CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 318/TT/2020

Coram:

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

Date of Order: 17.03.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of **Asset-1:** 400 kV Salem Pooling Station (Dharmapuri)-Salem 400 kV D/C Quad line along with new 765/400 kV Pooling Station at Salem (Dharmapuri) (initially charged at 400 kV) and bay extensions at Salem 400/220 kV existing Sub-station; and **Asset-2:** Salem Pooling Station-Madhugiri Pooling Station 765 kV S/C Line (initially charged at 400 kV) along with associated Bays and equipment at Salem PS and Madhugiri PS and 400 kV 63 MVAR line reactor at Madhugiri end only of the Salem Pooling Station-Madhugiri 765 kV S/C Line (Initially charged at 400 kV) under "Transmission System associated with Common System associated with Coastal Energen Private Limited and Ind-Bharat Power (Madras) Limited LTOA generation projects in Tuticorin area- Part-B in Southern Region".

And in the matter of:

Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2,
Sector 29,
Gurgaon-122001, Haryana. **…. Petitioner**

Vs.

1. Karnataka Power Transmission Corporation Limited,
   Kaveri Bhavan,
   Bangalore-560009.

2. Transmission Corporation of Andhra Pradesh Limited,
Vidyut Soudha,
Hyderabad-500082.

3. Kerala State Electricity Board,
Vaidyuthi Bhavanam, Pattom,
Thiruvananthapuram-695004.

4. Tamil Nadu Generation and Distribution Corporation Limited,
(Formerly Tamilnadu 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 Limited,
APEPDCL, P&T Colony, Seethmmadhara,
Vishakhapatnam, Andhra Pradesh.

7. Southern Power Distribution Company of Andhra Pradesh Limited,
Srinivasasa Kalyana Mandapam Backside,
Tiruchanoor Road, Kesavayana Gunta,
Tirupati-517501,Chittoor District, Andhra Pradesh.

8. Central Power Distribution Company of Andhra Pradesh Limited,
Corporate Office, Mint Compound,
Hyderabad-500063, Telangana.

9. Northern Power Distribution Company of Andhra Pradesh Limited,
Opposite NIT Petrol Pump, Chaitanyapuri, Kazipet,
Warangal-506004, Telangana.

10. Bangalore Electricity Supply Company Limited,
Corporate Office, K.R. Circle,
Bangalore-560001, Karnataka.

11. Gulbarga Electricity Supply Company Limited,
Station Main Road, Gulbarga,
Karnataka.

12. Hubli Electricity Supply Company Limited,
Navanagar, PB Road,
Hubli, Karnataka.

13. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle
Mangalore-575001, Karnataka.

14. Chamundeswari Electricity Supply Corporation Limited,
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 Limited,
Vidhyut Sudha, Khairatabad,
Hyderabad-500082.

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

18. Coastal Energen Private Limited,
5th Floor, Buhari Towers No.4, Moores Road,
Chennai-600006.

19. Ind-Bharath Power (Madras) Limited,
Plot no.-30-A, Road No.1, Film Nagar, Jubilee Hills,
Hyderabad-500033. **…Respondent(s)**

For Petitioner : Ms. Swapna Seshadri, Advocate, PGCIL
Shri Aditya H. Dubey, Advocate, PGCIL
Shri S.S. Raju, PGCIL
Shri D.K. Biswal, PGCIL
Shri Ved Prakash Rastogi, PGCIL
Shri A.K. Verma, PGCIL

For Respondents **:** Shri S. Vallinayagam, Advocate, TANGEDCO
Dr. R. Kathiravan, TANGEDCO
Shri R. Ramalakshmi, TANGEDCO
Shri R. Srinivasan, TANGEDCO

ORDER

The Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for truing up of transmission from the date of commercial operation (COD) 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 determination of transmission tariff 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 assets under "Transmission System associated with Common System associated with Coastal Energen Private Limited and Ind-Bharat Power (Madras) Limited LTOA generation projects in Tuticorin area-Part-B in Southern Region (hereinafter referred to as the "transmission project"):

Asset-1: 400 kV Salem Pooling Station (Dharmapuri)-Salem 400 kV D/C quad line along with new 765/400 kV Pooling Station at Salem (Dharmapuri) (initially charged at 400 kV) and bay extensions at Salem 400/220 kV existing Sub-station; and

Asset-2: Salem Pooling Station – Madhugiri Pooling Station 765 kV S/C Line (initially charged at 400 kV) along with associated bays and equipment at Salem PS and Madhugiri PS and 400 kV 63 MVAR line reactor at Madhugiri end only of the Salem Pooling Station – Madhugiri 765 kV S/C Line (Initially charged at 400 kV)

(Asset-1 and Asset-2 have been collectively referred to as "the transmission assets" for 2014-19 tariff period. The transmission assets have been combined as on 1.4.2019 and have been collectively referred to as the "Combined Asset" for 2019-24 tariff period.)

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

"1) Approve the trued-up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 12.2 and 13.0 above.

2) Approve the Completion cost and additional capitalization incurred during 2014-19, also allow the projected additional capitalization during 2019-24.

3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 12.2 and 13.0 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 Initial spares claimed as project as a whole.

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

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

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

and pass such other relief as 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 follows:

(a) Investment Approval (IA) and expenditure sanction in respect of the transmission project was accorded by the Board of Directors of the Petitioner vide Memorandum No. C/CP/LTA Tuticorin-Part-B dated 16.9.2011 at an estimated cost of ₹194013.00 lakh, including IDC of ₹12092.00 lakh based on 1st Quarter, 2011 price level (communicated vide memorandum dated 19.9.2011).

(b) Revised Cost Estimate-I (RCE-I) in respect of the transmission project was accorded by the Board of Directors of the Petitioner in 337th meeting held on 9.2.2017 vide Memorandum No. C/CP/PA1617-02-0T-RCE008 dated 7.3.2017 ₹270265.00 lakh including IDC of ₹37891.00 lakh. Revised Cost Estimate-II (RCE-II) of the transmission project was accorded by the Board of Directors of the Petitioner vide Memorandum No. C/CP/PA1819-12-0BI-RCE005 dated 29.3.2019 at ₹292269.00 lakh including IDC of ₹33843.00 lakh.

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

<u>Transmission Line:</u>

(i) Tuticorin Pooling Station – Salem Pooling Station 765 kV D/C line initially charged at 400 kV;

(ii) Salem Pooling Station – Salem 400 kV D/C Quad Line;

(iii) Salem Pooling Station – Madhugiri Pooling Station 765 kV S/C Line initially charged at 400 kV.

<u>Sub-station:</u>

(i) Establishment of 765/400 kV Pooling Station at Salem (Initially charged at 400 kV);

(ii) Extension of 765/400 kV Tuticorin Pooling Station;

(iii) Extension of 400/220 kV Madhugiri Pooling Station;

(iv) Extension of 400/220 kV Salem Station.

<u>Line Reactors (400 kV):</u>

(i) 80 MVAR Line Reactors at each end of both circuits of Tuticorin Pooling

Station – Salem Pooling Station 765 kV D/C line (initially charged at 400 kV);

(ii) 63 MVAR Line Reactors at Madhugiri end only of the Salem Pooling Station – Madhugiri 765 kV S/C line (initially charged at 400 kV).

(d) The entire scope of work under the transmission project has been completed and details of the transmission assets under the transmission project as covered under various petitions are as follows:

Sl. No.	Name of Assets	Covered under Petition No.
1.	400 kV Salem Pooling Station (Dharmapuri)-Salem 400 kV D/C quad line along with new 765/400 kV Pooling Station at Salem (Dharmapuri) (initially charged at 400 kV) and bay extensions at Salem 400/220 kV existing Sub-Station.	Instant petition
2.	Salem Pooling Station – Madhugiri Pooling Station 765 kV S/C Line (initially charged at 400 kV) along with associated Bays & equipment at Salem PS and Madhugiri PS and 400 kV 63 MVAR line reactor at Madhugiri end only of the Salem Pooling Station–Madhugiri 765 kV S/C Line (Initially charged at 400 kV)	
3.	Tuticorin Pooling Station-Salem Pooling Station 765 kV D/C line (initially charged at 400 kV) along with Bay extensions at Salem PS and Tuticorin Pooling Station and 80 MVAR Line Reactors at each end of both circuits of Tuticorin Pooling Station- Salem Pooling Station 765 kV D/C line (initially charged at 400 kV)	679/TT/2020

(e) The transmission assets were scheduled to be put into commercial within 36 months from the date of IA dated 16.9.2011. Accordingly, the scheduled date of commercial operation of the transmission project was 15.9.2014.

