

# CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 480/TT/2019

**Coram:**

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

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

**Shri Arun Goyal, Member**

**Shri Pravas Kumar Singh, Member**

**Shri Prakash S. Mhaske, Member, Ex-officio**

**Date of Order: 29.04.2021**

**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 of 2 Nos. of 400 kV line bays at Srikakulam for termination of Srikakulam Pooling Station-Garividi 400 kV Quad D/C line under "Sub-station works associated with Strengthening of Transmission System beyond Vemagiri" in Southern Region.

**And in the matter of:**

Power Grid Corporation of India Ltd. (PGCIL)  
"SAUDAMINI", Plot No-2,  
Sector-29, Gurgaon-122001 (Haryana).

.....Petitioner

**Vs**

1. Karnataka Power Transmission Corporation Ltd., (KPTCL)  
Kaveri Bhavan, Bangalore-560009.
2. Transmission Corporation of Andhra Pradesh Ltd., (APTRANSCO)  
Vidyut Soudha, Hyderabad-500082.
3. Kerala State Electricity Board (KSEB)  
Vaidyuthi Bhavanam,  
Pattom, Thiruvananthapuram-695004.
4. Tamil Nadu Generation and Distribution Corporation Ltd.  
(Formerly Tamilnadu Electricity Board-TNEB),



Order in Petition No. 480/TT/2019

- NPKRR Maaligai, 800, Anna Salai, Chennai-600002.
5. Electricity Department  
Govt of Pondicherry, Pondicherry-605001.
  6. Eastern Power Distribution Company of Andhra Pradesh Ltd. (APEPDCL)  
APEPDCL, P&T Colony,  
Seethmmadhara, Vishakhapatnam, Andhra Pradesh.
  7. Southern Power Distribution Company of Andhra Pradesh Ltd. (APSPDCL)  
Srinivasasa Kalyana Mandapam Backside,  
Tiruchanoor Road, Kesavayana Gunta, Tirupati-517501,  
Chittoor District, Andhra Pradesh.
  8. Central Power Distribution Company of Andhra Pradesh Ltd. (APCPDCL)  
Corporate Office, Mint Compound,  
Hyderabad-500063, Telangana.
  9. Northern Power Distribution Company of Andhra Pradesh Ltd. (APNPDCL)  
Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet,  
Warangal-506004, Telangana.
  10. Bangalore Electricity Supply Company Ltd. (BESCOM)  
Corporate Office, K.R.Circle,  
Bangalore-560001, Karanataka.
  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. 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-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  
NPKRR Maaligai, 800, Anna Salai,  
Chennai-600002.



18.POWERGRID Southern Interconnector Transmission System Ltd.  
B-9, Qutab institutional Area,  
Katwaria Sarai,  
New Delhi-110016.

.....Respondents

**For Petitioner:** Shri S. S. Raju, PGCIL  
Shri B. Dash, PGCIL  
Shri Ved Prakash Rastogi, PGCIL  
Shri A. K. Verma, PGCIL

**For Respondent:** None

### **ORDER**

The instant petition has been filed by the Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, for truing up of the tariff from 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 the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of 2 Nos. of 400 kV line bays at Srikakulam for termination of Srikakulam Pooling Station-Garividi 400 kV Quad D/C line (hereinafter referred to as “Asset-1/ the transmission asset”) under “Sub-station works associated with Strengthening of Transmission System beyond Vemagiri” in Southern Region (hereinafter referred to as the “transmission system”).

2. The Petitioner has made the following prayers in the instant 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 10.2 and 11.0 above.*

*2) Approve the Completion cost and additional capitalization 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 10.2 and 11.0 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 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.

7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 11.6 above.

8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.

9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

### **Background**

3. The brief facts of the case are as under:

a) The Investment Approval (IA) of the transmission system was accorded by Board of Directors of the Petitioner's Company in its 334<sup>th</sup> meeting held on 22.10.2016 (communicated *vide* Memorandum No. C/CP/PA 1617-10-00-IA 013 dated 24.10.2016), at an estimated cost of ₹608.24 crore including IDC of ₹36.12 crore based on June 2016 price level.

b) The scope of the transmission system was discussed and agreed to in the 37<sup>th</sup> and 39<sup>th</sup> meeting of the Standing Committee on Power System Planning of Southern Region held on 31.7.2014 and 28-29.12.2015 respectively and in the 26<sup>th</sup> and 29<sup>th</sup> meeting of SRPC held on 20.12.2014 and 5.3.2016 respectively.

c) The scope of work covered under the transmission system is as follows:  
i. 2 number of 765 kV line bays at Vemagiri-II Pooling Station for termination of Vemagiri-II-Chilakaluripeta 765 kV D/C Line;



- ii. 1 number of 240 MVAR Switchable Line Reactor on each circuit of Vemagiri-II-Chilakaluripeta 765 kV D/C Line at Vemagiri-II polling Station (2 number 240 MVAR reactor at Vemagiri-II);
- iii. 2 number of 765 kV line bays at Cuddapah for terminating Chilakaluripeta-Cuddapah 765 kV D/C Line;
- iv. 1 number of 240 MVAR Switchable Line Reactor on each circuit of Chilakaluripeta-Cuddapah 765 kV D/C Line at Cuddapah (2 number 240 MVAR Switchable line reactors);
- v. 2 number of 400 kV line bays at Cuddapah for terminating Cuddapah-Madhugiri 400 kV (quad) D/C line;
- vi. 1 number of 50 MVAR Switchable Line Reactor on each circuit of Cuddapah-Madhugiri 400 kV (quad) D/C line at Cuddapah (2 number 50 MVAR Switchable line reactors);
- vii. 2 number of 400 kV line bays at Madhugiri for termination of Cuddapah-Madhugiri 400 kV (quad) D/C line;
- viii. 1 number of 50MVAR Switchable Line Reactor on each circuit of Cuddapah-Madhugiri 400 kV (quad) D/C line at Madhugiri (2 number 50 MVAR Switchable line reactors);
- ix. 2 number of 400 kV line bays at Srikakulam for termination of Srikakulam Pooling Station - Garividi 400 kV Quad D/C line.

