

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 142/TT/2021

Coram:

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

Date of Order: 30.01.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for 400 kV D/C Mundra UMPP-Bhuj (Triple Snowbird) Ckt. 2 Transmission Line along with extension of 400 kV Mundra UMPP Switchyard and 400 kV Bhuj Pooling Station under Transmission system strengthening associated with Mundra UMPP (Part-B) in Western Region.

And in the matter of:

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

.....Petitioner

Versus

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



5. Maharashtra State Electricity Transmission Company Limited, Prakashganga, 6th Floor, Plot No. C-19, E-Block, Bandra Kurla Complex, Bandra (East), Mumbai-400051.
6. Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara-390007.
7. Electricity Department, Government of Goa, Vidyut Bhawan, Near Mandvi Hotel, Panaji, Goa-403001.
8. Electricity Department, Administration of Daman & Diu, Daman-396210.
9. DNH Power Distribution Corporation Limited, Vidyut Bhawan, 66 kV Road, Near Secretariat Amli, Silvassa-396230.
10. Chhattisgarh State Power Transmission Company Limited, State Load 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 A. K. Verma, PGCIL
Shri Ved Prakash Rastogi, PGCIL

For Respondents : Shri Anindya Khare, MPPMCL

ORDER

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



determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of 400 kV D/C Mundra UMPP-Bhuj (Triple Snowbird) Ckt. 2 Transmission Line along with extension of 400 kV Mundra UMPP Switchyard and 400 kV Bhuj Pooling Station (hereinafter referred to as “Asset-1” or “the transmission asset”) under transmission system strengthening associated with Mundra UMPP (Part-B) in Western Region (hereinafter referred to as “the transmission project”).

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

- “1) Allow additional RoE for 2014-19 tariff block.*
- 2) Allow the addcap for 2014-19 and 2019-24 tariff block as claimed as per Para 5 and 7 above.*
- 3) 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.*
- 4) 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 Hon’ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 6 and 7 above for respective block.*
- 5) 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.*
- 6) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the beneficiaries in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 7) 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.*
- 8) Allow the petitioner to file a separate petition before Hon’ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 7.6 above.*
- 9) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
- 10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from*



the beneficiaries, if GST on transmission is levied at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

3. **Backdrop of the case**

a) The Petitioner was entrusted with implementation of the transmission project and it was approved in the 36th Standing Committee Meeting of Power System Planning of Western Region held on 29.8.2013 followed by its ratification in the 24th Western Regional Power Committee Meeting held on 9.10.2013. The transmission project was further discussed in the 38th Standing Committee Meeting of Power System Planning of Western Region held on 17.7.2015.

b) Investment Approval (I.A.) for the transmission project was accorded by Board of Directors of the Petitioner's company (in its 330th meeting held on 20.7.2016) vide Memorandum Ref. No. C/CP/PA1617-07-0D-IA004 dated 22.7.2016 at an estimated cost of ₹30094.00 lakh including IDC of ₹1804.00 lakh (based on April 2016 Price Level) with the broad scope of work as follows:

- i. Mundra UMPP-Bhuj Pool 400 kV D/C line (Triple Snowbird): 95 km;
- ii. Extension of 400 kV Bhuj Pooling Station-400 kV Line bays: 2 numbers; and
- iii. Extension of 400 kV Mundra UMPP Switchyard-400 kV Line bays: 2 numbers.

c) The Petitioner had filed Petition No. 387/TT/2018 for approval of transmission tariff of the above-mentioned transmission elements under the transmission project i.e. 400 kV D/C Mundra UMPP-Bhuj (Triple Snowbird) Transmission Line along with extension of 400 kV Mundra UMPP Switchyard and 400 kV Bhuj Pooling Station from anticipated COD (1.11.2018) to 31.3.2019.

d) Further, vide affidavit dated 2.8.2019, transmission elements under the transmission project was bifurcated into Asset-1 [400 kV Mundra (CGPL)-Bhuj (Triple Snowbird) Ckt. 2 Line along with associated line bays at Mundra (CGPL) Generating station and 765/400 kV Bhuj Sub-station] and Asset-2 [400 kV Mundra (CGPL)-Bhuj (Triple Snowbird) Ckt.-I Line along with



associated line bays at Mundra (CGPL) Generating station and 765/400 kV Bhuj Sub-station] with their respective COD claimed as 20.3.2019 and 2.4.2019.

e) As Asset-2 was put into commercial operation in the 2019-24 tariff period, the Commission vide Record of Proceedings for the hearing dated 8.8.2019 in Petition No. 387/TT/2018 directed the Petitioner to file a separate petition claiming tariff for Asset-2 as per the 2019 Tariff Regulations.

f) Revised Cost Estimate (RCE) for the transmission project was accorded approval on 29.10.2019 vide Memorandum Ref. No. PA1920-08-0S-RCE004 dated 4.11.2019 for ₹33166.00 lakh including IDC of ₹1350.00 lakh (based on March 2019 Price Level).

g) The transmission tariff of Asset-1 from its COD (20.3.2019) to 31.3.2019 was approved by the Commission vide order dated 13.1.2020 in Petition No. 387/TT/2018.

h) As per I.A. dated 20.7.2016, Asset-1 was scheduled to be put under commercial operation on 20.12.2018 against which it was commissioned on 20.3.2019 i.e. with a time over-run of 3 months (90 days), which was condoned vide order dated 13.1.2020 in Petition No. 387/TT/2018.

i) Though the entire scope of work as per I.A. is complete but the same is not covered in this petition. The status of the assets covered under the transmission project is as follows:

Asset	Particulars	Status
Asset-1	400 kV Mundra (CGPL)-Bhuj (Triple Snowbird) Ckt. 2 Line along with associated line bays at Mundra (CGPL) Generating station and 765/400 kV Bhuj Sub-station [as named in the Petitioner's affidavit dated 2.8.2019 and order dated 13.1.2020 in Petition No. 387/TT/2018]	Tariff from COD (20.3.2019) to 31.3.2019 allowed vide order dated 13.1.2020 in Petition No. 387/TT/2018
	400 kV D/C Mundra UMPP-Bhuj (Triple Snowbird) Ckt. 2 Transmission Line along with extension of 400 kV Mundra UMPP Switchyard and 400 kV Bhuj Pooling Station [as named in this petition and the	Trued-up tariff for the 2014-19 period and tariff for the 2019-24 period claimed in this petition



	Petitioner's affidavit dated 20.9.2021]	
Asset-2	400 kV Mundra (CGPL)-Bhuj (Triple Snowbird) Ckt.-I Line along with associated line bays at Mundra (CGPL) Generating station and 765/400 kV Bhuj Sub-station [as named in the Petitioner's affidavit dated 2.8.2019 and order dated 13.1.2020 in Petition No. 387/TT/2018]	Tariff from COD (2.4.2019) to 31.3.2024 allowed vide order dated 3.1.2022 in Petition No. 684/TT/2020
	400 kV D/C Mundra UMPP-Bhuj (Triple Snowbird) Ckt-1 Transmission Line along with extension of 400 kV Mundra UMPP Switchyard and 400 kV Bhuj Pooling Station [as named in Petition No. 684/TT/2020, affidavit dated 20.9.2021 and in order dated 3.1.2022 in Petition No. 684/TT/2020]	

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition was published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or objections have been received from the general public in response to the aforesaid notices published in the newspapers. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No. 1, has filed its reply vide affidavit dated 12.8.2021 and has raised the issues of effective tax rates for grossing up of Return on Equity (RoE) during the 2014-19 tariff period, Initial Spares, Additional Capital Expenditure (ACE) during the 2019-24 tariff period and effect of CGST. The Petitioner vide affidavit dated 20.9.2021 has filed rejoinder to MPPMCL's reply.

6. It has been placed before us that MPPMCL has been raising the same issue(s) in other petitions as well despite clear findings of the Commission. The contentions of



MPPMCL have been rejected by the Commission in other petitions including order 21.9.2021 in Petition No. 326/TT/2020. As MPPMCL has not challenged the findings, the same have attained finality. In view of these, the pleas raised by MPPMCL are rejected. Therefore, MPPMCL's submissions, Petitioner's clarifications thereto and the Commission's findings on the said issue(s) have not been repeated herein for the sake of brevity. Further, the issues which are specific to the instant petition and not dealt by the Commission earlier are considered in the relevant portions of this order.

7. This order is issued considering the submissions made by the Petitioner in the Petition vide affidavit dated 24.6.2020, MPPMCL's reply filed vide affidavit dated 12.8.2021, the Petitioner's affidavit dated 20.9.2021 filed in response to technical validation letter and the Petitioner's rejoinder filed vide affidavit dated 20.9.2021.

8. The hearing in this matter was held on 24.9.2021 and 26.10.2021 through video conference and the order was reserved. Having heard the representatives of the Petitioner, MPPMCL and after perusal of the materials on record, we proceed to dispose of the petition.

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

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

Particulars	(₹ in lakh)
	2018-19 (Pro-rata 12 days)
Depreciation	42.07
Interest on Loan	43.95
Return on Equity	48.21
O&M Expenses	6.01
Interest on Working Capital	3.09
Total	143.33

10. The details of the trued-up IWC as claimed by the Petitioner for the transmission asset for the 2014-19 tariff period are as follows:



(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Working Capital for O&M Expenses	15.23
Working Capital for Maintenance Spares	27.42
Working Capital for Receivables	726.58
Total Working Capital	769.23
Rate of Interest (in %)	12.20
Interest on Working Capital	3.09

Capital Cost

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

12. The apportioned approved cost as per FR and RCE along with capital cost as on COD, as on 31.3.2019 and ACE for 2018-19 with respect to the transmission asset as admitted by the Commission vide order dated 13.1.2020 in Petition No. 387/TT/2018 is as follows:

(₹ in lakh)				
Apportioned approved cost (FR)	Apportioned approved cost (RCE)	Admitted Capital Cost (as on COD)	Admitted ACE for 2018-19	Admitted Capital Cost (as on 31.3.2019)
25531.33	27630.08	23742.56	244.32	23986.88

13. Based on the Auditor's Certificate dated 31.7.2019, the Petitioner has submitted and claimed the capital cost as on COD, as on 31.3.2019 (including actual ACE for 2018-19) as follows:

(₹ in lakh)		
Capital Cost (as on COD)	ACE for 2018-19	Capital Cost (as on 31.3.2019)
24100.97	246.67	24347.64

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



Cost Over-run

15. The Petitioner has submitted that against the apportioned approved cost of ₹27630.08 lakh (as per RCE), the total cost is ₹24347.64 lakh (as on 31.3.2019) and, therefore, there is no cost over-run with respect to the transmission asset.

16. We have considered the submissions of the Petitioner and observe that the total capital cost as on 31.3.2019 (including ACE for 2018-19) with respect to the transmission asset is within apportioned approved cost as per RCE. Hence, there is no cost over-run.

Time Over-run

17. As per I.A. dated 20.7.2016, the transmission asset was scheduled to be commissioned on 20.12.2018, against which it was commissioned on 20.3.2019, i.e., with a time over-run of 3 months (90 days), which was condoned vide order dated 13.1.2020 in Petition No. 387/TT/2018.

