CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 85/TT/2020.

Coram:

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

Date of Order: 08.02.2021

In the Matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of the assets consisting of **Asset-A:** LILO of Kurnool-Thiruvalam 765 kV D/C line along with bays and equipment at 765/400 KV at Cuddapah Sub-station and establishment of 765/400 kV Sub-station at Cuddapah with 2x1500 MVA transformer (GIS) along with associated bays and 2x240 MVAR bus reactors at Cuddapah GIS Sub-station; **Asset-B:** 400 kV D/C line from Cuddapah GIS to LILO point of NP Kunta portion of Cuddapah-Hindupur 400 kV D/C line along with bays and equipment at Cuddapah GIS; **Asset-C:** 400 kV D/C line from LILO point of NP Kunta to Hindupur Sub-station along with 2 nos. 400 kV bays and 2x80 MVAR switchable line reactor and 2 nos. 400 kV line bays at Hindupur Sub-station under "System Strengthening-XXIV in Southern Region".

And in the Matter of:

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

.....Petitioner

Vs

 Karnataka Power Transmission Corporation Ltd., Kaveri Bhavan, Bangalore-560009.



- 2. Transmission Corporation of Andhra Pradesh Ltd., Vidyut Soudha, Hyderabad-500082.
- Kerala State Electricity Board, Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram-695004.
- Tamil Nadu Generation and Distribution Corporation Ltd., (Formerly Tamil Nadu Electricity Board -TNEB), NPKRR Maaligai, 800, Anna Salai, Chennai-600002.
- Electricity Department, Government of Pondicherry, Pondicherry-605001.
- Eastern Power Distribution Company of Andhra Pradesh Ltd., APEPDCL, P&T Colony, Seethmmadhara, Vishakhapatnam, Andhra Pradesh.
- 7. Southern Power Distribution Company of Andhra Pradesh Ltd., Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayana Gunta, Tirupati-517501, Chittoor District, Andhra Pradesh.
- 8. Central Power Distribution Company of Andhra Pradesh Ltd., Corporate Office, Mint Compound, Hyderabad-500063, Telangana.
- 9. Northern Power Distribution Company of Andhra Pradesh Ltd., Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet, Warangal-506004, Telangana.
- 10. Bangalore Electricity Supply Company Limited, Corporate Office, K. R. Circle, Bangalore-560001, Karnataka.
- 11. Gulbarga Electricity Supply Company Ltd., Station Main Road, Gulburga, Karnataka.
- 12. Hubli Electricity Supply Company Ltd., Navanagar, PB Road, Hubli, Karnataka.
- 13. MESCOM Corporate Office, Paradigm Plaza, AB Shetty Circle, Mangalore-575001, Karnataka.



- 14. Chamundeswari Electricity Supply Corporation Ltd., 927, L J Avenue, Ground Floor, New Kantharaj Urs Road, Saraswatipuram, Mysore-570009, Karnataka.
- 15. Electricity Department, Government of Goa, Vidyuti Bhawan, Panaji, Goa 403001.
- 16. Transmission Corporation of Telangana Ltd., Vidhyut Sudha, Khairatabad, Hyderabad, 500082.
- 17. Tamil Nadu Transmission Corporation Ltd., NPKRR Maaligai, 800, Anna Salai Chennai-600002.

...Respondents

For Petitioner : Shri B. Dash, PGCIL

Shri S. S. Raju, PGCIL

For Respondents: Shri S. Vallinayagam, Advocate, TANGEDCO

<u>ORDER</u>

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as "the Petitioner"), a deemed transmission licensee, for truing up of the tariff of the period from the date of commercial operation (COD) to 31.3.2019 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of tariff for the period from 1.4.2019 to 31.3.2024 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following assets under "System Strengthening-XXIV in Southern Region" (hereinafter referred to as "the Transmission Project"):

Asset-A: LILO of Kurnool-Thiruvalam 765 kV D/C line along with the bays and equipment at 765/400 kV at Cuddapah Sub-station and establishment of 765/400 kV Sub-station at Cuddapah alongwith 2x1500 MVA transformer (GIS) alongwith associated bays and 2x240 MVAR bus reactors at Cuddapah GIS Sub-station;

Asset-B: 400 kV D/C line from Cuddapah GIS to LILO point of NP Kunta portion of Cuddapah-Hindupur 400 kV D/C line along with the bays and equipment at Cuddapah GIS; and

Asset-C: 400 kV D/C line from LILO point of NP Kunta to Hindupur Sub-station along with 2 nos. 400 kV bays and 2x80 MVAR switchable line reactor and 2 nos. 400 kV line bays at Hindupur Sub-station under the Transmission Project.

- 2. The Petitioner has made the following prayers in this petition:
 - "1) 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 11.2 and 12.0 above.
 - 2) Approve the Completion cost and additional capitalisation incurred during 2014-19, also allow the projected additional capitalization during 2019-24.
 - 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 11.2 and 12.0 above for respective block.
 - 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
 - 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
 - 6) Allow the additional RoE of 0.5% during 2014-19 period as per para 6.5 above.

- 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 respondents.
- 8) Allow the petitioner to file a separate petition before the Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 11.6 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 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 the Commission deems fit and appropriate under the circumstances of the case and in the interest of justice."

Background

- The brief facts of the case are as under:
 - a) The Investment Approval (IA) for the Transmission Project was accorded by the Board of Directors of the Petitioner Company on 12.1.2016 (communicated *vide* Memorandum No. C/CP/SRSS-XXIV dated 14.1.2016) at estimated cost of ₹145547 lakh including IDC of ₹8850 lakh based on August 2015 price level.
 - b) The entire scope of the Transmission Project has been covered in the instant petition and the same is as under:

Transmission Line:

- i. LILO of Kurnool- Thiruvalam 765 kV D/C line at Cuddapah-92 km
- ii. Cuddapah-Hindupur 400 kV (Quad) D/C line- 166.3 km

Sub-station:

Cuddapah 765/400 kV Sub-station

765 kV

- i. Establishment of 765/400 kV sub-station at Cuddapah with 2x1500 MVA Transformers (GIS)
- ii. 765 kV ICT bays: 2 nos.
- iii. 765 kV line bays: 4 nos.



- iv. 765 kV bus reactor bays: 2 nos.
- v. 2x240 MVAR bus reactors at Cuddapah Sub-station

400 kV

- i. 400 kV ICT bays: 2 nos.
- ii. 400 kV line bays: 2 nos.

Hindupur 400 kV Sub-station (Sub-station to be implemented by APTRANSCO)

- i. 2x80 MVAR switchable line reactors
- ii. 400 kV line bays: 2 nos.
- iii. 400 kV switchable line reactor bays: 2 nos.
- c) As per the IA dated 12.1.2016, the transmission assets were scheduled to be put into commercial operation within 30 months from the date of IA i.e. by 11.7.2018 against which Assets-A, B and C were put into commercial operation on 25.10.2018, 4.8.2018 and 12.10.2018 with a time over-run of 106 days, 24 days and 93 days respectively. The entire time over-run in execution of the transmission assets was condoned by the Commission vide order dated 29.7.2019 in Petition No. 257/TT/2018. COD of Asset-C was approved under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations and it was held in order dated 29.7.2019 that the transmission charges of Asset-C from 12.10.2018 to 21.1.2019 shall be borne by APTRANSCO. The entire scope of the Transmission Project has been completed.
- d) The tariff for the transmission assets was allowed from their respective COD to 31.3.2019 *vide* order dated 29.7.2019 in Petition No. 257/TT/2018. The Annual Fixed Charges (AFC) allowed by the Commission and trued up transmission tariff claimed by the Petitioner for the transmission assets are as under:

Assets	Particulars	2018-19 (<i>Pro-rata</i>)*
Asset-A	AFC approved <i>vide</i> order dated 29.7.2019 in Petition No. 257/TT/2018	5736.47
	Claimed by the Petitioner based on true-up in the instant petition	6077.60
Asset-B	AFC approved <i>vide</i> order dated 29.7.2019 in Petition No. 257/TT/2018	2087.28
	Claimed by the Petitioner based on true-up in the instant petition	2328.79
Asset-C	AFC approved <i>vide</i> order dated 29.7.2019 in Petition No. 257/TT/2018	2001.22
	Claimed by the Petitioner based on true-up in the instant petition	2054.46

^{*}the pro-rata days are 158, 240 and 171 for Assets-A, B and C respectively

- 4. The Respondents are the distribution licensees and power departments, which are procuring transmission service from the Petitioner and are mainly beneficiaries of the Southern Region.
- 5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No suggestions/objections have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. A general notice dated 12.3.2020 was published on the website of the Commission directing the beneficiaries/ Respondents to file reply in the matter. Tamil Nadu Generation and Distribution Corporation Ltd. (TANGEDCO), Respondent No. 4 has filed its reply *vide* affidavit dated 4.9.2020. TANGEDCO has raised the issues of capital cost and Additional Capital Expenditure (ACE) and submitted that they are claimed higher than what was admitted in the order dated 29.7.2019 in Petition No. 257/TT/2018. TANGEDCO has further submitted that break up of Initial Spares has not been furnished by the Petitioner. The Petitioner *vide*

affidavit dated 11.9.2020 has filed rejoinder to the reply of TANGEDCO. The issues raised by TANGEDCO and clarifications thereto by the Petitioner have been considered in the relevant portions of this order.