d) The Petitioner vide affidavit dated 7.10.2019 and 17.3.2021 has submitted the following implementation details of the assets (for convenience, assets are named as Asset-1, Asset-2, Asset-3 and Asset-4 in this order) under the said transmission system:

<b>Asset Name</b>	<b>COD</b>	<b>Petition No.</b>
2 number of 400 kV line bays at Srikakulam for termination of Srikakulam Pooling Station-Garividi 400 kV Quad D/C line <b>(Asset-1)</b>	7.8.2018	Covered in the instant petition (Truing up for 2014-19 period )
2 number 400 kV line bays and 2 number 50 MVAR Switchable line reactors each at Cuddapah GIS and Madhugiri ends for terminating Cuddapah – Madhugiri 400 kV (quad) D/C line <b>(Asset-2)</b>	28.2.2019	Covered in Petition No. 69/TT/2020 (order issued on 27.1.2021)
2 number 765 kV line bays and 1 number 240 MVAR Switchable line reactor on each circuit of Vemagiri II-Chilakaluripeta 765 D/C line at Vemagiri II Pooling Station (2 number 240 MVAR Switchable line reactors) <b>(Asset-3)</b>	15.1.2019	Separate truing up petition shall be filed



2 number 765 kV line bays and 1 number 240 MVAR Switchable line reactors on each circuit of Chilakaluripeta - Cuddapah 765 D/C line at Cuddapah (2 number 240 MVAR Switchable line reactors) <b>(Asset-4)</b>	Commissioned during Tariff Period 2019-24 and covered under Petition No. 661/TT/2020
--	--

4. Accordingly, in the instant petition, we are dealing with truing up of transmission tariff of 2014-19 period and determination of transmission tariff of 2019-24 period in respect of Asset-1 only. The transmission asset was scheduled to be put into commercial operation on 21.4.2019 and it was put into commercial operation on 7.8.2018. Thus, there was no time over-run.

5. COD of the transmission asset i.e. 7.8.2018 was approved by the Commission *vide* order dated 21.5.2019 in Petition No. 258/TT/2018 after taking into consideration the CEA energisation certificate, RLDC charging certificate and CMD certificate as required under Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010.

6. The transmission tariff was allowed for the transmission asset for 2014-19 period *vide* order dated 21.5.2019 in Petition No. 258/TT/2018.

7. The Respondents are distribution licensees, transmission licensees and power departments, which are procuring transmission service from the Petitioner, mainly beneficiaries of the Southern Region.

8. The Petitioner has served the petition on the Respondents and notice of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner.



9. The hearing in this matter was held on 10.3.2021 through video conference and the order was reserved.

10. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 7.10.2019, and information filed vide affidavits dated 9.9.2020, 9.3.2021 and 17.3.2021.

11. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.

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

12. The details of the trued-up transmission charges claimed by the Petitioner in respect of the transmission asset is as under:

(₹ in lakh)	
Particulars	2018-19
<b>Asset-1</b>	
Depreciation	67.67
Interest on Loan	66.72
Return on Equity	73.60
Interest on Working Capital	8.76
O&M Expenses	89.22
<b>Total</b>	<b>305.97</b>

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

(₹ in lakh)	
Particulars	2018-19
<b>Asset-1</b>	
O&M Expenses	11.45
Maintenance Spares	20.61
Receivables	78.54
Total Working Capital	110.60
Rate of Interest (%)	12.20
<b>Interest on Working Capital</b>	<b>8.76</b>



### **Capital Cost as on 1.4.2014**

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

15. The Commission vide order dated 21.5.2019 in Petition No. 258/TT/2018 had allowed capital cost as on COD and projected Additional Capital Expenditure (ACE) for determination of tariff for 2018-19 period, which are summarised as follows:

(₹ in lakh)

Admitted Capital Cost as on COD	ACE in 2018-19	Admitted Capital Cost as on 31.3.2019
1697.10	312.16	2009.26

16. The Petitioner has claimed capital cost based on actual expenditure as under:

(₹ in lakh)

FR Apportioned Approved Capital Cost	Capital Cost claimed as on COD	ACE claimed in 2018-19	Capital Cost claimed as on 31.3.2019
2470.38	1697.10	430.32	2127.42

### **Cost Over-run**

17. The Petitioner in the instant petition has revised the FR Apportioned Approved capital cost of ₹2166.38 lakh approved vide order dated 21.5.2019 in Petition No. 258/TT/2018 to ₹2470.38 lakh stating that the earlier contingency amount was not apportioned among all elements.

18. The details of apportioned approved capital cost, actual expenditure up to COD and ACE incurred during the period 2014-19 as claimed by the Petitioner are as under:

(₹ in lakh)

FR Apportioned Approved Capital Cost	Actual Capital Cost as on COD	ACE (2018-19)	Total Capital Cost as on 31.3.2019
2470.38	1697.10	430.32	2127.42





19. The Commission had approved FR apportioned approved capital cost of ₹2166.38 lakh vide order dated 21.5.2019 in Petition No. 258/TT/2018 for the transmission asset. The Petitioner has revised the same to ₹2470.38 lakh stating that the contingency amount was not apportioned among all elements in the previous filing. The Petitioner vide affidavit dated 17.3.2021 further submitted that while preparing the Detailed Project Report (DPR), IEDC and contingency have been estimated as 10.75% and 3% respectively on overall project basis. Asset-wise allocation of contingency amount is not made at the time of preparing DPR. The same is apportioned based on the eventualities faced during the execution of the Project. The Petitioner has submitted that the apportionment of FR approved capital cost submitted in Petition No. 258/TT/2018 is as follows:

Particulars	As per Original Apportionment				
	Hard Cost (a)	IDC (b)	IEDC (c)	Contingency (d)	Total (a+b+c+d)
2 number of 400 kV line bays at Srikakulam for termination of Srikakulam Pooling Station-Garividi 400 kV Quad D/C line (Asset-1)	18.18	1.47	2.01	-	21.66
2 number 400 kV line bays and 2 number 50 MVAR Switchable line reactors each at Cuddapah GIS and Madhugiri ends for terminating Cuddapah – Madhugiri 400 kV (quad) D/C line. (Asset-2)	121.39	8.59	11.44	3.20	144.62
2 number 765 kV line bays and 1 number 240 MVAR Switchable line reactor on each circuit of Vemagiri II- Chilakaluripeta 765 D/C line at Vemagiri II Pooling Station (2 number 240 MVAR Switchable line reactors) (Asset-3)	195.33	12.26	16.34	4.56	228.49
2 number 765 kV line bays and 1 number 240 MVAR Switchable line reactors on each circuit of Chilakaluripeta - Cuddapah 765 D/C line at Cuddapah (2 number 240 MVAR Switchable line reactors) (Asset-4)	175.67	13.80	18.33	5.68	213.48
<b>Total</b>	<b>510.57</b>	<b>36.12</b>	<b>48.12</b>	<b>13.44</b>	<b>608.25</b>



20. The Petitioner has further submitted that a part of the contingency amount from Asset-4 was re-apportioned to Asset-1 as the completion cost of Asset-1 was estimated to be higher than its approved apportioned FR capital cost. Accordingly, the Petitioner has submitted the revised apportionment as follows:

Particulars	(₹ in crore)				
	As per Revised Apportionment				
	Hard Cost (a)	IDC (b)	IEDC (c)	Contingency (d)	Total (a+b+c+d)
2 number of 400 kV line bays at Srikakulam for termination of Srikakulam Pooling Station-Garividi 400 kV Quad D/C line (Asset-1)	18.18	1.47	2.01	3.04	24.70
2 number 400 kV line bays and 2 number 50 MVAR Switchable line reactors each at Cuddapah GIS and Madhugiri ends for terminating Cuddapah – Madhugiri 400 kV (quad) D/C line. (Asset-2)	121.39	8.59	11.44	3.20	144.62
2 number 765 kV line bays and 1 number 240 MVAR Switchable line reactor on each circuit of Vemagiri II- Chilakaluripeta 765 D/C line at Vemagiri II Pooling Station (2 number 240 MVAR Switchable line reactors) (Asset-3)	195.33	12.26	16.34	4.56	228.49
2 number 765 kV line bays and 1 number 240 MVAR Switchable line reactors on each circuit of Chilakaluripeta - Cuddapah 765 D/C line at Cuddapah (2 number 240 MVAR Switchable line reactors) (Asset-4)	175.67	13.80	18.33	2.64	210.44
<b>Total</b>	<b>510.57</b>	<b>36.12</b>	<b>48.12</b>	<b>13.44</b>	<b>608.24</b>

21. We have considered the submissions of the Petitioner. The IA cost is ₹60824 lakhs and the entire scope of the work under the transmission system is covered in Petition No. 69/TT/2020 (true up petition for 2014-19 has not been filed yet) and Petition No. 661/TT/2020 (tariff for 2019-24 not determined yet) along with the instant true up petition. The Petitioner has now re-apportioned the capital cost of the transmission asset due to non-factoring the contingency amount for Asset-1. The original apportionment and revised apportionment of the complete scope of the work for all the assets is as follows:



(₹ in crore)

Asset Name	FR cost as per Original apportionment	FR cost as per Revised apportionment claimed in the instant petition	Remarks
Asset-1	21.66	24.70	Revised FR cost increased by about 3.04
Asset-2	144.62	144.62	No change in FR cost
Asset-3	228.49	228.49	No change in FR cost
Asset-4	213.48	210.44	Revised FR cost reduced by about 3.04
<b>Total</b>	<b>608.25</b>	<b>608.24</b>	

22. The Commission has examined the submissions made by the Petitioner in affidavits and during the hearing of the matter. It is observed that the Petitioner has changed the FR apportionment cost in respect of Asset-1 and Asset-4 only without changing the same for Asset-2 and Asset-3. The Petitioner had initially kept ₹5.68 crore as contingency for Asset-4. The Petitioner has subsequently re-apportioned this amount between Asset-1 and Asset-4 as ₹3.04 crore and ₹2.64 crore respectively and filed the same in this petition. However, it is not clear as to why the Petitioner has undertaken such an apportionment. Prima facie, it seems that the Petitioner has done so since the estimated completion cost of Asset-1 is more than the FR cost. By re-apportioning the FR cost, the Petitioner has tried to bring the completion cost of Asset-1 within the FR cost. Such an approach is not appropriate and therefore, this approach of the Petitioner cannot be accepted. The Petitioner is advised to take due care in future while undertaking apportionment of capital cost amongst various assets. Accordingly, the earlier claimed FR apportioned approved capital cost of ₹2166.38 lakh is considered in the instant petition. We further note that against the apportioned approved capital cost of ₹2166.38 lakh, the capital cost as on 31.3.2019 including ACE is within the FR apportioned approved capital cost. Therefore, there is no cost over-run.



### **Time over-run**

23. As per investment approval (FR), the transmission system was scheduled to be put under commercial operation within 30 months from the date of original IA. The date of IA is 22.10.2016, accordingly the schedule COD works out to be 21.4.2019 against which the transmission asset was put under commercial operation w.e.f. 7.8.2018. Hence, there was no time over-run in COD of Asset-1.