(f) The details of scheduled commercial operation date (SCOD), date of commercial operation (COD) and time over-run are as follows:

Asset	SCOD	COD	Time over-run
Asset – 1	15.9.2014	23.10.2016	769 days
Asset – 2	15.9.2014	1.11.2018	1508 days

(g) The transmission tariff in respect of Asset-1 was approved vide order dated 21.11.2017 in Petition No.71/TT/2017 and the transmission tariff in respect of Asset-2 was approved vide order dated 1.11.2019 in Petition No. 367/TT/2018 from their respective COD to 31.3.2019.

(h) The Annual Fixed Charges (AFC) approved by the Commission vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No. 367/TT/2018 and trued up tariff claimed by the Petitioner in respect of the transmission assets for 2014-19 tariff period 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 151 days)**
AFC approved vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No. 367/TT/2018	1535.32	3576.56	3576.60	4978.83
AFC claimed by the Petitioner based on truing up in the instant petition	1628.53	3772.90	3789.95	4981.96

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

5. The Petitioner has served the petition on the Respondents and notice of this petition has also 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 aforesaid notices published in the newspapers by the Petitioner.

Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO), Respondent No. 4, has filed its reply vide affidavit dated 23.6.2021 and has raised issues related to declaration of COD of the transmission assets, time over-run and sharing of transmission charges. In response, the Petitioner has filed its rejoinder affidavit dated 1.7.2021 to the reply of TANGEDCO. The issues raised by TANGEDCO and clarifications thereto given by the Petitioner are dealt in the relevant portions of the instant order.

6. The hearing in this matter was held on 24.9.2021 through video conference and order was reserved.

7. Having heard the counsel for the parties and having perused the material on record, we proceed to dispose of the petition.

8. This order is issued considering the submissions made by the Petitioner in the petition vide affidavits dated 25.1.2020, 11.12.2020, reply of TANGEDCO filed vide affidavit dated 23.6.2021 and the Petitioner's rejoinder affidavit dated 1.7.2021.

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

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

(₹ in lakh)

Particulars	**Asset – 1**			**Asset – 2**
	2016-17 (Pro-rata for 160 days)	**2017-18**	**2018-19**	**2018-19 (Pro-rata for 151 days)**
Depreciation	475.02	1114.26	1135.37	1551.18
Interest on Loan	413.21	919.60	873.15	1456.54
Return on Equity	559.13	1313.36	1343.96	1742.24
Interest on working capital	38.99	90.50	91.19	104.92
O&M Expenses	142.18	335.18	346.28	127.08
Total	**1628.53**	**3772.90**	**3789.95**	**4981.96**

10. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner in respect of 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 151 days)
O&M Expenses	27.03	27.93	28.86	25.60
Maintenance Spares	48.66	50.28	51.94	46.07
Receivables	619.19	628.82	631.66	2007.08
Total	694.88	707.03	712.46	2078.75
Rate of Interest (in %)	12.80	12.80	12.80	12.20
Interest on Working Capital	38.99	90.50	91.19	**104.92**

Capital Cost

11. The Commission vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No. 367/TT/2018 approved the capital cost as on COD and ACE up to 31.3.2019 in respect of Asset-1 and Asset-2 respectively. The details of the same are as follows:

(₹ in lakh)

Assets	Approved Cost (FR)	Approved Cost as per RCE-I	Approved Cost as per RCE-II	Capital Cost allowed as on COD	ACE			Total Capital Cost as on 31.3 2019
					2016-17	2017-18	2018-19	
Asset – 1	22722.00	24383.00	-	19969.55	604.61	815.44	20.00	21409.60
Asset – 2	33278.14	64862.32	85972.72	69700.43	0.00	0.00	3358.03	73058.46

12. The Petitioner in the instant true up petition has submitted capital cost as on COD and estimated ACE incurred or projected to be incurred in respect of the transmission assets as per Auditor's Certificate dated 30.7.2019 and the same are as follows:

(₹ in lakh)

Assets	Approved Cost (FR)	Approved Cost as per RCE-I	Approved Cost RCE-II	Capital Cost as on COD	ACE			Total Capital Cost as on 31.3 2019
					2016-17	2017-18	2018-19	
Asset-1	22722.00	24383.00	25133.00	21689.28	148.61	835.99	0.00	22673.82
Asset-2	33278.14	64862.32	85972.72	71106.67	0.00	0.00	851.73	71958.40

Cost Over-run

13. The Petitioner has claimed capital cost of ₹21689.28 lakh and ₹71106.67 lakh in respect of Asset-1 and Asset-2, respectively, as on COD.

14. The total completion cost including ACE in respect of the transmission assets is ₹94632.22 lakh and the approved revised cost-II as per RCE-II is ₹111105.72 lakh. The completion cost in respect of the transmission assets is within the approved cost as per RCE-II and as such there is no cost over-run with regard to the transmission assets.

Time Over-run

15. As per IA, the transmission assets were scheduled to be put under commercial operation within 36 months from the date of IA, which is 16.9.2011. Accordingly, SCOD was 15.9.2014 against which Asset-1 and Asset-2 were put into commercial operation on 23.10.2016 and 1.11.2018 respectively with time over-run of 25 months for Asset-I and 49 months and 17 days in respect of Asset-2. The Commission vide order dated 21.11.2017 in Petition No. 71/TT/2017 did not condone the time over-run of 25 months in case of Asset-1 and directed the Petitioner to submit valid documentary evidence at the time of truing up to show that asset (Asset-1) was ready in August, 2014, and that it was not put into commercial operation due to non-commissioning of the related assets. However, with regard to Asset-2, the Commission condoned the entire time over-run of 49 months and

17 days (1507 days) vide order dated 1.11.2019 in Petition No. 367/TT/2018 on account of RoW issues.

16. The Petitioner has submitted that the Commission vide order dated 21.11.2017 in Petition No. 71/TT/2017 directed to furnished the following details at the time of truing up:

> *"25…………The petitioner is directed to submit valid documentary evidence to show that it was ready in August, 2014 and it was not put the instant assets into commercial operation due to non-commissioning of the related assets at the time of truing-up and accordingly the time over-run in case of the instant assets will be reviewed."*

17. In compliance of the aforesaid directions of the Commission, the Petitioner has submitted that the transmission assets were scheduled to be put into commercial operation on 15.9.2014. Asset-1 was ready for commissioning by August, 2014. However, it could not be put into commercial operation due to non-availability of further connectivity at Salem (Dharmapuri) PS due to reasons beyond the control of the Petitioner. Details of various connectivity activities considered in matching time frame at Salem (Dharmapuri) Pooling Station and various issues faced during execution of these lines have been submitted by the Petitioner as follows:

(a) The commissioning of one of the matching time frames envisaged connectivity at Salem Pooling Station (Dharmapuri) i.e. above Tuticorin PS–Salem (Dharmapuri) PS 765 kV D/C line (initially to be operated at 400 kV) was held up due to severe RoW issues which were encountered during construction of the line. Subsequently, after rigorous efforts of the Petitioner, RoW issues could be resolved and Tuticorin PS–Salem (Dharmapuri) PS 765 kV D/C line could be commissioned and put under commercial operation w.e.f. 13.11.2016. Detailed justification for delay in commissioning of Tuticorin PS–Salem (Dharmapuri) PS

765 kV D/C line has already been submitted in Petition No. 235/TT/2016. Further, the Commission while disposing of the said Petition No. 235/TT/2016 allowed COD of the said transmission assets and condoned the entire time over-run of 25 months and 25 days in paragraph 33 of the said order. Relevant portion of the order is extracted as follows:

> *"33……The petitioner was not able to take up any work from 28.5.2012 to 22.9.2016 at location no.13. We are of the view that the delay at this location from 28.5.2012 to 22.9.2016 (51 months 26 days) is beyond the control of the petitioner. Accordingly, this time delay of 51 months and 26 days is condoned. The time taken by the petitioner to resolve the issues at other locations is subsumed by the time taken in settling the issues at location no. 13 and hence we are not going into the issues faced by the petitioner at other locations."*

(b) The commissioning of other matching time frame envisaged connectivity at Salem Pooling Station (Dharmapuri) i.e., Salem Pooling Station (Dharmapuri) – Madhugiri Pooling Station 765kV S/C line (initially to be charged at 400 kV) was also held up due to severe RoW issues encountered during construction of the said line. Subsequently, after rigorous efforts of the Petitioner, RoW issues beyond the control of the Petitioner were resolved and Salem Pooling Station (Dharmapuri) – Madhugiri Pooling Station 765 kV S/C line (initially charged at 400 kV) could be commissioned and put under commercial operation w.e.f. 1.11.2018. Further, the Commission while disposing of said the Petition No. 367/TT/2018, allowed COD of the transmission assets and condoned the entire time over-run of 49 months and 17 days in respect of transmission asset and capitalized the corresponding cost. The excerpt of the said paragraph 35 is as follows:

> *"35. The Petitioner has submitted extensive details of correspondences exchanged with various Authorities along with supporting documents. From the submission, it is clear that RoW issues from 17.10.2012 to 27.10.2018 (2201 days) at various locations affected the work of the instant asset. The time over run of 2201 days on*

account of RoW problems was beyond the control of the Petitioner and this delayed the schedule commissioning of the asset. However, the Petitioner has compressed the execution time and commissioned the instant asset with overall delay of 1507 days. Therefore, the overall time over run of 1507 days in commissioning of Asset-I is condoned."

