

**CENTRAL ELECTRICITY REGULATORY COMMISSION**

**NEW DELHI**

**Petition No.245/TT/2019**

**Coram:**

**Shri P.K. Pujari, Chairperson**

**Shri I.S. Jha, Member**

**Date of Order: 23.04.2020**

**In the matter of**

Approval under Regulation-86 of CERC (Conduct of Business) Regulations, 1999 and CERC (Terms and Conditions of Tariff) Regulations, 2014 and CERC (Terms and Conditions of Tariff) Regulations, 2019 for determination of,

- (i) Truing up Transmission tariff for 2014-19 tariff block &
- (ii) Transmission tariff for 2019-24 tariff block

For LILO of Alamathy-Siperumbudur 400 kV DC line at North Chennai TPS switchyard under "transmission system associated with Chennai NTPC –TNEB JV TPS" in Southern Region.

**And in the matter of**

Power Grid Corporation of India Limited  
"Saudamini", Plot No.2,  
Sector-29, Gurgaon -122 001

**...Petitioner**

**Versus**

1. Karnataka Power Transmission Corporation Ltd. (KPTCL),  
(KPTCL), Kaveri Bhavan,  
Bangalore - 560 009
2. Transmission Corporation of Andhra Pradesh Ltd. (APTRANSCO),  
(APTRANSCO), Vidyut Soudha,  
Hyderabad- 500082
3. Kerala State Electricity Board (KSEB)  
Vaidyuthi Bhavanam Pattom,  
Thiruvananthapuram - 695 004



4. Tamil Nadu Generation and Distribution Corporation Ltd, (TANGEDCO)  
(Formerly Tamil Nadu Electricity Board -TNEB),  
NPKRR Maaligai, 800, Anna Salai,  
Chennai - 600 002
5. Electricity Department, Govt of Pondicherry,  
Pondicherry – 605001
6. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL)  
P&T Colony, Seethmmadhara,  
Vishakhapatnam
7. Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL),  
Srinivasasa Kalyana Mandapam Backside,  
Tiruchanoor Road, Kesavayana Gunta,  
Tirupati - 517501
8. Central Power Distribution Company of Andhra Pradesh limited (APCPDCL)  
Corporate Office, Mint Compound,  
Hyderabad - 500 063
9. Northern Power Distribution Company of Andhra Pradesh Limited (APNPDCL),  
Opp. NIT Petrol Pump, Chaitanyapuri,  
Kazipet, Warangal - 506 004
10. Bangalore Electricity Supply Company Ltd. (BESCOM),  
Corporate Office, K.R.Circle,  
Bangalore - 560 001, Karnataka
11. Gulbarga Electricity Supply Company Ltd. (GESCOM),  
Station Main Road,  
Gulbarga, Karnataka
12. Hubli Electricity Supply Company Ltd. (HESCOM),  
Navanagar, PB Road,  
Hubli, Karnataka
13. Mangalore Electricity Supply Company Ltd. (MESCOM),  
Corporate Office, Paradigm Plaza,  
AB Shetty Circle,  
Mangalore - 575001, Karnataka
14. Chamundeswari Electricity Supply Corporation Ltd. (CESC),  
# 927, L J Avenue Ground Floor,  
New Kantharaj Urs Road, Saraswatipuram,



Mysore - 570 009, Karnataka

15. Electricity Department,  
Government of Goa,  
Vidyuti Bhawan, Panaji,  
Goa-403001
16. Transmission Corporation of Telangana Limited,  
Vidhyut Soudha, Khairatabad,  
Hyderabad-500082
17. Tamil Nadu Transmission Corporation Limited, (TANTRANSCO),  
NPKRR Maaligai, 800,  
Anna Salai, Chennai - 600 002
18. Tamil Nadu Generation and Distribution Corporation Ltd, (TANGEDCO)  
(Formerly Tamil Nadu Electricity Board -TNEB),  
NPKRR Maaligai, 800, Anna Salai,  
Chennai - 600 002

...Respondents

**Parties present:**

**For Petitioner:** Smt Anshul Garg, PGCIL  
Shri Zafrul Hasan, PGCIL  
Shri S.S.Raju, PGCIL  
Shri A.K. Jain, PGCIL  
Shri V.K.Singh, PGCIL

**For Respondent:** None

**ORDER**

The present petition has been filed by Power Grid Corporation of India Ltd. ("the Petitioner") for trueing up of transmission tariff for 2014-19 tariff period and transmission tariff for 2014-19 tariff period for LILO of Alamathy-Siperumbudur 400 kV DC line at North Chennai TPS switchyard under "transmission system associated with Chennai NTPC –TNEB JV TPS" in Southern Region (hereinafter referred as "transmission asset") under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff



Regulations”) and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”).