Interest During Construction (IDC)

18. The Petitioner has submitted that the Commission vide order dated 13.1.2020 in Petition No. 387/TT/2018 had directed the Petitioner to submit the detailed IDC statement by rectifying the mismatch between the amount of loan as mentioned in the IDC statement and Form-9C at the time of true-up. The details of claimed IDC (as per Auditor's Certificate) along with IDC discharged up to COD, discharged during 2018-19 and 2019-20 as submitted by the Petitioner are as follows:

(₹ in lakh)			
IDC (as per Auditor's Certificate)	IDC discharged (up to COD)	IDC to be discharged during 2018-19	IDC to be discharged during 2019-20
1266.63	1006.46	0.00	260.17

19. The Petitioner has submitted that IDC with respect to the transmission asset is on cash basis and the loan profile mentioned in Form 9C is after the adjustment of



loan corresponding to the accrual IDC. Further, the accrued IDC discharged during 2019-20 has not been included in ACE as per Auditor's Certificate. Out of total IDC of ₹1266.63 lakh, ₹1006.46 lakh has been discharged up to COD and the balance IDC of ₹260.17 lakh during 2019-20.

20. The Petitioner has submitted that the transmission tariff has been recalculated with the claim of IDC on cash basis and un-discharged IDC on COD has been reduced from the expenditure up to COD and claimed as ACE during for 2019-20. Further, the accrued IDC of ₹260.17 lakh has been taken out of COD expenditure and added in ACE for 2019-20, when it has been discharged, for calculation of tariff. The details of actual expenditure up to COD and ACE have been submitted in this petition.

21. In view of the above, the Petitioner has requested to allow IDC on the basis of cash outflow.

22. The Petitioner vide affidavit dated 20.9.2021 has submitted the IDC statement showing the total IDC amount and has reiterated its submissions made in the petition and has further submitted that mismatch between Form 9C, Form 6 and statement of cash IDC is due to deduction of loan from COD in Form 9C, due to IDC dis-allowance and shifting of loan from COD to ACE for accrual IDC to maintain debt-equity ratio of 70:30 and has prayed to consider COD loan as given in Cash IDC statement for IDC calculation.

23. We have considered the submissions and claims of the Petitioner and note that IDC computation statement containing name of loan, drawl date, loan amount, interest rate and interest claimed has been submitted by the Petitioner. Further, the loan amount as on COD has been mentioned in Form 6 and Form 9C. Accordingly, IDC is worked out based on the details given in IDC statement.



24. In view of the foregoing, IDC claimed and considered as on COD and summary of discharge of IDC liability up to COD and thereafter for the purpose of tariff determination is as follows:

(₹ in lakh)					
IDC as per Auditor's Certificate	IDC Disallowed due to computational difference	IDC allowed in the instant order	IDC discharged up to COD	Un-discharged IDC as on COD	IDC discharged in 2019-20
1266.64	9.00	1257.64	998.72	258.92	258.92

Incidental Expenditure During Construction (IEDC)

25. The Petitioner has submitted that the Commission vide order dated 13.1.2020 in Petition No. 387/TT/2018 had held that IEDC allowed for the transmission asset will be reconsidered in the light of the directions of Appellate Tribunal for Electricity in judgment dated 2.12.2019 in Appeal Nos. 95 of 2018 and 140 of 2018 against Commission's orders dated 29.7.2016 and 5.10.2017 in Petition Nos. 46/TT/2014 and 2/RP/2017 respectively, at the time of truing up. Further, the Petitioner has claimed IEDC of ₹470.73 lakh for the transmission asset and has submitted Auditor's Certificate in support of the same and the claimed IEDC is within the percentage of hard cost of 10.75% as indicated in the FR abstract cost estimate. The Petitioner has submitted that entire IEDC amount mentioned in the Auditor's Certificate for the transmission asset is on cash basis and is paid up to COD.

26. We have considered the submissions and claim of the Petitioner and IEDC allowed as on COD and considered with respect to the transmission asset for the purpose of tariff calculation is as follows:

(₹ in lakh)	
IEDC (as per Auditor's Certificate)	IEDC allowed (as on COD)
470.73	470.73



Initial Spares

27. The Petitioner has submitted the details of Initial spares for sub-station and transmission line as allowed by the Commission vide order dated 13.1.2020 in Petition No. 387/TT/2018 as follows:

(₹ in lakh)

Element	Plant & Machinery cost up to cut-off date (excluding IDC and IEDC) (A)	Initial Spares claimed (B)	Ceiling (%) (C)	Initial Spares worked out	Excess Initial Spares
				$D = [(A-B)*C / (100-C)]$	
Transmission Line	23487.26	234.00	1.00	234.88	0.00
Sub-station	1371.34	59.40	6.00	83.75	0.00
PLCC	334.99	16.00	3.50	11.57	4.43
Total	25193.68	309.40		330.20	4.43

28. The Petitioner has submitted that the Commission vide order dated 13.1.2020 in Petition No. 387/TT/2018 had allowed the ceiling of sub-station as 4%. Since Bhuj Sub-station is a Brownfield sub-station, the ceiling of Initial Spares is claimed as 6% as per the 2014 Tariff Regulations. Further, the excess Initial Spares of ₹4.43 lakh have been reduced from ACE during 2019-20 with respect to the transmission asset.

