

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 447/TT/2020

Coram:

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

Date of Order: 03.01.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of the transmission tariff of the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for LILO of both circuits of Mundra UMPP–Limbdi 400 kV D/C line (triple snowbird) at Bachau Sub-station along with extension of 400 kV Bachau Sub-station under “Transmission System Strengthening associated with Mundra UMPP (Part-A)” in Western Region.

And in the matter of:

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

...Petitioner

Vs.

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



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

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

For Respondents : Shri Anindya Khare, MPPMCL

ORDER

The Petitioner, Power Grid Corporation of India Ltd., a deemed transmission licensee, has filed the instant petition for trueing up of transmission tariff for the period from COD to 31.3.2019 under the Central Electricity Regulatory Commission (Terms



and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the Asset-I: LILO of both circuits of Mundra UMPP–Limbdli 400 kV D/C line (triple snowbird) at Bachau Sub-station along with extension of 400 kV Bachau Sub-station (hereinafter referred to as “transmission asset”) under the “Transmission System Strengthening associated with Mundra UMPP (Part-A)” (hereinafter referred to as “the transmission project”) in Western Region.

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

“1) Allow the add cap for 2014-19 and 2019-24 tariff block as claimed as per Para 5 and 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 respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

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

(a) The Investment Approval (IA) and expenditure sanction for the transmission project was accorded by the Board of Directors of the Petitioner company vide Memorandum No. C/CP/UMPP Part-A dated 12.1.2016 at an estimated cost of ₹ 24419 lakh, including an IDC of ₹ 1509 lakh based on August 2015 price level.

(b) The scope of work covered under the transmission project is as follows:

- (i) LILO of both circuits of Mundra UMPP-Limbdi 400 kV D/C line (triple snowbird) at Bachau Sub-station.
- (ii) Extension of 400 kV Bachau Sub-Station-Line bays: 4nos.

(c) The entire scope of work under the transmission project has been completed and is covered under the instant petition.

(d) The transmission asset was scheduled to be put into commercial operation within 30 months from the date of IA (12.1.2016) i.e. by 12.7.2018.

(e) The details of scheduled commercial operation date (SCOD), date of commercial operation (COD) and time over-run are as follows:



SCOD	COD	Time over-run
12.7.2018	30.10.2017	-

(f) The transmission tariff in respect of the transmission asset was allowed by the Commission from its COD to 31.3.2019 vide order dated 29.6.2018 in Petition No.196/TT/2017.

(g) The Annual Fixed Charges (AFC) allowed by the Commission vide order dated 29.6.2018 in Petition No.196/TT/2017 and trued-up tariff claimed by the Petitioner in respect of the transmission asset for the 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
AFC allowed vide order dated 29.6.2018 in Petition No.196/TT/2017	1070.41	2929.50
AFC claimed by the Petitioner based on truing up in the instant petition	1081.01	2755.90

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

5. The Petitioner has served the petition on the Respondents and notice of this application has also been published in the newspapers in accordance with Section 64 of the Electricity Act 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Madhya Pradesh Power Management Company Limited (MPPMCL) has filed its reply vide affidavit dated 5.6.2020 and has raised issues of grossing up of RoE and effects of CGST. In response, the Petitioner has filed its rejoinder to MPPMCL's reply vide affidavit dated 28.8.2020.



6. The hearing in this matter was held on 10.9.2021 through video conference and the order was reserved.

7. Having heard the representative of the Petitioner and having perused the materials on record, we proceed to dispose of the petition.

8. This order is issued considering the submissions made by the Petitioner in the petition, affidavits dated 4.10.2021, 28.6.2021, MPPMCL's reply filed vide affidavit 5.6.2020 and the Petitioner's rejoinder filed vide affidavit dated 28.8.2020.

9. It has been placed before us that MPPMCL has been raising the same issues in other petitions as well despite clear findings of the Commission rejecting the contentions of MPPMCL. The contentions of MPPMCL regarding RoE have been rejected by the Commission in other petitions including Petition No. 348/TT/2019. As MPPMCL has not challenged the findings, the same have attained finality. In view of these, the pleas raised by MPPMCL regarding grossing up of RoE are rejected. Further, MPPMCL's submissions, Petitioner's clarifications thereto and the Commission's findings on the issue of RoE have not been repeated herein for the sake of brevity.