2. The Petitioner has made the following prayers:

- (i) *Approve the truedup Transmission Tariff for the tariff block 2014-19 and transmission tariff for 2019-24 block for the assets covered under this petition.*
- (ii) *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 under clause 25 of the Tariff Regulations 2014 and Tariff Regulations 2019.*
- (iii) *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.*
- (iv) *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.*
- (v) *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.*
- (vi) *Allow the Petitioner to file a separate petition before Commission for claiming the overall security expenses and consequential IOWC on that security expenses.*
- (vii) *Allow the Petitioner to claim the capital spares at the end of tariff block as per actual.*
- (viii) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*  
*and pass such other relief as the Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.”*

3. The brief facts of the case are as follows:-

- (i) The Investment Approval (hereinafter referred to as "IA") for implementation of transmission assets was accorded by Board of Directors of the Petitioner



vide letter dated 16.5.2008 for ₹9026 lakh including an IDC of ₹580 lakh (based on 1<sup>st</sup> quarter, 2008 price level). The Revised Cost Estimate (RCE) was approved vide letter dated 11.3.2011 for ₹15036 lakh including an IDC of ₹1402 lakh (based on 3<sup>rd</sup> quarter, 2010 price level). The subject asset has been put under commercial operation w.e.f. 1.8.2011.

(ii) The Commission vide Order dated 15.2.2016 in petition no. 414/TT/2014 trued-up the tariff for the 2009-14 period and granted the tariff for the 2014-19 tariff period for the transmission asset covered under the instant petition.

(iii) The Commission vide Order dated 15.2.2016 in petition no. 414/TT/2014 admitted ₹14517.25 lakh as capital cost as on 31.3.2014.

4. Details of the Annual Transmission Charges approved by the Commission vide order dated 15.2.2016 in petition no. 414/TT/2014 for the instant asset vis-à-vis that claimed by the Petitioner on account of truing up of the additional capitalization and MAT adjustment as per the 2014 Tariff Regulations are as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved Annual Fixed Cost	2,404.99	2,336.51	2,267.89	2,199.26	2,130.71
Revised AFC based on truing up	2,405.63	2,341.02	2,271.97	2,203.34	2,137.08

5. Details of the interest on working capital claimed by the Petitioner are as under: -

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved Interest on Working Capital (IWC)	55.57	54.08	52.59	51.09	49.61
Revised IWC based on truing up	55.59	54.18	52.68	51.19	49.75

6. The Petitioner has served a copy of the petition upon the respondents and notice of this tariff petition has been published in the newspapers in accordance with



Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the notices published by the Petitioner under Section 64 of the Electricity Act, 2003. No reply to the petition has been filed by any Respondent in the matter.

7. The Petition was heard on 13.2.2020 and the Commission reserved the order in the Petition.

8. This order has been issued after considering the main petition dated 5.8.2019 and Petitioner's affidavits dated 3.10.2019 and 16.3.2020.

9. Having heard the representatives of the Petitioner present at the hearing and having perused the material on record, we proceed to dispose of the petition.

### **Analysis and Decision**

#### **Truing-up of Annual Transmission Charges of 2014-19 Tariff Period**

10. The Petitioner has submitted the information as required under the 2014 Tariff Regulations for truing up of annual fixed charges for 2014-19 tariff period. The tariff for 2014-19 tariff period has been trued up in the subsequent paragraphs.

#### **Capital Cost**

11. Regulation 8 of the 2014 Tariff Regulations provides as under:-

*"8. Truing up*

*(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2019, as admitted by the Commission after prudence check at the time of truing up:*

*Provided that the generating company or the transmission licensee, as the case may be, shall make an application for interim truing up of capital expenditure including additional capital expenditure in FY 2016-17.*

*(2).....*

*(3).....*

*(4) The Transmission Licensee shall carry out truing up of tariff of transmission system based on the controllable parameter of Re-Financing of loans:*



(5) *The Commission shall carry out truing up of tariff of transmission licensee based on the performance of following Uncontrollable parameters:*

- (i) Force Majeure; and*
- (ii) Change in Law.*

(6).....

