CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 38/TT/2020

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 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of the **Asset-1:** 2 Nos. 400 kV bays each at Nagapattinam Pooling Station and Salem New (Dharmapuri) for terminating Nagapattinam Pooling Station-Salem New (Dharmapuri) 765 kV D/C Line (Initially charged at 400 kV) being implemented under tariff based bidding and **Asset-2:** 1 No. 63 MVAR line reactor at Nagapattinam Pooling Station and Salem New (Dharmapuri) each for both circuits of Nagapattinam Pooling Station-Salem New (Dharmapuri) 765 kV D/C Line (Initially charged at 400 kV) under "Common Transmission scheme associated with ISGS projects in Nagapattinam/Cuddalore area of Tamil Nadu-Part-A1 (b)" in the Southern region.

And in the matter of:

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

Versus

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 Tamil Nadu Electricity Board -TNEB),
   NPKRR Maaligai, 800, Anna Salai, Chennai-600002.

5. Electricity Department,
   Government 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),
   Opposite NIT Petrol Pump, Chaitanyapuri, Kazipet,
   Warangal-506004, Telangana.

10. Bangalore Electricity Supply Company Ltd. (BESCOM),
    Corporate Office, K. R. Circle,
    Bangalore-560001, Karnataka.

11. Gulbarga Electricity Supply Company Ltd. (GESCOM),
    Station Main Road, Gulburga, 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,
Telangana-500082.

17. Tamil Nadu Transmission Corporation,
NPKRR Maaligai, 800, Anna Salai,
Chennai-600002.

18. POWERGRID NM Transmission Ltd.,
B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi-110016. **....Respondent(s)**

For Petitioner	:	Shri S. S. Raju, PGCIL Shri A. K. Verma, PGCIL Shri B. Dash, PGCIL Shri Ved Prakash Rastogi, PGCIL
For Respondent	:	Shri B. Vinodh Kanna, Advocate, TANGEDCO Ms. R. Ramalakshmi, TANGEDCO Dr. R. Kathiravan, TANGEDCO

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 for the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of tariff of 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 the following transmission assets under "Common Transmission scheme associated with ISGS projects in Nagapattinam/Cuddalore area of Tamil Nadu-Part-A1 (b)" in the Southern region (hereinafter referred to as "the transmission project'):

Asset-1: 2 Nos. 400 kV bays each at Nagapattinam Pooling Station and Salem New (Dharmapuri) for terminating Nagapattinam Pooling Station-Salem New (Dharmapuri) 765 kV D/C Line (Initially charged at 400 kV) being implemented under tariff based bidding and 1 No. 63 MVAR line reactor at Nagapattinam Pooling Station and Salem New (Dharmapuri) each for both circuits of Nagapattinam Pooling Station-Salem New (Dharmapuri) 765 kV D/C Line (Initially charged at 400 kV);

Asset-2: 1 No. 400 kV bay each at Salem New (Dharmapuri) and Madhugiri for terminating Salem New (Dharmapuri)-Madhugiri 765 kV S/C Line-2 (Initially charged at 400 kV) being implemented under tariff based bidding and 1 No. 63 MVAR line reactor at Madhugiri end of Salem New (Dharmapuri)-Madhugiri 765 kV S/C Line -2 (Initially charged at 400 kV).

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

"1) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 10.2 and 11.0 above.

2) Approve the Completion cost and additional capitalization incurred during 2014-19 and also projected to be incurred 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) for the transmission project was accorded by the Board of Directors of the Petitioner Company in its 307th meeting held on 11.11.2014 for ₹7429 lakh including IDC of ₹463 lakh based on August 2014 price level (communicated *vide* Memorandum No. C/CP/ Nagapattinam-Part-A I (b) dated 18.11.2014). The Revised Cost Estimate (RCE) for the transmission project was accorded by the Board of Directors of the Petitioner Company *vide* letter dated 31.3.2017 for ₹8244 lakh including IDC of ₹489 lakh.

b) The scope of work covered under the transmission project is as follows:

Transmission system

i. 2 Nos. 400 kV bays each at Nagapattinam pooling station and Salem New (Dharmapuri) for terminating Nagapattinam Pooling Station-Salem New (Dharmapuri) 765 kV D/C Line (Initially charged at 400 kV) being implemented under tariff-based bidding

ii. 1 No. 400 kV bay each at Salem New (Dharmapuri) and Madhugiri for terminating Salem New (Dharmapuri)-Madhugiri 765 kV S/C Line-2 (Initially charged at 400 kV) being implemented under tariff based bidding

iii. 1 No. 63 MVAR line reactor at Nagapattinam Pooling Station and Salem New (Dharmapuri) each for both circuits of Nagapattinam Pooling Station-Salem New (Dharmapuri) 765 kV D/C Line (Initially charged at 400 kV) being implemented under tariff-based bidding

iv. 1 No. 63 MVAR line reactor at Madhugiri end of Salem New (Dharmapuri)- Madhugiri 765 kV S/C Line - 2 (Initially charged at 400 kV) being implemented under tariff based bidding

c) The date of commercial operation of the assets along with the time over-run covered in the instant petition are as under:

Assets	Scheduled COD	COD	Time over-run	Time over-run condoned
Asset-1	11.5.2017	23.10.2016	No time over-run	Not Applicable
Asset-2	11.5.2017	26.1.2019	20 months and 15 days	Time over-run not condoned in order dated 20.5.2019 in Petition No. 256/TT/2018.

d) The complete scope of the work as per Investment approval is covered in the instant petition.

e) The tariff for Asset-1 for 2014-19 period was approved *vide* order dated 23.1.2017 in Petition No. 214/TT/2016 and that for Asset-2 for 2014-19 period was approved *vide* order dated 20.5.2019 in Petition No. 256/TT/2018.

4. The Respondents are distribution licensees and Power Departments, which are procuring transmission service from the Petitioner, mainly beneficiaries of the Southern Region.

5. The Petitioner has served a copy of the petition upon the respondents and notice of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the notices published by the Petitioner under Section 64 of the Electricity Act, 2003. Reply to the petition has been filed by Tamil Nadu Generation and Distribution Corporation Ltd. (TANGEDCO), Respondent No.4, *vide* affidavit dated 9.3.2021, in which issues like applicability and recovery of GST and sharing of transmission charges have been raised and the

Petitioner, *vide* affidavit dated 22.3.2021, has filed its rejoinder to the reply of TANGEDCO. Reply to the petition has been filed by Kerala State Electricity Board (KSEB), Respondent No.3, *vide* affidavit dated 19.3.2021, in which issues like RoE, ACE, and sharing of transmission charges have been raised and the Petitioner and *vide* affidavit dated 24.3.2021, has filed its rejoinder to the reply of KSEB. This order is issued considering the submissions made in the Petition and affidavits dated 20.12.2019, 20.7.2020, 22.10.2020, 9.3.2021, 22.3.2021 and 24.3.2021, and reply of TANGEDCO dated 9.3.2021 and reply of KSEB dated 19.3.2021.

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

7. Having heard the representatives of the Petitioner, learned counsel for TANGEDCO and KSEB and having perused the material on record, we proceed to dispose of the petition.

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

8. The Petitioner has claimed the following trued up tariff for the transmission assets for the period from COD to 31.3.2019:

(₹ in lakh)

Particulars	**Asset-1**			**Asset-2**
	2016-17 (Pro-rata for 160 days)	**2017-18**	**2018-19**	**2018-19 (Pro-rata for 65 days)**
Depreciation	105.03	264.06	283.47	18.92
Interest on Loan	108.30	256.82	254.81	19.08
Return on Equity	114.12	287.62	310.16	20.53
Interest on Working Capital	12.64	30.59	31.89	2.43
O&M Expenses	105.15	247.82	256.04	24.48
Total	**445.24**	**1086.91**	**1136.37**	**85.44**

9. The Petitioner has claimed the following Interest on Working Capital (IWC) for the transmission assets for the period from COD to 31.3.2019:

(₹ in lakh)

Particulars	**Asset-1**			**Asset-2**
	2016-17 (Pro-rata for 160 days)	**2017-18**	**2018-19**	**2018-19 (Pro-rata for 65 days)**
O&M Expenses	19.99	20.65	21.34	11.45
Maintenance Spares	35.98	37.17	38.41	20.61
Receivables	169.28	181.15	189.40	79.96
Total Working Capital	225.25	238.97	249.15	112.02
Rate of Interest (%)	12.80	12.80	12.80	12.20
Interest on Working Capital	**12.64**	**30.59**	**31.89**	**2.43**

<u>Capital Cost</u>

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

11. The Commission *vide* order dated 19.12.2017 in Petition No. 214/TT/2016 had allowed capital cost as on COD of ₹4167.49 lakh for Asset-1 and vide order dated 20.5.2019 in Petition No. 256/TT/2018 had allowed capital cost as on COD of ₹1944.79 lakh for Asset-2. Projected ACE of ₹1429.07 lakh (₹1369.39 lakh for Asset-1 and ₹59.68 lakh for Asset-2) was considered for determination of tariff for the 2014-19 period for the transmission assets as shown under:

(₹ in lakh)

Assets	**RCE apportioned approved Capital Cost**	**Capital Cost allowed as on COD**	**Admitted ACE**			**Estimated Completion Capital Cost**
			2016-17	**2017-18**	**2018-19**	
Asset-1	5559.82	4167.49	711.82	524.80	132.77	5536.88
Asset-2	2684.18	1944.79	0.00	0.00	59.68	2004.47

12. The details of the apportioned approved capital cost as per RCE, the actual expenditure up to the date of commercial operation and the ACE incurred during the 2014-19 period as claimed by the Petitioner in the instant petition are as follows:

(₹ in lakh)

Assets	RCE Apportioned Approved Capital Cost	Capital Cost as on COD (on cash basis)	ACE (on cash basis)			Total Capital Cost as on 31.3.2019
			2016-17	2017-18	2018-19	
Asset-1	5559.82	4167.42	472.69	450.44	283.96	5374.51
Asset-2	2684.18	1944.79	0.00	0.00	0.00	1944.79

13. TANGEDCO has submitted that the Commission in the previous order directed the Petitioner to de-capitalize Asset-1, i.e. Nagapattinam-Salem Transmission Line as and when the associated Nagapattinam-Salem or Salem-Madhugiri Transmission Lines are charged at 765 kV level. In response, the Petitioner *vide* affidavit dated 22.3.2021 has submitted that the transmission system is yet to be upgraded to 765 kV and the inter-connection transmission line will be de-capitalised after up-gradation.