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

24. The Petitioner has claimed IDC for the transmission asset and has submitted the statement showing IDC claim, discharge of IDC liability as on COD and thereafter as under:

(₹ in lakh)

IDC as per Auditor Certificate	IDC Discharged up to COD	IDC discharged during 2018-19	Un-discharged IDC up to COD
51.04	4.75	46.29	46.29

25. The allowable IDC has been worked out considering the information submitted by the Petitioner. The loan details submitted in Form-9C for 2014-19 period and date of drawl submitted in IDC statement has been considered for the purpose of calculating IDC for the transmission asset. Accordingly, IDC allowed is as follows:

(₹ in lakh)

DC as per Auditor Certificate	IDC up to COD as worked out	IDC disallowed due to computation difference	IDC allowed up to COD on cash basis	Un-discharged IDC as on COD (Discharged in 2018-19)
51.04	50.52	0.52	4.27	46.25

26. The Petitioner has claimed IEDC for the transmission asset as per the table given below. The Petitioner has claimed IEDC as on COD, which is within the percentage of hard cost as indicated in the abstract cost estimate. Hence, the entire



amount of IEDC has been allowed. Accordingly, IEDC details considered for the purpose of tariff calculation are as follows:

(₹ in lakh)	
IEDC claimed as per Auditor Certificate	IEDC considered as on COD
26.27	26.27

**Initial Spares**

27. The Petitioner has worked out the Initial Spares for the transmission asset as under:

Asset Type	Estimated Completion Cost (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Ceiling limit (%) (C)	Initial Spares worked out	Excess Initial Spares E = B-D (₹ in lakh)
				$D = [(A-B)*C / (100-C)]$ (₹ in lakh)	
Sub-station (Brown Field)	2138.67	64.77	6.0	132.38	0.00

28. The Petitioner has further submitted that the initial spares included in the Auditor’s Certificate is as per actual cash expenditure incurred and the initial spares discharged after COD is considered as ACE in the respective years. The discharge of initial spares submitted by the Petitioner is as under:

(₹ in lakh)		
Initial Spares claimed	Initial Spares discharged up to COD	Initial Spares discharged in 2018-19
64.77	58.60	6.17

29. We have considered the submissions made by the Petitioner. The initial spares claimed by the Petitioner for Asset-1 is within the permissible limit and the same is allowed. Accordingly, the initial spares allowed is as follows:



Asset type	Capital Cost as on cut-off date (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Ceiling limit (C) (%)	Initial Spares worked out	Excess Initial Spares	Initial Spares allowed (₹ in lakh)
				$D = [(A-B)*C / (100-C)]$ (₹ in lakh)	$E = D-B$ (₹ in lakh)	
Sub-station (Brown Field)	2138.67	64.77	6.0	132.38	-	64.77

### Capital Cost as on COD

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

(₹ in lakh)			
Capital Cost claimed in Auditor Certificate as on COD (A)	Un-discharged IDC as on COD (B)	IDC disallowed as on COD due to computation difference (C)	Capital Cost allowed as on COD (E) = (A-B-C)
1743.39	46.25	0.52	1696.62

### Additional Capital Expenditure (ACE)

31. The cut-off date for the transmission asset is 31.3.2021. The Petitioner has claimed ACE as under:

(₹ in lakh)	
<b>ACE Claimed in 2018-19</b>	
430.32*	

*\*Includes IDC discharged*

32. The Petitioner has submitted that ACE incurred in 2018-19 period is on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date and work to be executed within the cut-off date. The Petitioner has claimed the same under Regulation 14(1)(i) (undischarged liabilities recognized to be payable at a future date) and Regulation 14(1)(ii) (works deferred for execution) respectively of the 2014 Tariff Regulations. The break-up of ACE claimed by the Petitioner is as under:



(₹ in lakh)

Particulars	Regulation	ACE claimed
		2018-19
Balance and retention payments for liabilities other than IDC	14(1)(i)	311.38
Works deferred for execution	14(1)(ii)	72.65
IDC Discharged after COD	14(1)(i)	46.29
<b>Total ACE</b>		<b>430.32</b>

33. Further, the Petitioner vide affidavit dated 9.9.2020 has submitted the package wise breakup as below:

(₹ in lakh)

Vendor Name	Nature of Work	2018-19
<b>Asset-1</b>		
<b>Balance and retention payments for liabilities other than IDC</b>		
TBEA Energy India Pvt. Ltd.	Sub-station	311.38
<b>Works deferred for execution</b>		
TBEA Energy India Pvt. Ltd.	Sub-station	72.65

34. We have considered the submissions made by the Petitioner and the claim has been verified from the Auditor Certificates. The worked out un-discharged IDC as on COD has been allowed as ACE during the year of discharge. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) and (ii) of the 2014 Tariff Regulations which pertain to un-discharged liabilities recognized to be payable at a future date and liabilities toward works deferred for execution respectively. Accordingly, ACE allowed for the 2014-19 period is as follows:

(₹ in lakh)

Particulars	Regulation	ACE allowed
		2018-19
<b>Asset-1</b>		
Balance and retention payments for liabilities other than IDC	14(1)(i)	311.38
Works deferred for execution	14(1)(ii)	72.65
IDC Discharged after COD	14(1)(i)	46.25
<b>Total ACE</b>		<b>430.28</b>



(₹ in lakh)			
Apportioned Approved Capital Cost	Capital Cost allowed as on COD	ACE allowed	Capital Cost allowed as on 31.3.2019
		2018-19	
2470.38	1696.62	430.28	2126.90

### Debt-Equity ratio

35. Debt-equity ratio is considered as per Regulation 19 of the 2014 Tariff Regulations. The debt-equity ratio of 70:30 has been considered for ACE allowed during 2014-19 period in accordance with Regulation 19(3) of the 2014 Tariff Regulations.