- 6. This order is issued on consideration of Petitioner's affidavits dated 21.12.2019, and 11.3.2020, reply filed by TANGEDCO *vide* affidavit dated 4.9.2020 and rejoinder affidavit of the Petitioner dated 11.9.2020.
- 7. The hearing in this matter was held on 10.8.2020 through video conference and the order was reserved.
- 8. Having heard the representatives of the Petitioner, learned counsel for TANGEDCO and having perused the material on record, we proceed to dispose of the petition.

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

9. The details of the trued up transmission charges claimed by the Petitioner in respect of the transmission assets are as under:

(₹ in lakh)

	Asset-A	Asset-B	Asset-C
Particulars	2018-19 (<i>pro-rata</i> for 158 days)	2018-19 (<i>pro-rata for</i> 240 days)	2018-19 (<i>pro-rata for</i> 171 days)
Depreciation	1715.60	663.27	572.98
Interest on Loan	1785.07	700.13	578.73
Return on Equity	1997.79	781.85	663.97
Interest on Working Capital	136.19	51.12	47.23
O&M Expenses	442.95	132.42	191.55
Total	6077.60	2328.79	2054.46

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



Particulars	2018-19 (<i>pro-rata</i> 158 days)	2018-19 (<i>pro-rata for</i> 240 days)	2018-19 (<i>pro-rata for</i> 171 days)
O&M Expenses	85.27	16.78	34.07
Maintenance Spares	153.49	30.21	61.33
Receivables	2340.00	590.28	730.88
Total Working Capital	2578.76	637.27	826.28
Rate of Interest (%)	12.20	12.20	12.20
Interest on Working Capital	314.61	77.75	100.81
Pro-rata IWC	136.19	51.12	47.23

Capital Cost

11. The capital cost of the transmission assets is allowed in accordance with Regulation 9(3) of the 2014 Tariff Regulations. The Commission *vide* order dated 29.7.2019 in Petition No. 257/TT/2018 approved the capital cost and the projected ACE during the period from COD to 31.3.2019 as under:

(₹ in lakh)

Asset	FR Apportioned Approved Capital Cost	Admitted Capital Cost as on COD*	Projected ACE 2014-19*	Total Capital Cost as on 31.3.2019
Asset-A	90756.85	71587.91	2176.34	73764.25
Asset-B	24178.89	17578.66	530.92	18109.58
Asset-C	30610.84	22434.36	1255.00	23689.36

^{*} Accrued IDC adjusted from COD and added in the respective year of discharge

12. The details of FR approved apportioned cost, actual expenditure up to COD, and actual ACE incurred during period 2018-19 claimed by the Petitioner are as follows:

(₹ in lakh)

Assets	Apportioned Approved Capital Cost as per FR	Expenditure upto COD	ACE as per Auditor Certificates dated 30.7.2019 & 21.11.2019 (2018-19)	Total Capital Cost as on 31.3.2019
Asset-A	90756.85	73342.51	5579.76	78922.27
Asset-B	24178.89	18659.52	1742.88	20402.40
Asset-C	30610.84	23600.87	0.00	23600.87



- 13. TANGEDCO has submitted that the Petitioner has claimed capital cost of ₹1115602.90 lakh as on COD against the admitted capital cost of ₹111600.93 lakh. The Petitioner has submitted that the capital cost as on COD approved *vide* order dated 29.7.2019 in Petition No. 257/TT/2018 was based on proposed COD of Asset-C and as such the expenditure claimed upto COD was based on estimation as per Management Certificate. However, the Petitioner was granted liberty to furnish the Auditor's Certificate based on actual expenditure at the time of truing up. Accordingly, in the instant petition, the capital cost claimed for Asset-C upto COD is as per actual expenditure incurred and is as per the Auditor's Certificate.
- 14. We have considered the above submissions of Petitioner and TANGEDCO. In view of the submissions of the Petitioner, the claimed capital cost is allowed. The total capital cost claimed by the Petitioner is within the apportioned approved capital cost as per FR and, therefore, there is no cost over-run in case of Assets-A, B and C.

<u>Interest During Construction (IDC) and Incidental Expenditure During</u> Construction (IEDC)

15. The transmission assets were scheduled to be put into commercial operation on 11.7.2018 against which Assets-A, B and C were declared under commercial operation on 25.10.2018, 4.8.2018 and 12.10.2018 with a time over-run of 106 days, 24 days and 93 days respectively. The Commission vide order dated 29.7.2019 in the Petition No. 257/TT/2018 condoned the entire time over-run in respect of the transmission assets. The Petitioner has claimed IDC for Assets-A, B and C and has also submitted the statement showing IDC claim, discharge of IDC liability as on COD and thereafter. The details of the same are as under:

Assets	IDC as per Auditor's Certificate	IDC discharged upto COD	IDC discharged in 2018-19	IDC to be discharged in 2019-20
Asset-A	3687.02	2597.80	772.26	316.96
Asset-B	1287.78	1105.80	169.89	12.09
Asset-C	1080.91	239.67	807.26	33.98

- 16. The Commission disallowed IDC of ₹799.75 lakh, ₹905.27 lakh and ₹23.18 lakh for Assets-A, B and C respectively due to non-availability of supporting documents in order dated 29.7.2019 in Petition No. 257/TT/2018. The Commission in the said order further directed the Petitioner to furnish the details of SBI term loans utilized for financing of the transmission assets and the details of change in the rate of interest during the period for which IDC was claimed for the floating loan of ICICI and HDFC at the time of truing up.
- 17. The Petitioner has now submitted the details of rate of interest in term loan accounts corresponding to the SBI loans along with HDFC and ICICI term loans utilized for financing of transmission assets. The Petitioner has also submitted the IDC statement in the instant petition showing details consisting of the name of the loan, drawl date, loan amount, interest rate, annual interest payment date upto COD, interest discharged upto COD and annual interest payment date after COD.
- 18. We have considered the submissions of the Petitioner. We notice that the loan portfolio as mentioned in the IDC statement of Assets-A, B and C and as mentioned in Form 9C of the instant petition for each of the transmission assets are not matching. Hence, for the purpose of determination of allowable IDC, the loan amount as mentioned in the IDC statement and IDC as per Auditor certificate has been considered. Based on the available information, IDC allowed is as under:

Assets	IDC as per Auditor Certificates dated 30.7.2019 & 21.11.2019	IDC allowed on accrued basis	IDC allowed on cash basis as on COD	Un- discharged IDC liability as on COD	IDC liability allowed as ACE during 2018-19	IDC liability allowed as ACE during 2019-20
Asset-A	3687.02	3687.02	2597.80	1089.22	772.26	316.96
Asset-B	1287.78	1287.78	1105.80	181.98	169.89	12.09
Asset-C	1080.91	1080.91	239.67	841.24	807.26	33.98

19. The Petitioner has claimed IEDC of ₹1953.00 lakh, ₹474.41 lakh and ₹678.30 lakh in respect of Assets-A, B and C respectively. The Petitioner has submitted that IEDC has been discharged on or before the COD of the transmission assets and the same was allowed vide order dated 29.7.2019 in Petition No. 257/TT/2018. Further, the Petitioner has not claimed any additional IEDC in the instant petition. The claimed IEDC as on COD is within the permissible percentage of hard cost as indicated in the approved abstract cost estimate. Therefore, IEDC as claimed has been considered for the purpose of tariff.