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

10. The details of the trued-up transmission charges claimed by the Petitioner in respect of the transmission asset are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
Depreciation	300.46	780.52
Interest on Loan	301.74	746.73
Return on Equity	333.68	869.06



Interest on working capital	26.20	66.49
O&M Expenses	118.93	293.10
Total	1081.01	2755.90

11. The details of the trued-up IWC claimed by the Petitioner in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2017-18 (Pro-rata for 153 days)	2018-19
O&M Expenses	23.64	24.43
Maintenance Spares	42.56	43.97
Receivables	429.81	459.32
Total	496.01	527.72
Rate of Interest (%)	12.60	12.60
Interest on Working Capital	62.50	66.49

Capital Cost

12. The Commission vide order dated 29.6.2018 in Petition No.196/TT/2017 had allowed the capital cost as on COD and ACE up to 31.3.2019. The details are as follows:

(₹ in lakh)

Approved Cost (FR)	Capital Cost allowed (as on COD)	ACE		Total Capital Cost (as on 31.3.2019)
		2017-18	2018-19	
24418.19	12433.55	1860.49	3004.22	17298.26

13. The Petitioner has submitted that the capital cost as on COD and estimated ACE incurred or projected to be incurred for the transmission asset as per Auditor's Certificate dated 31.7.2019 is as follows:

(₹ in lakh)

Apportioned Approved Cost (FR)	Capital Cost (as on COD)	ACE		Total Capital Cost (as on 31.3.2019)
		2017-18	2018-19	
24418.19	12732.01	1866.37	227.11	14825.49



Cost Over-run

14. The Petitioner has claimed capital cost of ₹12732.01 lakh for the transmission asset as on COD.

15. The total completion cost including ACE in respect of the transmission asset is ₹14825.49 lakh and the approved cost is ₹24418.19 lakh. Hence, the completion cost in respect of the transmission asset is within the approved FR cost and, therefore, there is no cost over-run with regard to the transmission asset.

Time Over-run

16. As per the IA, the transmission asset was scheduled to be put under commercial operation within 30 months from the date of IA, which is 12.1.2016. Accordingly, the scheduled date of commercial operation was 12.7.2018 against which the transmission asset was put into commercial operation on 30.10.2017. Therefore, there is no time over-run in commercial operation of the transmission asset.

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

17. The Petitioner has claimed IDC in respect of the transmission asset and has submitted the Auditor's Certificates dated 31.7.2019 in support of the same. The Petitioner has submitted the computation of IDC along with year-wise details of the IDC discharged.

18. The allowable IDC has been worked out considering the information submitted by the Petitioner in respect of the transmission asset separately on cash basis. The loan details submitted in Form-9C for 2014-19 tariff period and IDC computation



sheet have been considered for the purpose of IDC calculation on cash basis and accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.

19. Accordingly, based on the information furnished by the Petitioner, IDC considered, is as follows:

(₹ in lakh)

IDC (as per Auditor's Certificate)	IDC Admissible	IDC Discharged (as on COD)	IDC Un-discharged (as on COD)	IDC Discharged	
				2017-18	2018-19
A	B	C	D=B-C		
458.66	458.66	160.20	298.46	198.05	100.41

20. The Petitioner has claimed IEDC of ₹184.24 lakh for the transmission asset and has submitted Auditor's Certificate in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the transmission asset. Accordingly, IEDC of ₹184.24 lakh has been allowed for the transmission asset.

Initial Spares

21. Initial Spares are provided in Regulation 13(d) of the 2014 Tariff Regulations subject to the following ceiling norms:

- “(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%*
-”*

22. The Petitioner has claimed the Initial Spares in respect of the transmission asset as follows:



(₹ in lakh)

Particulars	Estimated Completion Cost (A)	Initial Spares Claimed (B)	Ceiling Limit (in %) (C)	Initial Spares Worked Out	Excess Initial Spares
				$D=[(A-B)*C/(100-C)]$	
Sub-station	2243.75	134.49	6.00	134.63	0.00
Transmission Line	13474.24	134.00	1.00	134.75	0.00

23. We have considered the submissions of the Petitioner. The Initial Spares are allowable subject to the ceiling specified in Regulation 13(d) of the 2014 Tariff Regulations. The Petitioner's claim of Initial Spares is within the ceiling specified in Regulation 13(d) of the 2014 Tariff Regulations. Accordingly, the details of the Initial Spares allowed in respect of the transmission asset for the 2014-19 tariff period are as follows:

Sub-station

(₹ in lakh)