(c) The Commissioning of other envisaged connectivity at Salem Pooling Station (Dharmapuri) i.e. Salem (Dharmapuri) PS - Somanahalli 400 kV D/C line under SRSS-XIV project was scheduled to be commissioned by 27.8.2014. As the above two transmission lines under the transmission project i.e. Tuticorin PS–Salem (Dharmapuri) PS 765 kV D/C line (initially to be operated at 400 kV) and Salem Pooling Station (Dharmapuri)–Madhugiri Pooling Station 765 kV S/C Line (initially to be charged at 400 kV) were stuck up in severe RoW issues during construction while the transmission asset (Asset-1) i.e. 400 kV Salem Pooling Station (Dharmapuri)-Salem 400 kV D/C quad line along with new 765/400 kV Pooling Station at Salem (Dharmapuri) (initially charged at 400 kV) and bay extensions at Salem 400/220 kV existing Sub-station was in the final stages, anticipated to be ready for commissioning by April/ May, 2014 i.e. well within approved schedule. Due to non-availability of above said two lines in the matching time frame of Asset-1, and considering the benefit of commissioning of transmission asset (Asset-1) along with Salem (Dharmapuri) PS-Somanahalli 400 kV D/C line under SRSS-XIV project, the matter was taken up with SRPC for early commissioning of these elements. SRPC in its 24th meeting held on 15.3.2014 concurred the early commissioning of these assets considering the benefit to transmission system corridor e.g. providing alternate corridor between Karnataka and Tamil Nadu and relieving network congestion, reduction of transmission losses etc. In this regard, TANTRANSCO vide letter dated 18.2.2014 addressed to SRPC requested for relieving network congestion in the said corridor which is also a part of minutes of said SRPC meeting dated 15.3.2014. In the said meeting, SRPC even concurred for long duration shut-down from 21.5.2014 for a period of 45 days of existing corridor of 400 kV Somanahalli-Hosur S/C line which was required for completion of Salem (Dharmapuri) PS-Somanahalli 400 kV D/C line. However, due to severe RoW issues which cropped up in construction of Salem (Dharmapuri)-Somanahalli 400 kV D/C line near Bengaluru, the said line could not be put into commercial operation as planned due to RoW issues. However, the said line could be put under commercial operation w.e.f. 30.3.2019.

(d) In spite of the earnest efforts made by the Petitioner and despite the fact that Asset-1 under the subject petition i.e. 400 kV Salem Pooling Station (Dharmapuri)-Salem 400 kV D/C quad line along with new 765/400 kV Pooling Station at Salem (Dharmapuri) (initially charged at 400 kV) and bay extensions at Salem 400/220 kV existing Sub-station was ready for commissioning by August, 2014 i.e. within the approved schedule. However, the said asset could not be declared under commercial operation due to non-availability of further connectivity at Salem New (Dharmapuri) PS due to reasons beyond the control of the Petitioner.

(e) The Petitioner has placed on record extracts of SRPC meeting, detailed chronologies of events in respect of delay in construction of this line along with COD letter, RLDC and CEA Certificate.

(f) Despite the fact that Asset-1 was ready for commissioning as well as for commercial operation by August, 2014, the Petitioner had no other choice but to wait for availability of any onward connectivity at Salem New (Dharmapuri) PS. The same could be achieved w.e.f. 23.10.2016, only after COD of Nagapattinam Pooling Station-Salem New (Dharmapuri) 765 kV D/C Line (Initially charged at 400 kV), executed by PNMTL (under Tariff Based Competitive Bidding route) after their rigorous efforts and resolving severe RoW issues etc. in implementation of the said line.

(g) Thus, power flow at Salem New (Dharmapuri) PS could be available only after commissioning of Nagapattinam PS-Salem New (Dharmapuri) 765 kV D/C Line (Initially charged at 400 kV), hence commercial operation of Asset-1 could be declared only w.e.f. 23.10.2016 along with Nagapattinam–Dharmapuri 765 kV D/C line (executed by PNMTL under TBCB route). The petition for Nagapattinam PS–Dharmapuri 765 kV D/C line (executed by PNMTL under TBCB route) is presently sub-judice before the Commission in Petition No. 333/MP/2019.

(h) In view of above state of affairs, delay in commercial operation of Asset-1 in spite of being ready from August, 2014 was beyond the control of the Petitioner and the same was mainly attributable to RoW issues encountered in completion of transmission lines in matching time frame under the transmission project and SRSS-XIV project.

(i) In view of uncertainty in completion of associated transmission lines in matching time frame under the transmission project and SRSS-XIV project as explained above, considering the fact that CEA clearance for energization of new elements is to be obtained just before commissioning and also to be re-inspected if the system is not in charged condition for more than 6 months as per Regulation 43 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, Asset-1 was not offered for CEA inspection though it was ready for commissioning to avoid multiple inspections before capitalization.

(j) In view of above circumstances, delay in commissioning of Asset-1 is liable to be condoned due to unavoidable reasons of delay which were beyond the control of the Petitioner in declaration of commercial operation of Asset-1. The Petitioner has further submitted to allow full tariff in respect of Asset-1 as claimed in the instant petition.

18. TANGEDCO has made the following submissions:

(a) The Commission did not condone the time over-run in case of Asset-1 vide order dated 21.11.2017 in Petition No. 71/TT/2017. The Petitioner has made the transmission assets ready during August, 2014 and only because of delay in commissioning of downstream/upstream transmission assets established by the Petitioner's and its subsidiary companies, the Petitioner was prevented from commissioning of the transmission assets. However, the Petitioner has conveniently concealed the fact that in the month of August, 2014, the generators CEPL and IBPL were not ready and the transmission assets were created only at the behest of these two generators.

(b) It is evident from the submissions of the Petitioner that there is a clear collusion between the Petitioner and its subsidiary companies establishing other elements of the project and the generators in terms of declaration of COD. Merely disallowing IDC and IEDC for the delayed period and not declaring deemed COD will largely benefit the Petitioner and its subsidiary companies as well as the generators in terms of allowing the Initial Spares, IEDC and depreciation and other expenses included in the capital cost to be serviced by the beneficiaries from the actual COD thereby relieving them totally from these liabilities.

(c) It is a settled position of law that on declaring deemed COD, the recovery of the transmission charges is bilaterally from the entity responsible for the delay. The Commission has been consistent in treating such cases and directing the parties liable to pay transmission charges bilaterally for the mismatch period e.g. Petition No.361/TT/2018, Petition No.245/TT/2017 and Petition No.99/TT/2018.

(d) The transmission assets could be put into beneficial use only after the COD of the generating station and to the extent of generating capacity brought under commercial operation. Hence, the generators are liable to pay the transmission charges from the date of deemed declaration of commercial operation, if approved by the Commission, till commissioning of the generating units. Hence, the Petitioner is liable to bring on record the details of COD of each generating unit and matching of COD of the transmission assets with COD of the generating units, action taken to recover the transmission charges from the generators from deemed COD claimed by the Petitioner till relinquishment of LTA by the generators.

(e) Moreover, condonation of delay in execution of the other elements of the transmission project cannot be a reason to relieve the Petitioner and its subsidiary companies as well as the generators from the responsibility of bearing the tariff burden for not matching the commissioning of the transmission assets which otherwise would set a bad precedent and regulatory uncertainty in Indian power sector. The burden on account of their inefficiencies and misdeeds cannot be passed on to the end consumers.

(f) The Commission may declare the deemed COD with effect from the date of readiness of the transmission assets after SCOD of the transmission project i.e., during August, 2014 and direct the Petitioner to bill the transmission charges bilaterally to the concerned entities till the assets are brought to beneficial use.

