

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 140/TT/2020

Coram:

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

Date of Order : 22.07.2021

In the Matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and trueing-up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Combined Asset consisting of **Asset-I:** 315 MVA, 400/220/33 kV 3-phase Spare ICT at Raipur Sub-station; **Asset-II:** 315 MVA, 400/220/33 kV 3-Phase Spare ICT at Pune Sub-station; **Asset-III:** 420 kV, 80 MVAR 3-Phase Shunt Reactor at Wardha Sub-station; **Asset-IV:** 315 MVA, 400/220/33 kV 3-Phase Spare Transformer at Dehgam Sub-station; **Asset-V:** 315 MVA, 400/220/33 kV 3-Phase Spare Transformer at Jabalpur; **Asset-VI:** 400 kV, 125 MVAR 3-Phase Spare Reactor at Itarsi under Provision of Spare ICTs and Reactors 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

Vs.

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 Co. Ltd.,
Hongkong Bank Building, 3rd Floor,
M.G. Road, Fort, Mumbai-400 001.
5. Maharashtra State Electricity Transmission Co. 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,
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 Ltd.,
Vidyut Bhawan, 66 kV Road, Near Secretariat Amli,
Silvassa-396230.
10. Chhattisgarh State Power Transmission Co. Ltd.,
Office of the Executive Director (C&P),
State Load Despatch Building,
Dangania, Raipur-492013.
11. Chhattisgarh State Power Distribution Co. Ltd.,
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh-492013.

...Respondent(s)

For Petitioner: Shri S. S. Raju, PGCIL
Shri B. Dash, PGCIL
Shri V. P. Rastogi, PGCIL
Shri A. K. Verma, PGCIL

For Respondent: Shri Anindya Khare, MPPMCL



ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd., a deemed transmission licensee, for trueing up of capital expenditure of the period from 1.4.2014 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 for determination of tariff from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following transmission assets (combined during 2014-19 period and hereinafter collectively referred to as “the Combined Asset”) under Provision of Spare ICTs and Reactors in Western Region (hereinafter referred to as “the transmission project’):

Asset-I: 315 MVA, 400/220/33 kV 3-phase Spare ICT at Raipur Sub-station;

Asset-II: 315 MVA, 400/220/33 kV 3-Phase Spare ICT at Pune Sub-station;

Asset-III: 420 kV, 80 MVAR 3- Phase Shunt Reactor at Wardha Sub-station;

Asset-IV: 315 MVA, 400/220/33 kV 3-Phase Spare Transformer at Dehgam Sub-station;

Asset-V: 315 MVA, 400/220/33 kV 3-Phase Spare Transformer at Jabalpur; and

Asset-VI: 400 kV, 125 MVAR 3- Phase Spare Reactor at Itarsi.

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

“1) Approve the trueed up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 8 and 9 above.

2) Allow the add cap for 2014-19 tariff block as claimed as per Para 5.7 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 8 and 9 above for respective block.

4) 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.

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

6) 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 9.6 above.

7) 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 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) for the transmission project was accorded by the Board of Directors of the Petitioner company *vide* Memorandum No. C/CP/Spare ICTs & Reactors *vide* letter dated 4.8.2011 at an estimated cost of ₹6409 lakh (Western Region), which included IDC of ₹173 lakh based on 1st quarter 2011 price level. The transmission project was approved by the Western Region (WR) constituents during 15th WRPC meeting held on 12.11.2010.

b) The scope of work covered under the transmission project includes:

Asset No.	Assets' Description
Asset-I	315 MVA, 400/220/33 kV 3-phase Spare ICT at Raipur sub-station
Asset-II	315 MVA, 400/220/33 kV 3-phase Spare ICT at Pune sub-station
Asset-III	420 kV, 80 MVAR 3-phase shunt reactor at Wardha sub-station
Asset-IV	315 MVA, 400/220/33 kV 3-phase Spare transformer at Dehgam sub-station
Asset-V	315 MVA, 400/220/33 kV 3-phase Spare transformer at Jabalpur
Asset-VI	400 kV, 125 MVAR 3-phase Spare Reactor at Itarsi under provision of Spare ICTs and Reactors



c) The complete scope of the work as per IA is covered in the instant petition.