P&M cost considered as on cut- off date	Initial Spares claimed	Norms as per 2014 Tariff Regulations (in %)	Initial Spares allowable as per 2014 Tariff Regulations	Initial Spares allowed	Discharge of Initial Spares
					As on COD
2243.75	134.49	6.00	134.63	134.49	134.49

Transmission Line

(₹ in lakh)

P&M cost considered as on cut- off date	Initial Spares claimed	Norms as per 2014 Tariff Regulations (in %)	Initial Spares allowable as per 2014 Tariff Regulations	Initial Spares allowed	Discharge of Initial Spares
					As on COD
13474.24	134.00	1.00	134.75	134.00	134.00

Capital Cost allowed as on COD

24. Accordingly, the capital cost allowed as on COD is summarized as follows:

(₹ in lakh)

Capital Cost (as on	Less: IDC as on COD due to	Less: Disallowed IEDC	Less: Excess Initial Spares	Capital Cost (as on COD-



COD as per Auditor's Certificate)	IDC Disallowed	Un-discharged IDC		Disallowed	on cash basis)
12732.01	0.00	298.46	0.00	0.00	12433.55

Additional Capital Expenditure (ACE)

25. The Commission vide order dated 29.6.2018 in Petition No.196/TT/2017 had allowed ACE in respect of the transmission asset for the 2014-19 tariff period as follows:

(₹ in lakh)		
Particulars	2017-18	2018-19
ACE	1860.49	3004.22

26. The Petitioner has claimed the following ACE and has submitted Auditor's Certificate dated 31.7.2019 in support of the same:

(₹ in lakh)		
Particulars	2017-18	2018-19
ACE	1866.37	227.11

27. The Petitioner has submitted that ACE in 2014-19 has been claimed under Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations and the same is within the cut-off date.

28. We have considered the submissions of Petitioner. The un-discharged IDC as on COD have been allowed as ACE during the year of discharge. ACE claimed by the Petitioner has been allowed under Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations which pertain to balance and retention payment due to un-discharged liabilities for works executed before cut-off date/ work deferred for execution. Accordingly, ACE allowed for the 2014-19 tariff period is as follows:

Particulars	(₹ in lakh)	
	ACE Allowed	
	2017-18	2018-19
Balance & Retention Payment for liabilities	991.72	56.40



Work deferred for execution	874.65	170.71
IDC Discharged after COD	198.05	100.41

29. The capital cost allowed vide order dated 29.6.2018 in Petition No. 196/TT/2017, claimed in the instant petition and trued-up capital cost approved as on 31.3.2019 after inclusion of ACE in respect of the transmission asset is as follows :

(₹ in lakh)				
Particulars	Capital cost as on COD on cash basis	ACE 2017-18	ACE 2018-19	Total Capital cost including ACE as on 31.3.2019
Allowed vide order dated 29.6.2018 in Petition No. 196/TT/2017	12433.55	1860.49	3004.22	17298.26
Claimed by the Petitioner in the instant petition	12732.01	1866.37	227.11	14825.49
Approved after truing up in this Order	12433.55	2064.43	327.52	14825.50

Debt-Equity Ratio

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

Funding	Capital Cost (as on COD) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)
Debt	8703.49	70.00	10377.86	70.00
Equity	3730.06	30.00	4447.65	30.00
Total	12433.55	100.00	14825.50	100.00

Depreciation

31. The depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during the 2014-



19 tariff period. The Gross Block during the 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD). WAROD at Annexure-I has been worked out after taking into account the depreciation rates of asset as specified in the 2014 Tariff Regulations and depreciation allowed during the 2014-19 tariff period is as under:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
Opening Gross Block	12433.55	14497.98
ACE	2064.43	327.52
Closing Gross Block	14497.98	14825.50
Average Gross Block	13465.77	14661.74
Weighted average rate of Depreciation (WAROD) (in %)	5.29	5.29
Lapsed useful life of the Asset-at the beginning of the year (Year)	0	0
Balance useful life of the Asset - at the beginning of the year (Year)	33	33
Aggregated Depreciable Value	12119.19	13195.57
Depreciation during the year	298.44	775.29
Remaining Aggregated Depreciable Value	11820.75	12121.84

32. The details of the depreciation allowed in respect of the transmission asset vide order dated 29.6.2018 in Petition no.196/TT/2017, as claimed by the Petitioner in the instant petition and as trued-up in the instant order are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
Allowed vide order dated 29.6.2018 in Petition No. 196/TT/2017	295.88	833.55
Claimed by the Petitioner in the instant petition	300.47	780.52
Approved after true-up in this order	298.44	775.29

Interest on Loan (IoL)

33. The Petitioner has claimed the Weighted Average Rate of IoL based on its actual loan portfolio and rate of interest. Accordingly, IoL is calculated based on



actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations.