19. In response, the Petitioner has submitted that power flow at Salem New (Dharmapuri) PS could be available only after commissioning of Nagapattinam PS-Salem New (Dharmapuri) 765 kV D/C Line (Initially charged at 400 kV) and hence commercial operation of Asset-1 could be declared only w.e.f. 23.10.2016 along with Nagapattinam–Dharmapuri 765 kV D/C line (executed by PNMTL under TBCB route). The Petitioner has further submitted that petition for Nagapattinam PS–Dharmapuri 765 kV D/C line (executed by PNMTL under TBCB route) is presently sub-judice before the Commission in Petition No. 333/MP/2019. Hence, delay in commercial operation of Asset-1 in spite of being ready from August, 2014 was beyond the control of the Petitioner and the same was mainly attributable to unfortunate RoW issues encountered in completion of transmission lines in matching time frame under the transmission project and SRSS-XIV project. The Petitioner has further submitted that CEA clearance for energization of new elements is to be obtained just before commissioning and also to be re-inspected if the system is not in charged condition for more than 6 months as per Regulation 43 of the

Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, Asset-1 was not offered for CEA inspection though it was ready for commissioning to avoid multiple inspection before capitalization. The correspondence in respect of readiness of the elements with executing agencies and CMD certificate for said asset has already been submitted along with the petition.

20. The Petition was heard on 8.6.2021. The Relevant extracts of the RoP dated 8.6.2021 is as follows:

> *"5. The Commission observed that the Petitioner had the option of claiming the COD of Asset-1 when it was ready (as claimed by the Petitioner) in August 2014 or when its COD was matched with the COD of the upstream assets in October 2016. The Commission observed that the Petitioner having taken the decision to match the COD of Asset-1 with the upstream assets, cannot claim the time period from August 2014 to October 2016 as the time over-run attributable to the developers of the downstream and seek condonation of the same. The Commission further observed that if the Petitioner had claimed the COD of Asset-1 in August 2014 along with all the supporting documents and if the same was approved by the Commission, then the transmission charges of Asset-1 for the period from August 2014 to October 2016 would have to be paid by the developers of the upstream assets, who should have been made party to the present proceedings."*

21. The Petitioner in its written submissions has made the following submissions with reference to time over-run:

a) The order dated 21.11.2017 in Petition No. 71/TT/2017 has been challenged by TANGEDCO before the Appellate Tribunal for Electricity (APTEL) by way of Appeal No. 329 of 2018. The precise ground raised by TANGEDCO is that the liability to pay the transmission charges for the transmission asset should be on Coastal Energen Private Limited and Ind-Bharat Private Limited and not through the PoC pool.

b) TANGEDCO has not challenged the issue of COD being 23.10.2016 and the Petitioner has also accepted it. As the said Appeal is still pending before the

APTEL, the best course would be to direct capitalization of IDC and IEDC from August, 2014 to 23.10.2016 in the tariff of Petitioner. The issue of recovery of transmission charges can be made subject to the decision of the APTEL in Appeal No. 329 of 2018.

c) On the Commission’s observation during the hearing on 24.9.2021 that RoW issues which were considered for condonation of time over-run in respect of other connecting lines will not help the Petitioner in the present case since Asset-1 was ready in August, 2014, the Petitioner has submitted that various parts of a transmission system do not achieve COD on the same date and the system comes progressively depending upon the practical situation in the case of each asset.

d) There was no power flow from August, 2014 till 23.10.2016 in the case of Asset-1, since other connecting lines had not been commissioned. The Commission has given orders after considering the documentary evidence in respect of the other lines that the time over-run was for the reasons beyond the control of the Petitioner and the same approach may be followed with regard to time over-run of Asset-1.

22. Further, the Petitioner has submitted that provisions of Regulation 4(3) of the 2014 Tariff Regulations was not invoked by the Petitioner in view of the circumstances prevailing at that time. In the initial orders of the Commission of 2014-19 tariff period, the Commission was taking view that the Petitioner ought to co-ordinate and match its COD with COD of upstream/ downstream assets, especially when upstream and downstream assets were also being developed by the Petitioner. In the present case, Asset-1 was

ready in August, 2014, but without any use to the Grid and none of the balance associated assets were ready. The delay which occurred in declaration of COD of balance assets on account of severe RoW issues which was accepted by the Commission in the previous orders, the time over-run from August, 2014 till 23.10.2016 may be condoned and IDC and IEDC may be capitalized.

23. We have considered the submissions of the Petitioner and TANGEDCO. With respect to contention of TANGEDCO that the Commission should approve the deemed COD in August, 2014 in respect of the transmission asset (Asset-1), we are of the view that deemed COD can be declared only when the Petitioner prays for such COD under Regulation 4(3) of the 2014 Tariff Regulations. Without there being any prayer for approval of deemed COD with respect to the transmission asset, we do not consider it appropriate to do so at the behest of TANGEDCO. The Petitioner has claimed COD of Asset-1 as 23.10.2016 matching the same with the transmission line and submitted the CMD certificate in terms of directions given vide order dated 21.11.2017 in Petition No. 71/TT/2017.

24. The Commission in RoP for the hearing dated 8.6.2021 observed that the Petitioner had the option of claiming COD of Asset-1 when it was ready in August, 2014 or matching with the COD of the upstream assets in October, 2016. However, the Petitioner chose the option of matching with the COD of the upstream assets. The Commission further observed that the Petitioner having taken the decision to match COD of Asset-1 with the upstream assets, cannot claim the time-period from August, 2014 to October, 2016 as the time over-run attributable to the developers of the downstream and seek

condonation of delay for the same period. The Commission further observed that if the Petitioner had claimed COD of Asset-1 in August, 2014 along with all the supporting documents and if the same had been approved by the Commission, then the transmission charges of Asset-1 for the period from August, 2014 to October, 2016 would have been paid by the developers of the upstream assets. And for the same, the developers of the upstream assets should have been made party to the proceedings.

25. We observe that the Petitioner has not prayed for COD under Regulation 4(3) of the 2014 Tariff Regulations but has claimed the actual COD matching with the COD of the upstream assets as 23.10.2016. Therefore, we are of the view that the time over-run of 769 days (15.9.2014 to 23.10.2016), in case of Asset-1 is on account of Petitioner's voluntary decision of matching with the upstream transmission system i.e. Salem Pooling Station–Madhugiri Pooling Station 765 kV S/C line along with associated bays and equipment at Salem PS and Madhugiri PS, Nagapattinam Pooling Station-Salem 765 kV D/C line (TBCB line) and therefore the same cannot be condoned and as such is not condoned. Accordingly, IDC and IEDC for the period of time over-run not condoned, i.e. 769 days (15.9.2014 to 23.10.2016) is not capitalized. The Petitioner is at liberty to claim compensation in terms of Liquidated Damages (LDs), IDC or IEDC from upstream transmission licensees as per the arrangement/ agreement entered into with upstream transmission licensees, if any.

26. Accordingly, the decision with regard to time over-run in respect of Asset-1 is as follows:

Particulars	SCOD	COD	Time over-run	Time over-run condoned	Time over-run not condoned
Asset-1	15.9.2014	23.10.2016	769 days	-	769 days

Interest During Construction (IDC)

27. The Petitioner has claimed IDC in respect of the transmission assets and has submitted the Auditor's Certificates dated 30.7.2019 in support of the same. The Petitioner has submitted computation of IDC along with year-wise details of the IDC discharged.

28. The allowable IDC has been worked out considering the information submitted by the Petitioner in respect of the transmission assets on cash basis. The loan details submitted in Form-9C for 2014-19 tariff period and IDC computation sheet have been considered for the purpose of IDC calculation on cash basis and on accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.

29. Accordingly, based on the information furnished by the Petitioner, IDC considered, is as follows:

(₹ in lakh)

Particulars	IDC as per Auditor's Certificate	IDC Admissible	IDC Discharged as on COD	IDC Undischarged as on COD	IDC Discharge During			
	A	B	C	D=B-C	2016-17	2017-18	2018-19	2019-20
Asset-1	2920.37	1195.04	1195.04	0.00	-	-	-	-
Asset-2	6758.63	6728.73	6121.01	607.71	-	-	250.13	357.58

Incidental Expenditure During Construction (IEDC)

30. The Petitioner has claimed IEDC of ₹735.18 lakh and ₹3790.66 lakh for Asset-1 and Asset-2, respectively, and has submitted Auditor's Certificate in support of the same.

The Petitioner has also submitted that entire IEDC has been discharged as on COD in respect of the transmission assets.