36. The details of the debt-equity ratio as on COD and as on 31.3.2019 considered for the purpose of determination of tariff for the 2014-19 period is as follows:

Particulars	Capital cost as on COD (₹ in lakh)	(%)	ACE during 2014-19 (₹ in lakh)	(%)	Total cost as on 31.3.2019 (₹ in lakh)	(%)
<b>Asset-1</b>						
Debt	1187.63	70.00	301.19	70.00	1488.83	70.00
Equity	508.99	30.00	129.08	30.00	638.07	30.00
<b>Total</b>	<b>1696.62</b>	<b>100.00</b>	<b>430.28</b>	<b>100.00</b>	<b>2126.90</b>	<b>100.00</b>

### Depreciation

37. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed for the transmission asset vide order dated 21.5.2019 in Petition No. 258/TT/2018. The Petitioner has neither given any justification for claiming higher depreciation than that was allowed in previous orders nor made any specific prayer for allowing higher depreciation in this petition. The Petitioner did not claim any capital expenditure towards "IT Equipment" in Petition No. 258/TT/2018 where tariff for the instant assets for the 2014-19 period was allowed even though there was a clear provision in the 2014 Tariff Regulations providing





depreciation @15% for IT Equipment. Similar issue has 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 up to 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 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 up to 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 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations.”*

38. In line with the above order of the Commission, the Gross Block during the 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD). The calculation of WAROD for the 2014-19 period for Asset-1 is placed at 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 trued up depreciation allowed during 2014-19 is as follows:



(₹ in lakh)	
Particulars	2018-19 (pro rata 237 days)
<b>Asset-1</b>	
Opening Gross Block	1696.62
ACE	430.28
Closing Gross Block	2126.90
Average Gross Block	1911.76
(WAROD) (%)	5.30
Balance useful life of the asset (Year)	24
Elapsed useful life at the beginning of the year (Year)	0
Aggregate Depreciable Value	1720.58
<b>Depreciation during the year</b>	<b>65.76</b>
Cumulative Depreciation	65.76
Remaining Aggregate Depreciable Value	1654.82

39. The details of the depreciation approved vide order dated 21.5.2019 in Petition No. 258/TT/2018, claimed by the Petitioner in the instant petition and trued up depreciation allowed in this order is as follows:

(₹ in lakh)	
Particular	2018-19 (pro-rata 237 days)
<b>Asset-1</b>	
Approved vide order dated 21.5.2019 in Petition No. 258/TT/2018	63.75
Claimed by the Petitioner in the instant petition	67.67
Allowed after true up in this order	65.76

### **Interest on Loan (IoL)**

40. The Petitioner has claimed that the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rate submitted by the Petitioner, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL worked out is as follows:



(₹ in lakh)

Particulars	2018-19 (pro rata 237 days)
<b>Asset-1</b>	
Gross Normative Loan	1187.63
Cumulative Repayments up to Previous Year	0.00
Net Loan-Opening	1187.63
Additions	301.19
Repayment during the year	65.76
Net Loan-Closing	1423.07
Average Loan	1305.35
Weighted Average Rate of Interest on Loan (%)	7.8746
<b>Interest on Loan</b>	<b>66.74</b>

41. Accordingly, IoL approved earlier vide order dated 21.5.2019 in Petition No. 258/TT/2018, claimed by the Petitioner in the instant petition and true up IoL is as follows:

(₹ in lakh)

Particular	2018-19 (pro rata 237 days)
<b>Asset-1</b>	
Approved vide order dated 21.5.2019 in Petition No. 258/TT/2018	63.96
Claimed by the Petitioner in the instant petition	66.72
Allowed after true-up in this order	66.74

### **Return on Equity (RoE)**

42. The Petitioner is entitled to RoE for the transmission 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 Minimum Alternate Tax (MAT) rates and has claimed 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	19.705
2017-18	21.337	19.705



2018-19	21.549	19.758
---------	--------	--------

43. The Commission, vide order dated 27.4.2020 in Petition No. 274/TT/2019, has arrived at the effective tax rate based on the notified MAT rates. 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:*

<b>Year</b>	<b>Notified MAT rates (inclusive of surcharge &amp; cess)</b>	<b>Effective tax (in %)</b>
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

44. The MAT rates considered above 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 Regulations, as under:

<b>Year</b>	<b>Notified MAT rates (inclusive of surcharge &amp; cess) (in %)</b>	<b>Base rate of RoE (in %)</b>	<b>Grossed up RoE [Base Rate/(1-t)] (in %)</b>
2018-19	21.549	15.50	19.758



45. RoE is trued up on the basis of the MAT rate applicable in the respective years and is allowed as follows:

(₹ in lakh)	
Particulars	2018-19 ( <i>pro rata</i> 237 days)
<b>Asset-1</b>	
Opening Equity	508.99
Additions	129.08
Closing Equity	638.07
Average Equity	573.53
Return on Equity (Base Rate) (%)	15.500
MAT Rate for respective year (%)	21.549
Rate of Return on Equity (%)	19.758
<b>Return on Equity</b>	<b>73.58</b>

46. Accordingly, details of RoE approved vide order dated 21.5.2019 in Petition No. 258/TT/2019, claimed by the Petitioner in the instant petition and trued up RoE in this order for the 2014-19 tariff period are as follows:

(₹ in lakh)	
Particular	2018-19 ( <i>pro rata</i> 237 days)
<b>Asset-1</b>	
Approved vide order dated 21.5.2019 in Petition No. 258/TT/2018	70.79
Claimed by the Petitioner in the instant petition	73.60
Allowed after true-up in this order	73.58

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

47. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The total O&M Expenses for the transmission asset claimed by the Petitioner is as under:

O&M Expenses	2018-19 ( <i>pro rata</i> 237 days)
<b>Asset-1</b>	
2 number 400 kV Sub-station bays at Srikakulam	
<b>Total O&amp;M Expense (₹ in lakh)</b>	<b>89.23</b>

48. The O&M Expenses determined by us differ slightly from the Petitioner's claim due to rounding off. Regulation 29(3) of the 2014 Tariff Regulations specifies the



norms for O&M Expenses for the transmission system. The norm specified in respect of the transmission asset is as under:

Particulars	Unit	2018-19
<b>Sub-station bays</b>		
400 kV bays	(₹ lakh per bay)	68.71