14. We have considered the submissions of the Petitioner and TANGEDCO. As regards the contention of the TANGEDCO, the Petitioner is yet to upgrade to 765 kV level and the line continues to be charged at 400 kV. Accordingly, the capital cost of the 0.96 km of line is allowed.

15. The Petitioner has claimed the same capital cost as on COD as admitted by the Commission vide order dated 19.12.2017 in Petition No. 214/TT/2016 for Asset-1 and vide order dated 20.5.2019 in Petition No. 256/TT/2018 for Asset-2. It is observed that the estimated completion cost of the transmission assets as on 31.3.2019 including ACE is within the RCE apportioned approved capital cost. Therefore, there is no cost over-run.

Time over-run

16. Asset-1 and Asset-2 were scheduled to be put into commercial operation on 23.10.2016 and 11.5.2017 respectively against which Asset-1 and Asset-2 were put into commercial operation on 23.10.2016 and 26.1.2019 respectively. There is no

time over-run in case of Asset-1. However, there is time over-run of 20 months and 15 days (625 days) in case of Asset-2 which was not condoned by the Commission in order dated 20.5.2019 in Petition No. 256/TT/2018.

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

17. The Petitioner has claimed the following IDC for the transmission assets and has submitted the statement showing IDC claim, discharge of IDC liability as on date of commercial operation and thereafter as under:

(₹ in lakh)

Assets	**IDC as per Auditor Certificate**
Asset-1	162.15
Asset-2	225.48
Total	**387.63**

18. The Petitioner has submitted IDC computation statement which contains name of the loan, drawl date, loan amount, interest rate and interest claimed. IDC is worked out based on the details given in the IDC statement. Further, the loan amount as on the date of commercial operation has been mentioned in Form 6 and Form 9C. The allowable IDC is worked out based on the information available on record and by relying on loan amount as per tariff Form 9C. IDC claimed and considered as on the date of commercial operation and summary of discharge of IDC liability up to the date of commercial operation and thereafter for the purpose of tariff determination is as follows:

(₹ in lakh)

Assets	IDC as per Auditor Certificate (A)	IDC disallowed due to time over-run not condoned (B)	IDC allowed (C=A-B)	IDC discharged up to COD	IDC discharged	
					2016-17	2017-18
Asset-1	162.15	0.00	162.15	26.64	103.79	31.71
Asset-2	225.48	170.73	54.75	54.75	0.00	0.00

19. The Petitioner has claimed IEDC for the transmission assets as on COD which is within the percentage of hard cost indicated in the abstract cost estimate. Further, the Petitioner has submitted that the entire IEDC claimed in the Auditor Certificates is on cash basis and is paid up to the COD of the assets. The details of IEDC claimed by the Petitioner and allowed are as under:

(₹ in lakh)

Assets	IEDC claimed as per Auditor certificate	IEDC disallowed	IEDC considered as on COD
Asset-1	143.72	0.00	143.72
Asset -2	81.50	39.85	41.65

Initial Spares

20. Regulation 13(d) of the 2014 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of plant and machinery cost up to the cut-off date, subject to the following ceiling norms:

"(d) Transmission System
Transmission line: 1.00%
Transmission sub-station (Green Field): 4.00%
Transmission sub-station (Brown Field): 6.00%
Gas Insulated sub-station: 5.00%
Communication System: 3.5%"

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

(₹ in lakh)

Assets	Particulars	Plant & Machinery cost up to cut-off date (excluding IDC and IEDC) (A)	Initial Spares claimed by Petitioner (B)	Ceiling Limit (%) (C)	Initial Spares worked out D = [(A-B)*C /(100-C)]
Asset-1	Sub-station	4722.00	76.67	6.0	296.51
Asset-2	Sub-station	1908.07	104.94	6.0	115.09
Total		**6630.07**	**181.61**		**411.60**

22. We have considered the submissions of the petitioner. The initial spares claimed by the Petitioner for sub-station are within the norms specified in the 2014 Tariff Regulations. Accordingly, the details of the Initial Spares allowed are as under:

(₹ in lakh)

Asset	Particulars	Plant & Machinery cost up to cut-off date (excluding IDC and IEDC) (A)	Initial Spares claimed by Petitioner (B)	Ceiling Limit (%) (C)	Initial Spares worked out D = [(A-B)*C /(100-C)]	Initial Spares allowed
Asset-1	Sub-station	4722.00	76.67	6.0	296.51	76.67
Asset-2	Sub-station	1908.07	104.94	6.0	115.09	104.94

Capital Cost as on COD

23. Accordingly, the details of the capital cost approved as on COD are as under:

(₹ in lakh)

Assets	Capital Cost claimed as on COD (on accrual basis) (A)	Un-discharged IDC (B)	IDC Disallowed due to time over-run (C)	IEDC Disallowed due to time over-run (D)	Excess Initial Spares disallowed (E)	Capital Cost allowed as on COD (F) = (A-B-C-D-E)
Asset-1	4302.92	135.50	0.00	0.00	0.00	4167.42
Asset-2	2155.37	0.00	170.73	39.85	0.00	1944.79

Additional Capital Expenditure (ACE)

24. ACE of ₹1369.39 lakh was allowed in respect of Asset-1 for the 2014-19 period towards accrued IDC, liability and work deferred for execution *vide* order dated 19.12.2017 in Petition No. 214/TT/2016 and ACE of ₹59.68 lakh was allowed in

respect of Asset-2 for the 2014-19 period towards balance and retention payments including accrual of IDC *vide* order dated 20.5.2019 in Petition No. 256/TT/2018. The Petitioner in the instant petition has claimed ACE as under:

a) ACE of ₹1071.59 lakh (excluding un-discharged IDC) for Asset-1 incurred during 2016-17, 2017-18 and 2018-19 on account of any undischarged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations.

b) Nil for Asset-2.

25. KSEB has submitted that the Petitioner has claimed ACE under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations. However, the Petitioner has not substantiated whether this expenditure was within the original scope of work. In response, the Petitioner *vide* affidavit dated 24.3.2021 has mentioned that the expenditure for 2014-19 and 2019-24 is within the original scope and while projecting ACE at the time of determination of tariff, the contracts were not closed and liabilities were not finalised. ACE claimed now is based on actual expenditure and is as under:

(₹ in lakh)

Assets	**RCE approved apportioned Capital Cost**	**Expenditure up to COD**	**ACE (as per Auditor's Certificate)**			**Capital Cost as on 31.3.2019**
			2016-17	**2017-18**	**2018-19**	
Asset-1	5559.82	4167.42	368. 90	418.73	283.96	5374.51
Asset-2	2684.18	1944.79	0.00	0.00	0.00	1944.79
Total	**8244.00**	**6112.20**	**368. 90**	**418.73**	**283.96**	**7319.30**

We have considered the submissions of the Petitioner and KSEB. ACE claimed by the Petitioner is allowed under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations as it is towards balance and retention payments and balance work deferred for execution. The entitled un-discharged IDC liability as on the date of commercial operation has been allowed as ACE during the year of its discharge. The

ACE allowed for the transmission assets from date of commercial operation to 31.3.2019 is as follows:

(₹ in lakh)

Assets	**ACE during 2014-19**						
	2016-17			**2017-18**			**2018-19**
	ACE towards balance and retention payments and balance work deferred for execution	**IDC Discharged**	**Total**	**ACE towards balance and retention payments and balance work deferred for execution**	**IDC Discharged**	**Total**	**ACE towards balance and retention payments and balance work deferred for execution**
Asset-1	368.90	103.79	**472.69**	418.73	31.71	**450.44**	**283.96**
Asset-2	Nil						

26. The details of the capital cost allowed as on COD, ACE during the 2014-19 period and capital cost as on 31.3.2019 for the transmission assets are as under: -

(₹ in lakh)

Assets	**Capital Cost as on COD**	**ACE (including accrual IDC discharged)**			**Capital Cost as on 31.3.2019**
		2016-17	**2017-18**	**2018-19**	
Asset-1	4167.42	472.69	450.44	283.96	5374.51
Asset-2	1944.79	0.00	0.00	0.00	1944.79

Debt-Equity ratio

27. The Petitioner has claimed debt-equity ratio of 70:30 as on the date of commercial operation. The debt-equity ratio has been considered in accordance with Regulations 19(1), 19(3) and 19(5) of the 2014 Tariff Regulations. The details of the debt-equity in respect of Asset-1 and Asset-2 as on COD and as on 31.3.2019 are as under:

Asset-1

Particulars	**Capital Cost as on COD (₹ in lakh)**	**(%)**	**ACE during 2014-19 (₹ in lakh)**	**(%)**	**Capital Cost as on 31.3.2019 (₹ in lakh)**	**(%)**
Debt	2917.19	70.00	844.96	70.00	3762.16	70.00
Equity	1250.23	30.00	362.13	30.00	1612.35	30.00
Total	**4167.42**	**100.00**	**1207.09**	**100.00**	**5374.51**	**100.00**

Asset-2

Particulars	Capital Cost as on COD (₹ in lakh)	(%)	ACE during 2014-19 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	1361.35	70.00	0.00	70.00	1361.35	70.00
Equity	583.44	30.00	0.00	30.00	583.44	30.00
Total	**1944.79**	**100.00**	**0.00**	**100.00**	**1944.79**	**100.00**

Depreciation

28. The Petitioner has claimed the capital cost of the IT equipment in Petition No. 214/TT/2016 and 256/TT/2018 as part of the capital cost of the sub-station. The Petitioner now at the time of truing-up for the 2014-19 period has segregated the IT equipment cost from sub-station cost. The Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said petition where tariff for the transmission assets for the 2014-19 period was allowed even though there was a clear provision in the 2014 Tariff Regulations. Similar issue had come up in Petition No. 19/TT/2020 wherein the Commission vide order dated 9.5.2020 decided as under:

> *"31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012 and 9.5.2013 in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009- 14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014-19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations (the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred 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 31.3.2019while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations."

29. In line with the above decision, 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.

30. Accordingly, the Gross Block during the tariff period 2014-19 has been depreciated at weighted average of depreciation (WAROD). The WAROD has been worked out (as placed in Annexure-I) after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2014-19 is as under:

(₹ in lakh)

Particulars	**Asset-1**			**Asset-2**
	2016-17 (Pro-rata for 160 days)	**2017-18**	**2018-19**	**2018-19 (Pro-rata for 65 days)**
Opening Gross Block	4167.42	4640.11	5090.55	1944.79
ACE	472.69	450.44	283.96	0.00
Closing Gross Block	4640.11	5090.55	5374.51	1944.79
Average Gross Block	4403.77	4865.33	5232.53	1944.79
Weighted average rate of Depreciation (WAROD) (%)	5.33	5.32	5.32	5.28
Balance useful life of the asset (Year)	25	25	24	25
Elapsed Life of the asset (Year)	0	0	1	0
Aggregate Depreciable Value	3963.39	4378.80	4709.28	1750.31

Combined Depreciation during the year	**102.81**	**258.94**	**278.34**	**18.29**
Aggregate Cumulative Depreciation	102.81	361.75	640.09	18.29
Remaining Aggregate Depreciable Value	3860.58	4017.04	4069.18	1732.02

31. Accordingly, details of depreciation approved *vide* order dated 19.12.2017 in Petition No. 214/TT/2016 and order dated 20.5.2019 in Petition No. 256/TT/2018, claimed by the Petitioner in the instant petition and trued up depreciation allowed vide the instant order for the transmission assets are as follows:-

(₹ in lakh)

Particulars	**Asset-1**			**Asset-2**
	2016-17 (Pro-rata for 160 days)	**2017-18**	**2018-19**	**2018-19 (Pro-rata for 65 days)**
Approved *vide* order dated 19.12.2017 in Petition No. 214/TT/2016 and order dated 20.5.2019 in Petition No. 256/TT/2018	105.59	273.75	291.31	18.57
Claimed by the Petitioner in the instant Petition	105.03	264.06	283.47	18.92
Allowed after true-up in this order	102.81	258.94	278.34	18.92

Interest on Loan (IoL)

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

(₹ in lakh)

Particulars	**Asset-1**			**Asset-2**
	2016-17 (Pro-rata for 160 days)	**2017-18**	**2018-19**	**2018-19 (Pro-rata for 65 days)**
Gross Normative Loan	2917.19	3248.08	3563.39	1361.35
Cumulative Repayments up to Previous Year	0.00	102.81	361.75	0.00
Net Loan-Opening	2917.19	3145.27	3201.63	1361.35
Additions	330.88	315.31	198.77	0.00
Repayment during the year	102.81	258.94	278.34	18.29
Net Loan-Closing	3145.27	3201.63	3122.06	1343.07
Average Loan	3031.23	3173.45	3161.85	1352.21

Weighted Average Rate of Interest on Loan (%)	8.1534	8.1048	8.0842	7.9256
Interest on Loan	**108.34**	**257.20**	**255.61**	**19.09**

33. Accordingly, details of IoL approved *vide* order dated 19.12.2017 in Petition No. 214/TT/2016 and order dated 20.5.2019 in Petition No. 256/TT/2018, claimed by the Petitioner in the instant petition and trued up IoL allowed vide instant order for the transmission assets are as follows:-

(₹ in lakh)

Particulars	**Asset-1**			**Asset-2**
	2016-17 (Pro-rata for 160 days)	**2017-18**	**2018-19**	**2018-19 (Pro-rata for 65 days)**
Approved *vide* order dated 19.12.2017 in Petition No. 214/TT/2016 and order dated 20.5.2019 in Petition No. 256/TT/2018	111.71	274.31	269.93	19.26
Claimed by the Petitioner in the instant Petition	108.30	256.82	254.81	19.08
Allowed after true-up in this order	108.34	257.20	255.61	19.09

<u>Return on Equity (RoE)</u>

34. The Petitioner is entitled to RoE for the transmission assets in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 period:

Year	**Claimed effective tax rate (in %)**	**Grossed up RoE [Base Rate/(1-t)] (in %)**
2016-17	21.338	19.705
2017-18	21.337	19.705
2018-19	21.549	19.758

35. KSEB has submitted that the Petitioner has claimed effective tax rate by grossing up RoE rate for 2014-15 and 2015-16 based on Assessment Order issued by Income tax authorities, for 2016-17 and 2017-18 are based on Income Tax returns filed and 2018-19 is based on MAT rate, and the Petitioner has not furnished proof of

tax for the 2014-15, 2015-16 2016-17 and 2017-18. The tariff for each year of the 2014-19 tariff period is being determined by the Commission considering the effective tax percentage to arrive at grossed up return of equity (RoE). The Petitioner has submitted vide affidavit dated 24.3.2021 that the grossed up RoE (in %) and effective tax rate for the 2014-19 tariff period has already been determined by the Commission. The Petitioner has requested to allow the differential tariff on account of the trued-up RoE based on effective tax rate calculated on completion of Income-tax assessment/ re-assessment for the years 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of the respective assessment orders, directly from the beneficiaries, on year to year basis as provided under the Regulations.

36. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given in the table below. The relevant portion of the order dated 27.4.2020 is as under:

> *"26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term transmission customers/ DICs as the case may be on year to year basis.*
>
> *27. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up the rate of return on equity:*

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

”

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

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

38. RoE is trued up on the basis of the MAT rate applicable for the respective years and is allowed as under:

(₹ in lakh)

Particulars	**Asset-1**			**Asset-2**
	2016-17 (Pro-rata 160 days)	**2017-18**	**2018-19**	**2018-19 (Pro-rata 65 days)**
Return on Equity				
Opening Equity	1250.23	1392.03	1527.17	583.44
Additions	141.81	135.13	85.19	0.00
Closing Equity	1392.03	1527.17	1612.35	583.44
Average Equity	1321.13	1459.60	1569.76	583.44
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	21.342	21.342	21.549	21.549
Rate of Return on Equity (%)	19.705	19.705	19.758	19.758
Return on Equity	**114.12**	**287.61**	**310.15**	**20.53**

39. Accordingly, details of RoE approved *vide* order dated 19.12.2017 in Petition No. 214/TT/2016 and order dated 20.5.2019 in Petition No. 256/TT/2018, claimed by

the Petitioner in the instant petition and trued up RoE allowed in the instant order for the transmission assets are as follows:-

(₹ in lakh)

Particulars	Asset-1			Asset-2
	2016-17 (Pro-rata 160 days)	2017-18	2018-19	2018-19 (Pro-rata 65 days)
Approved *vide* order dated 9.12.2017 in Petition No. 214/TT/2016 and order dated 20.5.2019 in Petition No. 256/TT/2018	116.66	302.50	321.85	20.69
Claimed by the Petitioner in the instant Petition	114.12	287.62	310.16	20.53
Allowed after true-up in this order	114.12	287.61	310.15	20.53

<u>Operation & Maintenance Expenses (O&M Expenses)</u>

40. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The O&M Expenses claimed by the Petitioner for the transmission assets are as under:-

(₹ in lakh)

O&M Expenses	Asset-1		
Particulars	**2016-17 (Pro-rata 160 days)**	**2017-18**	**2018-19**
Transmission line			
D/C Bundled (4 or more sub conductors)	0.955	0.955	0.955
Norms (₹ lakh/km)	1.133	1.171	1.21
Sub-Station			
400 kV			
No. of Bays	2	2	2
Norms (₹ lakh/bay)	64.37	66.51	68.71
400 kV GIS			
No. of Bays	2	2	2
Norms (₹ lakh/bay)	55.02	56.84	58.73
Total O&M expenses (₹ in lakh)	**105.15**	**247.82**	**256.04**