*(7) The financial gains and losses by a generating company or the transmission licensee, as the case may be, on account of uncontrollable parameters shall be passed on to beneficiaries of the generating company or to the long term transmission customers/DICs of transmission system, as the case may be.*

*(8) The generating company or the transmission licensee as the case may be, shall carry out the truing up of grossed up rate of return on equity in accordance with Clause 3 of Regulation 25 of these regulations.*

*(9) The generating company or the transmission licensee as the case may be, shall make an application, as per **Annexure-I** to these regulations, for carrying out truing up exercise in respect of the generating station or a unit or block thereof or the transmission system or the transmission lines or sub-stations by 31.10.2019.*

*(10) The generating company or the transmission licensee as the case may be, shall submit for the purpose of truing up, details of actual capital expenditure and additional capital expenditure incurred for the period from 1.4.2014 to 31.3.2019, duly audited and certified by the auditor.*

*(11) Where after the truing up, the tariff recovered exceeds the tariff approved by the Commission under these regulations, the generating company or the transmission licensee, shall refund to the beneficiaries or the long term transmission customers /DICs, as the case may be, the excess amount so recovered as specified in the Clause 13 of this regulation.*

*(12) Where after the truing up, the tariff recovered is less than the tariff approved by the Commission under these regulations, the generating company or the transmission licensee shall recover from the beneficiaries or the long term transmission customers /DICs, as the case may be, the under-recovered amount as specified in the Clause 13 of this regulation.*

*(13) The amount under-recovered or over-recovered, along with simple interest at the rate equal to the bank rate as on 1st April of the respective year, shall be recovered or refunded by the generating company or the transmission licensee, as the case may be, in six equal monthly instalments starting within three months from the date of the tariff order issued by the Commission.”*

12. The additional capital expenditure claimed during the period 2014-19 is nil and the Petitioner has submitted that the revised tariff for 2014-19 tariff period is worked out based on the admitted cost of ₹14517.25 as on 31.3.2014.

13. The capital cost of ₹14517.25 lakh admitted by the Commission as on 31.3.2014 has been considered as opening capital cost as on 1.4.2014 for



determination of tariff in accordance with the Regulation 9 of the 2014 Tariff Regulations.

### **Additional Capitalisation /De-Capitalisation**

14. The Petitioner has not claimed any additional capital expenditure during the 2014-19 tariff period.

### **Debt-Equity Ratio**

15. The Commission vide order dated 15.2.2016 in Petition No.414/TT/2014 has considered the debt of ₹10292.99 lakh and equity of ₹4224.26 lakh as on 1.4.2014. Accordingly, the same amount of debt and equity has been considered as there is no additional capital expenditure. The details of the debt-equity as on 1.4.2014 considered for the purpose of tariff for the 2014-19 tariff period is as follows: -

(₹ in lakh)

Particular	Capital cost as on 1.4.2014		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	10292.99	70.90	10292.99	70.90
Equity	4224.26	29.10	4224.26	29.10
<b>Total</b>	<b>14517.25</b>	<b>100.00</b>	<b>14517.25</b>	<b>100.00</b>

### **Return on Equity (ROE)**

16. Regulation 24 of the 2014 Tariff Regulations provides as under:

*“1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.*

*2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the 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:*

*(i) In case of projects commissioned on or after 1st April, 2014, an additional return of 0.50% shall be allowed, if such projects are completed within the timeline specified in Appendix-I :*

*(ii) The additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:*





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

(iv) The rate of return of a new project shall be reduced by 1% 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) / Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

(v) As and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(vi) Additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.”

17. Further, Regulation 25 of the 2014 Tariff Regulations provides as under:

“1) The base rate of return on equity as allowed by the Commission under Regulation 24 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 the 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 on income from other business streams including deferred tax liability (i.e. income on business other than business of generation or transmission, as the case may be) shall not be considered for the calculation of “effective tax rate”.

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

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

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

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 2014-15 to 2018-19 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 transmission customers/DICs as the case may be on year to year basis.



18. The Petitioner is entitled for Return on equity for the instant asset in terms of Regulation 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that they are liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax (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

19. To arrive at the Effective Tax Percentage for the 2014-19 tariff period, the petitioner was directed vide RoP for the hearing dated 12.9.2019 in Petition no. 244/TT/2019 to submit the details (Section wise of Income Tax Act) of 'Total Tax & Interest paid', 'Assessed MAT Income' and 'Refund of Tax and interest recovered thereon or additional payment of tax and penalty for short deposited tax' duly certified by the Auditor in accordance with applicable Auditing Standard and Implementation Guideline and to submit the information separately for 'Tariff Income' and 'Non-Tariff Income' duly reconciled with Books of Accounts.