49. The O&M Expenses are allowed as per the norms specified in the 2014 Tariff Regulations and are as under:

O&M Expenses	2018-19 (pro rata 237 days)
<b>Asset-1</b>	
<b>Sub-station bays</b>	
400 kV Sub-station	
Number of bays	2
<b>Total O&amp;M Expense (₹ in lakh)</b>	<b>89.23</b>

50. The details of the O&M expenses approved vide order dated 21.5.2019 in Petition No. 258/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order is shown in the table below:

(₹ in lakh)	
Particular	2018-19 (pro rata 237 days)
<b>Asset-1</b>	
Approved vide order dated 21.5.2019 in Petition No. 258/TT/2018	89.40
Claimed by the Petitioner in the instant petition	89.22
Allowed after true-up in this order	89.23

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

51. The Petitioner is entitled for IWC as per Regulation 28 of the 2014 Tariff Regulations. IWC allowed as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations is as follows:



(₹ in lakh)

Particulars	2018-19 (pro rata 237 days)
<b>Asset-1</b>	
O&M Expenses (O&M Expenses for 1 month)	11.45
Maintenance Spares (15% of O&M Expenses)	20.61
Receivables (Equivalent to 2 months of annual fixed cost)	78.04
<b>Total Working Capital</b>	<b>110.10</b>
Rate of Interest (%)	12.20
<b>Interest on Working Capital</b>	<b>8.72</b>

52. The details of IWC approved in vide order dated 21.5.2019 in Petition No. 258/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order for the 2014-19 period is shown as follows:

(₹ in lakh)

Particular	2018-19 (pro rata 237 days)
<b>Asset-1</b>	
Approved vide order dated 21.5.2019 in Petition No. 258/TT/2018	8.57
Claimed by the Petitioner in the instant petition	8.76
Allowed after true-up in this order	8.72

### **Approved Annual Fixed Charges for the 2014-19 Tariff Period**

53. The trued up annual fixed charges allowed for the transmission asset for the 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2018-19 (pro rata 237 days)
<b>Asset-1</b>	
Depreciation	65.76
Interest on Loan	66.74
Return on Equity	73.58
Interest on Working Capital	8.72
O&M Expenses	89.23
<b>Total</b>	<b>304.03</b>



54. Accordingly, the Annual Fixed Charges approved vide order dated 21.5.2019 in Petition No. 258/TT/2018, trued up AFC claimed by the Petitioner in the instant petition and trued up AFC allowed in the instant order are shown in the table below:

(₹ in lakh)

Particular	2018-19 (pro rata 237 days)
<b>Asset-1</b>	
Approved vide order dated 21.5.2019 in Petition No. 258/TT/2018	296.48
Claimed by the Petitioner in the instant petition	305.97
Allowed after true-up in this order	304.03

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

55. The Petitioner 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	117.98	120.32	120.32	120.32	120.32
Interest on Loan	110.81	103.80	94.23	84.64	75.02
Return on Equity	122.37	124.86	124.86	124.86	124.86
Interest on Working Capital	8.11	8.19	8.15	8.11	8.06
O&M Expenses	64.97	67.23	69.57	71.99	74.49
<b>Total</b>	<b>424.24</b>	<b>424.40</b>	<b>417.13</b>	<b>409.92</b>	<b>402.75</b>

56. The details of IWC claimed by the Petitioner for the transmission asset for the 2019-24 tariff period are as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	5.41	5.60	5.80	6.00	6.21
Maintenance Spares	9.75	10.08	10.44	10.80	11.17
Receivables	52.16	52.32	51.43	50.54	49.52
Total Working Capital	67.32	68.00	67.67	67.34	66.90
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>8.11</b>	<b>8.19</b>	<b>8.15</b>	<b>8.11</b>	<b>8.06</b>





## **Capital Cost**

57. Regulation 19 of the 2019 Tariff Regulations provides 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;*
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) Expenditure on account of change in law and force majeure events; and*
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

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

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*



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

(4) The Capital Cost in case of existing or new hydro generating station shall also include:

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.

“(5) The following shall be excluded from the Capital Cost of the existing and new projects:

- (a) The 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 decapitalised only after its redeployment;*

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

58. The Petitioner has claimed capital cost of ₹2127.42 lakh as on 31.3.2019 for the transmission asset. The Commission has worked out capital cost of ₹2126.90 lakh



as on 31.3.2019 and it 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)**

59. Regulation 24 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 23 of these regulations;*
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;*
- (e) Change in law or compliance of any existing law; and*
- (f) Force Majeure events:*

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

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

60. The Petitioner has claimed ACE of ₹88.56 lakh during 2019-20 for Asset-1 on account of undischarged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date under Regulation 24(1)(a) of the 2019 Tariff Regulations. The capital cost projected by the Petitioner during the 2019-24 period is as under:

(₹ in lakh)

Capital Cost claimed as on 1.4.2019	ACE claimed	Capital Cost claimed as on 31.3.2024
	2019-20	
2127.42	88.56	2215.98



61. The Petitioner vide affidavit dated 9.9.2020 has submitted the package wise breakup as below:

		(₹ in lakh)
Vendor Name	Nature of Work	2019-20
<b>Asset-1</b>		
TBEA Energy India Pvt. Ltd.	Sub-station	88.56

62. ACE claimed on account of balance and retention payments is allowed under Regulation 24(1)(a) of the 2019 Tariff Regulations. It is observed that the capital cost of ₹2215.46 lakh as on 31.3.2024 claimed by the Petitioner exceeds the FR apportioned approved capital cost of ₹2166.38 lakh. Accordingly, the capital cost claimed by the Petitioner has been restricted to FR apportioned approved cost and out of the total ACE of ₹ 88.56 lakh claimed during 2019-20, ACE to the extent of ₹39.48 lakh only has been allowed. Therefore, the capital cost considered for the 2019-24 tariff period is as follows:

		(₹ in lakh)	
FR cost considered	Capital Cost as on 1.4.2019	Admitted ACE	Capital Cost as on 31.3.2024
		2019-20	
2166.38	2126.90	39.48	2166.38