O&M Expenses	Asset-2
Particulars	**2018-19 (Pro-rata 65 days)**
Sub-Station	

400 kV	
Number of Bays	2
Norms (₹ lakh/bay)	68.71
Total O&M Expenses (₹ in lakh)	**24.48**

41. The O&M Expenses approved for the transmission assets from their COD to 31.3.2014 are given in the table below followed by O&M Expenses approved *vide* order dated 19.12.2017 in Petition No. 214/TT/2016 and order dated 20.5.2019 in Petition No. 256/TT/2018, claimed by the Petitioner in the instant petition and trued up in this order:

(₹ in lakh)

O&M Expenses	**Asset-1**		
Particulars	**2016-17 (Pro-rata 160 days)**	**2017-18**	**2018-19**
Transmission Line (400 kV Nagapattinam-Dharmapuri Line)			
D/C Bundled (4 or more sub conductors)	0.955	0.955	0.955
Norms (₹ lakh/km)	1.133	1.171	1.21
Sub-Station			
400 kV			
No. of Bays	2	2	2
Norms (₹ lakh/bay)	64.37	66.51	68.71
400 kV GIS			
No. of Bays	2	2	2
Norms (₹ lakh/bay)	55.02	56.84	58.73
Total O&M expenses (₹ in lakh)	**105.14**	**247.82**	**256.04**

O&M Expenses	**Asset-2**
Particulars	**2018-19 (Pro rata 65 days)**
Sub-Station	
400 kV	
Number of Bays	2
Norms (₹ lakh/bay)	68.71
Total O&M Expenses (₹ in lakh)	**24.47**

(₹ in lakh)

Particulars	Asset-1			Asset-2
	2016-17 (Pro-rata 160 days)	2017-18	2018-19	2018-19 (Pro-rata 65 days)
Approved *vide* order dated 19.12.2017 in Petition No.214/TT/2016 and order dated 20.5.2019 in Petition No. 256/TT/2018	105.75	247.82	256.04	24.47
Claimed by the Petitioner in the instant petition	105.15	247.82	256.04	24.48
Allowed after true-up in this order	105.14	247.82	256.04	24.47

Interest on Working Capital (IWC)

42. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and is allowed as under:

(₹ in lakh)

Particulars	Asset-1			Asset-2
	2016-17 (Pro-rata 160 days)	2017-18	2018-19	2018-19 (Pro-rata 65 days)
O&M Expenses (O&M Expenses for 1 month)	8.76	20.65	21.34	2.04
Maintenance Spares (15% of O&M Expenses)	15.77	37.17	38.41	3.67
Receivables (Equivalent to 2 months of annual fixed cost)	73.83	180.34	188.66	14.13
Total Working Capital	**98.37**	**238.17**	**248.40**	**19.84**
Rate of Interest (%)	12.80	12.80	12.80	12.20
Interest on working capital	**12.59**	**30.49**	**31.79**	**2.42**

43. Accordingly, details of IWC approved earlier, claimed by the Petitioner in the instant petition and trued up IWC allowed for the transmission assets are as follows:

(₹ in lakh)

Particulars	Asset-1			Asset-2
	2016-17 (Pro-rata for 160 days)	2017-18	2018-19	2018-19 (Pro-rata for 65 days)
Approved *vide* order dated 19.12.2017 in Petition No. 214/TT/2016 and order dated 20.5.2019 in Petition No. 256/TT/2018	12.81	31.51	32.64	2.43
Claimed by the Petitioner in the instant Petition	12.64	30.59	31.89	2.43
Allowed after true-up in this order	12.59	30.49	31.79	2.42

Approved Annual Fixed Charges of the 2014-19 Period

44. The trued up annual fixed charges allowed for the transmission assets for the 2014-19 tariff period is as under:

(₹ in lakh)

Particulars	Asset-1			Asset-2
	2016-17 (Pro-rata 160 days)	2017-18	2018-19	2018-19 (Pro-rata 65 days)
Depreciation	102.81	258.94	278.34	18.29
Interest on Loan	108.34	257.20	255.61	19.09
Return on Equity	114.12	287.61	310.15	20.53
Interest on Working Capital	12.59	30.49	31.79	2.42
O&M Expenses	105.14	247.82	256.04	24.47
Total	**443.00**	**1082.06**	**1131.93**	**84.79**

45. Accordingly, the Annual Transmission Charges approved *vide* order dated 19.12.2017 in Petition No. 214/TT/2016 and order dated 20.5.2019 in Petition No. 256/TT/2018, claimed by the Petitioner in the instant petition and approved after truing up in the instant order for transmission assets is shown in the table below:

(₹ in lakh)

Particulars	Asset-1			Asset-2
	2016-17 (Pro-rata 160 days)	2017-18	2018-19	2018-19 (Pro-rata 65 days)
Approved *vide* order dated 19.12.2017 in Petition No. 214/TT/2016 and order dated 20.5.2019 in Petition No. 256/TT/2018	452.52	1129.88	1171.77	85.42
Claimed by the Petitioner in the instant Petition	445.24	1086.91	1136.37	85.44
Allowed after true-up in this order	443.00	1082.06	1131.93	84.79

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

46. The Petitioner has combined the transmission assets into one single asset and has submitted the tariff forms for the Combined Asset. Accordingly, as per proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations, single tariff for the Combined Asset has been worked out for the 2019-24 tariff period.

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	403.69	410.15	410.15	410.15	410.15
Interest on Loan	349.28	322.68	290.85	259.67	226.18
Return on Equity	419.31	426.20	426.20	426.20	426.20
Interest on Working Capital	25.42	25.55	25.34	25.16	24.90
O&M Expenses	178.81	184.96	191.32	197.89	204.70
Total	**1376.51**	**1369.54**	**1343.86**	**1319.07**	**1292.13**

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	14.90	15.41	15.94	16.49	17.06
Maintenance Spares	26.82	27.74	28.70	29.68	30.71
Receivables	169.24	168.85	165.68	162.63	158.87
Total Working Capital	210.96	212.00	210.32	208.80	206.64
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	**25.42**	**25.55**	**25.34**	**25.16**	**24.90**

Effective Date of Commercial Operation (E-COD)

49. The Petitioner has claimed that E-COD of the Combined Asset is 30.5.2017. Based on the capital cost and actual COD of the individual assets, E-COD has been worked out as under:

Assets	Trued-up Capital Cost as on 31.3.2019 (₹ in lakh)	Actual COD	Number of days from last COD	Weight of Cost (%)	Weighted days	Effective COD (latest COD – total weighted days)
Asset-1	5374.51	23.10.2016	825.00	0.73	605.79	**30.5.2017**
Asset-2	1944.79	26.1.2019	0.00	0.27	0.00	
Total	**7319.30**				**605.79**	

50. E-COD is used to determine the lapsed life of the project as a whole which works out as 1 (one) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (WAL) of the Asset

51. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of Weighted Average Life.

52. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have different span of life. Therefore, the concept of Weighted Average Life (WAL) has been used as the useful life of the project as a whole.

53. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as specified in the 2019 Tariff Regulations. Accordingly, WAL of the assets put into commercial operation during the 2014-19 period have been worked out as 25 years as shown under:

Particulars	**Life (in years) (1)**	**Capital Cost as on 31.3.2019 (₹ in lakh) (2)**	**Weighted Cost (₹ in lakh) (3)= (1) x (2)**	**Weighted Average Life of Asset (in years) (4) = (3)/(2)**
Building Civil Works & Colony	25	0.00	0.00	**24.88 years (rounded off to 25 years)**
Transmission Line	35	269.63	9437.05	
Sub Station	25	6763.80	169095.00	
PLCC	15	196.27	2944.05	
IT Equipment (Including Software)	6.67	89.60	597.63	
Total		**7319.30**	**182073.73**	

54. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed above, the Effective COD of the assets is 30.5.2017 and the lapsed life of the project as a whole works out as 1 year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from Effective COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 24 years.

Capital Cost

55. Regulation 19 of the 2019 Tariff Regulations provide as under:

> *"**19 Capital Cost:** (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.*
>
> *(2) The Capital Cost of a new project shall include the following:*
>
> *(a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
> *(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
> *(c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
> *(d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
> *(e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;*
> *(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
> *(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
> *(h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
> *(i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
> *(j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to 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."

56. The Petitioner has claimed the combined capital cost of ₹7319.30 lakh.

57. KSEB has submitted that the capital cost as on 31.3.2019 as per Auditor's certificate is ₹7529.88 lakh, whereas the Petitioner has claimed ₹7319.30 lakh. The Petitioner has submitted that the difference is due to restriction of capital cost of Asset-2 on account of disallowed IDC (₹170.73 lakh) and IEDC (₹39.85 lakh) due to time over-run in order dated 20.5.2019 in Petition No. 256/TT/2018.

58. We have considered the submissions of the Petitioner and KSEB. Capital cost of ₹7319.30 lakh has been worked out by the Commission and the same 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

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

*"**24. Additional Capitalisation within the original scope and up to the cut-off date***

(1) The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

(a) 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.

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

(1) The ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:

(a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
(b) Change in law or compliance of any existing law;
(c) Deferred works relating to ash pond or ash handling system in the original scope of work;
(d) Liability for works executed prior to the cut-off date;
(e) Force Majeure events;
(f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and
(g) Raising of ash dyke as a part of ash disposal system.

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

(a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
(d) The replacement of such asset or equipment has otherwise been allowed by the Commission."