20. In response, the Petitioner vide affidavit dated 3.10.2019 has submitted the following details alongwith its computation duly certified by the Auditor:

(₹in lakh)

Financial Year	Total Income (Tariff + Non-Tariff) u/s 115JB	Tax Liability	Interest u/s 234A	Interest u/s 234B	Interest u/s 234C	Total Interest (u/s 234)	Total Tax Liability	Effective Tax Rate (in%)
	A	B	(a)	(b)	(c)	C=(a)+(b)+(c)	D=B+C	E=D/A
2014-15 (Assessment Order)	611665	128208		178	171	349	128558	21.018%



2015-16 (Assessment Order)	738584	157547	30	281	66	377	157924	21.382%
2016-17 (ITR filed)	938656	200177			117	117	200294	21.338%
2017-18 (ITR filed)	1032555	220317					220317	21.337%
2018-19 (Applicable MAT Rate u/s 115JB)								21.549%

21. It has been noted that the Petitioner while claiming annual effective tax rate for the 2014-19 tariff control period has included the interest under Section 234 of the Income Tax Act, 1961 (IT Act, 1961). The Section 234 of IT Act, 1961 broadly covers the interest levied for defaults and delay in submission of IT returns, payment of advance tax, deferment of advance tax and various sub-sections of Section 234 is as under:-

<b>Section</b>	<b>Deals with</b>
Section - 234A	<b>Interest for defaults in furnishing return of income</b>
Section - 234B	<b>Interest for defaults in payment of advance tax</b>
Section - 234C	<b>Interest for deferment of advance tax</b>
Section - 234D	Interest on excess refund
Section - 234E	Fee for default in furnishing statements
Section - 234F	Fee for default in furnishing return of income

22. It is observed that interest levied under Section 234A, 234B and 234C is broadly penal in nature and imposed for default on the part of the Assessee. Therefore, we are of the view that while determining the effective tax rate for the purpose of grossing up of RoE for truing up of 2014-19 tariff, the interest/ penalty imposed for default by the Petitioner for the income/ income tax up to the stage of filing of Income Tax return shall not be considered. However, interest arising on account of any additional income tax demand pursuant to the assessment of income tax by the Income Tax authorities shall be considered for determining the effective tax rate.

23. In order to examine interest levied on Petitioner, the Petitioner was directed to explain the interest levied with reference to above referred sections of the IT Act, 1961 at the stages of filing of IT return and additional demand of tax after assessment of tax return. In response, the Petitioner has submitted that the Petitioner has paid interest under Section 234 of the IT Act, 1961 at the aforesaid stages and the details of the same are summarized as under:-

**(₹in lakh)**

Financial Year	Interest u/s 234A**	Interest u/s 234B**	Interest u/s 234C**	Total Interest (u/s 234)	Interest u/s 234 as per return	Interest u/s 234 as per Assessment Order	Remarks
	(a)	(b)	(c)	(d)=(a)+(b)+(c)	A	B	C
2014-15***		178	171	349	290	59	Against the addition by AO, Appeal was filed by the Petitioner before the CIT(A) and CIT(A) passed order in favour of the Petitioner
2015-16***	30	281	66	377	329	48	Against the addition by AO, Appeal was filed by the Petitioner before the CIT(A) and CIT(A) passed the order in favour of the Petitioner
2016-17***			117	117	117	0.00	
2017-18				0.00			
2018-19							

\*\*Based on the Petitioner's reply dated 25.2.2020 in Petition No. 60/TT/2020

\*\*\* Assessment completed and Assessment Order issued

24. It is observed from the submissions of the Petitioner that the Petitioner paid interest under Section 234 of the IT Act, 1961 at both stages i.e. at the stage of filing of IT Return and at the stage of Assessment Order. It is further observed that IT authorities imposed the interest on additional tax demand for the year 2014-15 and 2015-16 and same was challenged by Petitioner before the CIT(A) and an Order was passed in favour of the Petitioner. It is noted that no interest was paid



by the Petitioner at the Assessment Order stage for the year 2014-15, 2015-16 and 2016-17. It is further noted that the income tax assessment for the year 2017-18 and 2018-19 has not been completed.

25. 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.