31. IEDC amounting to ₹303.46 lakh has been disallowed due to time over-run in respect of Asset-1 in the instant order. Further, IEDC amounting to ₹612.32 lakh has been disallowed by the Commission in respect of Asset-2 vide order dated 1.11.2019 in Petition No. 367/TT/2018. The Petitioner in its written submissions has submitted that an Appeal against the Commission's order dated 1.11.2019 in Petition No. 367/TT/2018 has been filed before the APTEL being Appeal No. 224 of 2021 on the limited issue of restriction of IEDC to 5% of hard cost. The APTEL vide its judgment dated 13.9.2021 directed the Commission to decide the issue relating to IEDC in line with judgment of APTEL dated 2.12.2019 in Appeal Nos. 95 and Appeal No. 140 of 2018 and judgment dated 9.3.2021 in Appeal No. 63 of 2020.

32. In line with the APTEL's aforesaid judgement, it is noted that IEDC as per RCE-II submitted by the Petitioner is ₹9893.00 lakh, against which allowed IEDC is ₹431.72 lakh and ₹3790.66 lakh, for Asset-1 and Asset- 2 respectively. Accordingly, IEDC allowed in respect of the transmission assets is as follows:

(₹ in lakh)

Particulars	**IEDC allowed**
Asset-1	431.72
Asset-2	3790.66
Total	**4222.38**

Initial Spares

33. Regulation 13(d) of the 2014 Tariff Regulations provides for the norms for Initial Spares, which are as follows:

> ***"(d) Transmission system***
> *(i) Transmission line – 1.00%*
> *(ii) Transmission Sub-station (Green Field) – 4.00%*
> *(iii) Transmission Sub-station (Brown Field) – 6.00%*
> *(iv) Series Compensation devices and HVDC Station – 4.00%*
> *(v) Gas Insulated Sub-station (GIS) – 5.00%*
> *(vi) Communication system – 3.5%*
> *………………………………………………………"*

34. The Petitioner has claimed Initial Spares in respect of the transmission assets as follows:

(₹ in lakh)

Assets	Particulars	Estimated Completion Cost (A)	Initial Spares Claimed (B)	Ceiling Limit (in %) (C)	Initial Spares Worked Out D = [(A-B) *C/(100-C)]	Excess Initial Spares
Asset-1	Sub-station	2072.73	82.45	4.0	82.93	-
	Transmission Line	14175.44	140.22	1.0	141.77	-
Asset-2	Sub-station	1061.55	59.00	6.0	63.99	-
	Transmission Line	34602.00	340.00	1.0	346.08	-

35. We have considered the submission of the Petitioner. Initial Spares claimed by the Petitioner in respect of Sub-station and transmission line in the case of Asset-1 and Asset-2 is within the norms under Regulation 13(d) of the 2014 Tariff Regulations. Accordingly, the details of the Initial Spares allowed in respect of the transmission assets for 2014-19 tariff period are as follows:

Sub-station

(₹ in lakh)

Particulars	Plant and Machinery cost considered as on cut- off date	Initial Spares claimed	Norms as per 2014 Tariff Regulations (in %)	Initial Spares allowable as per 2014 Tariff Regulations	Initial Spares allowed	Discharge of Initial Spares
						As on COD
Asset – 1	2072.73	82.45	4.00	82.93	82.45	82.45
Asset – 2	1061.55	59.00	6.00	63.99	59.00	59.00

Transmission Line

(₹ in lakh)

Particulars	Plant & Machinery cost considered as on cut- off date	Initial Spares claimed	Norms as per 2014 Tariff Regulations (in %)	Initial Spares allowable as per 2014 Tariff Regulations	Initial Spares allowed	Discharge of Initial Spares
						As on COD
Asset-1	14175.44	140.22	1.00	141.77	140.22	140.22
Asset-2	34602.00	340.00	1.00	346.08	340.00	340.00

Capital Cost allowed as on COD

36. Accordingly, capital cost allowed as on COD is as follows:

(₹ in lakh)

Particulars	Capital Cost as on COD as per Auditor's Certificate	Less: IDC as on COD due to		Less: Disallowed IEDC	Less: Excess Initial Spares disallowed	Capital Cost as on COD *(on cash basis)*
		IDC Disallowed	Un-discharged IDC			
Asset-1	21689.28	1725.33	0.00	303.46	0.00	19660.48
Asset-2	71106.67	29.90	607.71	0.00	0.00	70469.05

Additional Capital Expenditure ("ACE")

37. The Commission vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No. 367/TT/2018 allowed ACE in respect of the transmission assets for 2014-19 tariff period and the same is as follows:

(₹ in lakh)

Assets	2016-17	2017-18	2018-19
Asset – 1	604.61	815.44	20.00
Asset – 2	0.00	0.00	3358.03

38. The Petitioner has claimed the following ACE in support of the transmission assets and has submitted Auditor's Certificate dated 30.7.2019 in support of the same:

(₹ in lakh)

Assets	2016-17	2017-18	2018-19
Asset-1	148.61	835.93	0.00
Asset-2	0.00	0.00	851.73

39. The Petitioner has submitted that ACE for 2014-19 tariff period in respect of the transmission assets has been claimed under Regulations 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations and the same is within the cut-off date.

40. We have considered the submissions of Petitioner. The un-discharged IDC as on COD has been allowed as ACE during the year of discharge. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations which pertain to balance and retention payment due to un-discharged liabilities for works executed before the cut-off date/work deferred for execution. Accordingly, ACE allowed for 2014-19 tariff period is as follows:

(₹ in lakh)

Assets	Particulars	ACE Allowed		
		2016-17	2017-18	2018-19
Asset – 1	Balance & Retention Payment for liabilities	148.61	763.05	-
	Work deferred for execution	-	72.88	-
	IDC Discharged after COD	-	-	-
Asset – 2	Balance & Retention Payment for liabilities	-	-	-
	Work deferred for execution	-	-	851.73
	IDC Discharged after COD	-	-	250.13

41. The capital cost allowed as on 31.3.2019 after inclusion of ACE in respect of the transmission assets is as follows:

(₹ in lakh)

Assets	Particulars	Capital cost as on COD on cash basis	2016-17	2017-18	2018-19	Total Capital cost including ACE as on 31.3.2019
Asset – 1	Allowed vide order dated 21.11.2017 in Petition No.71/TT/2017	19969.55	604.61	815.44	20.00	21409.60
	Claimed by the Petitioner in the instant petition	21689.28	148.61	835.93	0.00	22673.82
	Allowed after truing up in this order	19660.48	148.61	835.93	0.00	20645.02
Asset – 2	Allowedvide order dated 1.11.2019 in Petition No. 367/TT/2018	69700.43	0.00	0.00	3358.03	73058.46
	Claimed by the Petitioner in the instant petition	71106.67	0.00	0.00	851.73	71958.40
	Allowed after truing up in this order	70469.05	0.00	0.00	1101.85	71570.90

Debt-Equity Ratio

42. The Petitioner has claimed debt-equity ratio of 70:30 as on COD and for ACE. Debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of debt-equity ratio in respect of the transmission assets as on COD and 31.3.2019 are as follows:

Asset – 1	**Amount as on COD (₹ in lakh)**	**(in %)**	**Amount as on 31.3.2019 (₹ in lakh)**	**(in %)**
Debt	13762.35	70.00	14451.53	70.00
Equity	5898.13	30.00	6193.49	30.00
Total	**19660.48**	**100.00**	**20645.02**	**100.00**
Asset – 2	**Amount as on COD (₹ in lakh)**	**(in %)**	**Amount as on 31.3.2019 (₹ in lakh)**	**(in %)**
Debt	49328.34	70.00	50099.64	70.00
Equity	21140.72	30.00	21471.26	30.00
Total	**70469.05**	**100.00**	**71570.90**	**100.00**