The details of IoL allowed are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
Gross Normative Loan	8703.49	10148.59
Cumulative Repayments up to Previous Year	0.00	298.44
Net Loan-Opening	8703.49	9850.15
Addition due to ACE	1445.10	229.26
Repayment during the year	298.44	775.29
Net Loan-Closing	9850.15	9304.13
Average Loan	9276.82	9577.14
Weighted Average Rate of Interest on Loan (in %)	7.76	7.80
Interest on Loan	301.78	747.09

34. The details of IoL allowed vide order dated 29.6.2018 in Petition No. 196/TT/2017, claimed by the Petitioner in the instant petition and trued-up in this order are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 27 days)	2018-19
Allowed vide order dated 29.6.2018 in Petition No. 196/TT/2017	300.22	804.03
Claimed by the Petitioner in the instant petition	301.74	746.73
Approved after true-up in this order	301.78	747.09

Return on Equity (RoE)

35. The Petitioner has claimed RoE in respect of 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 the following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax (in %)	Grossed up RoE [(Base Rate)/(1-t)] (in %)
2014-15	21.018	19.625



2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

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

Year	Notified MAT rates (%) (inclusive of surcharge & cess)	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 MAT rates as allowed vide order dated 27.4.2020 in Petition No. 274/TT/2019 for the purpose of grossing up of the rate of RoE for truing up of the tariff of 2014-19 period in terms of the provisions of the 2014 Tariff Regulations are considered in the instant case which are as follows:

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

38. Accordingly, RoE allowed in respect of the transmission asset is as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
Opening Equity	3730.06	4349.39
Addition due to ACE	619.33	98.26
Closing Equity	4349.39	4447.65
Average Equity	4039.72	4398.52
Return on Equity (Base Rate) (in %)	15.500	15.500
Tax Rate applicable (in %)	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.758



Particulars	2017-18 (Pro-rata for 153 days)	2018-19
Return on Equity (Pre-tax)	333.68	869.06

39. The details of RoE allowed vide order dated 29.6.2018 in Petition No.196/TT/2017, as claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153 days)	2018-19
Allowed vide order dated 29.6.2018 in Petition No.196/TT/2017	329.55	929.29
Claimed by the Petitioner in the instant petition	333.68	869.06
Approved after true-up in this order	333.68	869.06

Operation & Maintenance Expenses (O&M Expenses)

40. The Commission vide RoP for hearing dated 10.9.2021 had directed the Petitioner to clarify the configuration and length of the line as mentioned in Petition No. 196/TT/2017 and in the present petition and the reasons for the deviation. In response, the Petitioner vide affidavit dated 4.10.2021 has submitted that at the time of determination of tariff for the 2014-19 tariff period vide order dated 29.6.2018 in Petition No.196/TT/2017, the length of the line was projected as 20.18 km {17.36 km (DC) and 2.82 km (MC)} and the O&M expenses were claimed accordingly. The Commission vide order dated 29.6.2018 in Petition No.196/TT/2017 had admitted the O&M expenses for 20.18 km [17.36 km (DC) and 2.82 km (MC)].

41. We have considered the submissions of the petitioner. We have perused the CEA energization certificate dated 26.10.2017, wherein the total length of the line is mentioned as 22.650 km and the Petitioner had submitted the same CEA energization certificate in Petition No.196/TT/2017 also. Taking cognizance of the



CEA energization certificate, the line length of 22.65 km [18.24 km (DC) and 4.41 km (MC)] is considered for determination of O&M expenses. The details of the O&M Expenses allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of tariff are as follows:

(₹ in lakh)		
Particulars	2017-18 (Pro-rata for 153 days)	2018-19
Transmission Line		
LILO of Mundra Umpp-Limbdi	18.24	18.24
LILO of Mundra Umpp-Limbdi	4.41	4.41
Norm (₹ lakh/ km)		
D/C Twin/Triple Conductor	0.78	0.81
M/C Twin/Triple Conductor	1.37	1.41
Total Transmission Expenses	20.26	20.93
Sub-station		
Bachau: Mundra Bay I and Bay II	2	2
Bachau: Limbdi Bay I and Bay II	2	2
Norm (₹ lakh/ bay)		
400 kV	66.51	68.71
Total Sub-station Expenses	266.04	274.84
Total O&M Expenses	120.01	295.77