### **Debt-Equity Ratio**

63. 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 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 ACE 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.”*

64. The debt and equity considered for the purpose of tariff for 2019-24 tariff period are as follows:

<b>Particulars</b>	<b>Capital Cost as on 1.4.2019 (₹ in lakh)</b>	<b>%</b>	<b>ACE during 2019-24 (₹ in lakh)</b>	<b>%</b>	<b>Capital Cost as on 31.3.2024 (₹ in lakh)</b>	<b>%</b>
Debt	1488.83	70.00	27.64	70.00	1516.47	70.00
Equity	638.07	30.00	11.85	30.00	649.91	30.00
<b>Total</b>	<b>2126.90</b>	<b>100.00</b>	<b>39.48</b>	<b>100.00</b>	<b>2166.38</b>	<b>100.00</b>



## **Depreciation**

65. 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 project or element thereof including communication project. In case of the tariff of all the units of a generating station or all elements of a transmission project including communication project 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 project taking into consideration the depreciation of individual units:*

*Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission project, 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 project, weighted average life for the generating station of the transmission project 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.”

66. The IT equipment has been considered as a part of the Gross Block and depreciated using WAROD. WAROD has been worked out after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered as nil i.e., IT asset has been considered as 100 per cent depreciable. The calculation of WAROD for the 2019-24 period is placed at Annexure-II to this order. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed for the transmission asset is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Depreciation</b>					
Opening Gross Block	2126.90	2166.38	2166.38	2166.38	2166.38
ACE	39.48	0.00	0.00	0.00	0.00
Closing Gross Block	2166.38	2166.38	2166.38	2166.38	2166.38
Average Gross Block	2146.64	2166.38	2166.38	2166.38	2166.38
Freehold Land	0.00	0.00	0.00	0.00	0.00
Weighted average rate of Depreciation (WAROD) (%)	5.43	5.43	5.43	5.43	5.43
Balance useful life of the asset (Year)	24	23	22	21	20
Elapsed useful life at the beginning of the year (Year)	0	1	2	3	4
Aggregate Depreciable Value	1935.02	1952.79	1952.79	1952.79	1952.79
<b>Depreciation during the year</b>	<b>116.66</b>	<b>117.70</b>	<b>117.70</b>	<b>117.70</b>	<b>117.70</b>
Cumulative Depreciation	182.41	300.11	417.81	535.51	653.21
Remaining Aggregate Depreciable Value	1752.61	1652.68	1534.98	1417.28	1299.58



## **Interest on Loan (IoL)**

67. 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 de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.*

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

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

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

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

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

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

68. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been worked out in accordance with Regulation 32





of the 2019 Tariff Regulations. The details of weighted average rate of interest for 2019-24 tariff period and the IoL allowed for Asset-1 is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	1488.83	1516.47	1516.47	1516.47	1516.47
Cumulative Repayments up to Previous Year	65.76	182.41	300.11	417.81	535.51
Net Loan-Opening	1423.07	1334.05	1216.35	1098.66	980.96
Additions	27.64	0.00	0.00	0.00	0.00
Repayment during the year	116.66	117.70	117.70	117.70	117.70
Net Loan-Closing	1334.05	1216.35	1098.66	980.96	863.26
Average Loan	1378.56	1275.20	1157.51	1039.81	922.11
Weighted Average Rate of Interest on Loan (%)	7.9515	7.9515	7.9515	7.9499	7.9431
<b>Interest on Loan</b>	<b>109.62</b>	<b>101.40</b>	<b>92.04</b>	<b>82.66</b>	<b>73.24</b>

### **Return on Equity (RoE)**

69. 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 excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;*

*Provided further that:*

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

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



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

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

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

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

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

Illustration-

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

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

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore / Rs 1000 Crore = 24%;

(d) Rate of return on equity =  $15.50 / (1 - 0.24) = 20.395\%$ .



(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	638.07	649.91	649.91	649.91	649.91
Additions	11.85	0.00	0.00	0.00	0.00
Closing Equity	649.91	649.91	649.91	649.91	649.91
Average Equity	643.99	649.91	649.91	649.91	649.91
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
<b>Return on Equity</b>	<b>120.95</b>	<b>122.07</b>	<b>122.07</b>	<b>122.07</b>	<b>122.07</b>

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

71. The Petitioner has claimed the O&M expenses for the 2019-24 tariff period as under:

(₹ in lakh)					
O&M Expenses					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
2 number of 400 kV Sub-station bays at Srikakulam	64.30	66.56	68.90	71.32	73.82
<b>O&amp;M for PLCC (2% of ₹326.44 lakh)</b>	0.67	0.67	0.67	0.67	0.67
<b>Total O&amp;M expenses</b>	<b>64.97</b>	<b>67.23</b>	<b>69.57</b>	<b>71.99</b>	<b>74.49</b>



72. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations are 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:

<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>Norms for sub-station Bays (₹ Lakh per bay)</b>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<b>Norms for Transformers (₹ Lakh per MVA)</b>					
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
<b>Norms for AC and HVDC lines (₹ Lakh per km)</b>					
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
<b>Norms for HVDC stations</b>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942



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

*Provided further that:*

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- iii. the O&M expenses of  $\pm 500$  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  $\pm 500$  kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
- iv. the O&M expenses of  $\pm 800$  kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for  $\pm 800$  kV, Bishwanath-Agra HVDC bi-pole scheme;*
- v. the O&M expenses of  $\pm 800$  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  $\pm 800$  kV, Bishwanath-Agra HVDC bi-pole scheme; and*
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*

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

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

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

*(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”*



73. 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 and the Petitioner has made a similar claim in several other petitions as well. Though PLCC is a communication system, it has been considered as part of the Sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for Sub-station have been specified accordingly. Accordingly, the Commission *vide* order dated 24.1.2021 in Petition No. 126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. 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 sub-station 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.