d) The details of commercial operation of the transmission assets covered in the instant petition are as follows:

Assets	SCOD	COD	Time over-run
Asset- I	1.1.2013	1.7.2012	Nil
Asset- II	1.1.2013	1.7.2012	Nil
Asset- III	1.1.2013	1.8.2012	Nil
Asset- IV	1.1.2013	1.9.2012	Nil
Asset- V	1.1.2013	1.9.2012	Nil
Asset- VI	1.1.2013	1.1.2013	Nil
Combined Asset		1.9.2012 (Effective COD)	

e) The transmission assets were executed in 2009-14 period and were combined into single element during 2014-19 tariff period. The tariff in respect of the Combined Asset for 2009-14 tariff period was trued up and the tariff for 2014-19 tariff period was approved *vide* order dated 8.3.2016 in Petition No. 564/TT/2014.

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

5. The Petitioner has served the petition on the Respondents and notice regarding the filing of this petition has 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 newspaper by the Petitioner. Madhya Pradesh Power Management Company Ltd. (MPPMCL), Respondent No.1, has filed its reply *vide* affidavit dated 22.2.2020 and has raised the issues of grossing up of rate of Return on Equity (RoE) and effect of CGST. The Petitioner *vide* affidavit dated 3.9.2020 has filed rejoinder to the reply of



MPPMCL. The issues raised by MPPMCL and clarifications given by the Petitioner are considered in the relevant portions of this order.

6. This order is issued considering the submissions made in petition vide affidavits dated 7.1.2020 and 8.6.2020, MPPMCL's reply and the Petitioner's rejoinder thereto.

7. The hearing in this matter was held on 8.6.2021 through video conference and order was reserved.

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 2014-19 Tariff Period

9. The details of the trued-up transmission charges claimed by the Petitioner in respect of the Combined Asset are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	275.40	282.54	286.88	286.88	286.88
Interest on Loan	287.54	271.06	250.38	222.83	196.22
Return on Equity	307.26	314.43	316.90	316.90	317.75
Interest on Working Capital	20.03	19.98	19.66	19.03	18.43
O & M Expenses	0.00	0.00	0.00	0.00	0.00
Total	890.23	888.01	873.82	845.64	819.28

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	148.37	148.00	145.64	140.94	136.55
Total Working Capital	148.37	148.00	145.64	140.94	136.55
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	20.03	19.98	19.66	19.03	18.43



Capital Cost

11. The capital cost of the Combined Asset has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations.

12. The Commission *vide* order dated 8.3.2016 in Petition No. 564/TT/2014 approved the transmission tariff of the Combined Asset for 2014-19 period based on admitted capital cost of ₹5165.81 lakh as on 31.3.2014 and projected Additional Capital Expenditure (ACE) of ₹120.66 lakh during 2014-19 and the same is as follows:

Approved Cost as on 1.4.2014	ACE	Total cost as on 31.3.2019
	2014-19	
5165.81	120.66	5286.47

13. The Petitioner *vide* Auditor's Certificates has claimed the capital cost incurred up to 31.3.2014 and ACE up to 31.3.2019. The details of approved apportioned capital cost, capital cost as on 31.3.2014 and ACE up to 31.3.2019 claimed by the Petitioner in respect of various transmission assets of the Combined Asset are as follows:

Assets	Apportioned approved Cost as per F.R.	Capital Cost as on 31.3.2014	ACE for 2014-15	ACE for 2015-16	Estimated completion cost as on 31.3.2019
Asset- I	1275.56	1085.53	15.63	0.00	1101.16
Asset- II	1268.58	1047.82	0.00	0.00	1047.82
Asset- III	621.21	429.97	90.59	0.00	520.56
Asset- IV	1263.97	937.43	0.00	15.09	952.52
Asset- V	1263.97	1234.84	0.00	21.77	1256.61
Asset- VI	703.89	430.22	0.00	127.49	557.71
Combined Asset		5165.81	106.22	164.35	5436.38

14. The estimated completion cost of the Combined Asset as on 31.3.2019 including ACE is within the apportioned approved capital cost.