Initial Spares

- 20. Regulation 13(d) of the 2014 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of plant and machinery cost up to the cut-off date, subject to the following ceiling norms:
 - "(d) Transmission System
 - (i) Transmission line: 1.00%
 - (ii) Transmission sub-station (Green Field): 4.00%
 - (iii) Transmission sub-station (Brown Field): 6.00%
 - (iv) Series Compensation devices and HVDC Station: 4.00%
 - (v) Gas Insulated Sub-station (GIS): 5.00%

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21. The Initial Spares claimed by the Petitioner are as follows:

Assets	Plant and Machinery Cost (A) (₹ in lakh)	Initial Spares as per Auditor's Certificates dated 30.7.2019 & 21.11.2019 (B) (₹ in lakh)	Ceiling (%) (C)	Initial Spares worked out as per Norms (₹ in lakh) D = [(A-B) *C /(100- C)]
For Gas Insulated Sub-station (GIS)				
Asset-A	41411.72	1301.55	5.00	2111.06
Asset-B	5192.88	217.70	5.00	261.85

- 22. TANGEDCO has submitted that the Petitioner has not furnished the break-up of the Initial Spares as mandated under Form-13. In response, the Petitioner has submitted that details of the Initial Spares as per Form-13 were submitted *vide* affidavit dated 11.3.2020.
- 23. We have considered the submissions of the Petitioner and TANGEDCO. The Initial Spares are allowed for Asset-A and Asset-B as a percentage of the capital cost of Plant and Machinery as on the cut-off date and the same is as under:

Assets	Plant and Machinery Cost as on cut-off date (A) (₹ in lakh)	Initial Spares as per Auditor's Certificates dated 30.7.2019 & 21.11.2019 (B) (₹ in lakh)	Ceiling (%) (C)	Initial Spares worked out as per Norms (₹ in lakh) D = [(A- B)*C /(100- C)]	Excess Claim E=B-D (₹ in lakh)	Initial Spares allowed (₹ in lakh)
For Gas Insulated Sub-station (GIS)						
			- 00	0444.00		1201 EE
Asset-A	41411.72	1301.55	5.00	2111.06	-	1301.55

^{*} The petitioner has not claimed any Initial Spares for Asset-C.

Capital Cost as on COD

24. The Petitioner has claimed higher capital cost for Asset-C in the instant petition.

On a query, the Petitioner has submitted that the capital cost approved *vide* order



dated 29.7.2019 in Petition No. 257/TT/2018 was based on the proposed COD and, therefore, expenditure claimed up to proposed COD was as per estimated expenses and as per Management Certificate. Further, the Petitioner was directed to submit Auditor's Certificate for the expenditure mentioned in the Management Certificate in respect of Asset-C at the time of true up. Accordingly, in the instant petition, the capital cost claimed for Asset-C up to COD is as per actual expenditure incurred and the Auditor's Certificates.

25. The details of the capital cost as on COD approved after adjustment of IDC, are as under:

(₹ in lakh)

Assets	Capital Cost claimed as on COD (as per Auditor Certificates dated 30.7.2019 & 21.11.2019) (A)	IDC undischarged as on COD (B)	Capital Cost allowed as on COD (C=A-B)
Asset-A	73342.51	1089.22	72253.29
Asset-B	18659.52	181.98	18477.54
Asset-C	23600.87	841.24	22759.63

Additional Capital Expenditure (ACE)

- 26. ACE of ₹2176.34 lakh, ₹530.92 lakh and ₹1255 lakh was allowed vide order dated 29.7.2019 in Petition No. 257/TT/2018, for Assets-A, B and C respectively during the 2014-19 period towards balance and retention payments and for works deferred for execution under Regulation 14(1)(i) and (ii) of the 2014 Tariff Regulations.
- 27. As per the Auditor's Certificates dated 30.7.2019 and 21.11.2019, the Petitioner has claimed ACE based on actual expenditure as under:

Assets	Capital Cost up to COD after	ACE	IDC discharged during the year	Capital Cost as on 31.3.2019
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	adjustment of accrued IDC	2018-19	2018-19	
Asset-A	72253.29	5579.76	772.26	78605.31
Asset-B	18477.54	1742.88	169.89	20390.31
Asset-C	22759.63	0.00	807.26	23566.89
Total	113490.46	7322.64	1749.41	122562.51

- 28. Assets-A, B and C were put into commercial operation *w.e.f.* 25.10.2018, 4.8.2018 and 12.10.2018, respectively. Accordingly, the cut-off date for all the three transmission assets is 31.3.2021 and, therefore, ACE claimed during the 2014-19 period for the transmission assets is within the cut-off date.
- 29. In response to a query for claiming higher ACE than approved *vide* order dated 29.7.2019 in Petition No. 257/TT/2018, the Petitioner has submitted that ACE approved by the Commission was based on projections. However, in the instant true up petition, the Petitioner has claimed ACE on the basis of actual payments made to the contractor after receipt of final invoices from the contractor. The Petitioner has further submitted that the payments were made after submission of invoice and reconciliation in accordance with provisions of the contract. ACE for the year 2018-19 for all the transmission assets has been claimed under Regulation 14(1)(i) and (ii) of the 2014 Tariff Regulations.
- 30. TANGEDCO has submitted that higher ACE is being claimed by the Petitioner in the instant petition than what was allowed *vide* order dated 29.7.2019 in Petition No. 257/TT/2018. In response, the Petitioner has submitted that ACE approved by the Commission vide order dated 29.7.2019 was based on projections and at that time contracts were not closed and liabilities were not crystalized.
- 31. We have considered the submissions of the Petitioner and TANGEDCO. ACE for the year 2018-19 for the transmission assets has been claimed as balance and

retention payments and works deferred for execution. Therefore, ACE as claimed is allowed under Regulations 14(1)(i) and (ii) of the 2014 Tariff Regulations.

32. The un-discharged IDC liability as on COD of the transmission assets has been allowed as part of ACE during their respective year of discharge. ACE allowed from COD to 31.3.2019 in respect of the transmission assets is summarized as under:

(₹ in lakh)

Assets	Particulars	ACE	Total ACE
Acces	T di tiodiai 3	2018-19	
Asset-A	ACE	5579.76	6352.02
ASSEL-A	IDC Discharged	772.26	0332.02
Asset-B	ACE	1742.88	1912.77
ASSEL-D	IDC Discharged	169.89	
Asset-C	ACE	0	807.26
ASSEL-C	IDC Discharged	807.26	007.20
Total	ACE	7322.64	9072.05
Total	IDC Discharged	1749.41	9072.03

33. Accordingly, the capital cost considered for the 2014-19 period is as follows:

(₹ in lakh)

			,
Assets	Capital Cost as on COD	ACE	Total Capital Cost as on 31.3.2019
		2018-19	
Asset-A	72253.29	6352.02	78605.31
Asset-B	18477.54	1912.77	20390.31
Asset-C	22759.63	807.26	23566.89

Debt-Equity ratio

34. The Petitioner has claimed the debt-equity ratio of 70:30 as on COD. The loan amount claimed by the Petitioner for calculation of debt-equity ratio in Form-6 and for calculation of IDC in the Statement of IDC discharged up to COD is not matching. The details of the same are as under:

Assets	Loan considered in Form-6	Loan considered for IDC calculation	Difference
	(A)	(B)	(C=B-A)
Asset-A	50577.31	51339.76	762.45
Asset-B	12934.28	13061.66	127.38
Asset-C	15931.74	16520.61	588.87

35. We have considered the loan used for calculation of IDC for working out the debt-equity ratio. Hence, the debt-equity ratio as on COD works out as 71.06:28.94, 70.69:29.31 and 72.59:27.41 for Assets-A, B and C respectively. Further, for the purpose of ACE, debt-equity ratio of 70:30 has been considered in accordance with Regulation 19(3) of the 2014 Tariff Regulations. The details of debt-equity ratio of the capital cost as on COD and as on 31.3.2019 for the transmission assets considered for the purpose of truing up of tariff for the 2014-19 period are as under:

Assets	Particu-	Capita	l Cost as o	n COD	ACE			Capital Cost as on 31.3.2019		31.3.2019
ASSEIS	Assets lars Debt Equity Total		Debt	Equity	Total	Debt	Equity	Total		
	%age	71.06%	28.94%	100.00%	70.00%	30.00%	100.00%	70.97%	29.03%	100.00%
Asset-A	Amount (₹ in lakh)	51339.76	20913.53	72253.29	4446.41	1905.61	6352.02	55786.17	22819.14	78605.31
	%age	70.69%	29.31%	100.00%	70.00%	30.00%	100.00%	70.62%	29.38%	100.00%
Asset-B	Amount (₹ in lakh)	13061.66	5415.88	18477.54	1338.94	573.83	1912.77	14400.60	5989.71	20390.31
Asset-	%age	72.59%	27.41%	100.00%	70.00%	30.00%	100.00%	72.51%	27.49%	100.00%
C	Amount (₹ in lakh)	16520.61	6239.02	22759.63	565.08	242.18	807.26	17085.69	6481.20	23566.89