29. The Petitioner has submitted the details of Initial Spares capitalized up to COD, from COD to 31.3.2019 and balance Initial Spares liabilities to be discharged during 2019-20 is as follows:

(₹ in lakh)

Element	Initial Spares capitalized up to COD	Spares capitalized from COD to 31.3.2019	Balance Initial Spares liabilities to be discharged during 2019-20	Total
Sub-station	53.86	2.35	3.59	75.40
Transmission Line	163.80	0.00	70.20	234.00
PLCC	4.84	0.00	11.16	16.00

30. The Petitioner has submitted that the expenditure incurred towards Initial Spares have been considered in COD cost, whereas, the amount towards balance Initial Spares liabilities have been considered in ACE.



31. The Petitioner vide affidavit dated 20.9.2021 has reiterated its submissions (regarding Initial Spares claim) in this petition.

32. MPPMCL has submitted that the Petitioner has claimed Initial Spares @6% for Bhuj sub-station stating that it is a brown-field sub-station but no documentary evidence has been submitted and has requested to undertake prudence check before allowing Initial Spares. In response, the Petitioner has reiterated its submission already made in this petition and affidavit dated 20.9.2021.

33. We have considered the submissions of the Petitioner and MPPMCL. It is observed that the Petitioner has claimed Initial Spares separately for PLCC under the head "Communication System" specified under Regulation 13 of the 2014 Tariff Regulation in this petition. The Commission vide order dated 24.1.2021 in Petition No. 126/TT/2020 had given the findings pertaining to considering PLCC as a part of sub-station and, accordingly, had not allowed separate O&M Expenses for PLCC. The relevant paragraphs of order dated 24.1.2021 in Petition No. 126/TT/2020 are as follows:

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

.....

105. In our view, granting of O&M Expenses for PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations under the communication system head would tantamount to granting O&M Expenses twice for PLCC equipment as PLCC equipment has already been considered as part of the sub-station. Therefore, the Petitioner's prayer for grant of O&M Expenses for the PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations is rejected. 106. The principle adopted in this petition that PLCC is part of sub-station and accordingly no separate O&M Expenses is admissible for PLCC equipment in the 2019-24 tariff period under Regulation 35(4) of the 2019 Tariff Regulations shall be applicable in case of all petitions where similar claim is made by the Petitioner. As already mentioned, the Commission, however, on the basis of the claim made by the Petitioner has inadvertently allowed O&M Expenses for PLCC equipment @2% of its



original project cost, which is applicable for other “communication system”, for 2019-24 period in 31 petitions given in Annexure-3 of this order. Therefore, the decision in this order shall also be applicable to all the petitions given in Annexure3. Therefore, PGCIL is directed to bring this decision to the notice of all the stakeholders in the 31 petitions given in Annexure-3 and also make revised claim of O&M Expenses for PLCC as part of the sub-station at the time of truing up of the tariff allowed for 2019-24 period in respective petitions.”

34. In view of the findings in the above-quoted order, we are of the view that PLCC has to be considered as a part of sub-station. Therefore, cost of PLCC has been clubbed with cost of sub-station while computing the Initial Spares.

35. The Petitioner has stated that Bhuj sub-station is a brown-field sub-station and claimed initial spares (of 6%) accordingly. It has further submitted that the Commission had in the order dated 13.1.2020 in Petition No. 387/TT/2018 has wrongly allowed initial spares (of 4%) allowable for a green-field sub-station. We observe that as 400 kV line bays (2 numbers) are terminating in the existing 400 kV Bhuj Sub-station, which is a brownfield project. Accordingly, Initial Spares with respect to the transmission asset are allowed under the head “Brown Field” sub-station as follows:

Element	Plant & Machinery cost up to cut-off date (excluding IDC and IEDC) (A)	Initial Spares claimed (B)	Ceiling limit (in %) (C)	Initial Spares worked out	Excess Initial Spares disallowed	Initial Spares allowed in this order
				$D = [(A-B)*C / (100-C)]$		
Transmission Line	23487.26	234.00	1.00	234.88	0.00	234.00
Sub-station and PLCC	1706.42	75.40	6.00	104.11	0.00	75.40

Capital Cost as on COD

36. In view of the above, the details of the capital cost approved as on COD after adjustment of IDC, IEDC and Initial Spares with respect to the transmission asset are as follows:



(₹ in lakh)			
Capital Cost (as per Auditor's Certificate) (A)	Un-discharged IDC (B)	IDC Disallowed (due to computational difference) (C)	Capital Cost allowed (as on COD) (D) = (A-B-C)
24100.97	258.92	9.00	23833.05

Additional Capital Expenditure

37. The Petitioner has submitted that ACE incurred after COD and up to cut-off date is to be dealt in accordance with Regulation 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations and the admissibility of ACE incurred after cut-off date is to be dealt in accordance with Regulation 14(2)(iv) of the 2014 Tariff Regulations. Further, ACE in this case is within cut-off date and is, accordingly, claimed as per Regulation 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations.

38. Based on the Auditor's Certificate dated 31.7.2019, ACE of ₹246.67 lakh for 2018-19 has been submitted and claimed by the Petitioner on account of balance and retention payments due to un-discharged liability for works executed within cut-off date. Further, as COD of the transmission asset was 20.3.2019, the cut-off date comes out to 31.3.2022 and, hence, ACE incurred is within the cut-off date. The details of reasons for ACE are given by the Petitioner in Form 7.

39. In view of the above, the Petitioner has requested to allow ACE as claimed in this petition.

40. We have considered the submissions and claim of the Petitioner. ACE claimed has been verified from the Auditor's Certificate submitted in this petition, and, accordingly, ACE of ₹246.67 lakh for 2018-19 with respect to the transmission asset is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations as it is towards balance and retention payments.