26. 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 %)	Grossed up ROE (Base Rate/1-t) (in %)
2014-15	20.961	20.961	19.610
2015-16	21.342	21.342	19.705
2016-17	21.342	21.342	19.705
2017-18	21.342	21.342	19.705
2018-19	21.549	21.549	19.758

27. Accordingly, the ROE as trued up in accordance with the 2014 Tariff Regulations is shown in the table below: -

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	4224.26	4224.26	4224.26	4224.26	4224.26
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Equity	4224.26	4224.26	4224.26	4224.26	4224.26
Average Equity	4224.26	4224.26	4224.26	4224.26	4224.26
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the Financial year	20.961%	21.342%	21.342%	21.342%	21.549%
Rate of Return on Equity (Pre-tax)	19.610%	19.705%	19.705%	19.705%	19.758%
<b>Return on Equity (Pre-tax)</b>	<b>828.38</b>	<b>832.39</b>	<b>832.39</b>	<b>832.39</b>	<b>834.63</b>

### Interest on Loan (IOL)

28. The Petitioner has claimed the IOL based on actual interest rates for each year during the 2014-19 period. We have considered the submissions of the Petitioner and accordingly calculated the IOL based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations.

29. The interest on loan has been worked out as under: -

- (i) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition.



(ii) The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period.

30. The details of IOL calculated are as follows: -

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	10292.99	10292.99	10292.99	10292.99	10292.99
Cumulative Repayment upto previous Year	2025.29	2792.77	3560.25	4327.73	5095.21
Net Loan-Opening	8267.70	7500.22	6732.74	5965.26	5197.78
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Repayment during the year	767.48	767.48	767.48	767.48	767.48
Net Loan-Closing	7500.22	6732.74	5965.26	5197.78	4430.30
Average Loan	7883.96	7116.48	6349.00	5581.52	4814.04
Weighted Average Rate of Interest on Loan	8.97%	8.97%	8.98%	8.98%	8.98%
<b>Interest on Loan</b>	<b>707.18</b>	<b>638.61</b>	<b>569.91</b>	<b>501.14</b>	<b>432.37</b>

### Depreciation

31. The Petitioner has submitted that in the instant petition, details are provided in various Tariff Forms with respect to Capital Cost as per books / Gross Block amount as per Books for which deemed cost exemption as per Para D7 AA of Ind AS 101 'First-time Adoption of Indian Accounting Standards' has been adopted. Accordingly, the Petitioner has considered carrying value i.e. Gross Block less Accumulated Depreciation as deemed cost as on the date of transition i.e. 1<sup>st</sup> April, 2015 and in case of assets commissioned before 01.04.2015, the accumulated depreciation as on 1st April 2015 is added back to the deemed Capital Cost as per books/ Gross Block amount as per Books for arriving at the figures to be provided in various Tariff Forms.

32. Depreciation has been calculated annually based on Straight Line Method and at rates specified in the 2014 Tariff Regulations. The depreciation for the 2014-19 tariff period has been trued up in accordance with the Regulation 27 of the 2014 Tariff Regulations based on the admitted capital expenditure as under: -



**(₹ in lakh)**

<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Gross Block	14517.25	14517.25	14517.25	14517.25	14517.25
Additional Capital expenditure	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	14517.25	14517.25	14517.25	14517.25	14517.25
Average Gross Block	14517.25	14517.25	14517.25	14517.25	14517.25
Rate of Depreciation	5.2867%	5.2867%	5.2867%	5.2867%	5.2867%
Depreciable Value	13065.53	13065.53	13065.53	13065.53	13065.53
Remaining Depreciable Value	11040.24	10272.76	9505.28	8737.80	7970.32
<b>Depreciation</b>	<b>767.48</b>	<b>767.48</b>	<b>767.48</b>	<b>767.48</b>	<b>767.48</b>

### **Operation and Maintenance Expenses (O&M Expenses)**

33. O&M Expenses allowed vide order dated 15.2.2016 in Petition No. 414/TT/2014 has been considered for the purpose of tariff calculation. Accordingly, the O&M Expenses claimed by the petitioner are allowed as under: -

**(₹ in lakh)**

<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
O & M Expenses	46.37	47.94	49.51	51.14	52.85

### **Interest on Working Capital (IWC)**

34. Sub-clause (c) of clause (1) of Regulation 28 of the 2014 Tariff Regulations provides the components of the working capital for the transmission system and clause (3) of Regulation 28 of the 2014 Tariff Regulations provides for the rate of IWC.