15. The capital cost of ₹5165.81 lakh admitted by the Commission as on 31.3.2014 has been considered as the opening capital cost as on 1.4.2014 for determination of tariff in accordance with the Regulation 9 of the 2014 Tariff Regulations.



Additional Capital Expenditure (ACE)

16. The Commission *vide* order dated 8.3.2016 in Petition No. 564/TT/2014 allowed ACE of ₹120.66 lakh during 2014-15 towards balance and retention payments due to un-discharged liabilities. Against this, the Petitioner has claimed ACE of ₹15.63 lakh for Asset-I and ₹90.59 lakh for Asset-III during 2014-15 and ₹127.49 lakh for Asset-VI during 2015-16 on account of balance and retention payments due to un-discharged liability for works executed within the cut-off date under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations. The Petitioner has further claimed ACE of ₹15.09 lakh for Asset-IV and ₹21.77 lakh for Asset-V during 2015-16 period which is beyond the cut-off date on account of balance and retention payments due to un-discharged liability for works executed within the cut-off date under Regulation 14(3)(v) of the 2014 Tariff Regulations. The details of ACE claimed by the Petitioner are as follows:

(₹ in lakh)

Assets	ACE claimed		Regulation
	2014-15	2015-16	
Asset-I	15.63	-	14(1)(i) and 14(1)(ii)
Asset-II	-	-	-
Asset-III	90.59	-	14(1)(i) and 14(1)(ii)
Asset-IV	-	15.09	14(3)(v)
Asset-V	-	21.77	14(3)(v)
Asset-VI	-	127.49	14(1)(i) and 14(1)(ii)

17. The Commission *vide* Technical Validation letter directed the Petitioner to clarify the reasons for claiming higher ACE than what was approved *vide* order dated 8.3.2016 in Petition No. 564/TT/2014. In response, the Petitioner *vide* affidavit dated 8.6.2020 has submitted that ACE claimed for 2015-16 period is on the basis of actual payments made to the contractor after receipt of final invoices from the contractor. The Petitioner has further submitted that ACE incurred for Combined Asset is on account



of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date. The Petitioner has also submitted Auditor's Certificates in support of ACE claimed. The Petitioner has submitted the party-wise and year-wise details of liabilities as follows:

Financial Year	Party Name	Amount paid (₹ in lakh)	Remarks
2014-15	Siemens	15.63	Spare Transformer Package
		90.59	
2015-16	Siemens	15.09	Sub-station Package
	Siemens	21.77	
	Siemens	127.49	
	Total	270.57	

18. We have considered the submission of the Petitioner. ACE claimed by the Petitioner for Asset-I and Asset-III during 2014-15 and for Asset-VI during 2015-16 is on account of balance and retention payments due to un-discharged liability for works executed within the cut-off date and the same has been allowed under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations. ACE claimed for Asset-IV and Asset-V during 2015-16 period is beyond the cut-off date on account of balance and retention payments due to un-discharged liability for works executed within the cut-off date and the same has been allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations. Accordingly, the capital cost considered for 2014-19 tariff period is as follows:

Capital Cost as on 1.4.2014	ACE as approved		Total Capital Cost as on 31.3.2019
	2014-15	2015-16	
5165.81	106.22	164.35	5436.38



Debt-Equity ratio

19. The Petitioner has claimed debt-equity ratio as on 31.3.2014 as approved by the Commission *vide* order dated 8.3.2016 in Petition No. 564/TT/2014. The same has been considered as opening debt-equity ratio as on 1.4.2014 and the details are as follows:

Particulars	Amount (in ₹ lakh)	(%)
Debt	3616.07	70.00
Equity	1549.74	30.00
Total	5165.81	100.00