41. In view of the above, the details of the allowed capital cost as on COD, as on 31.3.2019 and ACE during the 2014-19 period (including accrual IDC dis-charged) for the transmission assets are as follows:



(₹ in lakh)		
Capital Cost allowed (as on COD)	ACE allowed for 2018-19 (including accrual IDC discharged)	Capital Cost (as on 31.3.2019)
23833.05	246.67	24079.72

Debt-Equity Ratio

42. The debt-equity ratio has been considered in accordance with Regulation 19 of the 2014 Tariff Regulations. The debt-equity ratio of 70:30 has been considered for ACE allowed during the 2014-19 period in accordance to Regulation 19(3) of the 2014 Tariff Regulations. The details of the debt-equity ratio as on COD and 31.3.2019 considered for the purpose of truing up of tariff for the 2014-19 tariff period is as follows:

Funding	Capital Cost (₹ in lakh) (as on COD)	(in %)	Capital Cost (₹ in lakh) (as on 31.3.2019)	(in %)
Debt	16683.13	70.00	16855.80	70.00
Equity	7149.91	30.00	7223.91	30.00
Total	23833.05	100.00	24079.72	100.00

Depreciation

43. The Gross Block during 2018-19 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 assets as specified in the 2014 Tariff Regulations and the details of the trued-up depreciation allowed during the 2014-19 is as follows:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Opening Gross Block	23833.05
ACE	246.67
Closing Gross Block	24079.72
Average Gross Block	23956.38
Weighted average rate of Depreciation (WAROD) (in %)	5.34
Balance useful life of the asset beginning of the year (Year)	34
Lapsed life at the beginning of the year (Year)	0
Depreciable Value	21572.64
Depreciation during the year	42.05
Cumulative depreciation at the end of the year	42.05
Remaining Depreciable Value at the end of the year	21530.59



44. Depreciation for the transmission asset as allowed vide order dated 13.1.2020 in the Petition No. 387/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Allowed vide order dated 13.1.2020 in the Petition No. 387/TT/2018	41.89
Claimed by the Petitioner in the instant petition	42.07
Approved after true-up in this order	42.05

Interest on Loan (IoL)

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

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Gross Normative Loan	16683.13
Cumulative Repayments up to Previous Year	0.00
Net Loan-Opening	16683.13
Additions due to ACE	172.67
Repayment during the year	42.05
Net Loan-Closing	16813.75
Average Loan	16748.44
Weighted Average Rate of Interest on loan (in %)	7.9790
Interest on Loan	43.94

46. IoL for the transmission asset as allowed vide order dated 13.1.2020 in Petition No. 387/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Allowed vide order dated 13.1.2020 in Petition No. 387/TT/2018	43.77
Claimed by the Petitioner in the instant petition	43.95
Approved after true-up in this order	43.94



Return on Equity

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

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

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

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

Additional RoE

49. The Petitioner has submitted that the transmission asset was commissioned on 20.3.2019 which is within 36 months for claiming additional RoE of 0.5% as per Regulation 24(i) of the 2014 Tariff Regulations. The application for RPC certificate for the transmission asset had already been made and the same was to be discussed in GCC Meeting scheduled to be held in the last week of March 2020. However, due to Covid-19 pandemic and lockdown, the said meeting was postponed and could not be held.

50. The Petitioner vide affidavit dated 20.9.2021 has submitted that the Commission vide order dated 13.1.2020 in the Petition No. 387/TT/2018 had granted



the liberty to the Petitioner to approach for additional RoE subject to RPC certificate. The Petitioner submitted that the matter of issuance of WRPC Certificate for the transmission asset has been deliberated and agreed in 528th OCC dated 20.2.2020, 83rd Commercial Committee meeting and 40th WRPC dated 7.6.2021. A copy of Minutes of WRPC has also been submitted.

51. We have considered the submissions and claim of the Petitioner and note that though the matter of issuance of certificate for claiming additional RoE of 0.5% for the transmission asset was agreed in the 40th WRPC meeting held on 7.6.2021, the certificate in this regard has not been furnished by the Petitioner in the instant petition. Regulation 24(2)(iii) of the 2014 Tariff Regulations provides for certification of Regional Power Committee for claiming additional RoE, if any of the element of the transmission project is completed within specified timeline. The relevant extracts of Regulation 24(2)(iii) of the 2014 Tariff Regulations are as follows:

“iii. additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid.”

52. Since WRPC has agreed for the same in the meeting held on 7.6.2021 but certificate has not been issued, we allow additional RoE of 0.5% subject to the Petitioner producing WRPC certificate for claiming the same at the time of truing up. The grossing up of rate of RoE with applicable MAT rates for truing up of the tariff of the 2014-19 period in terms of the provisions of the 2014 Tariff Regulations considered is as follows:



Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Base rate of RoE (in %)	Grossed-up RoE (in %) [(Base Rate)/(1-t)]
2018-19	21.549	16.00 (subject to production of WRPC certificate)	19.758

53. Accordingly, RoE is trued-up on the basis of the MAT rate applicable in the respective year and is allowed as follows:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Opening Equity	7149.91
Additions due to ACE	74.00
Closing Equity	7223.91
Average Equity	7186.91
Return on Equity (Base Rate) (in %)	16.00
MAT Rate for respective year (in %)	21.549
Rate of Return on Equity (in %)	20.395
Return on Equity	48.19

54. RoE for the transmission asset allowed vide order dated 13.1.2020 in Petition No. 387/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Allowed vide order dated 13.1.2020 in Petition No. 387/TT/2018	46.16
Claimed by the Petitioner in the instant petition	48.21
Approved after true-up in this order	48.19