35. The IWC trued up is as under:-

**(₹ in lakh)**

<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Maintenance Spares	6.96	7.19	7.43	7.67	7.93
O&M expenses	3.86	4.00	4.13	4.26	4.40
Receivables	400.83	390.10	378.66	367.22	356.18
<b>Total</b>	<b>411.65</b>	<b>401.29</b>	<b>390.21</b>	<b>379.16</b>	<b>368.51</b>
Rate of Interest on Working Capital	13.50%	13.50%	13.50%	13.50%	13.50%
<b>Interest on Working Capital</b>	<b>55.57</b>	<b>54.17</b>	<b>52.68</b>	<b>51.19</b>	<b>49.75</b>





(i) **Maintenance spares:**

Maintenance spares have been worked out based on 15% of Operation and Maintenance expenses specified in Regulation 28.

(ii) **O & M expenses:**

O&M expenses have been considered for one month of the allowed O&M expenses.

(iii) **Receivables:**

The receivables have been worked out on the basis of 2 months of annual transmission charges as worked out above.

(iv) **Rate of interest on working capital:**

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

### **Annual Transmission Charges for 2014-19 Tariff Period**

36. Accordingly, the annual transmission charges after truing up for the 2014-19 tariff period are as under: -

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	767.48	767.48	767.48	767.48	767.48
Interest on Loan	707.18	638.61	569.91	501.14	432.37
Return on Equity	828.38	832.39	832.39	832.39	834.63
Interest on Working Capital	55.57	54.17	52.68	51.19	49.75
O&M Expenses	46.37	47.94	49.51	51.14	52.85
<b>Total</b>	<b>2404.98</b>	<b>2340.60</b>	<b>2271.97</b>	<b>2203.34</b>	<b>2137.07</b>

### **Determination of Annual Transmission Charges of 2019-24 tariff period**

37. The Petitioner, vide affidavit dated 3.10.2019, has claimed the following transmission charges for the 2019-24 tariff period:-

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	767.48	767.48	767.48	767.48	767.48
Interest on Loan	363.59	294.79	225.98	157.13	88.19
Return on Equity	793.40	793.40	793.40	793.40	793.40
Interest on Working Capital	31.54	30.67	29.73	28.78	27.77
O&M Expenses	59.62	61.66	63.75	65.91	68.14
<b>Total</b>	<b>2,015.63</b>	<b>1,948.00</b>	<b>1,880.34</b>	<b>1,812.70</b>	<b>1,744.98</b>



38. The Petitioner, vide affidavit dated 3.10.2019, has claimed the following 'Interest on Working Capital' for the 2019-24 tariff period:-

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Maintenance Spares	8.94	9.25	9.56	9.89	10.22
O&M expenses	4.97	5.14	5.31	5.49	5.68
Receivables	247.82	240.16	231.82	223.48	214.55
<b>Total</b>	<b>261.73</b>	<b>254.55</b>	<b>246.69</b>	<b>238.86</b>	<b>230.45</b>
Rate of Interest	12.05%	12.05%	12.05%	12.05%	12.05%
<b>Interest on Working Capital</b>	<b>31.54</b>	<b>30.67</b>	<b>29.73</b>	<b>28.78</b>	<b>27.77</b>

### Capital Cost

39. Clause (1) and (3) of Regulation 19 of the 2019 Tariff Regulations provides as follows: -

*“(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.”*

*“(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;”*

40. The admitted capital cost of ₹14517.25 lakh as on 31.3.2019 as trued up in above paragraphs is considered as the capital cost as on 1.4.2019 for the purpose of determination of tariff for the 2019-24 tariff period.

### Projected Additional Capital Expenditure

41. The Petitioner has not claimed any additional capital expenditure during 2019-24 tariff period.



## Debt-Equity Ratio

42. Debt-equity ratio for the 2019-24 Tariff period is dealt in line with Regulation 18(3) of the 2019 Tariff Regulations. Accordingly, the admitted debt-equity ratio as on 31.3.2019 has been considered as the debt-equity ratio as on 1.4.2019 for the purpose of determination of tariff for the 2019-24 tariff period and the same has been summarized as under: -

(₹ in lakh)

Particular	Capital cost as on 1.4.2019		Capital cost as on 31.3.2024	
	Amount	%	Amount	%
Debt	10292.99	70.90	10292.99	70.90
Equity	4224.26	29.10	4224.26	29.10
<b>Total</b>	<b>14517.25</b>	<b>100.00</b>	<b>14517.25</b>	<b>100.00</b>

## Return on Equity (ROE)

43. The Petitioner had claimed the ROE @ 19.758% after grossing up the ROE with MAT Rate of 21.5488% initially. However, the Petitioner vide affidavit dated 31.10.2019 submitted that there is change in MAT rate applicable for FY 2019-20 on account of taxation laws (Amendment) ordinance 2019 published in the Gazette dated 20.9.2019 and submitted the following:

- (i) The petitioner being liable to pay income tax at MAT rate prescribed vide the taxation laws (Amendment) ordinance 2019 published in the Gazette dated 20<sup>th</sup> September 2019. The ROE has been calculated @ 18.782% after grossing up the ROE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12%. + Cess 4%) based on the formula given at regulation 31 (2) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for 2019-24 period.
- (ii) That as per clause 31 (3) of the above regulation, the grossed up rate of ROE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly



adjusted for any refund of tax including interest received from the IT authorities pertaining to 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.