Interest on Loan (IoL)

36. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on the actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The following tables show asset-wise IoL allowed in the instant petition followed by IoL approved earlier, claimed by the Petitioner in the instant petition and trued up in this order:



Particulars	Asset-A
Particulars	2018-19 (<i>pro-rata</i> for 158 days)
Gross Normative Loan	51339.76
Cumulative Repayments upto Previous Year	0.00
Net Loan-Opening	51339.76
Additions	4446.41
Repayment during the year	1712.40
Net Loan-Closing	54073.77
Average Loan	52706.76
Weighted Average Rate of Interest on Loan (%)	7.9390
Interest on Loan	4184.41
Pro-rata Interest on Loan	1811.33

(₹ in lakh)

Particulars	2018-19 (pro-rata for 158 days)
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	1679.64
Claimed by the Petitioner in the instant petition	1785.07
Allowed after true-up in this order	1811.33

(₹ in lakh)

	Asset-B
Particulars	2018-19
	(pro-rata for 240 days)
Gross Normative Loan	13061.66
Cumulative Repayments up to Previous Year	0.00
Net Loan-Opening	13061.66
Additions	1338.94
Repayment during the year	661.81
Net Loan-Closing	13738.79
Average Loan	13400.23
Weighted Average Rate of Interest on Loan (%)	8.0227
Interest on Loan	1075.06
Pro-rata Interest on Loan	706.89

(₹ in lakh)

Particulars	2018-19 (pro-rata for 240 days)
Approved vide order dated 29.7.2019 in Petition	618.51

No. 257/TT/2018	
Claimed by the Petitioner in the instant petition	700.13
Allowed after true-up in this order	706.89

	Asset-C
Particulars	2018-19 (<i>pro-rata for</i> 171 days)
Gross Normative Loan	16520.61
Cumulative Repayments up to Previous Year	-
Net Loan-Opening	16520.61
Additions	565.08
Repayment during the year	572.98
Net Loan-Closing	16512.72
Average Loan	16516.66
Weighted Average Rate of Interest on Loan (%)	7.7556
Interest on Loan	1280.96
Pro-rata Interest on Loan	600.12

(₹ in lakh)

Particulars	2018-19 (pro-rata for 171 days)
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	592.73
Claimed by the Petitioner in the instant petition	578.73
Allowed after true-up in this order	600.12

Return on Equity (RoE)

37. The Petitioner is entitled to RoE for the transmission assets in accordance with Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at Minimum Alternate Tax (MAT) rates and has claimed the following effective tax rates for the 2014-19 period:

Year	Claimed effective tax (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757

- 38. We have considered the submission of the Petitioner. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given in the table below. The relevant portion of the order dated 27.4.2020 is as under:
 - "26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act. 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long-term transmission customers / DICs as the case may be on year to year basis.

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

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

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

Ī	Voor	Notified MAT rates	Base rate of RoE	Grossed up RoE
	Year	(inclusive of surcharge	(in %)	(Base Rate/1-t) (in %)



Regulations, which is as under:

	& cess) (in %)		
2014-15	20.961	16.00	20.243
2015-16	21.342	16.00	20.341
2016-17	21.342	16.00	20.341
2017-18	21.342	16.00	20.341
2018-19	21.549	16.00	20.395

40. RoE (Base rate already allowed by the Commission vide order dated 29.7.2019 in Petition No. 157/TT/2018) is trued up on the basis of the MAT rate applicable in the respective years. The following tables show asset-wise RoE allowed in the instant petition followed by RoE approved earlier, claimed by the Petitioner in the instant petition and trued up in this order:

(₹ in lakh)

	Asset A
Particulars	2018-19
	(pro-rata for 158 days)
Opening Equity	20913.53
Additions	1905.61
Closing Equity	22819.14
Average Equity	21866.33
Return on Equity (Base Rate) (%)	16.00
MAT Rate for respective year (%)	21.549
Rate of Return on Equity (%)	20.395
Return on Equity	4459.60
Pro-rata Return on Equity	1930.46

(₹ in lakh)

	(* 111 161111)
Particulars	2018-19 (<i>pro-rata for</i> 158 days)
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	1844.32
Claimed by the Petitioner in the instant petition	1997.79
Allowed after true-up in this order	1930.46

	Asset B	
Particulars	2018-19	
	(pro-rata for 240 days)	
Opening Equity	5415.88	
Additions	573.83	

Closing Equity	5989.71
Average Equity	5702.80
Return on Equity (Base Rate) (%)	16.000
MAT Rate for respective year (%)	21.549
Rate of Return on Equity (%)	20.395
Return on Equity	1163.08
Pro-rata Return on Equity	764.76

Particulars	2018-19 (pro-rata for 240 days)
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	696.41
Claimed by the Petitioner in the instant petition	781.85
Allowed after true-up in this order	764.76

(₹ in lakh)

	(* III lakii)
	Asset C
Particulars	2018-19
	(pro-rata for 171 days)
Opening Equity	6239.02
Additions	242.18
Closing Equity	6481.20
Average Equity	6360.11
Return on Equity (Base Rate) (%)	16.000
MAT Rate for respective year (%)	21.549
Rate of Return on Equity (%)	20.395
Pro-rata Return on Equity	607.70

(₹ in lakh)

Particulars	2018-19 (<i>pro-rata for</i> 171 days)
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	600.33
Claimed by the Petitioner in the instant petition	663.97
Allowed after true-up in this order	607.70

Depreciation

41. The Petitioner's claim towards rate of depreciation in this petition for Assets-A and B was found higher than the depreciation allowed for the transmission assets in order dated 29.7.2019 in Petition No. 257/TT/2018. The Petitioner has neither given any justification for claiming higher rate of depreciation than what was allowed earlier



in order dated 29.7.2019 nor made any specific prayer for allowing higher rate of depreciation in this petition. Similar issue had come up in Petition No. 19/TT/2020, wherein the Commission vide order dated 9.5.2020 decided as under:

"31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012 and 9.5.2013 in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014-19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations(the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted Order in Petition No. 58/TT/2020 Page 13 of 36 and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the sub-station upto 31.3.2019while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations."

42. In line with above order, depreciation @5.28% has been considered for IT Equipment as part of the sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 of the

2019 Tariff Regulations. The Gross Block during the 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD) (placed as Annexure-I to this order). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during the 2014-19 period is as under:

(₹ in lakh)

	Asset A
Particulars	2018-19
	(pro-rata for 158 days)
Opening Gross Block	72253.29
ACE	6352.02
Closing Gross Block	78605.31
Average Gross Block	75429.30
WAROD (%)	5.24
Balance useful life of the asset	30.00
Elapsed life at the beginning of the year	0.00
Aggregated Depreciable Value	67886.37
Combined Depreciation during the year	1712.40
Aggregate Cumulative depreciation	1712.40
Remaining Aggregate Depreciable Value	66173.97

(₹ in lakh)

	(*)
Particulars	2018-19 (<i>pro-rata for</i> 158 days)
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	1649.21
Claimed by the Petitioner in the instant petition	1715.60
Allowed after true-up in this order	1712.40

	Asset-B
Particulars	2018-19
	(pro-rata for 240 days)
Opening Gross Block	18477.54
ACE	1912.77
Closing Gross Block	20390.31
Average Gross Block	19433.93
WAROD (%)	5.18

Aggregate Depreciable Value	17490.53
Balance useful life of the asset	32.00
Elapsed life at the beginning of the year	0.00
Aggregate Depreciable Value	17490.53
Combined Depreciation during the year	661.81
Cumulative depreciation	661.81
Remaining Depreciable Value	16828.72

Particulars	2018-19 (pro-rata for 240 days)
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	607.22
Claimed by the Petitioner in the instant petition	663.27
Allowed after true-up in this order	661.81

(₹ in lakh)

Particulars	Asset-C	
	2018-19	
	(pro-rata for 171 days)	
Opening Gross Block	22759.63	
ACE	807.26	
Closing Gross Block	23566.89	
Average Gross Block	23163.26	
WAROD (%)	5.28%	
Balance useful life of the asset	34.00	
Elapsed life at the beginning of the year	0.00	
Aggregate Depreciable Value	20846.93	
Combined Depreciation during the year	572.98	
Cumulative depreciation	572.98	
Remaining Depreciable Value	20273.96	