Operation & Maintenance Expenses (O&M Expenses)

55. The total O&M Expenses claimed by the Petitioner in respect of the various elements covered under the transmission asset for the 2014-19 tariff period are as follows:



(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Sub-station	
400 kV	
Number of Bays	2
Norms (₹ lakh/bay)	68.71
Transmission Lines	
400 kV: S/C (Triple Conductor) (km)	98.407
Norms (₹ lakh/km)	0.461
Total O&M Expenses (₹ in lakh)	6.01

56. The Petitioner vide affidavit dated 20.9.2021 has submitted that due to typographical error, 400 kV line length claimed in Petition No. 387/TT/2018 was 98.350 km in place of 98.407 km which is corrected in this petition and resultantly the O&M Expense has increased marginally. A copy of CEA inspection report of this line has been submitted by the Petitioner.

57. We have considered the submissions of the Petitioner. The revised line length of 98.407 km is considered for O&M Expenses and the O&M Expenses allowed are as follows:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Sub-station	
400 kV	
Number of Bays	2
Norms (₹ lakh/bay)	68.71
Transmission Lines	
400 kV: S/C (Triple Conductor) (km)	98.407
Norms (₹ lakh/km)	0.461
Total O&M Expenses (₹ in lakh)	6.01

58. O&M Expenses allowed for the transmission asset vide order dated 13.1.2020 in the Petition No. 387/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Allowed vide order dated 13.1.2020 in Petition No. 387/TT/2018	5.90
Claimed by the Petitioner in the instant petition	6.01
Approved after true-up in this order	6.01



Interest on Working Capital

59. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and the trued-up IWC allowed for the transmission asset for the 2014-19 tariff period are as follows:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Working Capital for O&M Expenses (one Month of O&M Expenses)	15.23
Working Capital for Maintenance Spares (15% of O&M Expenses)	27.42
Working Capital for Receivables (Equivalent to two months of annual fixed costs/annual transmission charges)	726.29
Total Working Capital	768.94
Rate of Interest (in %)	12.20
Interest on Working Capital	3.08

60. IWC for the transmission asset allowed vide order dated 13.1.2020 in the Petition No. 387/TT/2018, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Allowed vide order dated 13.1.2020 in Petition No. 387/TT/2018	3.03
Claimed by the Petitioner in the instant petition	3.09
Approved after true-up in this order	3.08

Approved Annual Fixed Charges for the 2014-19 Tariff Period

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

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Depreciation	42.05
Interest on Loan	43.94
Return on Equity	48.19
O&M Expenses	6.01
Interest on Working Capital	3.08
Total	143.27

62. Accordingly, the Annual Transmission Charges for the transmission asset allowed vide order dated 13.1.2020 in the Petition No. 387/TT/2018, claimed by the



Petitioner in the instant petition and approved after trueing up in the instant order are as follows:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 12 days)
Allowed vide order dated 13.1.2020 in Petition No. 387/TT/2018	140.74
Claimed by the Petitioner in the instant petition	143.33
Approved after true-up in this order	143.27

DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 PERIOD

63. The details of the transmission charges as claimed by the Petitioner for the transmission asset for the 2019-24 tariff period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1342.47	1418.90	1438.91	1438.91	1438.91
Interest on Loan	1348.47	1319.02	1226.13	1110.88	994.83
Return on Equity	1417.00	1498.11	1519.46	1519.46	1519.46
O&M Expenses	120.59	124.62	128.73	133.02	137.49
Interest on Working Capital	67.03	69.32	68.72	67.17	65.44
Total	4295.56	4429.97	4381.95	4269.44	4156.13

64. The details of IWC as claimed by the Petitioner for the transmission asset for the 2019-24 period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses	10.05	10.39	10.73	11.09	11.46
Working Capital for Maintenance Spares	18.09	18.69	19.31	19.95	20.62
Working Capital for Receivables	528.14	546.16	540.24	526.37	511.00
Total Working Capital	556.28	575.24	570.28	557.41	543.08
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	67.03	69.32	68.72	67.17	65.44

Capital Cost

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

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

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



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

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

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



on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

- (4) *The capital cost in case of existing or new hydro generating station shall also include:*
- (a) *cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
 - (b) *cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*
- (5) *The following shall be excluded from the capital cost of the existing and new projects:*
- (a) *The assets forming part of the project, but not in use, as declared in the tariff petition;*
 - (b) *De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*

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

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

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

66. The Petitioner has claimed capital cost of ₹24087.47 lakh as on 31.3.2019 for the transmission asset and vide affidavit dated 20.9.2021, the Petitioner has submitted that estimated completion cost for the transmission asset (including projected ACE during the 2019-24 period) is within RCE apportioned cost and has further requested the Commission to allow the estimated completion cost as claimed.

67. We have considered the submissions and claim of the Petitioner. The trued-up capital cost of ₹24079.72 lakh has been considered as the opening capital cost as on



1.4.2019 for the determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure

68. Regulation 24 of the 2019 Tariff Regulations provides as follows:

“24. Additional Capitalisation 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) Un-discharged 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.”

69. Based on the Auditor's Certificate dated 31.7.2019, the Petitioner has submitted and claimed projected ACE of ₹1865.72 lakh and ₹757.68 lakh for 2019-20 and 2020-21 respectively. Also, ACE during the 2019-20 is within cut-off date and is accordingly claimed as per Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations. Further, ACE is on account of any un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date.