(iii) Any under-recovery or over-recovery of grossed up rate on ROE after truing up shall be recovered or refunded to beneficiaries or the long-term customers, as the case may be on year to year basis. It is further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable I adjustable during the tariff period 2019-24 on year to year basis on receipt of Income Tax assessment order.

44. We have considered the submissions made by the Petitioner. Regulation 30 read with Regulation 31 of the 2019 Tariff Regulations provides for grossing up of ROE with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, the MAT rate applicable during 2019-20 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations.

45. Accordingly, the ROE allowed is as follows: -

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	4224.26	4224.26	4224.26	4224.26	4224.26
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Equity	4224.26	4224.26	4224.26	4224.26	4224.26
Average Equity	4224.26	4224.26	4224.26	4224.26	4224.26
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the Financial year 2019-20	17.472%	17.472%	17.472%	17.472%	17.472%
Rate of Return on Equity (Pre-tax)	18.782%	18.782%	18.782%	18.782%	18.782%
<b>Return on Equity (Pre-tax)</b>	<b>793.40</b>	<b>793.40</b>	<b>793.40</b>	<b>793.40</b>	<b>793.40</b>



## Interest on Loan (IOL)

46. Clause (5) and (6) of Regulation 32 of the 2019 Tariff Regulations provides as under: -

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

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

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

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

47. The Petitioner has submitted that the IOL has been claimed on the basis of rate prevailing as on 1.4.2019 for respective loans and the change in interest due to floating rate of interest applicable, if any, needs to be claimed/ adjusted over the tariff block 2019-24. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing-up. The IOL is allowed considering all the loans submitted in Form-9C. The Petitioner is directed to reconcile the total Gross Loan for the calculation of weighted average Rate of Interest and for the calculation of IDC, which would be reviewed at the time of truing-up.

48. Accordingly, the IOL allowed is as follows:-

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	10292.99	10292.99	10292.99	10292.99	10292.99
Cumulative Repayment upto previous Year	5862.69	6630.17	7397.65	8165.13	8932.61
Net Loan-Opening	4430.30	3662.82	2895.34	2127.86	1360.38
Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Repayment during the year	767.48	767.48	767.48	767.48	767.48
Net Loan-Closing	3662.82	2895.34	2127.86	1360.38	592.90
Average Loan	4046.56	3279.08	2511.60	1744.12	976.64
Weighted Average Rate of Interest on Loan	8.99%	8.99%	9.00%	9.01%	9.03%
<b>Interest on Loan</b>	<b>363.59</b>	<b>294.79</b>	<b>225.98</b>	<b>157.13</b>	<b>88.19</b>



## Depreciation

49. Clause (2), (5) and (6) of Regulation 33 of the 2019 Tariff Regulations provide as follows: -

**"33. Depreciation:**

*"(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 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"*

*"(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 up to 31.3.2019 from the gross depreciable value of the assets."*

50. The instant asset was put under commercial operation on 1.8.2011. Accordingly, it will complete 12 years beyond the tariff period 2019-24, As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-I to the 2019 Tariff Regulations.

51. Accordingly, depreciation allowed is as under: -

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	14517.25	14517.25	14517.25	14517.25	14517.25
Additional Capital expenditure	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	14517.25	14517.25	14517.25	14517.25	14517.25
Average Gross Block	14517.25	14517.25	14517.25	14517.25	14517.25
Rate of Depreciation	5.2867%	5.2867%	5.2867%	5.2867%	5.2867%
Depreciable Value	13065.53	13065.53	13065.53	13065.53	13065.53
Remaining Depreciable Value	7202.84	6435.36	5667.88	4900.40	4132.92
<b>Depreciation</b>	<b>767.48</b>	<b>767.48</b>	<b>767.48</b>	<b>767.48</b>	<b>767.48</b>

## Operation & Maintenance Expenses (O&M Expenses)



52. The O&M Expenses claimed by the petitioner for combined asset are as under: -

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	46.37	47.94	49.51	51.14	52.85

53. As per Regulation 35(3)(a) and 35(4) of 2019 Tariff Regulations, the normative O&M expenses for the asset covered in the petition are as under: -

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Normative rate of O&M for communication system	2% of the Original Project Cost related to such communication system.				