20. The Petitioner vide Form-7A has claimed the debt-equity ratio of 70:30 for 2014-15 and 83.82:16.18 for 2015-16 for ACE during 2014-19 period in respect of the Combined Asset. However, in response to Commission's query regarding actual equity infused for ACE during 2014-19 period, the Petitioner vide affidavit dated 8.6.2020 has submitted that equity deployed for ACE during 2014-19 period is not less than 30% of the total expenditure. The same is contradictory to the details provided in Form-7A of the petition. We do not expect such lapses from the Petitioner. We have considered the debt-equity ratio as claimed vide Form-7A for the purpose of truing-up of tariff of 2014-19 period. The Petitioner is directed to be careful and consistent in future in its submissions.

21. The details of the debt-equity ratio in accordance with Regulation 19(3) of the 2014 Tariff Regulations in respect of the Combined Asset as on 1.4.2014 and 31.3.2019 are as follows:

Particulars	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	Total cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	3616.07	70.00	3828.18	70.42
Equity	1549.74	30.00	1608.20	29.58
Total	5165.81	100.00	5436.38	100.00



Depreciation

22. The Gross Block during 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD) as placed in Annexure-I. WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations. Depreciation allowed during 2014-19 period is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	5165.81	5272.03	5436.38	5436.38	5436.38
ACE	106.22	164.35	0.00	0.00	0.00
Closing Gross Block	5272.03	5436.38	5436.38	5436.38	5436.38
Average Gross Block	5218.92	5354.21	5436.38	5436.38	5436.38
Weighted Average Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset (Year)	24	23	22	21	20
Lapsed life at the beginning of the year	1	2	3	4	5
Depreciable Value	4697.03	4818.78	4892.74	4892.74	4892.74
Depreciation during the year	275.40	282.54	286.88	286.88	286.88
Cumulative Depreciation at the end of the year	665.40	947.94	1234.82	1521.70	1808.58
Remaining Depreciable Value at the end of the year	4031.63	3870.85	3657.92	3371.04	3084.16

23. The details of the depreciation approved *vide* order dated 8.3.2016 in Petition No. 564/TT/2014, as claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 8.3.2016 in Petition No. 564/TT/2014	275.78	278.96	278.96	278.96	278.96
Claimed by Petitioner in the instant petition	275.40	282.54	286.88	286.88	286.88
Allowed after true-up in this order	275.40	282.54	286.88	286.88	286.88



Interest on Loan (IoL)

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

25. We have considered the submissions of the Petitioner. Accordingly, IoL has been calculated based on actual interest rate submitted by the Petitioner, in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed in respect of the Combined Asset is as follows:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan					
Gross Normative Loan	3616.07	3690.43	3828.18	3828.18	3828.18
Cumulative Repayments up to Previous Year	390.00	665.40	947.94	1234.82	1521.70
Net Loan-Opening	3226.07	3025.03	2880.24	2593.36	2306.48
Additions	74.36	137.75	0.00	0.00	0.00
Repayment during the year	275.40	282.54	286.88	286.88	286.88
Net Loan-Closing	3025.03	2880.24	2593.36	2306.48	2019.60
Average Loan	3125.55	2952.64	2736.80	2449.92	2163.04
Weighted Average Rate of Interest on Loan (%)	9.200	9.180	9.149	9.095	9.072
Interest on Loan	287.54	271.06	250.38	222.83	196.22

26. The details of IoL approved *vide* order dated 8.3.2016 in Petition No. 564/TT/2014, IoL claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 8.3.2016 in Petition No. 564/TT/2014	287.89	266.28	240.63	214.89	189.07
Claimed by Petitioner in the instant petition	287.54	271.06	250.38	222.83	196.22
Allowed after true-up in this order	287.54	271.06	250.38	222.83	196.22



Return on Equity (RoE)

27. The Petitioner has claimed RoE in respect of the Combined 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	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