70. MPPMCL has submitted that the Petitioner has not supported its projected ACE claim during the 2019-24 period with proper documents and has also not justified the



same and has requested that ACE may be deferred till true up and only actual ACE may be allowed at that stage. In response, the Petitioner vide affidavit dated 20.9.2021 has reiterated its submissions (regarding projected ACE) in this petition.

71. We have considered the submission of the Petitioner and MPPMCL. ACE claimed on account of un-discharged liabilities towards final payment/ withheld payment due to contractual exigencies, accrued IDC discharge and unexecuted works of the approved scope executed within cut-off date is allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations.

72. In view of the above, ACE allowed in the instant order is as follows:

(₹ in lakh)			
Year	ACE claimed	IDC Discharged after COD	ACE allowed
2019-20	1865.72	258.92	2124.64
2020-21	757.68	0.00	757.68

Capital Cost considered for the 2019-24 tariff period:

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

(₹ in lakh)			
Capital Cost (as on 1.4.2019)	Admitted ACE		Capital Cost (as on 31.3.2024)
	2019-20	2020-21	
24079.72	2124.64	757.68	26962.04

Debt-Equity Ratio

74. 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.

(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.”

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

Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	16855.80	70.00	18873.43	70.00
Equity	7223.91	30.00	8088.61	30.00
Total	24079.72	100.00	26962.04	100.00



Depreciation

76. 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.

(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.”

77. Depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and ACE in the 2019-24 period. WAROD at Annexure-II has been worked out after taking into account the depreciation rates of assets as specified in the 2019 Tariff Regulations. Depreciation allowed for the transmission asset for the 2019-24 tariff period is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	24079.72	26204.36	26962.04	26962.04	26962.04
ACE	2124.64	757.68	0.00	0.00	0.00
Closing Gross Block	26204.36	26962.04	26962.04	26962.04	26962.04
Average Gross Block	25142.04	26583.20	26962.04	26962.04	26962.04



Weighted average rate of Depreciation (WAROD) (in %)	5.34	5.34	5.34	5.34	5.34
Balance useful life at the beginning of the year (Year)	34	33	32	31	30
Lapsed life of the asset at the beginning of the year (Year)	0	1	2	3	4
Depreciable Value	22640.09	23937.51	24278.46	24278.46	24278.46
Depreciation during the year	1342.14	1418.70	1438.70	1438.70	1438.70
Cumulative Depreciation	1384.19	2802.89	4241.59	5680.30	7119.00
Remaining Depreciable Value	21255.90	21134.62	20036.87	18598.17	17159.47

Interest on Loan

78. 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 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.

(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.”*

79. WAAROI on loan has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the transmission asset for the 2019-24 tariff period is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	16855.80	18343.05	18873.43	18873.43	18873.43
Cumulative Repayments up to Previous Year	42.05	1384.19	2802.89	4241.59	5680.30
Net Loan-Opening	16813.75	16958.86	16070.54	14631.83	13193.13
Additions due to ACE	1487.25	530.38	0.00	0.00	0.00
Repayment during the year	1342.14	1418.70	1438.70	1438.70	1438.70
Net Loan-Closing	16958.86	16070.54	14631.83	13193.13	11754.43
Average Loan	16886.31	16514.70	15351.19	13912.48	12473.78
Weighted Average Rate of Interest on Loan (in %)	7.9836	7.9856	7.9859	7.9834	7.9740
Interest on Loan	1348.14	1318.80	1225.92	1110.69	994.66

Return on Equity

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

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

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

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



Provided further that:

- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;*
- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;*
- iii. in case of a thermal generating station, with effect from 1.4.2020:*
 - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;*
 - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:*

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

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

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

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

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

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



Illustration-

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

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

(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."

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



beneficiaries or the long term customers on yearly basis. The Petitioner has further submitted that any adjustment due to additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable/ adjustable during 2019-24 tariff period on yearly basis on receipt of Income Tax assessment order.

82. We have considered the submissions of the Petitioner. MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the transmission asset for the 2019-24 tariff period is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	7223.91	7861.31	8088.61	8088.61	8088.61
Additions due to ACE	637.39	227.30	0.00	0.00	0.00
Closing Equity	7861.31	8088.61	8088.61	8088.61	8088.61
Average Equity	7542.61	7974.96	8088.61	8088.61	8088.61
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
Return on Equity	1416.65	1497.86	1519.20	1519.20	1519.20

Operation & Maintenance Expenses

83. Regulations 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 (Rs. lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (Rs. lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282



132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (Rs. lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs. lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (Rs. lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs. lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs. lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs. lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs. lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

(i) the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;



- (ii) the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- (iii) the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2500 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- (iv) the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- (v) the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- (vi) the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

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

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

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

“35(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.”

84. The total O&M Expenses claimed by the Petitioner in respect of the various elements covered under 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
Sub-station					
400 kV					
Number of Bays	2	2	2	2	2
Norms (₹ lakh/bay)	32.15	33.28	34.45	35.66	36.91
O&M Claimed (₹ in lakh)	64.30	66.56	68.90	71.32	73.82
Transmission Lines					
400 kV: S/C (Triple Conductor) (km)	98.407	98.407	98.407	98.407	98.407
Norms (₹ lakh/km)	0.503	0.521	0.539	0.558	0.578



O&M Claimed (₹ in lakh)	49.50	51.27	53.04	54.91	56.88
Communication System: PLCC					
Norms (in %)	2	2	2	2	2
Project cost/Asset related to the communication system (₹ in lakh)	339.37	339.37	339.37	339.37	339.37
O&M Expenses Claimed (₹ in lakh)	6.79	6.79	6.79	6.79	6.79
Total O&M Expenses (₹ in lakh)	120.59	124.62	128.73	133.02	137.49