54. The details of O&M Expenses allowed as per Regulation 35(3)(a) and 35(4) of the 2019 Tariff Regulations is given hereunder: -

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
LILO of Alamathy-Siperumbudur 400 kV DC line at North Chennai TPS switchyard (65.575 KM)	57.77	59.80	61.90	64.06	66.29
Communication system (*)	1.85	1.85	1.85	1.85	1.85
<b>Total normative O&amp;M</b>	<b>59.62</b>	<b>61.66</b>	<b>63.75</b>	<b>65.91</b>	<b>68.14</b>

(\*)2% of the original project cost of ₹ 92.26 lakh related to such communication system as submitted by the petitioner.

### Interest on Working Capital (IWC)

55. Sub-clause (c) of clause (1), and clause 3 of Regulation 34 of the 2019 Tariff Regulations provides the following:



“(1) The working capital shall cover:

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

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

(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and

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

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

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

56. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate for IWC is considered as 12.05% (SBI Base Rate of 8.55% plus 350 basis points). The IWC worked out is shown in the table below: -

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Maintenance Spares	8.94	9.25	9.56	9.89	10.22
O&M expenses	4.97	5.14	5.31	5.49	5.68
Receivables	247.82	240.17	231.82	223.48	214.55
<b>Total</b>	<b>261.73</b>	<b>254.55</b>	<b>246.70</b>	<b>238.86</b>	<b>230.45</b>
Rate of Interest	12.05%	12.05%	12.05%	12.05%	12.05%
Interest on WC	<b>31.54</b>	<b>30.67</b>	<b>29.73</b>	<b>28.78</b>	<b>27.77</b>

### Annual Transmission Charges

57. The details of Annual Transmission Charges allowed for the 2014-19 tariff period in respect of assets covered under the instant petition is summarized below:-

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	767.48	767.48	767.48	767.48	767.48
Interest on Loan	363.59	294.79	225.98	157.13	88.19
Return on Equity	793.40	793.40	793.40	793.40	793.40
Interest on Working Capital	31.54	30.67	29.73	28.78	27.77
O&M Expenses	59.62	61.66	63.75	65.91	68.14
<b>Total</b>	<b>2015.62</b>	<b>1948.01</b>	<b>1880.34</b>	<b>1812.70</b>	<b>1744.98</b>





### **Filing fee and the publication expenses**

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

### **License fee and RLDC Fees and Charges**

59. The Petitioner has prayed to allow the Petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. We are of the view that the Petitioner shall be entitled for reimbursement of license fee and RLDC fees and charges in accordance with Clause (3) and (4) of Regulation 70 in the 2019 Tariff Regulations.

### **Goods and Services Tax**

60. The Petitioner has prayed for reimbursement of tax, if any, on account of implementation of GST. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is premature.

### **Security Expenses and Capital Spares**

61. As per Regulation 35(3)(c) of 2019 Tariff Regulations: -

“(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 year-wise actual capital spares consumed at the time of truing up with appropriate justification.”



62. The Petitioner has submitted that a separate petition shall be filed for claiming the overall 'Security Expenses' and consequential Interest on Working Capital (IWC) on the same. The Petitioner has proposed to consider actual security expense of 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 actual expenses. Thus, petition for Security Expenses shall be filed on year to year basis with annual True up. Similarly petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on the basis of actual expenses of previous year subject to true up at the end of the year on actual expenses. The difference, if any, between the Estimated Security Expenses and Actual Security Expenses calculated as per audited accounts, on year to year basis may be allowed to recover from beneficiaries. Further, the 'Capital Spares' shall be claimed by the petitioner at the end of tariff block as per actual. Accordingly, these expenses are not claimed in the subject petition through the relevant Tariff Form and shall be claimed separately in a separate petition along with all other assets.

63. We have considered the submissions of the Petitioner. Any application filed by the Petitioner in this regard, if any, will be dealt with in accordance with the appropriate provisions of the 2019 Tariff Regulations.

### **Sharing of Transmission Charges**

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



65. This order disposes of Petition No. 245/TT/2019.

**Sd/-**  
**(I. S. Jha)**  
**Member**

**Sd/-**  
**(P. K. Pujari)**  
**Chairperson**