Depreciation

43. Depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during 2014-19 tariff period. The Gross Block during 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD) and working of WAROD is given at Annexure-I and Annexure-II. WAROD has been worked out after taking into account the depreciation rates of asset as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2014-19 tariff period is 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 151 days)
	Depreciation				
A	Opening Gross Block	19660.48	19809.09	20645.02	70469.05
B	ACE	148.61	835.93	0.00	1101.85
C	Closing Gross Block (A+B)	19809.09	20645.02	20645.02	71570.90
D	Average Gross Block [(A+C)/2]	19734.79	20227.06	20645.02	71019.98
E	Average Gross Block (90% depreciable assets)	19372.69	19822.15	20197.31	70997.97
F	Average Gross Block (100% depreciable assets)	64.40	68.36	72.31	22.01
G	Depreciable value (excluding IT equipment and software) [(E)*90%]	17435.42	17839.94	18177.58	63898.17
H	Depreciable value of IT equipment and software	57.96	61.52	65.08	19.81
I	Total Depreciable Value (G+H)	17493.38	17901.46	18242.66	63917.98
J	Weighted Average Rate of Depreciation (WAROD) (in %)	4.98	4.97	4.97	5.27
K	Lapsed useful life at the beginning of the year (Year)	0	0	1	0
L	Balance useful life at the beginning of the year (Year)	32	32	31	35
M	**Depreciation during the year** (D*J)	**431.16**	**1006.27**	**1025.04**	**1549.65**
N	Aggregate Cumulative Depreciation at the end of the year	431.16	1437.43	2462.46	1549.65
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	17062.22	16464.03	15780.20	62368.33

44. The details of depreciation allowed in respect of the transmission assets vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No. 367/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order 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 151 days)
Allowed vide order dated 21.11.2017 in Petition No. 71/TT/2017 and dated 1.11.2019 in Petition No. 367/TT/2018	442.99	1041.49	1057.66	1557.38
Claimed by the Petitioner in the instant petition	475.02	1114.26	1135.37	1551.18
Approved after true-up in this order	431.16	1006.27	1025.04	1549.65

<u>Interest on Loan ("IoL")</u>

45. The Petitioner has claimed Weighted Average Rate of IoL based on its actual loan portfolio and rate of interest. Accordingly, IoL is calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of trued up IoL allowed in respect of 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 151 days)
A	Gross Normative Loan	13762.35	13866.38	14451.53	49328.34
B	Cumulative Repayments up to Previous Year	0.00	431.16	1437.43	0.00
C	Net Loan-Opening (A-B)	13762.35	13435.22	13014.10	49328.34
D	Addition due to ACE	104.03	585.15	0.00	771.30
E	Repayment during the year	431.16	1006.27	1025.04	1549.65
F	Net Loan-Closing (C+D-E)	13435.22	13014.10	11989.07	48549.99
G	Average Loan [(A+F)/2]	13598.79	13224.66	12501.59	48939.16

H	Weighted Average Rate of Interest on Loan (in %)	6.341	6.333	6.367	7.191
I	**Interest on Loan** (GxH)	**377.98**	**837.58**	**795.91**	**1455.96**

46. The details of IoL approved vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No. 367/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order 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 151 days)**
Allowed vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No.367/TT/2018	390.36	879.22	827.08	1453.08
Claimed by the Petitioner in the instant petition	413.21	919.60	873.15	1456.54
Approved after true-up in this order	377.98	837.58	795.91	1455.96

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

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

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

48. The Commission vide 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 as follows:

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

49. MAT rates as allowed vide order dated 27.4.2020 in Petition No. 274/TT/2019 for the purpose of grossing up of the rate of RoE for truing up of the tariff of 2014-19 period in terms of the provisions of the 2014 Tariff Regulations are considered in the instant case which are as follows:

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

50. Accordingly, RoE allowed in respect of the transmission assets is 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 151 days)
A	Opening Equity	5898.13	5942.72	6193.49	21140.72
B	Additions	44.58	250.78	0.00	330.55
C	Closing Equity (A-B)	5942.72	6193.49	6193.49	21471.26
D	Average Equity (A+B)/2	5920.42	6068.11	6193.49	21305.99
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	21.342	21.342	21.549	21.549
G	Rate of Return on Equity	19.705	19.705	19.758	19.758
H	**Return on Equity** (DxG)	**511.39**	**1195.72**	**1223.71**	**1741.52**

51. The details of RoE allowed vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No. 367/TT/2018, as claimed by the Petitioner in the instant petition and trued up in the instant order 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 151 days)
Allowed vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No. 367/TT/2018	522.78	1234.36	1258.94	1737.31
Claimed by the Petitioner in the instant petition	559.13	1313.36	1343.96	1742.24
Approved after true-up in this order	511.39	1195.72	1223.71	1741.52

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

52. The details of O&M Expenses claimed by the Petitioner in respect of the transmission assets and allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of tariff are as follows:

(₹ in lakh)

Asset – 1				
Transmission lines				
Sl. No.	Name of Line	Single Circuit / Double Circuit	Number of Sub- Conductors	Line Length in km
1	Salem 400 kV D/C Quad Line along with New 765/400 kV Pooling Station at Salem (Dharmapuri)	Double Circuit	4	59.043
Sl. No.	400 kV Sub-station bay			
1	Salem: Salem 400 kV D/C Quad Line along with New 765/400 kV Pooling Station at Salem (Dharmapuri)			
2	Dharmapuri: Bays at Salem New for Salem-Salem 400 kV D/C T/L			
O&M Expenses				

	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station-					
400 kV					
Number of bays	-	-	4	4	4
Transmission lines					
D/C with 4 or more conductor	-	-	1.13	1.17	1.21
Total O&M Expense (₹ in lakh)	**-**	**-**	**142.19**	**335.18**	**346.28**

(₹ in lakh)

Asset – 2				
Transmission lines				
Sl. No.	**Name of Line**	**Single Circuit / Double Circuit**	**Number of Sub- Conductors**	**Line Length in km**
1	Salem PS-Madhugiri PS 765 kV S/C Line (Initially Charged at 400 kV) along with associated Bays - EQU	Single Circuit	4	245.650

Sl. No.	**400 kV Sub-station bay**				
1	Dharmapuri: Salem PS-Madhugiri PS 765 kV S/C Line (Initially Charged at 400 kV) along with associated				
2	Madhugiri Tumkur: Salem PS- Madhugiri PS 765 kV S/C Line (Initially Charged at 400 kV)				
O&M Expenses					
	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Sub-station					
400 kV					
Number of bays	-	-	-	-	2
Transmission lines					
S/C with 4 or more conductor	-	-	-	-	0.69
Total O&M Expense (₹ in lakh)	**-**	**-**	**-**	**-**	**127.07**

53. Regulation 29(4) of the 2014 Tariff Regulations specifies norms for O&M Expenses for the transmission system. The norms specified in respect of the elements covered in the transmission assets are as follows:

Asset – 1						
Element	**Norms**	**Norms for 2014-15**	**Norms for 2015-16**	**Norms for 2016-17**	**Norms for 2017-18**	**Norms for 2018-19**
400 kV Sub-station	₹ lakh/bay	60.30	62.30	64.37	66.51	68.71

Asset – 1						
Element	**Norms**	**Norms for 2014-15**	**Norms for 2015-16**	**Norms for 2016-17**	**Norms for 2017-18**	**Norms for 2018-19**
D/C with 4 or more conductor	₹ lakh/km	1.06	1.10	1.13	1.17	1.21

Asset – 2						
Element	**Norms**	**Norms for 2014-15**	**Norms for 2015-16**	**Norms for 2016-17**	**Norms for 2017-18**	**Norms for 2018-19**
400 kV Sub-station	₹ lakh/bay	60.30	62.30	64.37	66.51	68.71
S/C with 4 or more conductor	₹ lakh/km	0.61	0.63	0.65	0.67	0.69

54. We have considered the submissions of the Petitioner. O&M Expenses approved under Regulation 29(4) of the 2014 Tariff Regulations are as follows:

(₹ in lakh)

Asset – 1	2016-17 (Pro-rata for 160 days)	2017-18	2018-19
4 Number of 400 kV Sub-station bays	257.48	266.04	274.84
59.043 km D/C 4 or more conductor transmission line	66.90	69.14	71.44
Total	**142.19**	**335.18**	**346.28**

(₹ in lakh)

Asset – 2	2018-19 (Pro-rata for 151 days)
2 Numbers of 400 kV Sub-station bays	137.42
245.65 km S/C 4 or more conductor transmission line	169.74
Total	**127.07**

55. The details of O&M Expenses approved vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide dated 1.11.2019 in Petition No. 367/TT/2018, claimed by the Petitioner in the instant petition and trued up O&M Expenses allowed in respect of the transmission assets in the instant order 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 151 days)
Allowed vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No. 367/TT/2018	142.19	335.18	346.28	126.23
Claimed by the Petitioner in the instant petition	142.18	335.18	346.28	127.08
Approved after true-up in this order	142.19	335.18	346.28	127.07

Interest on Working Capital ("IWC")

56. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations.