60. The Petitioner *vide* affidavit dated 20.12.2019 has claimed ACE of ₹244.68 lakh during the 2019-24 tariff period for the Combined Asset under Regulation 25(1)(d) of the 2019 Tariff Regulations. The Petitioner has claimed capital cost as on 31.3.2024 as under:

(₹ in lakh)

Assets	Apportioned approved cost as per RCE	Expenditure as on 31.3.2019	Projected ACE	Capital Cost as on 31.3.2024
			2019-20	
Asset-1	5559.82	5374.51	85.00	5459.51
Asset-2	2684.18	1944.79	159.68	2104.47
Total	**8244.00**	**7319.30**	**244.68**	**7563.98**

61. The Petitioner has claimed ACE for Asset-1 in 2019-20. The Petitioner has submitted that the payments are to be made after submission of invoice and after reconciliation in accordance with contractual clause as per provisions of the contract. The petitioner has also submitted that there is no further un-discharged liability/ balance retention payment for the assets covered in the instant petition.

62. The petitioner was directed vide TV (technical validation) letter dated 2.7.2020 to explain ACE of ₹85.00 lakh in case of Asset-I which is beyond the cut-off date. In response, the Petitioner vide affidavit dated 20.7.2020 has submitted that while projecting ACE, contracts were not closed and liabilities were not finalized for Asset-1. However, ACE is claimed in 2014-19 tariff period on the basis of actual payments made to the contractor after receipt of invoices from the contractor and incorporating the amendments. The Petitioner has submitted that the contract for the asset is yet to be closed and ACE projected during 2019-20 i.e. beyond the cut-off date is for the payments to be made after submission of invoice and after reconciliation in accordance with contractual clause as per provisions of contract.

63. The petitioner was directed vide TV letter dated 2.7.2020 to submit any ACE expected on account of un-discharged liability/ balance retention payment for the assets covered in the instant petition. In response, the Petitioner vide affidavit dated 20.7.2020 has submitted that there is as no further un-discharged liability/ balance retention payment for the assets covered in the instant petition.

64. The details of capital cost claimed under instant petition are as follows:

(₹ in lakh)

Claimed in instant truing up petition		
COD Cost Claimed as per Certificate	**Less IDC& IEDC disallowed due to Time overrun**	**COD Cost for Tariff Calculation**
2155.37	210.58	1944.79

65. The difference in capital cost as on COD is due to the disallowance of IDC and IEDC on account of the time over-run not condoned in order dated 20.5.2019 in Petition No. 256/TT/2018.

66. We have considered the submissions of the petitioner. ACE claimed by the Petitioner has been allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations. The un-discharged IDC liability as on COD has been allowed as ACE during the year of its discharge. The ACE allowed is as under:

(₹ in lakh)

Assets	**ACE (as per Auditor Certificate)**	**Expenditure 2019-24 (Including Accrual IDC)**
	2019-20	
Combined Asset	244.68	244.68

67. Accordingly, the capital cost as on 1.4.2019 and as on 31.3.2024 considered for the tariff determination of the 2019-24 tariff period is as under:

(₹ in lakh)

Capital Cost as on 1.4.2019	**ACE (including accrual IDC discharged)**	**Capital Cost as on 31.3.2024**
	2019-20	
7319.30	244.68	7563.98

<u>Debt-Equity ratio</u>

68. 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 additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation."

69. The debt-equity ratio considered for the purpose of computation of tariff for the 2019-24 tariff period is as under:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	ACE during 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	5123.51	70.00	171.28	70.00	5294.79	70.00
Equity	2195.79	30.00	73.40	30.00	2269.19	30.00
Total	**7319.30**	**100.00**	**244.68**	**100.00**	**7563.98**	**100.00**

Depreciation

70. Regulation 33(1), 33(2) and 33(5) of the 2019 Tariff Regulations provide as under:

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

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

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

*"(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."

71. 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 nil, i.e. IT asset has been considered as 100 per cent depreciable. 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 under:

(₹ in lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	7319.30	7563.98	7563.98	7563.98	7563.98
Addition during the year 2019-24 due to projected ACE	244.68	0.00	0.00	0.00	0.00
Closing Gross Block	7563.98	7563.98	7563.98	7563.98	7563.98
Average Gross Block	7441.64	7563.98	7563.98	7563.98	7563.98
Weighted average rate of Depreciation (WAROD) (%)	5.42	5.42	5.42	5.42	5.42
Balance useful life at the beginning of the year (Year)	24	23	22	21	20
Elapsed Life of the asset (Year)	1	2	3	4	5
Aggregated Depreciable Value	6706.44	6816.54	6816.54	6816.54	6816.54
Combined Depreciation during the year	**403.69**	**410.15**	**410.15**	**410.15**	**410.15**
Aggregate Cumulative Depreciation	1062.07	1472.22	1882.36	2292.51	2702.66
Remaining Aggregated Depreciable Value	5644.37	5344.33	4934.18	4524.03	4113.88

Interest on Loan (IoL)

72. 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 up to 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."

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	5123.51	5294.79	5294.79	5294.79	5294.79
Cumulative Repayments up to Previous Year	658.38	1062.07	1472.22	1882.36	2292.51
Net Loan-Opening	4465.13	4232.72	3822.57	3412.42	3002.27
Additions	171.28	0.00	0.00	0.00	0.00
Repayment during the year	403.69	410.15	410.15	410.15	410.15
Net Loan-Closing	4232.72	3822.57	3412.42	3002.27	2592.13
Average Loan	4348.92	4027.64	3617.50	3207.35	2797.20
Weighted Average Rate of Interest	8.0556	8.0376	8.0692	8.1293	8.1240

on Loan (%)					
Interest on Loan	**350.33**	**323.73**	**291.90**	**260.74**	**227.24**

Return on Equity (RoE)

74. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations specify 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:

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

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

Illustration-

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

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

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

- *(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;*
- *(b) Estimated Advance Tax for the year on above is Rs 240 crore;*
- *(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;*
- *(d) Rate of return on equity = 15.50/ (1-0.24) = 20.395%.*

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

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	2195.79	2269.19	2269.19	2269.19	2269.19
Additions	73.40	0.00	0.00	0.00	0.00
Closing Equity	2269.19	2269.19	2269.19	2269.19	2269.19
Average Equity	2232.49	2269.19	2269.19	2269.19	2269.19
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	**419.31**	**426.20**	**426.20**	**426.20**	**426.20**

Operation & Maintenance Expenses (O&M Expenses)

76. The O&M Expenses claimed by the Petitioner for the various elements included in the Combined Asset are as under:

(₹ in lakh)

O&M Expenses					
Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Sub-station					
400 kV Bays					
No. of bays	4	4	4	4	4
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
400 kV GIS Bays					
No. of bays	2	2	2	2	2
Norms (₹ lakh/Bay)	22.505	23.296	24.115	24.962	25.837
Transmission Line (400 kV Nagapattinam – Dharmapuri Line)					
D/C Bundled (4 or more sub-conductors) (km)	0.955	0.955	0.955	0.955	0.955
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
O&M for PLCC (2% of ₹196.27 lakh)	3.93	3.93	3.93	3.93	3.93
Total O&M expense (₹ in lakh)	**178.81**	**184.96**	**191.32**	**197.89**	**204.70**

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

"35. Operation and Maintenance Expenses:

…

(3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:

Particulars	***2019-20***	***2020-21***	***2021-22***	***2022-23***	***2023-24***
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	*45.01*	*46.60*	*48.23*	*49.93*	*51.68*
400 kV	*32.15*	*33.28*	*34.45*	*35.66*	*36.91*
220 kV	*22.51*	*23.30*	*24.12*	*24.96*	*25.84*
132 kV and below	*16.08*	*16.64*	*17.23*	*17.83*	*18.46*
Norms for Transformers (₹ Lakh per MVA)					
765 kV	*0.491*	*0.508*	*0.526*	*0.545*	*0.564*
400 kV	*0.358*	*0.371*	*0.384*	*0.398*	*0.411*
220 kV	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
132 kV and below	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*
Single Circuit (Bundled conductor with four sub-conductors)	*0.755*	*0.781*	*0.809*	*0.837*	*0.867*
Single Circuit (Twin & Triple Conductor)	*0.503*	*0.521*	*0.539*	*0.558*	*0.578*
Single Circuit (Single Conductor)	*0.252*	*0.260*	*0.270*	*0.279*	*0.289*
Double Circuit (Bundled conductor with four or more sub-	*1.322*	*1.368*	*1.416*	*1.466*	*1.517*
Double Circuit (Twin & Triple Conductor)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*
Double Circuit (Single Conductor)	*0.377*	*0.391*	*0.404*	*0.419*	*0.433*
Multi Circuit (Bundled Conductor with four or more sub-conductor)	*2.319*	*2.401*	*2.485*	*2.572*	*2.662*
Multi Circuit (Twin & Triple Conductor)	*1.544*	*1.598*	*1.654*	*1.713*	*1.773*
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	*834*	*864*	*894*	*925*	*958*
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	*1,666*	*1,725*	*1,785*	*1,848*	*1,913*
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	*2,252*	*2,331*	*2,413*	*2,498*	*2,586*
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	*2,468*	*2,555*	*2,645*	*2,738*	*2,834*
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	*1,696*	*1,756*	*1,817*	*1,881*	*1,947*

±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	*2,563*	*2,653*	*2,746*	*2,842*	*2,942*

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

Provided further that:

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

ii. *the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*

iii. *the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*

iv. *the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;*

v. *the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*

vi. *the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*

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

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

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

(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related

to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up."