85. We have considered the submissions and claim 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.

86. Further, the Commission vide order dated 3.1.2022 in Petition No. 684/TT/2020 had held as follows:

"54. As stated earlier, the Petitioner has split the transmission asset into Ckt-1 and Ckt-2 and has claimed O&M Expenses considering them as single circuit (S/C) in the instant petition for 98.407 km S/C of Ckt-1 and also in Petition No. 142/TT/2021 (filed for truing up of the tariff allowed for Ckt-2 of the transmission line vide order dated 13.1.2020 in Petition No.387/TT/2018) for 98.407 km S/C. With COD of Ckt-1, both the circuits of the transmission line have been put into commercial operation. Therefore, O&M Expenses shall be allowed for Double Circuit (D/C) instead of S/C separately in this instant order. Accordingly, no O&M Expenses shall be allowed for Ckt-2 of the transmission line in Petition No. 142/TT/2021 for 2019-24 period that has been filed for truing-up of tariff of 2014-19 period and determination of tariff for 2019- 24 period. After hearing the parties, order in Petition No. 142/TT/2021 is reserved."



87. In view of the foregoing findings, the O&M Expenses under S/C line is allowed only up to 1.4.2019. Accordingly, O&M Expenses allowed in respect of the various elements covered under the transmission asset are as follows:

(₹ in lakh)					
O&M Expenses	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station					
400 kV					
Number of Bays	2	2	2	2	2
Norms (₹ lakh/bay)	32.15	33.28	34.45	35.66	36.91
O&M allowed (₹ in lakh)	64.30	66.56	68.90	71.32	73.82
Transmission Lines					
400 kV: S/C (Triple Conductor) (km)	98.407				
Norms (₹ lakh/km)	0.503				
*O&M allowed (Pro-rata 1 day) (₹ in lakh)	0.14				
Total O&M Expenses (₹ in lakh)	64.44	66.56	68.90	71.32	73.82

* O&M Expenses allowed for S/C line for one day

Interest on Working Capital

88. 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) The working capital shall cover:

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

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

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

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

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



“3. Definitions ...

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

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (1 month of O&M Expenses)	9.48	5.55	5.74	5.94	6.15
Working Capital for Maintenance Spares (15% of O&M Expenses)	17.07	9.98	10.34	10.70	11.07
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost/annual transmission charges)	520.99	538.05	531.40	517.31	501.75
Total Working Capital	547.54	553.58	547.47	533.95	518.97
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	65.98	62.28	57.48	56.07	54.49

Annual Fixed Charges of the 2019-24 Tariff Period

90. The transmission charges allowed for 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	1342.14	1418.70	1438.70	1438.70	1438.70
Interest on Loan	1348.14	1318.80	1225.92	1110.69	994.66
Return on Equity	1416.65	1497.86	1519.20	1519.20	1519.20



O&M Expenses	64.44	66.56	68.90	71.32	73.82
Interest on Working Capital	65.98	62.28	57.48	56.07	54.49
Total	4237.35	4364.19	4310.21	4195.98	4080.88

Filing Fee and Publication Expenses

91. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner is 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

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

Goods and Services Tax

93. 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.

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



Security Expenses

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

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

Capital Spares

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

Sharing of Transmission Charges

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



DICs through Bills 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.

99. To summarise:

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

(₹ in lakh)	
2018-19 (Pro-rata 12 days)	
143.27	

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

(₹ in lakh)				
2019-20	2020-21	2021-22	2022-23	2023-24
4237.35	4364.19	4310.21	4195.98	4080.88

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

101. This order disposes of Petition No. 142/TT/2021 in terms of the above discussions and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
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 the 2014 Tariff Regulations (in %)	Annual Depreciation as per the 2014 Tariff Regulations (₹ in lakh)	
		2018-19	Total			2018-19	
Transmission Line	22397.77	175.31	175.31	22573.08	5.28	1187.23	
Sub-station	1077.59	60.40	60.40	1137.99	5.28	58.49	
PLCC	238.77	10.96	10.96	249.73	6.33	15.46	
IT Equipment (Including Software)	118.92	0.00	0.00	118.92	15.00	17.84	
Total	23833.05	246.67	246.67	24079.72		1279.02	
Average Gross Block (₹ in lakh)						23956.38	
Weighted Average Rate of Depreciation (in %)						5.34	

Annexure-II

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per the 2019 Tariff Regulations (in %)	Annual Depreciation as per the 2019 Tariff Regulations (₹ in lakh)				
		2019-20	2020-21	Total			2019-20	2020-21	2021-22	2022-23	2023-24
Building Civil Works & Colony	0.00	40.00	0.00	40.00	40.00	3.34	0.67	1.34	1.34	1.34	1.34
Transmission Line	22573.08	1874.64	676.72	2551.36	25124.44	5.28	1241.35	1308.71	1326.57	1326.57	1326.57
Sub Station	1137.99	108.68	80.96	189.64	1327.62	5.28	62.95	67.96	70.10	70.10	70.10
PLCC	249.73	93.98	0.00	93.98	339.28	6.33	18.78	21.76	21.76	21.76	21.76
IT Equipment (Including Software)	118.92	7.34	0.00	7.34	126.27	15.00	18.39	18.94	18.94	18.94	18.94
Total	24079.72	2124.64	757.68	2882.32	26962.04		1342.14	1418.70	1438.70	1438.70	1438.70
Average Gross Block (₹ in lakh)							25142.04	26583.20	26962.04	26962.04	26962.04
Weighted Average Rate of Depreciation (in %)							5.34	5.34	5.34	5.34	5.34