57. The trued up IWC allowed in respect of the transmission assets is 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 151 days)
A	Working Capital for O&M Expenses (one month of O&M Expenses)	27.03	27.93	28.86	25.60
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M Expenses)	48.66	50.28	51.94	46.07
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	569.91	576.42	579.24	2005.92
D	**Total Working Capital (A+B+C)**	645.60	654.63	660.04	2077.59
E	Rate of Interest (in %)	12.80	12.80	12.80	12.20
F	**Interest on Working Capital (DxE)**	**36.22**	**83.79**	**84.48**	**104.86**

58. The details of IWC approved vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No. 367/TT/2018, claimed by the Petitioner in the instant petition and trued up IWC allowed in respect of the transmission assets in the instant order is 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 151 days)**
Allowed vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No. 367/TT/2018	37.00	86.31	86.64	104.83
Claimed by the Petitioner in the instant petition	38.99	90.50	91.19	104.92
Approved after true-up in this order	36.22	83.79	84.48	104.86

<u>Approved Annual Fixed Charges for 2014-19 Tariff Period</u>

59. The trued up Annual Fixed Charges (AFC) allowed in respect of the transmission assets for 2014-19 tariff period 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 151 days)**
Depreciation	431.16	1006.27	1025.04	1549.65
Interest on Loan	377.98	837.58	795.91	1455.96
Return on Equity	511.39	1195.72	1223.71	1741.52
O&M Expenses	142.19	335.18	346.28	127.07
Interest on Working Capital	36.22	83.79	84.48	104.86
Total	**1498.94**	**3458.54**	**3475.43**	**4979.07**

60. Accordingly, AFC allowed vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No. 367/TT/2018, trued up AFC claimed by the Petitioner in the instant petition and trued up AFC approved in the instant order 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 151 days)
Allowed vide order dated 21.11.2017 in Petition No. 71/TT/2017 and vide order dated 1.11.2019 in Petition No. 367/TT/2018	1535.32	3576.56	3576.60	4978.83
Claimed by the Petitioner in the instant petition	1628.53	3772.90	3789.95	4981.96
Approved after true-up in this order	1498.94	3458.54	3475.43	4979.07

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

61. The Petitioner has combined Asset-1 and Asset-2 into one Combined Asset as provided under proviso (i) of Regulation 8(1) of 2019 Tariff Regulations and has claimed the tariff accordingly. The details of transmission charges claimed by the Petitioner in respect of the Combined Asset for 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	5000.89	5087.93	5087.93	5087.93	5084.11
Interest on Loan	4238.80	3958.57	3585.10	3415.87	3289.39
Return on Equity	5405.07	5498.33	5498.33	5498.33	5498.33
Interest on Working Capital	240.24	240.05	235.15	233.35	231.56
O&M Expenses	459.01	474.89	491.62	508.72	526.60
Total	**15344.01**	**15259.77**	**14898.13**	**14744.20**	**14629.99**

62. The Petitioner has claimed the following IWC in respect of the Combined Asset for 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	38.25	39.57	40.97	42.39	43.88

Working Capital for Maintenance Spares (15% of O&M Expenses)	68.85	71.23	73.74	76.31	78.99
Working Capital for Receivables (Equivalent to two months of annual fixed cost /annual transmission charges)	1886.56	1881.34	1836.76	1817.78	1798.77
Total Working Capital	1993.66	1992.14	1951.47	1936.48	1921.64
Rate of Interest on working capital (in %)	12.05	12.05	12.05	12.05	12.05
Interest on working Capital	**240.24**	**240.05**	**235.15**	**233.35**	**231.56**

Effective Date of Commercial Operation ("E-COD")

63. The Petitioner has claimed E-COD of the Combined Asset as 7.5.2018. Based on the trued-up admitted capital cost and actual COD of all the transmission assets, E-COD has been worked out as follows:

Computation of E-COD					
Particulars	**Actual COD**	**Admitted Capital Cost as on 31.3.2019 (₹ in lakh)**	**Weight of the cost (in %)**	**Number of Days from last COD**	**Weighted Days**
Asset – 1	23.10.2016	20645.02	22.39	739	165.45
Asset – 2	1.11.2018	71570.90	77.61	0	0
Total		**91603.60**	**100.00**		**165.45**
E-COD (Latest COD – Total weighted Days) 19.5.2018					

64. E-COD is used to determine the lapsed life of the project as a whole, which works out as zero (0) 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")

65. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of WAL. 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 WAL has been used as the useful life of the project as a whole.

66. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 34 years as follows:

Admitted Capital Cost as on 31.3.2019				
Particulars	**Combined Asset Cost (in lakh) (1)**	**Life in Years (2)**	**Weighted Cost (3)=(1) x (2)**	**Weighted Average Life of Asset (in years) (4)=[(3)/(1)]**
Building	2600.61	25.00	65015.28	
Transmission Line	85862.89	35.00	3005201.09	
Sub-Station Equipment	3164.66	25.00	79116.58	
PLCC	118.00	15.00	1770.03	
IT Equipment and Software	94.36	6.67	629.09	
Total	**91840.53**		**3151732.07**	**34.32 years (rounded off to 34 years)**

67. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e., for 2019-24 tariff period and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed, E-COD of the assets is 19.5.2018 and the lapsed life of the project as a whole, works out as zero (0) year as on 1.4.2019 (i.e., the number of completed years as on 1.4.2019 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 34 years.

<u>Capital Cost</u>

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

*"**19 Capital Cost:** (1) The Capital cost of the generating station or the transmission system,*

as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.

(1) 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) Capitalized 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 Asset-before the date of commercial operation;

(i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;

(k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;

(l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;

(m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;

(n) Expenditure on account of change in law and force majeure events; and

(o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

(2) 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."

(3) 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.

(4) The following shall be excluded from the capital cost of the existing and new projects:
(a) The Asset-forming part of the project, but not in use, as declared in the tariff petition;
(b) De-capitalized Asset-after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

Provided that in case replacement of transmission Asset-is recommended by Regional Power Committee, such Asset-shall be de-capitalized 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 asset.

(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."

69. The Petitioner has claimed capital cost as on 31.3.2019 of ₹94632.22 lakh in respect of the Combined Asset. The capital cost worked out by the Commission as on 31.3.2019 is ₹92215.93 lakh and the same has been considered as the opening capital cost as on 1.4.2019 for determination of tariff for 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (“ACE”)

70. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as follows:

*“**24. Additional Capitalization 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

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission."

71. The Petitioner has projected ACE for 2019-20 period on account of balance and retention payments due to undischarged liability projected for works executed within the cut-off date and unexecuted works within cuff-off date. The details of projected ACE in respect of the Combined Asset are as follows:

(₹ in lakh)

Particulars	**2019-20**
ACE	2949.34

72. We have considered the submissions of the Petitioner. ACE claimed on account of balance and retention payments and deferred works is allowed under Regulation 24(1)(a) and Regulation 24(1)(b) of the 2019 Tariff Regulations subject to truing-up. ACE allowed in respect of the Combined Asset is as follows:

(₹ in lakh)

Particulars	**ACE**
	2019-20
Discharge of IDC	357.58
Deferred Work	2949.34

Capital Cost for 2019-24 Tariff Period

73. Capital cost of the Combined Asset considered for 2019-24 tariff period is as follows:

(₹ in lakh)

Capital Cost as on 1.4.2019	Admitted ACE 2019-20	Capital Cost as on 31.3.2024
92215.93	3306.92	95522.85

Debt-Equity Ratio

74. Regulation 18 of the 2019 Tariff Regulations provides as follows:

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

Provided that:

i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:

ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

Explanation.-*The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilized 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 modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation."

75. The details of debt-equity ratio considered for the purpose of computation of tariff for 2019-24 period in respect of the Combined Asset are as follows:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	64551.17	70.00	66866.02	70.00
Equity	27664.76	30.00	28656.83	30.00
Total	**92215.93**	**100.00**	**95522.85**	**100.00**

Depreciation

76. Regulation 33 of the 2019 Tariff Regulations provides as follows:

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

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

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

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the Asset-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 asset"

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.

(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.

