	0.15	0.36	39.37	5.28%	2.06	2.07
Total	4304.17	280.16	522.47	5106.80	Total	234.75	255.88
Average Gross Block (₹ in lakh)						4444.25	4845.56
Weighted Average Rate of Depreciation						5.28%	5.28%



ANNEXURE-2**DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION FOR THE 2019-24 PERIOD**

2019-24 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2019 / COD (₹ in lakh)	Additional Capitalization (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23	2023-24
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	66.13	2.84	0.00	0.00	0.00	0.00	68.97	3.34%	2.26	2.30	2.30	2.30	2.30
Transmission Line	4210.98	35.99	0.00	0.00	0.00	0.00	4246.97	5.28%	223.29	224.24	224.24	224.24	224.24
Sub Station	667.84	0.00	0.00	0.00	0.00	0.00	667.84	5.28%	35.26	35.26	35.26	35.26	35.26
PLCC	122.48	0.00	0.00	0.00	0.00	0.00	122.48	6.33%	7.75	7.75	7.75	7.75	7.75
IT Equipment (Incl. Software)	39.37	0.00	0.00	0.00	0.00	0.00	39.37	15.00%	5.91	5.91	5.91	5.91	5.91
Total	5106.80	38.83	0.00	0.00	0.00	0.00	5145.63	Total	274.47	275.46	275.46	275.46	275.46
Average Gross Block (₹ in lakh)									5126.21	5145.63	5145.63	5145.63	5145.63
Weighted Average Rate of Depreciation									5.35%	5.35%	5.35%	5.35%	5.35%