(₹ in lakh)

Particulars	2018-19 (pro-rata for 171 days)
Approved <i>vide</i> order dated 29.7.2019 in Petition No. 257/TT/2018	570.47
Claimed by the Petitioner in the instant petition	572.98
Allowed after true-up in this order	572.98

Operation & Maintenance Expenses (O&M Expenses)

43. The total O&M Expenses claimed by the Petitioner for the transmission assets are as under:



O&M Expenses	Asset-A
Particulars	2018-19
T di tiodidi 3	(pro-rata for 158 days)
Transmission line LILO of Kurnool Thiruvalam 765 kV D/C line	
D/C Bundled (4 or more sub-conductors) (km)	96.06
Norms (₹ lakh/km)	1.21
Sub-station Bays 765 kV	
Cuddapah: Kurnool Line bay I & II 765 kV (GIS)	2 nos.
Cuddapah: Thiruvalam Line bay I & II 765 kV (GIS)	2 nos.
Cuddapah ICT I & II bays 765 kV (GIS)	2 nos.
Cuddapah:240 MVAR Bus Reactor bay I & II 765 kV (GIS)	2 nos.
Norms (₹ lakh/bays)	96.20
Sub-station Bays 400 kV	
Cuddapah: ICT Bay I & II bay 400 kV (Conventional)	2 nos.
Norms (₹ lakh/bays)	68.71
Sub-station Bays	
Cuddapah: ICT – I 1500 MVA 765 kV (GIS)	1 no.
Cuddapah: ICT – II 1500 MVA 765 kV (GIS)	1 no.
Total O&M Expenses (₹ in lakh)	442.95

O&M Expenses	Asset-B
Particulars	2018-19 (<i>pro-rata for</i> 240 days)
Transmission line 400 kV D/C Cuddapah to NP Kunta LILO	
D/C Bundled (4 or more sub-conductors) (km)	52.87
Norms (₹ lakh/km)	1.21
Sub-station Bays 400 kV	
Cuddapah line bay NP Kunta LILO Point I &II 400 kV (Conventional)	2 nos.
Norms (₹ lakh/bays)	68.71
Total O&M Expenses (₹ in lakh)	132.42

(₹ in lakh)

O&M Expenses	Asset-C
Particulars	2018-19 (pro-rata for 171 days)
Transmission line LILO of NP Kunta to Hindupur	
D/C Bundled (4 or more sub-conductors) (km)	110.76
Norms (₹ lakh/km)	1.21
Sub-station Bays 400 kV	
Cuddapah: Line bay for NP Kunta I&II 400 kV (Conventional)	2 nos.



Cuddapah: Switchable Line reactor bay I&II 400 kV (Conventional)	2 nos.
Total O&M Expenses (₹ in lakh)	191.55

44. In respect of Assets-A and B, the Petitioner has claimed 2 nos. of 400 kV Substation bays as "Conventional" in the instant petition whereas in Petition No. 257/TT/2018, the same bays were specified as "GIS" by the Petitioner. The Petitioner has not offered any justification for this deviation. Therefore, for Assets-A and B, the O&M Expenses are allowed based on the type of sub-station bays (GIS) as approved in order dated 29.7.2019 in Petition No. 257/TT/2018. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The following tables show asset-wise O&M Expenses allowed in the instant petition followed by O&M Expenses approved earlier, claimed by the Petitioner in the instant petition and trued up in this order:

O&M Expenses	Asset-A
Particulars	2018-19 (pro-rata for 158 days)
Transmission line LILO of Kurnool Thiruvalam 765 kV D/C	
D/C Bundled (4 or more sub-conductors) (km)	96.06
Norms (₹ lakh/km)	1.21
Sub-station Bays 765 kV	
Cuddapah: Kurnool Line bay I & II 765 kV (GIS)	2 nos.
Cuddapah: Thiruvalam Line bay I & II 765 kV (GIS)	2 nos.
Cuddapah ICT I & II bays 765 kV (GIS)	2 nos.
Cuddapah:240 MVAR Bus Reactor bay I & II 765 kV (GIS)	2 nos.
Norms (₹ lakh/bays)	96.20
Sub-station Bays 400 kV GIS	
Cuddapah: ICT Bay I & II bay 400 kV (GIS)	2 nos.
Norms (₹ lakh/bays)	58.73
Sub-station Bays	
Cuddapah: ICT – I 1500 MVA 765 kV (GIS)	1 no.
Cuddapah: ICT – II 1500 MVA 765 kV (GIS)	1 no.
Total O&M expenses (₹ in lakh)	434.30

Particulars	2018-19 (<i>pro-rata for</i> 158 days)
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	434.30
Claimed by the Petitioner in the instant petition	442.95
Allowed after true-up in this order	434.30

(₹ in lakh)

(* 111 141111)
Asset-B
2018-19 (<i>pro-rata for</i> 240 days)
52.87
1.21
2 nos.
58.73
119.30

(₹ in lakh)

Particulars	2018-19 (<i>pro-rata for</i> 240 days)
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	119.30
Claimed by the Petitioner in the instant petition	132.42
Allowed after true-up in this order	119.30

(₹ in lakh)

O&M Expenses	Asset-C
Particulars	2018-19 (pro-rata for 171 days)
Transmission line LILO of NP Kunta to Hindupur Line	
D/C Bundled (4 or more sub-conductors) (km)	110.76
Norms (₹ lakh/km)	1.21
Sub-station Bays 400 kV	
Cuddapah: Line bay for NP Kunta I&II 400 kV (Conventional)	2 nos.
Cuddapah: Switchable Line reactor bay I&II 400 kV (Conventional)	2 nos.
Norms (₹ lakh/bays)	68.71
Total O&M expenses (₹ in lakh)	191.55

(₹ in lakh)

	2018-19
Particulars Particulars	(pro-rata for 171
	days)



Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	191.55
Claimed by the Petitioner in the instant petition	191.55
Allowed after true-up in this order	191.55

Interest on Working Capital (IWC)

45. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations. The following tables show asset-wise IWC allowed in the instant petition followed by IWC approved earlier, claimed by the Petitioner in the instant petition and trued up in this order respectively:

(₹ in lakh)

Particulars	Asset-A 2018-19 (pro-rata for 158 days)
O&M Expenses	83.61
Maintenance Spares	150.49
Receivables	2319.11
Total Working Capital	2553.21
Rate of Interest (%)	12.20
Interest on Working Capital	134.84

(₹ in lakh)

Particulars	2018-19 (pro-rata for 158 days)
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	129.00
Claimed by the Petitioner in the instant petition	136.19
Allowed after true-up in this order	134.84

(₹ in lakh)

	Asset-B
Particulars	2018-19
	(pro-rata for 240 days)
O&M Expenses	15.12
Maintenance Spares	27.21
Receivables	583.74
Total Working Capital	626.08
Rate of Interest (%)	12.20
Interest on Working Capital	50.22

	\	,
Doutiouloro	2018-1	9
Particulars	(pro-rata for 2	40 days)



Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	45.84
Claimed by the Petitioner in the instant petition	51.12
Allowed after true-up in this order	50.22

Particulars	Asset-C 2018-19 (pro-rata for 171 days)
O&M Expenses	34.07
Maintenance Spares	61.33
Receivables	718.21
Total Working Capital	813.61
Rate of Interest (%)	12.20
Interest on Working Capital	46.50

(₹ in lakh)

Particulars	2018-19 (pro-rata for 171 days)
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	46.14
Claimed by the Petitioner in the instant petition	47.23
Allowed after true-up in this order	46.50

Approved Annual Fixed Charges for the 2014-19 Tariff Period

46. The trued up Annual Fixed Charges of the transmission assets for the 2014-19 tariff period are as under:

(₹ in lakh)

	1 - 1
	Asset-A
Particulars	2018-19
	(pro-rata for 158 days)
Depreciation	1712.40
Interest on Loan	1811.33
Return on Equity	1930.46
Interest on Working Capital	134.84
O&M Expenses	434.30
Total	6023.34

Particulars	2018-19 (pro-rata for 158 days)	
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	5736.47	
Claimed by the Petitioner in the instant petition	6077.60	
Allowed after true-up in this order	6023.34	



	Asset-B		
Particulars	2018-19		
	(pro-rata for 240 days)		
Depreciation	661.81		
Interest on Loan	706.89		
Return on Equity	764.76		
Interest on Working Capital	50.22		
O&M Expenses	119.30		
Total	2302.98		

(₹ in lakh)

Particulars	2018-19 (pro-rata for 240 days)
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	2087.28
Claimed by the Petitioner in the instant petition	2328.79
Allowed after true-up in this order	2302.98

(₹ in lakh)

	, ,		
	Asset-C		
Particulars	2018-19		
	(pro-rata for 171 days)		
Depreciation	572.98		
Interest on Loan	600.12		
Return on Equity	607.70		
Interest on Working Capital	46.50		
O&M Expenses	191.55		
Total	2018.85		

(₹ in lakh)

Particulars	2018-19 (pro-rata for 171 days)
Approved vide order dated 29.7.2019 in Petition No. 257/TT/2018	2001.22
Claimed by the Petitioner in the instant petition	2054.46
Allowed after true-up in this order	2018.85

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

47. The Petitioner has combined the transmission assets into one asset and has also submitted the tariff forms. Accordingly, as per Regulation 8(1)(i) of the 2019 Tariff

Regulations, a single tariff for the Combined Asset has been worked out for the 2019-24 tariff period.