74. O&M Expenses for transmission asset allowed by the Commission for the 2019-24 tariff period are as follows:

O&M Expenses	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Sub-station bays at Srikakulam</b>					
400 kV Conventional					
Number of bays	2	2	2	2	2
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>64.30</b>	<b>66.56</b>	<b>68.90</b>	<b>71.32</b>	<b>73.82</b>

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

75. Regulation 34(1)(c), Regulation 34(3) & (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 fixed cost;
- ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
- iii. Operation and maintenance expenses, including security expenses for one month

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

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



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

“3. Definitions .....

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

76. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas rate of IWC 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 thereon allowed is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses for 1 month)	5.36	5.55	5.74	5.94	6.15
Maintenance Spares (15% of O&M Expenses)	9.65	9.98	10.34	10.70	11.07
Receivables (Equivalent to 45 days of annual transmission charges)	51.58	51.19	50.32	49.46	48.47
Total Working Capital	66.59	66.72	66.40	66.10	65.69
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
<b>Interest on Working Capital</b>	<b>8.02</b>	<b>7.51</b>	<b>7.47</b>	<b>7.44</b>	<b>7.39</b>

#### **Annual Fixed Charges of the 2019-24 Tariff Period**

77. The transmission charges allowed for the transmission asset for the 2019-24 tariff period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	116.66	117.70	117.70	117.70	117.70
Interest on Loan	109.62	101.40	92.04	82.66	73.24
Return on Equity	120.95	122.07	122.07	122.07	122.07





Interest on Working Capital	8.02	7.51	7.47	7.44	7.39
O & M Expenses	64.30	66.56	68.90	71.32	73.82
<b>Total</b>	<b>419.55</b>	<b>415.23</b>	<b>408.17</b>	<b>401.19</b>	<b>394.22</b>

### **Filing Fee and the Publication Expenses**

78. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner is entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on *pro rata* basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

### **Licence Fee & RLDC Fee and Charges**

79. The Petitioner has claimed reimbursement of license fee and recovery of RLDC fees and charges. The Petitioner is 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 is 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**

80. 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 & 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.

81. Further, the Petitioner has prayed that any taxes including GST and duties including cess etc. imposed by any statutory/Government/Municipal authorities shall



be allowed to be recovered from the beneficiaries. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately.

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

### **Security Expenses**

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

84. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission asset 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**

85. 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**

86. 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 or 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.

87. To summarise, the trued up Annual Fixed Charges allowed for the transmission asset in the 2014-19 tariff period are as follows:

(₹ in lakh)	
Particulars	2018-19 ( <i>pro rata</i> 237 days)
Annual Fixed Charges	304.03

88. The Annual Fixed Charges allowed for the transmission asset for the 2019-24 tariff period in this order are as follows:

(₹ in lakh)					
Asset-1	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	419.55	415.23	408.17	401.19	394.22



89. Both the annexures given hereinafter form part of the instant order.

90. This order disposes of Petition No. 480/TT/2019.

**sd/-**  
**(Prakash S. Mhaske)**  
**Member (Ex-officio)**

**sd/-**  
**(Pravas Kumar Singh)**  
**Member**

**sd/-**  
**(Arun Goyal)**  
**Member**

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

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



<b>Petition No.:</b>	<b>480/TT/2019</b>
<b>Period</b>	<b>2014-19 Tariff</b>

## Annexure-I

2014-19  Capital Expenditure	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)
		2018-19	Total			2018-19
Land - Freehold	-	-	-	-	-	-
Land - Leasehold	-	-	-	-	3.34%	-
Building Civil Works & Colony	-	-	-	-	3.34%	-
Transmission Line	-	-	-	-	5.28%	-
Sub Station	1637.55	425.45	425.45	2062.99	5.28%	97.69
PLCC	29.40	4.02	4.02	33.42	6.33%	1.99
IT Equipment (Incl. Software)	29.67	0.81	0.81	30.48	5.28%	1.59
<b>Total</b>	<b>1696.62</b>	<b>430.28</b>	<b>430.28</b>	<b>2126.90</b>		<b>101.27</b>
<b>Average Gross Block (₹ in lakh)</b>						<b>1911.76</b>
<b>Weighted Average Rate of Depreciation</b>						<b>5.30%</b>





<b>Petition No.:</b>	<b>480/TT/2019</b>
<b>Period</b>	<b>2019-24 Tariff</b>

**Annexure-II**

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)						
		2019-20	Total			2019-20	2020-21	2021-22	2022-23	2023-24		
Land - Freehold	-	-	-	-	-	-	-	-	-	-	-	-
Land - Leasehold	-	-	-	-	3.34%	-	-	-	-	-	-	-
Building Civil Works & Colony	-	-	-	-	3.34%	-	-	-	-	-	-	-
Transmission Line	-	-	-	-	5.28%	-	-	-	-	-	-	-
Sub Station	2062.99	39.48	39.48	2102.48	5.28%	109.97	111.01	111.01	111.01	111.01	111.01	111.01
PLCC	33.42	-	-	33.42	6.33%	2.12	2.12	2.12	2.12	2.12	2.12	2.12
IT Equipment (Incl. Software)	30.48	-	-	30.48	15.00%	4.57	4.57	4.57	4.57	4.57	4.57	4.57
<b>Total</b>	<b>2126.90</b>	<b>39.48</b>	<b>39.48</b>	<b>2166.38</b>		<b>116.66</b>	<b>117.70</b>	<b>117.70</b>	<b>117.70</b>	<b>117.70</b>	<b>117.70</b>	<b>117.70</b>
				<b>Average Gross Block (₹ in lakh)</b>		<b>2146.64</b>	<b>2166.38</b>	<b>2166.38</b>	<b>2166.38</b>	<b>2166.38</b>	<b>2166.38</b>	<b>2166.38</b>
				<b>Weighted Average Rate of Depreciation</b>		<b>5.43%</b>	<b>5.43%</b>	<b>5.43%</b>	<b>5.43%</b>	<b>5.43%</b>	<b>5.43%</b>	<b>5.43%</b>