42. The details of O&M Expenses allowed vide order dated 29.6.2018 in Petition No.196/TT/2017, O&M Expenses claimed by the Petitioner in the instant petition and trued-up O&M Expenses allowed in the instant order are as follows:

(₹ in lakh)		
Particulars	2017-18 (Pro-rata for 153 days)	2018-19
Allowed vide order dated 29.6.2018 in Petition No.196/TT/2017	118.79	292.51
Claimed by the Petitioner in the instant petition	118.92	293.10
Approved after true-up in this order	120.01	295.77

Interest on Working Capital (IWC)

43. The Petitioner has claimed IWC in terms of Regulation 28 of the 2014 Tariff Regulations. The Petitioner is entitled to IWC as per Regulation 28 of the 2014 Tariff



Regulations.

44. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and the same is allowed in respect of the transmission asset as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153days)	2018-19
Working Capital for O&M Expenses (O&M Expenses for One month)	23.86	24.65
Working Capital for Maintenance Spares (15% of O&M Expenses)	42.95	44.37
Working Capital for Receivables (Equivalent to Two months of annual fixed cost /annual transmission charges)	429.46	458.96
Total Working Capital	496.26	527.97
Rate of Interest on working capital (in %)	12.60	12.60
Interest on working Capital	26.21	66.52

45. The details of IWC allowed vide order dated 29.6.2018 in Petition No.196/TT/2017, IWC claimed by the Petitioner and trued-up IWC allowed in the instant order is as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153days)	2018-19
Allowed vide order dated 29.6.2018 in Petition No.196/TT/2017	25.97	70.12
Claimed by the Petitioner in the instant petition	26.20	66.49
Approved after true-up in this order	26.21	66.52

Approved Annual Fixed Charges for the 2014-19 Tariff Period

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

Particulars	(₹ in lakh)	
	2017-18	2018-19



	(Pro-rata for 153 days)	
Depreciation	298.44	775.29
Interest on Loan	301.78	747.09
Return on Equity	333.68	869.06
Operation and Maintenance	120.01	295.77
Interest on Working Capital	26.21	66.52
Total	1080.12	2753.74

47. Accordingly, AFC allowed vide order dated 29.6.2018 in Petition No. 196/TT/2017, trued-up AFC claimed by the Petitioner in the instant petition and trued-up AFC approved in the instant order are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153days)	2018-19
Allowed vide order dated 29.6.2018 in Petition No.196/TT/2017	1070.51	2929.50
Claimed by the Petitioner in the instant petition	1081.01	2755.90
Approved after true-up in this order	1080.12	2753.74

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

48. The Petitioner has claimed the following transmission charges in respect of the transmission asset for the 2019-24 tariff period:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	833.73	878.26	878.26	878.26	878.26
Interest on Loan	744.10	723.25	653.39	583.57	513.95
Return on Equity	929.66	980.55	980.55	980.55	980.55
Interest on Working Capital	44.37	45.83	45.02	44.21	43.30
O&M Expenses	152.86	158.09	163.49	169.08	174.85
Total	2704.72	2785.98	2720.71	2655.67	2590.91

49. The Petitioner has claimed the following IWC in respect of the transmission asset for the 2019-24 tariff period:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for One month)	12.74	13.17	13.62	14.09	14.57



Working Capital for Maintenance Spares (15% of O&M Expenses)	22.93	23.71	24.52	25.36	26.23
Working Capital for Receivables (Equivalent to Two months of annual fixed cost /annual transmission charges)	332.55	343.48	335.43	327.41	318.56
Total Working Capital	368.22	380.36	373.57	366.86	359.36
Rate of Interest on working capital (in %)	12.05	12.05	12.05	12.05	12.05
Interest on working Capital	44.37	45.83	45.02	44.21	43.30

Capital Cost

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

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

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

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



environment clearance for the project;
(n) Expenditure on account of change in law and force majeure events;
and
(o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

- (3) The Capital cost of an existing project shall include the following:*
- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly tried up by excluding liability, if any, as on 1.4.2019;*
 - (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
 - (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
 - (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
 - (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
 - (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”*
- (4) The capital cost in case of existing or new hydro generating station shall also include:*
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
 - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*
- (5) The following shall be excluded from the capital cost of the existing and new projects:*
- (a) The Asset-forming part of the project, but not in use, as declared in the tariff petition;*
 - (b) De-capitalised Asset-after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*

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

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



concerned asset.