48. The Petitioner has claimed the following transmission charges for the Combined Asset for the 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	6606.85	6910.29	7041.00	7041.00	7041.00
Interest on Loan	6513.51	6295.05	5883.36	5326.02	4757.85
Return on Equity	7091.19	7415.96	7555.44	7555.44	7555.44
Interest on Working Capital	405.42	416.08	417.65	413.13	407.57
O&M Expenses	2328.57	2409.48	2494.42	2583.60	2673.65
Total	22945.54	23446.86	23391.87	22919.19	22435.51

The Petitioner has claimed the following IWC for the Combined Asset for the 49. 2019-24 tariff period:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	194.05	200.79	207.87	215.30	222.80
Maintenance Spares	349.29	361.42	374.16	387.54	401.05
Receivables	2821.17	2890.71	2883.93	2825.65	2758.46
Total Working Capital	3364.51	3452.92	3465.96	3428.49	3382.31
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	405.42	416.08	417.65	413.13	407.57

Effective Date of Commercial Operation (E-COD)

50. The Petitioner has submitted that E-COD of the Combined Asset works out to be 9.10.2018 and the same matches with our calculations based on the trued up capital cost and actual COD of the individual assets. The same is as shown under:

Assets	Trued-up Capital Cost as on 31.3.2019 (₹ in lakh)	COD	No. of days from COD of Asset from COD of Project	Weight of cost	Weighted days
Asset-A	78605.31	25.10.2018	-	64.14%	0.00
Asset-B	20390.31	4.8.2018	82.00	16.64%	13.64
Asset-C	23566.89	12.10.2018	13.00	19.23%	2.50



Total	122562.51			100%	16.14
Effective COD (latest COD less total weighted days) - 9.10.2018					

Weighted Average Life (WAL) of the Combined Asset

51. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as provided in the 2019 Tariff Regulations. Accordingly, WAL of the transmission assets put into commercial operations during 2014-19 period has been worked out as 31 years and the same is as under:

(₹ in lakh)

Particulars	Useful Life (in years) (A)	Capital Cost as on 31.3.2019 (₹ in lakh) (B)	Weighted Cost (₹ in lakh) (C=A x B)	Weighted Avg. Life of Asset (in years) (D=C / B)
Building & Civil Works	25	2495.37	62,384.23	
Transmission Line	35	75118.95	2629163.12	
Sub-station	25	44698.18	1117454.58	31.10 years
PLCC	15	150.56	2258.38	(rounded off to
IT Equipment (Incl. Software)	6.67	99.45	663.02	31 years)
Total		122562.51	3811923.32	

52. It is assumed that the Weighted Average Life as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. Accordingly, the WAL has been used to determine the remaining useful life as on 31.3.2019 to be 31 years.

Capital Cost as on 1.4.2019

- 53. Regulation 19 of the 2019 Tariff Regulations provide as under:
 - "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:
 - (I) 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."

54. As per Form 6, the Petitioner has claimed capital cost of ₹122562.51 lakh as on 31.3.2019 for the Combined Asset. The trued up capital cost of ₹122562.51 lakh as on 31.3.2019 for the Combined Asset has been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

55. Regulations 24 and 25 of the 2019 Tariff Regulations provide as under:

"24. Additional Capitalisation within the original scope and upto the cut-off date

- (1) The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
 - (a) Undischarged liabilities recognized to be payable at a future date;
 - (b) Works deferred for execution;
 - (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23of these regulations;
 - (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
 - (e) Change in law or compliance of any existing law; and
 - (f) Force Majeure events:

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

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

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

- (1) The ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:
 - (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
 - (b) Change in law or compliance of any existing law;



- (c) Deferred works relating to ash pond or ash handling system in the original scope of work:
- Liability for works executed prior to the cut-off date; (d)
- Force Majeure events; (e)
- Liability for works admitted by the Commission after the cut-off date to the (f) extent of discharge of such liabilities by actual payments; and
- (g) Raising of ash dyke as a part of ash disposal system.
- In case of replacement of assets deployed under the original scope of the (2) existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:
 - The useful life of the assets is not commensurate with the useful life of (a) the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
 - The replacement of the asset or equipment is necessary on account of (b) change in law or Force Majeure conditions:
 - The replacement of such asset or equipment is necessary on account of (c) obsolescence of technology; and
 - The replacement of such asset or equipment has otherwise been allowed (d) by the Commission."
- 56. As per the Auditor's Certificates dated 30.7.2019 and 21.11.2019, the Petitioner has claimed ACE of ₹11164.55 lakh for the Combined Asset for 2019-20 during the 2019-24 tariff period. The Petitioner has claimed the following capital cost as on 31.3.2024:

(₹ in lakh)

Capital Cost as on	Projected ACE	Capital Cost as on	
31.3.2019 (on accrual basis)	2019-24 (on accrual basis)	31.3.2024 (on accrual basis)	
122925.54	11164.55	134090.09	

57. However, based on the actual cash discharge, the Petitioner has claimed the capital cost in Form 6 as on 31.3.2024 as under:

(₹ in lakh)

Capital Cost as on 31.3.2019	Projected ACE as per Auditor Certificate 2019-24	IDC to be discharged during the year 2019-20	Capital Cost as on 31.3.2024
122562.51	11164.55	363.03	134090.09

58. TANGEDCO has submitted that higher additional ACE is being claimed in the instant petition and that the Petitioner has not undertaken any prudent utility practices to firm up the contractual liabilities. In response, the Petitioner has submitted that the payments are made after submission of invoices and reconciliation in accordance with the terms of contract. The Petitioner has furnished contractor-wise liabilities and the same is as under:

Assets	COD	Vendor	(₹ in lakh)
		BHEL	116.18
		Jiangdong	2.28
		L&T	23.07
		Pingao	3816.05
Asset-A	25.10.2018	Smita Conductors	18.21
A3361-A	25.10.2010	Sterlite	22.65
		TATA	744.82
		TBEA	36.74
		Toshiba	52.37
		ZTT	0.38
Sub-total (A)			4832.37
		BHEL	23.61
		EMC	152.95
		KPTL	0.26
		Pingao	775.62
		Raghavendra Enterprises	0.18
Asset-B	4.8.2018	Smita Conductors	18.21
		Sterlite	22.65
		TATA	151.39
		TBEA	36.74
		Toshiba	52.37
		V. Sanjeevaraju	0.63
Sub-total (B)			1234.61
		B.Venkataramudu	0.60
		K Seshagiri	0.90
		Logic Mapping & IT	1.79
		Solutions	
Asset-C	12.10.2018	Scope T&M Pvt Ltd.	1.10
		Modern Engineering	5.42
		Consultants North Line	2.22
			0.77
		Raghavendra Enterprises	0.77

	Scope T&M Pvt. Ltd.	0.03
	Smita Conductors	18.21
	Sterlite	22.64
	VMS Services	2.05
Sub-total (C)		55.73
Grand Total (A+B+C)		6122.71

- 59. The Petitioner has further submitted that ACE for the Combined Asset has been claimed under Regulation 24(1)(a) and (b) of the 2019 Tariff Regulations.
- 60. We have considered the submissions of the Petitioner and TANGEDCO. The ACE claimed is allowed under Regulation 24(1)(a) and (b) of the 2019 Tariff Regulations. Accordingly, the capital cost as on 31.3.2024 is considered as under:

(₹ in lakh)

Admitted Capital Cost as on 1.4.2019	ACE allowed	IDC to be discharged during the year	Capital Cost as on 31.3.2024	
(A)	2019-24 (B)	2019-20 (C)	(D=A+B+C)	
122562.51	11164.55	363.03	134090.09	

Debt-Equity ratio

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

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

Provided that:

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

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



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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."
- 62. The details of the debt and equity considered for the purpose of computation of tariff for the 2019-24 tariff period for the Combined Asset is as under:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	ACE 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	87272.47	71.21	8069.31	70.00	95341.77	71.10
Equity	35290.05	28.79	3458.27	30.00	38748.32	28.90
Total	122562.51	100.00	11527.58	100.00	134090.09	100.00



Return on Equity (RoE)

- 63. Regulations 30 and 31 of the 2019 Tariff Regulations provide as under:
 - **"30. Return on Equity**: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.
 - (2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system

Provided further that:

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

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

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



calculation of effective tax rate.