28. MPPMCL has submitted that the Petitioner has claimed grossed up RoE on the basis of actual taxes paid during the years 2016-17 and 2017-18. For the year 2018-19, RoE has been grossed up on the basis of applicable MAT rate, surcharge and cess and not on the basis of actual taxes paid for the year 2018-19. MPPMCL has also submitted that the Petitioner has not placed on record the assessment orders for the years 2016-17 and 2017-18 and that the Petitioner has also not enclosed the audited accounts in respect of actual taxes paid for years 2016-17 and 2017-18. MPPMCL has submitted that the Petitioner has not finalized its income tax assessment order for the years 2016-17, 2017-18 and 2018-19.

29. In response, the Petitioner has submitted that the assessment orders for years 2014-15, 2015-16 and 2016-17 have been issued by the Income Tax Department and Income Tax returns for years 2017-18 and 2018-19 have been filed. The Petitioner has further submitted that the assessment order for the years 2014-15 and 2015-16 was submitted in Petition No. 20/TT/2020. The Petitioner has also annexed a copy of the assessment order for the year 2016-17 along with its rejoinder.



30. It was placed before us that the same issue has been raised by MPPMCL in several other petitions and the Commission has taken a view on the contentions of MPPMCL. In view of the clarification given by the Petitioner, we are of the view that there is no merit in the contentions of MPPMCL and they are rejected.

31. 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

32. The MAT rates as allowed *vide* 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 2014-19 period in terms of the provisions of the 2014 Tariff Regulations which is as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Base rate of RoE (in %)	Grossed up RoE [[Base Rate]/(1-t)] (in %)
2014-15	20.961	15.50	19.610
2015-16	21.342	15.50	19.705
2016-17	21.342	15.50	19.705
2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758

33. Accordingly, the trued-up RoE allowed in respect of the Combined Asset for 2014-19 tariff period is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity					



Opening Equity	1549.74	1581.60	1608.20	1608.20	1608.20
Additions	31.86	26.60	0.00	0.00	0.00
Closing Equity	1581.60	1608.20	1608.20	1608.20	1608.20
Average Equity	1565.67	1594.90	1608.20	1608.20	1608.20
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity	307.03	314.28	316.90	316.90	317.75

34. The details of RoE approved *vide* order dated 8.3.2016 in Petition No. 564/TT/2014, RoE claimed in the instant petition and trued up in the instant order for 2014-19 period in respect of the Combined Asset is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 8.3.2016 in Petition No. 564/TT/2014	307.45	311.00	311.00	311.00	311.00
Claimed by Petitioner in the instant petition	307.26	314.43	316.90	316.90	317.75
Allowed after true-up in this order	307.03	314.28	316.90	316.90	317.74

Operation & Maintenance Expenses (O&M Expenses)

35. The Petitioner has not claimed any Operation & Maintenance Expenses in respect of the Combined Asset for 2014-19 period.

Interest on Working Capital (IWC)

36. IWC has been worked out as per the methodology provided under Regulation 28 of the 2014 Tariff Regulations and is allowed in respect of the Combined Asset as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital					
O&M Expenses (O&M Expenses for One month)	0.00	0.00	0.00	0.00	0.00
Maintenance Spares (15% of O&M Expenses)	0.00	0.00	0.00	0.00	0.00



Receivables (Equivalent to Two months of annual fixed cost)	148.33	147.98	145.64	140.94	136.55
Total Working Capital	148.33	147.98	145.64	140.94	136.55
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	20.02	19.98	19.66	19.03	18.43

37. The details of IWC approved *vide* order dated 8.3.2016 in Petition No. 564/TT/2014, IWC claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 8.3.2016 in Petition No. 564/TT/2014	20.05	19.71	19.12	18.53	17.93
Claimed by Petitioner in the instant petition	20.03	19.98	19.66	19.03	18.43
Allowed after true-up in this order	20.02	19.98	19.66	19.03	18.43