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

51. The Petitioner has claimed the capital cost of ₹14825.49 lakh as on 31.3.2019 in respect of the transmission asset. The same has been worked out by the Commission as on 31.3.2019 and is, therefore, considered as the opening capital cost as on 1.4.2019 for determination of tariff for the 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

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

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

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

(a) Undischarged liabilities recognized to be payable at a future date;

(b) Works deferred for execution;

(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;

(d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;

(e) Change in law or compliance of any existing law; and

(f) Force Majeure events:

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and



cumulative depreciation of the assets replaced on account of de-capitalization.

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

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

(1) The ACE incurred or projected to be incurred in respect of an existing project or a

new project on the following counts within the original scope of work and after the cutoff date may be admitted by the Commission, subject to prudence check:

a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;

b) Change in law or compliance of any existing law;

c) Deferred works relating to ash pond or ash handling system in the original scope of work;

d) Liability for works executed prior to the cut-off date;

e) Force Majeure events;

f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and g) Raising of ash dyke as a part of ash disposal system.

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

(a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;

(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;

(c) The replacement of such asset or equipment is necessary on account of

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

53. The Petitioner has projected ACE for 2019-20 period on account of balance and retention payments due to undischarged liability projected for works executed



within the cut-off date and unexecuted works within cuff-off date. The details of the projected ACE in respect of the transmission asset are as follows:

(₹ in lakh)	
Particulars	2019-20
ACE	1717.09

54. We have considered the submissions of the Petitioner. ACE claimed on account of balance and retention payments and deferred works is allowed under Regulation 24(1)(a) of the 2019 Tariff Regulations subject to truing-up as follows:

(₹ in lakh)	
Particulars	ACE
	2019-20
Balance & Retention Payment	1717.09

Capital Cost for the 2019-24 Tariff Period

55. Capital cost of the transmission asset considered for the 2019-24 tariff period is as follows:

(₹ in lakh)		
Capital Cost (as on 1.4.2019)	Admitted ACE 2019-20	Capital Cost (as on 31.3.2024)
14825.50	1717.09	16542.59

Debt-Equity Ratio

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

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

Provided that:

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



considered as a part of capital structure for the purpose of debt: equity ratio.

Explanation.-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilized 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 modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.

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

57. The details of debt-equity considered for the purpose of computation of tariff for the 2019-24 period for the transmission asset are as follows:



Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Total Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	10377.86	70.00	11579.82	70.00
Equity	4447.65	30.00	4962.77	30.00
Total	14825.50	100.00	16542.59	100.00

Depreciation

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

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

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

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

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

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

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

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

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

(4) *Land other than the land held under lease and the land for reservoir in case of*



hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

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

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

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

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

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

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

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

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

b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or

c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”

59. We have considered the submissions of the Petitioner. WAROD at Annexure-



It has been worked out after taking into account the depreciation rates as specified in the 2019 Tariff Regulations. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed in respect of the transmission asset is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	14825.50	16542.59	16542.59	16542.59	16542.59
Addition during the year 2019 -24 due to projected ACE	1717.09	0.00	0.00	0.00	0.00
Closing Gross Block	16542.59	16542.59	16542.59	16542.59	16542.59
Average Gross Block	15684.05	16542.59	16542.59	16542.59	16542.59
Weighted average rate of Depreciation (WAROD) (%)	5.32	5.31	5.31	5.31	5.31
Lapsed useful life at the beginning of the year	1	2	3	4	5
Balance useful life at the beginning of the year (Year)	32	31	30	29	28
Aggregated Depreciable Value	14121.05	14893.74	14893.74	14893.74	14893.74
Combined Depreciation during the year	833.73	878.25	878.25	878.25	878.25
Aggregate Cumulative Depreciation at the end of the year	1907.46	2785.71	3663.96	4542.21	5420.46
Remaining Aggregate Depreciable Value at the end of the year	12213.59	12108.03	11229.78	10351.53	9473.28

Interest on Loan (IoL)

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

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

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

(3) The repayment for each of the year of the tariff period 2019-24 shall be



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

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

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

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

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

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

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

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

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

(₹ in lakh)



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	10377.86	11579.82	11579.82	11579.82	11579.82
Cumulative Repayments up to Previous Year	1073.73	1907.46	2785.71	3663.96	4542.21
Net Loan-Opening	9304.13	9672.36	8794.11	7915.86	7037.61
Addition due to ACE	1201.96	0.00	0.00	0.00	0.00
Repayment during the year	833.73	878.25	878.25	878.25	878.25
Net Loan-Closing	9672.36	8794.11	7915.86	7037.61	6159.36
Average Loan	9488.25	9233.24	8354.99	7476.74	6598.49
Weighted Average Rate of Interest on Loan (in %)	7.848	7.839	7.827	7.813	7.798
Interest on Loan	744.67	723.82	653.96	584.13	514.53

Return on Equity (RoE)

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

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

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

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

Provided further that:

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

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



continues;

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

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

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

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

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

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

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

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.”

63. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. The MAT rate applicable in 2019-20 has been considered for the purpose of RoE which will be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the transmission asset is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	4447.65	4962.77	4962.77	4962.77	4962.77
Addition due to ACE	515.13	0.00	0.00	0.00	0.00
Closing Equity	4962.77	4962.77	4962.77	4962.77	4962.77
Average Equity	4705.21	4962.77	4962.77	4962.77	4962.77
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	17.470	17.470	17.470	17.470	17.470
Rate of Return on Equity (Pre-tax)	18.780	18.780	18.780	18.780	18.780
Return on Equity (Pre-tax)	883.73	932.11	932.11	932.11	932.11

Operation & Maintenance Expenses (O&M Expenses)

64. The O&M Expenses claimed by the Petitioner in respect of the transmission asset is as follows:



(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line					
LILO of Mundra UMPP-LIMBDI	18.24	18.24	18.24	18.24	18.24
LILO of Mundra UMPP-LIMBDI	4.41	4.41	4.41	4.41	4.41
Norm (₹ lakh/km)					
D/C Twin/Triple Conductor	0.881	0.912	0.944	0.977	1.011
M/C Twin/Triple Conductor	1.544	1.598	1.654	1.713	1.773
Total Transmission Expense	22.88	23.68	24.51	25.37	26.26
Sub-station Bays					
Bachau: Mundra Bay I and II	2	2	2	2	2
Bachau: Limbdi Bay I and II	2	2	2	2	2
Norm (₹ lakh/bay)					
400 kV	32.15	33.28	34.45	35.66	36.91
Total Sub-station O&M Expenses	128.60	133.12	137.80	142.64	147.64
Communication System					
PLCC (₹ in lakh)	215.64	215.64	215.64	215.64	215.64
Norms (in %)	2	2	2	2	2
Total Communication System	4.31	4.31	4.31	4.31	4.31
Total O&M Expenses	155.79	161.11	166.63	172.33	178.21

65. Regulations 35(3)(a) and 35(4) of the 2019 Tariff Regulations provide as follows:

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

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



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

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

Provided further that:

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



- iii. *the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
- iv. *the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;*
- v. *the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*
- vi. *the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*

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

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

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

*(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."*

66. We have considered the submissions of the Petitioner. 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.

67. The O&M Expenses allowed in respect of the transmission asset are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line					
LILO of Mundra UMPP-LIMBDI	18.24	18.24	18.24	18.24	18.24
LILO of Mundra UMPP-LIMBDI	4.41	4.41	4.41	4.41	4.41
Norm (₹ lakh/km)					
D/C Twin/Triple Conductor	0.881	0.912	0.944	0.977	1.011
M/C Twin/Triple Conductor	1.544	1.598	1.654	1.713	1.773
Total Transmission Expense	22.88	23.68	24.51	25.37	26.26
Sub-station Bays					
Bachau: Mundra Bay I and II	2	2	2	2	2
Bachau: Limbdi Bay I and II	2	2	2	2	2
Norm (₹ lakh/bay)					
400 kV	32.15	33.28	34.45	35.66	36.91
Total Sub-station O&M Expenses	128.60	133.12	137.80	142.64	147.64
Total O&M Expenses	151.48	156.80	162.31	168.01	173.90

Interest on Working Capital (IWC)

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

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

.....