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

79. The O&M Expenses allowed as per the norms specified in the 2019 Tariff Regulations are as under:

O&M Expenses	**Combined Asset**				
Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Sub-station					
400 kV					
Number of bays	4	4	4	4	4
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
400 kV GIS					
Number of bays	2	2	2	2	2
Norms (₹ lakh/Bay)	22.505	23.296	24.115	24.962	25.837
Transmission Line (400 kV Nagapattinam–Dharmapuri Line)					
D/C Bundled (4 or more sub-conductors) (km)	0.955	0.955	0.955	0.955	0.955
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
Total O&M expense (₹ in lakh)	**174.87**	**181.02**	**187.38**	**193.96**	**200.76**

Interest on Working Capital (IWC)

80. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specifies 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;"*

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

82. 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) and 11.25% (SBI 1-year MCLR applicable as on 1.4.2019 of 7.75% plus 350 basis points). The components of the working capital and interest allowed thereon for the Combined Asset for the 2019-24 tariff period are as under:

(₹ in lakh)

Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
O&M Expenses (O&M Expenses for 1 month)	14.57	15.08	15.62	16.16	16.73
Maintenance Spares (15% of O&M Expenses)	26.23	27.15	28.11	29.09	30.11
Receivables (Equivalent to 45 days of annual transmission cost)	169.24	168.85	165.68	162.63	158.87
Total Working Capital	**210.05**	**211.09**	**209.40**	**207.88**	**205.71**
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	**25.31**	**23.75**	**23.56**	**23.39**	**23.14**

Annual Fixed Charges of the 2019-24 Tariff Period

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	403.69	410.15	410.15	410.15	410.15
Interest on Loan	350.33	323.73	291.90	260.74	227.24
Return on Equity	419.31	426.20	426.20	426.20	426.20
Interest on Working Capital	25.31	23.75	23.56	23.39	23.14
O & M Expenses	174.87	181.02	187.38	193.96	200.76
Total	**1373.51**	**1364.84**	**1339.19**	**1314.43**	**1287.50**

Filing Fee and the Publication Expenses

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

Licence Fee & RLDC Fees and Charges

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

Security Expenses

86. KSEB has submitted that the Petitioner has claimed recovery of security expenses from the beneficiaries directly on quarterly basis which is against the provisions under Regulation 35(3)(c) of the 2019 Tariff Regulations.

87. The Petitioner has submitted that security expenses for the transmission assets 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.

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

Goods and Services Tax

89. The Petitioner has submitted that if GST is levied at any rate and at any point of time in future on Charges of Transmission of Electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

90. TANGEDCO has submitted that as per the provisions of GST Act, the transmission charges are exempted from the levy of GST and even if GST is levied in future, the same should not be allowed retrospectively. Further, he has submitted that the Hon'ble High Court of Gujarat in the judgement dated 19.12.2018 in the Special Civil Appeal No. 5343 of 2018 quashed the clarification with regard to levy of GST issued in para 4 (1) of the impugned Circular No. 34/8/2018-GST dated 1.3.2018 by the Government of India as ultra vires the provisions of the GST Acts as well as the notifications issued there under and made the rule absolute. Therefore, the Commission may direct the Petitioner to restrain from including the paragraph related to GST in all the petitions. In response, the Petitioner has submitted that the transmission charges claimed in the instant petition are exclusive of GST and if in future, the GST is levied on the transmission charges, the same shall be charged and additionally billed by the Petitioner. Further, the Petitioner has requested that if any additional taxes are to be paid on account of demand from Government of India/ Statutory Authorities, the same may be allowed to be recovered from the beneficiaries.

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

Capital Spares

92. 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

93. TANGEDCO has submitted that the trued-up transmission charges from March 2019 to 31.10.2020 should be shared by the beneficiaries as per Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 (2010 Sharing Regulations) and from 1.11.2020 as per Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 (2020 Sharing Regulations). In response, the Petitioner has submitted that after truing up and determination of transmission tariff, sharing of transmission charges for 2014-19 period and 2019-24 period up to 31.10.2020 shall be done as per 2010 Sharing Regulations and thereafter from 1.11.2020 onwards shall be done as per the new 2020 Sharing Regulations.

94. TANGEDCO and KSEB have submitted that the transmission assets are associated with evacuation scheme under HCPTC-XI for the generators, IL&FS and PELPL. IL&FS has been granted LTA of 1150 MW while PELPL has been granted LTA of 987 MW. However, subsequently PELPL has abandoned the generation project and relinquished the entire LTA of 987 MW whereas IL&FS relinquished LTA of 610 MW out of 1150 MW. The Commission vide order dated 8.3.2019 in Petition No. 92/MP/2015 has directed CTU to work out the relinquishment charges and recover the same from the generators who have relinquished the LTA. The same has been reiterated by the Commission in its order dated 2.5.2019 in the Petition No. 256/TT/2018 corresponding to the Asset-2 of the instant petition. However, the generators have filed Appeal against the Commission’s order before APTEL. Further, APTEL vide its order dated 8.10.2020 has directed the Petitioner not to raise any invoices during the pendency of the Appeal except where insolvency proceedings are faced by the generators.

95. Further, TANGEDCO and KSEB have submitted that the Petitioner is duty bound to raise invoices immediately after notifying the relinquishment charges payable by the generators. But CTU has failed to raise invoices against the generators and waited till the stay was granted by APTEL on 8.10.2020, even though the relinquishment charges have been notified by CTU on 20.5.2019. The Petitioner is continuing to enjoy the tariff of these assets even though the liability is partially vested with the generators and the Petitioner has failed to take any concrete action to get the stay vacated and recover the relinquishment charges from the concerned generators.

96. The Petitioner vide affidavits dated 22.3.2021 and 24.3.2021 has submitted that raising invoices for relinquishment charges will have substantial financial repercussions on CTU in the form of upfront payment of GST due to which CTU issued demand letters and not formal invoices for relinquishment charges to all the relinquished LTA customers. Further, due to directions of APTEL in order dated 8.10.2020 in IA. No.1314 of 2020 in Appeal No.251 of 2019 and others, directing the Petitioner not to raise invoices during pendency of appeals before APTEL except where insolvency proceedings are faced by the generators, CTU could not proceed further. Further, where IPPs landed in insolvency proceedings, claims have been lodged with the Resolution Professional/ Liquidators and are being pursued.

97. The Petitioner has further submitted that in some cases, IPPs have relinquished their LTAs while in others, on abandonment of projects, LTAs of IPPs were terminated by CTU as deemed relinquished. The Commission vide order dated 8.3.2019 in Petition No. 92/MP/2015 prescribed the methodology to determine relinquishment charges and also directed that the relinquishing LTA customers are to deposit the charges calculated and billed by CTU as relinquishment charges within a

period of six months of raising the bill by CTU. Pursuant to the order dated 8.3.2019, CTU computed the relinquishment charges and published a list of relinquished long-term customers and their respective liability towards payment of relinquishment charges on its website from time to time commencing from 20.5.2019. Being aggrieved by the liability of relinquishment charges imposed under the order dated 8.3.2019 in Petition No. 92/MP/2015, 17 LTA grantees have filed Appeals before APTEL which are pending for adjudication. One of the common grounds raised by the Appellants in the Appeals is that Regulation 18 of the Connectivity Regulations is unworkable and that no stranded capacity can be ascertained in a meshed network and hence there can be no consequent liability of payment of relinquishment charges. Subsequently, CTU filed a Petition No. 252/MP/2019 before the Commission with regard to grievances on calculations of relinquishment charges being raised by the relinquished LTA customers. The Commission vide order dated 11.12.2019 directed CTU to share all the details of computations of the relinquishment charges with relinquished LTA customers and reiterated its direction to raise the bills for relinquishment charges in accordance with its order dated 8.3.2019. The Petitioner submitted that CTU was earlier served a show cause notice from Tax authorities on payment of GST on the MTOA relinquishment charges and the matter is still to be settled with the Tax authorities. Considering that raising of invoices for LTA relinquishment charges involves substantial financial repercussions on payment of upfront GST by CTU which is a revenue neutral entity with no coffers to meet such huge liability, demand letters have been issued by CTU to all these relinquished LTA customers seeking payment of the relinquishment charges, amounting to approximately ₹7368 crore. Further, in view of the difficulty being faced in raising the invoices having financial repercussion on payment of upfront GST, CTU filed Petition

No. 266/MP/2020 to (a) allow CTU to raise invoices for relinquishment charges only after advance ruling on applicability of GST on relinquishment charges was obtained from tax authority or (b) in case invoices are to be raised, remedial measures may be provided to meet exigency of upfront payment of GST amounting to approximately ₹1300 crore. Meanwhile, Himachal Sorang Ltd., one of the appellants in APTEL against the relinquishment charges, filed an IA in APTEL seeking stay of the proceedings in the aforesaid petition of CTU before the Commission citing that CTU cannot seek implementation of order dated 8.3.2019 and the order dated 11.12.2019 when Appeals are pending before APTEL against the said orders wherein substantial questions of law have been raised. In view of the order dated 5.8.2020 passed in the above IA, APTEL directed that since 17 appeals are pending on the same issue, the Commission should not consider prayer 'b' of CTU in the abovementioned Petition No. 266/MP/2020. Having lost the substratum of the Petition on account of the above directions by APTEL, CTU withdrew Petition No. 266/MP/2020 on 7.8.2020. Thereafter, in an IA filed in Appeal No. 251/2019 before APTEL on 29.9.2020 by SKS Power Ltd, another appellant in APTEL, seeking quashing of the demand letters issued by CTU towards relinquishment charges during pendency of appeals, APTEL vide order dated 8.10.2020 directed the Petitioner not to raise invoices during pendency of similar Appeals before this Tribunal except where insolvency proceedings are faced by generators.