Approved Annual Fixed Charges for 2014-19 Tariff Period

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	275.40	282.54	286.88	286.88	286.88
Interest on Loan	287.54	271.06	250.38	222.83	196.22
Return on Equity	307.03	314.28	316.90	316.90	317.75
Interest on Working Capital	20.02	19.98	19.66	19.03	18.43
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Total	889.99	887.85	873.81	845.63	819.29

39. Accordingly, the Annual Transmission Charges approved *vide* order dated 8.3.2016 in Petition No. 564/TT/2014, claimed by the Petitioner in the instant petition and approved after truing up in the instant order are as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 8.3.2016 in Petition No. 564/TT/2014	891.18	875.96	849.71	823.38	796.97
Claimed by the Petitioner in the instant petition	890.23	888.01	873.82	845.64	819.28
Allowed after true-up in this order	889.99	887.85	873.81	845.63	819.29

40. AFC approved after truing up have increased in comparison to what was approved earlier vide order dated 8.3.2016 in Petition No. 564/TT/2014 and the same is mainly on account of variation in ACE.

Determination of Annual Fixed Charges for 2019-24 Tariff Period

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	286.88	286.88	286.88	286.88	286.88
Interest on Loan	170.21	144.03	117.89	92.29	66.75
Return on Equity	302.05	302.05	302.05	302.05	302.05
Interest on Working Capital	31.07	31.44	31.77	32.15	32.43
O&M Expenses	451.08	467.46	483.84	501.48	517.86
Total	1241.29	1231.86	1222.43	1214.85	1205.97

42. The Petitioner has claimed the following IWC in respect of the Combined Asset for 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	37.59	38.96	40.32	41.79	43.16
Maintenance Spares	67.66	70.12	72.58	75.22	77.68
Receivables	152.62	151.87	150.71	149.78	148.28
Total Working Capital	257.87	260.95	263.61	266.79	269.12
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	31.07	31.44	31.77	32.15	32.43



Capital Cost

43. 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 tried up by*



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

44. The Petitioner has claimed capital cost of ₹5436.38 lakh in respect of the Combined Asset as on 31.3.2019. The same capital cost has been worked out by the



Commission and, therefore, the capital cost of ₹5436.38 lakh as on 31.3.2019 has been considered as the opening capital cost as on 1.4.2019 for Combined Asset for the purpose of determination of transmission tariff for 2019-24 tariff period in accordance with Regulation 19 of the 2019 Tariff Regulations.

45. The Petitioner has not claimed any ACE during 2019-24 tariff period in respect of the Combined Asset in the instant petition.

Debt-Equity ratio

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

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

Provided that:

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

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

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



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

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

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

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

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

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

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	3828.18	70.42	3828.18	70.42
Equity	1608.20	29.58	1608.20	29.58
Total	5436.38	100.00	5436.38	100.00

Depreciation

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

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



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

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

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

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

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

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

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

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

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

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

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

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



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

49. The Gross Block during 2019-24 tariff period has been depreciated at WAROD. WAROD at Annexure-II to this order has been allowed after taking into account the depreciation rates of the Combined Asset as prescribed 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 approved for the Combined Asset for the 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	5436.38	5436.38	5436.38	5436.38	5436.38
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	5436.38	5436.38	5436.38	5436.38	5436.38
Average Gross Block	5436.38	5436.38	5436.38	5436.38	5436.38
Weighted Average Rate of Depreciation (WAROD) (%)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset (Year)	19	18	17	16	15
Lapsed life at the beginning of the year	6	7	8	9	10
Depreciable value	4892.74	4892.74	4892.74	4892.74	4892.74
Depreciation during the year	286.88	286.88	286.88	286.88	286.88
Total Cumulative Depreciation at the end of the year	2095.46	2382.34	2669.22	2956.10	3242.98
Remaining Depreciable Value at the end of the year	2797.28	2510.41	2223.53	1936.65	1649.77

Interest on Loan (IoL)

50. 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.”*

51. We have considered the submission of the Petitioner. 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 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations as follows:



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	3828.18	3828.18	3828.18	3828.18	3828.18
Cumulative Repayments up to Previous Year	1808.58	2095.46	2382.34	2669.22	2956.10
Net Loan-Opening	2019.60	1732.72	1445.84	1158.96	872.08
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	286.88	286.88	286.88	286.88	286.88
Net Loan-Closing	1732.72	1445.84	1158.96	872.08	585.20
Average Loan	1876.16	1589.28	1302.40	1015.52	728.64
Weighted Average Rate of Interest on Loan (%)	9.072	9.063	9.052	9.088	9.161
Interest on Loan	170.21	144.03	117.89	92.29	66.75

Return on Equity (RoE)

52. 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 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.”

“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.”

53. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, 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 in respect of the Combined Asset is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	1608.20	1608.20	1608.20	1608.20	1608.20
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	1608.20	1608.20	1608.20	1608.20	1608.20
Average Equity	1608.20	1608.20	1608.20	1608.20	1608.20
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
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	302.05	302.05	302.05	302.05	302.05

Operation & Maintenance Expenses (O&M Expenses)

54. The O&M Expenses claimed by the Petitioner in respect of the Combined Asset for 2019-24 period are as under:

(₹ in lakh)					
Name of the Asset	2019-20	2020-21	2021-22	2022-23	2023-24
4 Numbers of 315 MVA Spare ICT at Raipur, Pune, Dehgam and Jabalpur Sub-stations	451.08	467.46	483.84	501.48	517.86
Total O&M Expenses	451.08	467.46	483.84	501.48	517.86

55. The norms specified under Regulation 35(3)(a) and 35(4) of the 2019 Tariff Regulations provide as follows:

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



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



56. There are four ICTs forming part of the Combined Asset. The Petitioner has claimed O&M expenses for these four 315 MVA 400 kV ICTs as per the normative O&M rates provided under Regulation 35(3)(a) of the 2019 Tariff Regulations. The Commission vide its order dated 24.1.2021 in Petition No. 136/TT/2020 has dealt with the issue of O&M Expenses for spares ICTs. The relevant portion of the order dated 24.1.2021 is extracted as follows:

“28. We are also not convinced with the Petitioner’s clarification that it has not claimed O&M Expenses for the 2014-19 tariff period since the 2019 Tariff Regulations provide for O&M Expenses for transformers based on their rating. The norms specified in the 2019 Tariff Regulations are for transmission elements that are in regular use and not for spares which are used only in case of any eventualities. As already stated earlier, the ‘assets in use as spares’ are being granted tariff only on the basis of consent and approval of the concerned Regional Power Committee and as these assets are not being in regular use, we are of the view that O&M Expenses cannot be granted to the transmission assets. Accordingly, O&M Expenses are not allowed for the Combined Asset for the 2019-24 tariff period. We also feel that it is pertinent to mention here that disallowance of O&M Expenses for the Combined Asset does not mean that they do not need any maintenance and the consequent expenditure. The Combined Asset requires maintenance and the expenditure involved in maintaining them would be miniscule compared to the O&M Expenses in respect of transformers put to regular use. We are also of the view that the Petitioner should meet this expenditure from the O&M Expenses allowed for the regular ICTs installed at Mandola and Ludhiana in Northern Region. In case, the expenses are unusually high and cannot be met from the O&M Expenses allowed for the regular ICTs, the Petitioner may approach the Commission with certification of O&M Expenses from RPC at the time of true-up.”

57. In view of the above, we are not inclined to grant O&M Expenses for 4 numbers of 315 MVA Spare ICT at Raipur, Pune, Dehgam and Jabalpur Sub-stations. In case, the expenses are unusually high, the Petitioner may approach the Commission with certification of O&M Expenses from RPC at the time of true-up.

Interest on Working Capital (IWC)

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

“34. Interest on Working Capital

(1)...



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

- i. *Receivables equivalent to 45 days of fixed cost;*
- ii. *Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*
- iii. *Operation and maintenance expenses, including security expenses for one month”*

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

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

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

“3.Definitions ...

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

59. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%.

60. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (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, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-2021 and from 2021-22 onwards ROI has been considered as 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). The components of the working capital and interest thereon allowed are as follows:



(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses for One month)	0.00	0.00	0.00	0.00	0.00
Maintenance Spares (15% of O&M Expenses)	0.00	0.00	0.00	0.00	0.00
Receivables (Equivalent to 45 days of annual transmission charges)	94.74	91.64	88.29	85.09	81.67
Total Working Capital	94.74	91.64	88.29	85.09	81.67
Rate of Interest (%)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	11.42	10.31	9.27	8.93	8.58

Annual Fixed Charges for 2019-24 Tariff Period

61. The transmission charges allowed in respect of the Combined Asset for 2019-24 tariff period are summarised as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	286.88	286.88	286.88	286.88	286.88
Interest on Loan	170.21	144.03	117.89	92.29	66.75
Return on Equity	302.05	302.05	302.05	302.05	302.05
Interest on Working Capital	11.42	10.31	9.27	8.93	8.58
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Total	770.55	743.27	716.10	690.16	664.26

Filing Fee and the Publication Expenses

62. 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

63. 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 2019-24 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 period.

Security Expenses

64. The Petitioner has submitted that security expenses for the Combined 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.

65. 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

66. MPPMCL has submitted that the demand of the Petitioner for CGST is premature and need not be considered at this juncture. In response, the Petitioner has submitted that CGST Act, 2017 has been implemented w.e.f. 1.7.2017. The Govt. of India has exempted the charges of transmission of electricity vide Notification No. 12/2017-Central Tax (Rate) dated 28.6.2017 at Sl. No. 25 under the heading 9969 “Transmission or distribution of electricity by an electric transmission or distribution utility” by giving applicable GST rate NIL. Hence, the transmission charges as indicated in the instant petition 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 Respondents to the Petitioner and the same shall be charged and billed separately. 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.

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

Capital Spares

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

Sharing of Transmission Charges

69. With effect from 1.11.2020, sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and



Losses) Regulations, 2020 (in short, '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 shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of 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.

70. To summarise:

a. The trued-up AFC allowed in respect of the Combined Asset for 2014-19 tariff period are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	889.99	887.85	873.81	845.63	819.29

b. The AFC allowed in respect of the Combined Asset for 2019-24 tariff period in this order are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	770.55	743.27	716.10	690.16	664.26

71. Annexure-I and Annexure-II given hereinafter shall form part of this order.

72. This order disposes of Petition No. 140/TT/2020 in terms of the above findings and discussions.

sd/-
(Pravas Kumar Singh)
Member

sd/-
(I. S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson



ANNEXURE-I

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014 / COD (₹ in lakh)	ACE (₹ 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)				
		2014-15	2015-16			2014-15	2015-16	2016-17	2017-18	2018-19
Building Civil Works & Colony	8.31	0.00	0.00	8.31	3.34%	0.28	0.28	0.28	0.28	0.28
Sub Station	5157.50	106.22	164.35	5428.07	5.28%	275.12	282.26	286.60	286.60	286.60
Total	5165.81	106.22	164.35	5436.38	Total	275.40	282.54	286.88	286.88	286.88
Average Gross Block (₹ in lakh)						5218.92	5354.21	5436.38	5436.38	5436.38
Weighted Average Rate of Depreciation						5.28%	5.28%	5.28%	5.28%	5.28%



ANNEXURE-II

2019-24 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2019 / COD (₹ 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
Building Civil Works & Colony	8.31	8.31	3.34%	0.28	0.28	0.28	0.28	0.28
Sub Station	5428.07	5428.07	5.28%	286.60	286.60	286.60	286.60	286.60
Total	5436.38	5436.38	Total	286.88	286.88	286.88	286.88	286.88
Average Gross Block (₹ in lakh)				5436.38	5436.38	5436.38	5436.38	5436.38
Weighted Average Rate of Depreciation				5.28%	5.28%	5.28%	5.28%	5.28%