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

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

(ii) Maintenance spares @ 15% of operation and maintenance



expenses including security expenses; and

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

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

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

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

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

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

69. The Petitioner has submitted that it has computed IWC for 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 IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20 and 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-24. The components of the working capital and interest allowed thereon in respect of the transmission asset are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M expenses for One month)	12.62	13.07	13.53	14.00	14.49



Working Capital for Maintenance Spares (15% of O&M expenses)	22.72	23.52	24.35	25.20	26.08
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	326.71	336.95	328.57	320.58	311.78
Total Working Capital	362.05	373.53	366.45	359.79	352.35
Rate of Interest on Working Capital (in %)	12.05	11.25	10.50	10.50	10.50
Interest on working capital	43.63	42.02	38.48	37.78	37.00

Annual Fixed Charges for the 2019-24 Tariff Period

70. The transmission charges allowed in respect of the transmission asset for the 2019- 24 tariff period are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	833.73	878.25	878.25	878.25	878.25
Interest on Loan	744.67	723.82	653.96	584.13	514.53
Return on Equity	883.73	932.11	932.11	932.11	932.11
Operation and Maintenance	151.48	156.80	162.31	168.01	173.90
Interest on Working Capital	43.63	42.02	38.48	37.78	37.00
Total	2657.23	2733.00	2665.11	2600.28	2535.78

Filing Fee and Publication Expenses

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

72. Regulation 70(1) of the 2019 Tariff Regulations provides for reimbursement of filing fees and publication expenses paid by the Petitioner. Accordingly, 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 and RLDC Fees and Charges

73. The Petitioner shall be entitled for reimbursement of license fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 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 2019-24 tariff period.

Goods and Services Tax

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

75. MPPMCL has submitted that the claim of GST is premature at this stage and need not be considered at this juncture.

76. In response PGCIL submitted that under CGST Act, 2017 implemented w.e.f. 1.7.2017, the Government of India has exempted the charges of transmission of electricity vide notification no. 12/2017 - Central Tax (Rate) dated Order in Petition No.8/TT/2020 Page 40 of 45 28.6.2017 at serial no. 25 under the heading 9969 "Transmission or distribution of electricity by an electric transmission or distribution utility" by giving applicable GST rate as NIL. Hence, the transmission charges claimed in the instant petition is exclusive of GST. Further, if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the



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

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

Security Expenses

78. The Petitioner has submitted that security expenses in respect of 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.

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

Capital Spares

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



Sharing of Transmission Charges

81. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. With effect from 1.11.2020, sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of the DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of the transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations

82. To summarise,

(a) The trued-up AFC approved in respect of the transmission asset for 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata for 153days)	2018-19
Annual Fixed Charges	1080.12	2753.74

(b) AFC allowed in respect of the transmission asset for the 2019-24 tariff period in the instant order are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charge	2657.23	2733.00	2665.11	2600.28	2535.78

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



84. This order disposes of Petition No. 447/TT/2020 in terms of the above discussions and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(P.K. Pujari)
Chairperson



Petition No.	447/TT/2020
Period	2014-19 Tariff

Annexure – I

Asset-I

2014-19 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
		2017-18	2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Building	55.62	0.89	0.45	56.97	3.34	-	-	-	1.88	1.90
Transmission Line	10450.94	1866.42	138.39	12455.75	5.28	-	-	-	601.08	654.01
Substation	1700.03	157.81	185.25	2043.09	5.28	-	-	-	93.92	102.98
PLCC	181.39	31.19	3.06	215.64	6.33	-	-	-	12.47	13.55
IT Equipment & Software	45.57	8.12	0.37	54.06	5.28	-	-	-	2.62	2.84
TOTAL	12433.55	2064.43	327.52	14825.50		-	-	-	711.97	775.29
Average Gross Block (₹ in lakh)						-	-	-	13465.77	14661.74
Weighted Average Rate of Depreciation (%)						-	-	-	5.29	5.29



Petition No.	447/TT/2020
Period	2019-24 Tariff

Annexure – II

2019-24 Capital Expenditure as on 1.4.2019	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-20	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
					2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Building	56.97	83.08	140.05	3.34	3.29	4.68	4.68	4.68	4.68
Transmission Line	12455.75	1562.77	14018.52	5.28	698.92	740.18	740.18	740.18	740.18
Substation	2043.09	71.24	2114.33	5.28	109.76	111.64	111.64	111.64	111.64
PLCC	215.64	0.00	215.64	6.33	13.65	13.65	13.65	13.65	13.65
IT Equipment & Software	54.06	0.00	54.06	15.00	8.11	8.11	8.11	8.11	8.11
TOTAL	14825.50	1717.09	16542.59		833.73	878.25	878.25	878.25	878.25
Average Gross Block (₹ in lakh)					15684.05	16542.59	16542.59	16542.59	16542.59
Weighted Average Rate of Depreciation (%)					5.32	5.31	5.31	5.31	5.31