98. The Petitioner has submitted that in view of the position as stated in paragraph 99, raising of invoices for relinquishment charges will have substantial financial repercussions on CTU in the form of upfront payment of GST due to which CTU issued the demand letters and not formal invoices for relinquishment charges. Further, efforts of CTU seeking remedy from the Commission, to meet the exigency

of payment towards GST on raising the invoices, could not proceed further due to APTEL's order dated 8.10.2020. The Petitioner has submitted that some of the relinquished LTA Customers (IPPs) landed in insolvency proceedings and claims have been lodged with the Resolution Professional/ Liquidators and the same is being pursued. Hearing on the issue of applicability of GST on relinquishment charges was held by the Principal Commissioner, CGST, Delhi on 29.1.2021 and the order is awaited. With regard to pursuance of various appeals against relinquishment charges filed before APTEL, replies have already been filed by and the Appeals are being pursued by the CTU.

99. We have considered the submissions of the Petitioner and TANGEDCO and KSEB. APTEL vide order dated 8.10.2020 in IA. No.1314 of 2020 in Appeal No.251 of 2019 and others observed as under:

> *"We make it clear that in all those matters where such letters are issued by PGCIL revising the date of relinquishment of LTA, the generators should not take it as invoices raised by the Respondent PGCIL, unless it is in the format of invoice. Therefore, till such demand of relinquishment charges of LTA customers are revised by raising invoices, question of immediate demand would not arise. This direction shall not apply to those generators who are either seeking declaration of insolvency in their favour or against whom such CIRP proceedings are initiated by third party. Therefore, in the light of the above terms, we make it clear that the Respondent-PGCIL shall not raise invoices during pendency of similar Appeals before this Tribunal except where insolvency proceedings are faced by generators."*

100. As regards the contention of the TANGECO and KSEB with respect to relinquishment charges, the Commission in order dated 8.3.2019 in Petition No. 92/MP/2015 has prescribed a methodology for determination of relinquishment charges and directed CTU to work out the relinquishment charges in accordance with the methodology. Accordingly, the relinquishment charges, if any, recovered from PELPL and IL&FS shall be adjusted towards the transmission charges of the transmission assets.

101. As regards the sharing of transmission charges, the Commission vide order dated 19.12.2017 in Petition No. 214/TT/2016 held as under:

"68. We have considered the submissions of the petitioner and TANGEDCO. PGCIL has filed the petition for determination of tariff for two 400 kV bays each at Nagapattinam Pooling Station and Salem New (Dharmapuri) Sub-station for terminating Nagapattinam Pooling Station-Salem New (Dharmapuri) 765 kV D/C line. These pooling stations formed part of the High Capacity Power Transmission Corridors XI (HCPTC-XI) i.e. Transmission System associated with IPP Projects in Nagapattinam/Cuddalore Area of Tamil Nadu. The regulatory approval for HCPTC XI was granted by the Commission vide order dated 13.12.2011 in Petition No.154/MP/2011. The trunk transmission corridor was to be developed under the TBCB route and the pooling stations/sub-stations alongwith inter-connection with the grid were to be implemented under the cost plus basis.

69. The status of the projects is connection with HCPTC XI was noted by the Commission as under:-

> *"19. The petitioner has submitted the following with regard to the progress of work on corridor XI:*
>
> > *a) IPPs who have been granted LTA in the Nagapattinam/Cuddalore area and have signed BPTA and submitted Bank Guarantee are IL&FS Power Company Ltd (1200 MW) with LTA of 1150 MW and PEL Power Ltd (1050 MW) with LTA of 987 MW. Besides these, grant of Connectivity/LTA to two more generation projects viz. NSL Nagapatnam Power & Infratech (1320 MW) with LTA of 800 MW and PPN Power (1080 MW) with LTA of 360 MW has been finalized in the 12thConnectivity/LTA meeting held on 08.06.2011 at New Delhi.*
> >
> > *b) BPTAs for the subject transmission system were signed by the petitioner before 5 January 2011. However, in line with the decisions of the Empowered Committee, the trunk transmission corridor is proposed to be developed under the Tariff based bidding and the pooling stations/Substations along with their interconnection with the grid would be implemented by the petitioner under cost plus basis.*
> >
> > *c) The RFQ for package-A of the trunk transmission corridor viz. Nagapattinam - Salem 765 kV D/c line and Salem–Maduhgiri 765 kV S/c line for implementation through tariff based competitive bidding has already been issued and bids have been opened.*
> >
> > *d) The time schedule specified in the RFQ for the scheme has been given as 36 months from the effective date as per the TSA approved by MOP. Therefore, assuming that the RFP process and effective transfer to IPTC is achieved by March, 2012, then the likely commissioning date for the system would be March, 2015*
> >
> > *e) The petitioner shall implement the associated substations/pooling stations and their interconnection to the grid matching with the above time schedule.*
> >
> > *f) The studies for evolution of transmission system was discussed and finalised in consultation with CEA, generation developers and various utilities. It was agreed that the charges of the transmission system would be borne by the generation developers till the time beneficiaries are firmed up and agree to bear its transmission charges*

g) As the synchronous operation of SR and NEW grid by 2013-14 through Raichur–Sholapur 765 kV 2xS/c lines is being achieved, it is desirable that Narendra–Kolhapur 765 kV D/c link should be available by that timeframe for smooth synchronization. Accordingly, the Narendra–Kolhapur section alongwith necessary interconnections has been decided to be delinked from generation development in the Cuddalore/Nagapattinam area and is being taken up separately as regional system strengthening scheme (SRSS-XVII). The 765 kV operation of this link shall be undertaken matching with the progress of generation projects in Cuddalore/Nagapattinam area.

h) The subject transmission system is required to be taken up for implementation immediately.

20. The petitioner has submitted that as per the report of site visit of the IPPs, in case of one generating station out of four power plants, i.e. IL&FS, physical activities like, construction of site office, construction of substation for construction power etc. are under progress. In other three cases, there is no physical activity except fencing work at PEL Power Ltd. EPC orders were awarded by IL&FS and PPN Power, and in the other two cases, it is under process.

"21. It is observed that the work of IL&FS (1200 MW) is in progress and there is possibility of implementation of PPN Power (1080 MW). Total LTA granted in this corridor is 3297 MW. Keeping in view the petitioner's submission that this transmission system would be required even if one generation project is materialized and the RFQ process for one of the trunk lines has already been started, the implementation of HCPTC-XI be taken up by the petitioner."

70. While granting regulatory approval, the Commission in order dated 13.12.2011 in Petition No.154/MP/2011 observed that even if one generation project is materialized, the petitioner should implement the assets under the instant transmission system. Further, the Commission held that —the transmission systems which have been granted regulatory approval under this petition shall be included in PoC charges.

71. It is therefore clear that the Commission granted approval for construction of the HCPTC XI on the basis of the submission of the petitioner that the transmission system is required even if one generation project is materialized and it was further decided that the assets would be serviced through PoC mechanism.

72. It is further observed that Salem Pooling Station is connected to existing Salem (400 kV) Sub-station and to Nagapattinam Sub-station. The Tuticorin-Salem transmission line (TBCB), Salem-Salem transmission line (TBCB), and Salem Nagapattinam (TBCB line) are connected to these sub-station and therefore, used by all beneficiaries of the Southern Region.

73. TANGEDCO has submitted that the instant transmission lines of 765 kV has been charged at 400 kV level, thus making the investment in establishment of 765 kV line futile. Out of the four generation project for which HCPTC XI was conceived, IL&FS has been commissioned and PEL has relinquished the LTA capacity. The other two generators have not materialized. Accordingly, the instant assets were implemented as 400 kV bays though the associated transmission line is 765 kV, after the same was approved in the SRPC. The instant transmission line may be underutilized at present, but will be utilized to meet the future requirement of evacuation of power in the Southern Region in future. It is further noted that PEL has relinquished the LTA capacity and it has been decided in order dated 12.7.2016 in Petition No. 315/MP/2013, that the relinquishment charges shall be paid by PEL in the light of the decision in Petition No. 92/MP/2015. Relevant portion of the order is extracted as under:-

"34. We have considered the submission of the petitioner. It is noted that the petitioner vide its letter dated 16.12.2011 requested PGCIL to defer the requirement of present transmission system associated with the IPPs of Nagapattinam/Cuddalore area-Package A (Nagapattinam-Salem-Madhugiri). Subsequently, the petitioner also requested PGCIL to consider its requirement for the second pooling station proposed in the near future when NSL, EMPEE, Sindya Power and Chettinad power, etc., achieve progress. The proposed transmission system refers to the 2nd Pooling station which was proposed by PGCIL in the meeting held on 2.12.2011 and which was also mentioned by the petitioner in its communication dated 16.12.2011. It is further noticed that the petitioner vide letter dated 24.1.2012 stated that they are very much interested in the construction of the power plant and require the proposed transmission system. It appears from the letters of the petitioner that the petitioner never wanted to abandon the project and it was only seeking deferment of the requirement of present transmission system to the proposed transmission system. However, the petitioner has prayed for refund of bank guarantee of Rs. 49.35 crore in the petition. This implies that the petitioner was actually seeking relinquishment of LTA granted to it, else the BG would have been subsisting till it is replaced by payment security mechanism at the operationalization of LTA as per applicable Regulations. Since the petitioner sought return of bank guarantee first time on 26.7.2013, this date shall be treated as request date of relinquishment sought. Regulation 18 (1) (b) of the Connectivity Regulations provides for relinquishment of access right in case the long term customer has not availed access right for at least 12 (twelve) years. In this case, the petitioner sought for relinquishment of access right vide letter dated 26.7.2013 as stated above. As per the Connectivity Regulations, the long term customer needs to submit application for relinquishment to CTU at least 1 year prior to the date from which the applicant desires to relinquish the access right. However, the petitioner may seek relinquishment without any notice period, where it needs to bear 66% of estimated transmission charges for the period falling short of 1 year under 2nd proviso to Regulation 18 (1) (b). In such a case, the relinquishment shall be effective from 26.7.2013. In addition to above, the petitioner needs to bear 66% of estimated transmission charges for Stranded Capacity for 12 years as per Connectivity Regulations. The payment of the relinquishment charges shall be decided by the Commission after considering the recommendations of the Committee formed vide order dated 28.8.2015 in Petition No. 92/MP/2015."