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

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

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

Illustration-

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

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

- (ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:
 - (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
 - (b) Estimated Advance Tax for the year on above is Rs 240 crore;
 - (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;
 - (d) Rate of return on equity = 15.50/(1-0.24) = 20.395%.
- (3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."
- 64. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, MAT rate applicable in the year 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 Combined Asset is as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	35290.05	37263.05	38748.32	38748.32	38748.32
Additions	1973.00	1485.27	0.00	0.00	0.00
Closing Equity	37263.05	38748.32	38748.32	38748.32	38748.32
Average Equity	36276.55	38005.68	38748.32	38748.32	38748.32
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	6813.28	7138.04	7277.52	7277.52	7277.52

Interest on Loan (IoL)

- 65. Regulation 32 of the 2019 Tariff Regulations provides as under:
 - **"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 decapitalization 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

A.

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."
- 66. The weighted average rate of loL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that 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 truing-up. Therefore, loL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. loL allowed for the Combined Asset is as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	87272.47	91876.13	95341.77	95341.77	95341.77
Cumulative Repayments upto Previous Year	2947.19	9554.05	16464.33	23505.31	30546.29
Net Loan-Opening	84325.28	82322.09	78877.45	71836.46	64795.48
Additions	4603.67	3465.64	0.00	0.00	0.00
Repayment during the year	6606.86	6910.28	7040.98	7040.98	7040.98
Net Loan-Closing	82322.09	78877.45	71836.46	64795.48	57754.49
Average Loan	83323.68	80599.77	75356.95	68315.97	61274.99
Weighted Average Rate of Interest on Loan (%)	7.9588	7.9567	7.9641	7.9692	7.9574
Interest on Loan	6631.55	6413.06	6001.51	5444.27	4875.87

Depreciation

- 67. Regulation 33 of the 2019 Tariff Regulations provides as under:
 - **"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



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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."
- 68. The Gross Block during the 2019-24 tariff period has been depreciated at WAROD (placed as Annexure-II to this order). The WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2019 Tariff Regulations and depreciation allowed is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	122562.51	129139.18	134090.09	134090.09	134090.09
ACE	6576.67	4950.91	0.00	0.00	0.00
Closing Gross Block	129139.18	134090.09	134090.09	134090.09	134090.09
Average Gross Block	125850.85	131614.64	134090.09	134090.09	134090.09
WAROD (%)	5.25	5.25	5.25	5.25	5.25
Balance useful life of the asset	31.00	30.00	29.00	28.00	27.00
Elapsed life at the beginning of the year	0.00	1.00	2.00	3.00	4.00
Aggregate Depreciable Value	113275.72	118463.15	120691.06	120691.06	120691.06
Combined Depreciation during the year	6606.86	6910.28	7040.98	7040.98	7040.98
Total Cumulative Depreciation	9554.05	16464.33	23505.31	30546.29	37587.28
Aggregate Remaining Depreciable Value	103721.68	101998.82	97185.75	90144.76	83103.78

Operation and Maintenance Expenses (O&M Expenses)

69. Regulation 35(3)(a) and 4 of the 2019 Tariff Regulations provides as under:

"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		



Order in Petition No. 85/TT/2020.

132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (Rs Lakh per I	NVA)				
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 Laki	n 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 (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bipole 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 substation 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."
- 70. The O&M Expenses claimed by the Petitioner for the Combined Asset are as under:

(₹ in lakh)

O&M Expenses						
Particulars 2019-20 2020-21 2021-22 2022-23 2023-24						
Transmission Line D/C Bundled (4 or more sub-conductors) (km)						
LILO of Kurnool Thiruvalam 765 kV D/C	96.060	96.060	96.060	96.060	96.060	



400 kV D/C Cuddapah to NP Kunta LILO Point	52.870	52.870	52.870	52.870	52.870	
400 kV LILO Point NP Kunta to Hindupur	110.760	110.760	110.760	110.760	110.760	
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517	
Sub-station Bays 765 kV GIS						
Cuddapah: Kurnool Line bay I & II	2.00	2.00	2.00	2.00	2.00	
Cuddapah: Thiruvalam Line bay I & II	2.00	2.00	2.00	2.00	2.00	
Cuddapah ICT I & II bays	2.00	2.00	2.00	2.00	2.00	
Cuddapah:240 MVAR Bus Reactor bay I & II	2.00	2.00	2.00	2.00	2.00	
Norms (₹ lakh/Bay)	31.507	32.62	33.761	34.951	36.176	
Sub-station 765 kV ICT						
Cuddapah ICT I 1500 MVA	1.00	1.00	1.00	1.00	1.00	
Cuddapah ICT II 1500 MVA	1.00	1.00	1.00	1.00	1.00	
Norms (₹ lakh/MVA)	0.491	0.508	0.526	0.545	0.564	
Sub-station 400 kV (Conventional)						
Cuddapah ICT I & II bays	2.00	2.00	2.00	2.00	2.00	
Cuddapah Line bay NP Kunta LILO Point	2.00	2.00	2.00	2.00	2.00	
Cuddapah Line bay for NP Kunta -I & II	2.00	2.00	2.00	2.00	2.00	
Cuddapah Switchable Line Reactor Bay I & II	2.00	2.00	2.00	2.00	2.00	
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91	
PLCC	2% of the PLCC cost					
PLCC related project cost	150.93	150.93	150.93	150.93	150.93	
Total O&M expense (₹ in lakh)	2328.57	2409.48	2494.42	2583.60	2673.65	

- 71. In respect of Assets-A and B, the Petitioner has claimed 2 nos. of 400 kV substation bays as "Conventional" in the instant petition whereas in Petition No. 257/TT/2018, the same bays were specified as "GIS" by the Petitioner. The Petitioner has not offered any justification for this deviation. Therefore, the O&M Expenses are allowed for Assets-A and B based on the type of sub-station bays (GIS) as approved in order dated 29.7.2019 in Petition No. 257/TT/2018.
- 72. It is also observed that 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. 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. The Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has decided that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The relevant portions of the order dated 24.1.2021 in Petition No. 126/TT/2020 are extracted hereunder:

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

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

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

Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.

73. The O&M Expenses allowed as per the norms specified in the 2019 Tariff Regulations for the Combined Asset are as under:

(₹ in lakh)

					(₹ in lakh)
	&M Expen	1		T	T
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line D/C Bundled (4 or	more sub-	conductor	s) (km)		
LILO of Kurnool Thiruvalam 765 kV D/C	96.060	96.060	96.060	96.060	96.060
400 kV D/C Cuddapah to NP Kunta LILO Point	52.870	52.870	52.870	52.870	52.870
400 kV LILO Point NP Kunta to Hindupur	110.760	110.760	110.760	110.760	110.760
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
Sub-station Bays 765 kV GIS					
Cuddapah: Kurnool Line bay I & II	2.00	2.00	2.00	2.00	2.00
Cuddapah: Thiruvalam Line bay I & II	2.00	2.00	2.00	2.00	2.00
Cuddapah ICT I & II bays	2.00	2.00	2.00	2.00	2.00
Cuddapah:240 MVAR Bus Reactor bay I & II	2.00	2.00	2.00	2.00	2.00
Norms (₹ lakh/Bay)	31.507	32.62	33.761	34.951	36.176
Sub-station 765 kV ICT					
Cuddapah ICT I 1500 MVA	1.00	1.00	1.00	1.00	1.00
Cuddapah ICT II 1500 MVA	1.00	1.00	1.00	1.00	1.00
Norms (₹ lakh/MVA)	0.491	0.508	0.526	0.545	0.564
Sub-station 400 kV (Conventional)					
Cuddapah Line bay for NP Kunta -I & II	2.00	2.00	2.00	2.00	2.00
Cuddapah Switchable Line Reactor Bay I & II	2.00	2.00	2.00	2.00	2.00
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
Sub-station 400 kV (GIS)					
Cuddapah ICT I & II bays	2.00	2.00	2.00	2.00	2.00
Cuddapah Line bay NP Kunta LILO Point	2.00	2.00	2.00	2.00	2.00
Norms (₹ lakh/Bay)	22.51	23.30	24.12	24.96	25.84
Total O&M expense (₹ in lakh)	2286.99	2366.52	2450.07	2537.80	2626.35

Interest on Working Capital (IWC)

- 74. Regulation 34(1)(c), Regulation 34(3) and Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations provide as under:
 - "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 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. -** In these regulations, unless the context otherwise requires:
 - (7) 'Bank Rate' means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;"
- 75. The Petitioner has submitted that it has computed IWC for the 2019-24 tariff period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. 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, whereas, ROI for 2020-21 onwards has been



considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of the working capital and interest allowed thereon are as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	190.58	197.21	204.17	211.48	218.86
Maintenance Spares	343.05	354.98	367.51	380.67	393.95
Receivables	2795.89	2861.75	2854.80	2796.38	2729.10
Total Working Capital	3329.52	3413.94	3426.48	3388.54	3341.91
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	401.21	384.07	385.48	381.21	375.97

Annual Fixed Charges of the 2019-24 Tariff Period

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	6606.86	6910.28	7040.98	7040.98	7040.98
Interest on Loan	6631.55	6413.06	6001.51	5444.27	4875.87
Return on Equity	6813.28	7138.04	7277.52	7277.52	7277.52
Interest on Working Capital	401.21	384.07	385.48	381.21	375.97
O&M Expenses	2286.99	2366.52	2450.07	2537.80	2626.35
Total	22739.88	23211.97	23155.56	22681.78	22196.68

Filing Fee and the Publication Expenses

77. 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 and RLDC Fees and Charges

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

Goods and Services Tax

- 79. 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.
- 80. We have considered the submission of the Petitioner. Since, GST is not levied on transmission service at present, we are of the view that the Petitioner's prayer is premature.

Security Expenses

The Petitioner has submitted that security expenses for the transmission assets 81. 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 shall 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 per the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

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

Capital Spares

83. 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

84. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43

of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

- 85. The Commission vide order dated 29.7.2019 in Petition No. 257/TT/2018 held that the transmission charges of Asset-C for the period from 12.10.2018 to 21.1.2019 shall be borne by APTRANSCO. The relevant portion of the order dated 29.7.2019 is extracted hereunder. Thereafter, the transmission charges from 22.1.2019 shall be governed as per the provisions of the 2010 Sharing Regulations:
 - "24.Taking into consideration of the CEA energisation certificate and RLDC charging certificate, the COD of the Asset-C is approved as 12.10.2018 under provision (ii) of Regulation 4(3) of the 2014 Tariff Regulations. The Petitioner has submitted that power flow in the instant Asset-C started w.e.f. 22.1.2019 and 23.1.2019 for Circuits Hindupur-1 and 2 respectively with the commissioning of 400 kV D/C Hindupur-Uravakonda line I and II of APTRANSCO. Hence the transmission charges for the Asset-C from 12.10.2018 to 21.1.2019 shall be borne by APTRANSCO."
- 86. To summarise, the trued-up Annual Fixed Charges allowed for the transmission assets for the 2014-19 tariff period are as under:

Annual Fixed Charges

Assets 2018-19 (pro-rata)*

Asset-A 6023.34

Asset-B 2302.98

Asset-C 2018.85

The Annual Fixed Charges allowed for the Combined Asset for the 2019-24 tariff period are as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	22739.88	23211.97	23155.56	22681.78	22196.68

^{*} pro-rata for 158, 240 and 110 days for Assets-A, B and C respectively

87. This order disposes of Petition No. 85/TT/2020.

Sd/ (Arun Goyal) Member Sd/ (I. S. Jha) Member Sd/ (P. K. Pujari) Chairperson

ANNEXURE-I

Asset-A (WAROD)

2014-19	Admitted Opening Capital Cost (₹ in lakh)	Allowed Additional Capitlisation (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in	Rate of Depn.	Annual Depreciation as per Regulations (₹ in lakh)
Capital Cost (₹ in lakh)	,	2018-19	lakh)		2018-19
Land - Freehold	-		-	-	-
Land - Leasehold	-	-	-	3.34	-
Building Civil Works & Colony	1406.06	51.64	1457.70	3.34	47.82
Transmission Line	39361.66	879.93	40241.59	5.28	2101.53
Sub Station	31328.31	5395.73	36724.05	5.28	1796.58
PLCC	81.56	23.91	105.47	6.33	5.92
IT Equipment (Incl. Software)	75.69	0.81	76.50	5.28	4.02
Total	72253.29	6352.02	78605.31	Total	3955.87
	75429.30				
		W	leighted Average Rate	e of Depreciation	5.24%

Asset-B (WAROD)

2014-19		Allowed Additional Capitlisation (₹ in lakh) Cost as o			preciation as egulaton			
Capital Cost	Admitted Opening Capital Cost(₹ in lakh)	2018-19	31.3.2019 (₹ in lakh)	Rate of Depn.	2018-19			
Land - Freehold	-	-	-	-	-			
Land - Leasehold	-	-	-	3.34	-			
Building Civil Works & Colony	1,028.21	9.45	1,037.67	3.34	34.50			
Transmission Line	13,253.34	1,468.89	14,722.23	5.28	738.56			
Sub Station	4,137.02	425.36	4,562.37	5.28	229.66			
PLCC	36.22	8.86	45.09	6.33	2.57			
IT Equipment (Incl. Software)	22.75	0.21	22.96	5.28	1.21			
Total	18,477.54	1,912.77	20,390.31	Total	1,006.50			
Average Gross Block								
(₹ in lakh)								
Weighted Average Rate of Depreciation								

Asset-C (WAROD)

2014-19	Admitted Opening Capital Cost as on COD	Allowed ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in	7 z op	oreciation as per on (₹ in lakh)		
Capital Cost (₹ in lakh)	(₹ in lakh)	2018-19	lakh)	Rate of Depn.	2018-19		
Land - Freehold	-	-	-	-	-		
Land - Leasehold	-	-	-	3.34	-		
Building Civil Works & Colony	-	-	-	3.34	-		
Transmission Line	19,464.74	690.39	20,155.13	5.28	1,045.96		
Sub Station	3,294.89	116.87	3,411.76	5.28	177.06		
PLCC	-	-	-	6.33	-		
IT Equipment (Incl. Software)	-	-	-	5.28	-		
Total	22,759.63	807.26	23,566.89	Total	1223.02		
Average Gross Block (₹ in lakh)							
		Weig	ghted Average Rate	e of Depreciation	5.28%		

Annexure-II (WAROD- Combined Asset)

2019-24	2019-24			Allowed ACE (₹ in lakh)		An	nual Depre	ciation as p (₹ in lakh)	er Regulatio	ons
Capital Cost (₹ in lakh)	Admitted Opening Capital Cost (₹ in lakh)	2019-20	2020-21	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depn.	2019-20	2020-21	2021-22	2022-23	2023-24
Land - Freehold	-	-	-	-	-	-		-	-	
Land - Leasehold	-	-	-	-	3.34	-	-	-	-	-
Building Civil Works & Colony	2495.37	95.04	0.00	2590.41	3.34	84.93	86.52	86.52	86.52	86.52
Transmission Line	75118.95	4583.44	0.00	79702.39	5.28	4087.28	4208.29	4208.29	4208.29	4208.29
Sub Station	44698.18	1897.45	4950.91	51546.54	5.28	2410.16	2590.95	2721.66	2721.66	2721.66
PLCC	150.56	0.45	0.00	151.00	6.33	9.54	9.56	9.56	9.56	9.56
IT Equipment (Incl. Software)	99.45	0.29	0.00	99.75	15.00	14.94	14.96	14.96	14.96	14.96
Total	122562.51	6576.67	4950.91	134090.09	Total	6606.86	6910.28	7040.98	7040.98	7040.98
Average Gross Block (₹ in lakh)					1125850 85	131614.64	134090.09	134090.09	134090.09	
			Weigh	ted Average Rate o	of Depreciation	5.25%	5.25%	5.25%	5.25%	5.25%