74. Considering the surrounding facts leading to the implementation of HCPTC XI which includes the instant asset, the decision to charge the transmission line at a lower voltage till the demand for evacuation picks up and the prospect of future use of the assets, the Commission is of the view that the transmission asset shall be serviced through PoC mechanism.

75. The modalities for sharing of the transmission charges allowed in this order will be decided after the disposal of the Petition No. 92/MP/2015 pending for the consideration of the Commission. Till such time, the petitioner is directed to recover the transmission charges of the instant assets in terms of our order dated 23.1.2017 in this petition."

102. It is further placed that the Commission in order dated 20.5.2019 in Petition No. 256/TT/2018 held as under:

"70. The Commission in Order dated 8.3.2019 in Petition No. 92/MP/2015 has prescribed a methodology for determination of relinquishment charges and directed

CTU to work out the relinquishment charges in accordance with the methodology. Accordingly, the relinquishment charges, if any, recovered from PELPL shall be adjusted towards the transmission charges of the instant assets as held in the said order.

"71. Since the instant asset is the part of Meshed network, 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 the 2014 Tariff Regulations."

103. Regulation 8(5) of the 2010 Sharing Regulations provides as under:-

"(5) In the case of Approved Withdrawal or Approved Injection is not materialising either partly or fully for any reasons whatsoever, the Designated ISTS customer shall be obliged to pay the transmission charges allocated."

104. Regulation 8(6) of the 2010 Sharing Regulations provides as follows:-

"(6) For Long Term Transmission Customers availing power supply from inter State generating stations, the charges attributable to such generation for long term supply shall be calculated directly at drawal nodes as per methodology given in the Annexure-I. Such mechanism shall be effective only after commercial operation of the generator. Till then it shall be the responsibility of the generator to pay transmission charges."

105. As per Regulations 8(5) and 8(6) of the 2010 Sharing Regulations, the generators having long term access are liable to bear the transmission charges for the transmission system till they achieve commercial operation. In the instant case, only 400 kV bays at Nagapattinam, Salem and Madhugiri Sub-stations alongwith 63 MVAR reactors are covered and the associated transmission lines i.e. 765 kV D/C Nagapattinam-Salem Transmission Line and 765 kV S/C Salem-Madugiri Transmission Line are implemented through TBCB route. The instant assets were put into commercial operation on 23.10.2016 and 26.01.2019 matching with the commissioning of the 765 kV D/C (initially charged at 400 kV level) Nagapattinam PS-Salem New (Dharmapuri) transmission line and 765 kV S/C (initially charged at 400 kV level) Salem New (Dharmapuri)-Madhugiri transmission line-2 being implemented under the TBCB. The assets covered in the instant petition form part of

the High Capacity Power Transmission Corridors-XI (HCPTC-XI). PELPL applied for and was granted LTA of 987 MW and IL&FS applied for and was granted LTA of 1150 MW. PELPL abandoned the project and has relinquished the LTA of 987 MW on 26.7.2013 much before COD of the transmission system. IL&FS has set up a 1200 MW (2x600) power project at Cuddalore in the State of Tamil Nadu. IL&FS entered into a BPTA with CTU on 24.12.2010 which envisaged 575 MW LTA to Southern Region and 575 MW LTA to Western Region. IL&FS tied up for sale of 540 MW power to TANGEDCO on long term basis and informed CTU for operationalisation of LTA for 540 MW vide its letter dated 15.8.2015. Unit I and Unit II of the generating station of IL&FS achieved COD on 29.9.2015 and 30.4.2016 respectively. CTU has part-operationalized the LTA of 540 MW with effect from 29.9.2015. As IL&FS has commissioned generation of 540 MW and LTA has been operationalized from 29.9.2015 and 540 MW of power is transferred to TANGEDCO through the transmission assets, the transmission assets are put to use and also the instant assets are part of mesh network and is used by TANGEDCO. Therefore, we are of the view that in respect of the transmission assets, the transmission charges from the date they were put into commercial operation on 23.10.2016 and 26.01.2019 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.

106. Accordingly, the transmission charges shall be recovered on monthly basis in accordance with the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff

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

107. To summarise:

The trued-up Annual Fixed Charges allowed for the transmission assets for the 2014-19 tariff period are:

(₹ in lakh)

Particulars	Asset-1			Asset-2
	2016-17 (Pro-rata 160 days)	2017-18	2018-19	2018-19 (Pro-rata 65 days)
Annual Fixed Charges	443.00	1082.06	1131.93	84.79

The Annual Fixed Charges allowed for the Combined Asset for the 2019-24 tariff period in this order are:

(₹ in lakh)

Combined Asset	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	1373.51	1364.84	1339.19	1314.43	1287.50

108. Annexures given hereinafter form part of the order.

109. This order disposes of Petition No. 38/TT/2020.

sd/-	sd/-	sd/-	sd/-	sd/-
(Prakash S. Mhaske)	**(Pravas Kumar Singh)**	**(Arun Goyal)**	**(I. S. Jha)**	**(P. K. Pujari)**
Member Ex-officio	**Member**	**Member**	**Member**	**Chairperson**

ANNEXURE-1

Asset-1

2014-19	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	ACE (₹ in lakh)				Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)		
Capital Expenditure		2016-17	2017-18	2018-19	Total			2016-17	2017-18	2018-19
Land - Freehold	-	-	-	-	-	-	-	-	-	-
Land - Leasehold	-	-	-	-	-	-	3.34%	-	-	-
Building Civil Works & Colony	-	-	-	-	-	-	3.34%	-	-	-
Transmission Line	-	-	269.63	-	269.63	269.63	5.28%	-	7.12	14.24
Sub Station	3926.18	466.68	178.97	283.96	929.62	4855.80	5.28%	219.62	236.67	248.89
PLCC	190.09	4.73	1.45	-	6.18	196.27	6.33%	12.18	12.38	12.42
IT Equipment (Incl. Software)	51.15	1.27	0.39	-	1.66	52.81	5.28%	2.73	2.78	2.79
Total	**4167.42**	**472.69**	**450.44**	**283.96**	**1207.09**	**5374.51**	**Total**	**234.54**	**258.94**	**278.34**
						Average Gross Block (₹ in lakh)		**4403.77**	**4865.33**	**5232.53**
						Weighted Average Rate of Depreciation		**5.33%**	**5.32%**	**5.32%**

Asset-2

2014-19	Admitted Capital Cost as on 1.4.2014/COD (₹ 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)
Capital Expenditure				2018-19
Land - Freehold	-	-	-	-
Land - Leasehold	-	-	3.34%	-
Building Civil Works & Colony	-	-	3.34%	-
Transmission Line	-	-	5.28%	-
Sub Station	1908.00	1908.00	5.28%	100.74
PLCC	-	-	6.33%	-
IT Equipment (Incl. Software)	36.79	36.79	5.28%	1.94
Total	**1944.79**	**1944.79**	**Total**	**102.68**
		Average Gross Block (₹ in lakh)		**1944.79**
		Weighted Average Rate of Depreciation		**5.28%**

ANNEXURE-2

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh) 2019-20	Projected ACE (₹ in lakh) Total	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh) 2019-20	2020-21	2021-22	2022-23	2023-24
Land - Freehold	0.00	-	-	0.00	-	-	-	-	-	-
Land - Leasehold	0.00	-	-	0.00	3.34%	-	-	-	-	-
Building Civil Works & Colony	-	-	-	-	3.34%	-	-	-	-	-
Transmission Line	269.63	-	-	269.63	5.28%	14.24	14.24	14.24	14.24	14.24
Sub Station	6763.80	244.68	244.68	7008.48	5.28%	363.59	370.05	370.05	370.05	370.05
PLCC	196.27	-	-	196.27	6.33%	12.42	12.42	12.42	12.42	12.42
IT Equipment (Incl. Software)	89.60	-	-	89.60	15.00%	13.44	13.44	13.44	13.44	13.44
Total	**7319.30**	**244.68**	**244.68**	**7563.98**		**403.69**	**410.15**	**410.15**	**410.15**	**410.15**
				Average Gross Block (₹ in lakh)		**7441.64**	**7563.98**	**7563.98**	**7563.98**	**7563.98**
				Weighted Average Rate of Depreciation		**5.42%**	**5.42%**	**5.42%**	**5.42%**	**5.42%**