(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of—

a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or
b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or
c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life"

77. We have considered the submissions of the Petitioner. WAROD has been worked out and placed as Annexure-III after taking into account the depreciation rates as prescribed in the 2019 Tariff Regulations. Depreciation has been worked out considering ACE as on 31.3.2019 and accumulated depreciation up to 31.3.2019. Depreciation allowed in respect of the Combined Asset is as follows:

(₹ in lakh)

	Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
A	Opening Gross Block	92215.93	95522.85	95522.85	95522.85	95522.85
B	ACE	3306.92	0.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	95522.85	95522.85	95522.85	95522.85	95522.85
D	Average Gross Block [(A+C)/2]	93869.39	95522.85	95522.85	95522.85	95522.85
E	Average Gross Block (90% depreciable assets)	93399.57	95052.98	95052.98	95052.98	95052.98
F	Average Gross Block (100% depreciable assets)	94.42	94.47	94.47	94.47	94.47
G	Depreciable value (excluding IT equipment and software) (E*90%)	84059.61	85547.68	85547.68	85547.68	85547.68
H	Depreciable value of IT equipment and software	94.42	94.47	94.47	94.47	94.47

I	Total Depreciable Value (G+H)	84154.03	85642.15	85642.15	85642.15	85642.15
J	Weighted Average Rate of Depreciation (WAROD) (in %)	5.22	5.22	5.22	5.22	5.22
K	Lapsed useful life at the beginning of the year (Year)	0	1	2	3	4
L	Balance useful life at the beginning of the year (Year)	34	33	32	31	30
M	**Depreciation during the year** (D*J)	**4896.09**	**4983.04**	**4983.04**	**4983.04**	**4983.04**
N	Aggregate Cumulative Depreciation at the end of the year	8908.20	13891.24	18874.28	23857.32	28840.36
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	75245.83	71750.91	66767.87	61784.83	56801.79

Interest on Loan ("IoL")

78. Regulation 32 of the 2019 Tariff Regulations provides as follows:

*"**32. Interest on loan capital:** (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

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

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

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

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

(5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered.

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

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

79. The weighted average rate of interest of IoL has been considered on the basis of the rates prevailing as on 1.4.2019. The Petitioner has prayed that change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, floating rate of interest, if any, shall be considered at the time of truing-up. In view of above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the Combined Asset is as follows:

(₹ in lakh)

	Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
A	Gross Normative Loan	64551.17	66866.02	66866.02	66866.02	66866.02
B	Cumulative Repayments up to Previous Year	4012.11	8908.20	13891.24	18874.28	23857.32
C	Net Loan-Opening (A-B)	60539.06	57957.82	52974.78	47991.74	43008.70
D	Additions	2314.85	0.00	0.00	0.00	0.00
E	Repayment during the year	4896.09	4983.04	4983.04	4983.04	4983.04
F	Net Loan-Closing (C+D-E)	57957.82	52974.78	47991.74	43008.70	38025.66
G	Average Loan [(A+F)/2]	59248.44	55466.30	50483.26	45500.22	40517.18
H	Weighted Average Rate of Interest on Loan (in %)	7.021	7.008	6.975	7.376	7.979
I	**Interest on Loan (GxH)**	**4159.89**	**3887.06**	**3521.28**	**3356.09**	**3232.95**

Return on Equity ("RoE")

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

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

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

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

Provided further that:

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

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

iii. in case of a thermal generating station, with effect from 1.4.2020:
a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:
Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

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

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

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

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

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

Illustration-

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

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

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

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

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

81. The Petitioner has submitted that MAT rate is applicable to it. MAT rate applicable in the year 2019-20 has been considered for the purpose of RoE which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the Combined Asset is as follows:

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	27664.76	28656.83	28656.83	28656.83	28656.83
B	Additions	992.07	0.00	0.00	0.00	0.00
C	Closing Equity (A-B)	28656.83	28656.83	28656.83	28656.83	28656.83
D	Average Equity [(A+B)/2]	28160.79	28656.83	28656.83	28656.83	28656.83
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.470	17.470	17.470	17.470	17.470
G	Rate of Return on Equity (in %)	18.780	18.780	18.780	18.780	18.780
H	**Return on Equity (DxG)**	**5289.16**	**5382.33**	**5382.33**	**5382.33**	**5382.33**

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

82. O&M Expenses claimed by the Petitioner in respect of the Combined Asset are as follows:

(₹ in lakh)

Transmission lines				
Sl. No.	**Name of Line**	**Single Circuit / Double Circuit**	**No of Sub- Conductors**	**Line Length in km**
1	Salem 400 kV D/C Quad Line along with New 765/400 kV Pooling Station at Salem (Dharmapuri)	Double Circuit	4	59.043
2	Salem PS-Madhugiri PS 765 kV S/C Line (Initially Charged at 400 kV) along with associated Bays – (km)	Single Circuit	4	245.650

Sl. No.	Sub-station 400 kV
1	Salem: Salem 400 kV D/C Quad Line along with New 765/400 kV Pooling Station at Salem (Dharmapuri)
2	Dharmapuri: Bays at Salem New for Salem-Salem 400 kV D/C T/L
3	Dharmapuri: Salem PS-Madhugiri PS 765 kV S/C Line (Initially Charged at 400 kV)
4	Madhugiri Tumkur: Salem PS- Madhugiri PS 765 kV S/C Line (Initially Charged at 400 kV)

O&M Expenses					
	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Sub-station					
400 kV					
Number of bays	6	6	6	6	6
Transmission lines					
D/C 4 or more Conductor (km)	59.043	59.043	59.043	59.043	59.043
S/C 4 or more Conductor (km)	245.650	245.650	245.650	245.650	245.650
PLCC					
Original project cost (₹ in lakh)	129.38	129.38	129.38	129.38	129.38
Total O&M Expense (₹ in lakh)	**459.01**	**474.89**	**491.62**	**508.71**	**526.59**

83. Regulation 35(3)(a) of the 2019 Tariff Regulations provides the following norms for O&M Expenes for the 2019-24 tariff period:

*"**35 (3) Transmission system**: (a) The following normative operation and maintenance expenses shall be admissible for the combined 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-conductors)	*1.322*	*1.368*	*1.416*	*1.466*	*1.517*
Double Circuit (Twin & Triple Conductor)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*

Double Circuit (Single Conductor)	*0.377*	*0.391*	*0.404*	*0.419*	*0.433*
Multi Circuit (Bundled Conductor with four or more sub-conductor)	*2.319*	*2.401*	*2.485*	*2.572*	*2.662*
Multi Circuit (Twin & Triple Conductor)	*1.544*	*1.598*	*1.654*	*1.713*	*1.773*
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	*834*	*864*	*894*	*925*	*958*
Gazuwaka HVDC Back-to-Back station (₹ 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."*

84. We have considered the submissions 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.

85. We have considered the submissions of the Petitioner. O&M Expenses in respect of the Combined Asset have been worked out as per the norms specified in the 2019 Tariff Regulations and the same are as follows:

(₹ in lakh)

Details	2019-20	2020-21	2021-22	2022-23	2023-24
6 Numbers of 400 kV Sub-station bays	192.90	199.68	206.70	213.96	221.46
59.043 km D/C Twin/Triple Conductor transmission line	78.05	80.77	83.60	86.56	89.57
245.65 km S/C Twin/Triple Conductor transmission line	185.47	191.85	198.73	205.61	212.98
Total	**456.42**	**472.30**	**489.04**	**506.13**	**524.01**

Interest on Working Capital ("IWC")

86. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations provide as follows:

*"**34. Interest on Working Capital**: (1) The working capital shall cover:*

…..

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

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

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

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

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

*"**3. Definition** - In these regulations, unless the context otherwise requires:-*

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

87. The Petitioner has submitted that it has computed IWC for 2019-24 tariff period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Rate of Interest (RoI) on working capital considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas RoI for 2020-21 has been considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) and from 2021-22 onwards it has been considered as 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon in respect of the Combined Asset are as follows:

(₹ in lakh)

	Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
A	Working Capital for O&M Expenses (Equivalent to annualized O&M Expenses for one month)	38.04	39.36	40.75	42.18	43.67
B	Working Capital for Maintenance Spares (Equivalent to 15% of O&M Expenses)	68.46	70.85	73.36	75.92	78.60
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	1848.83	1842.46	1797.09	1778.64	1760.66
D	**Total Working Capital (A+B+C)**	1955.33	1952.66	1911.19	1896.74	1882.93
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
F	**Interest on Working Capital (DxE)**	**235.62**	**219.67**	**200.68**	**199.16**	**197.71**

<u>**Annual Fixed Charges for 2019-24 Tariff Period**</u>

88. The transmission charges allowed in respect of the Combined Asset for 2019- 24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	4896.09	4983.04	4983.04	4983.04	4983.04
Interest on Loan	4159.89	3887.06	3521.28	3356.09	3232.95
Return on Equity	5289.16	5382.33	5382.33	5382.33	5382.33
O&M Expenses	456.42	472.30	489.04	506.13	524.01
Interest on Working Capital	235.62	219.67	200.68	199.16	197.71
Total	**15037.18**	**14944.40**	**14576.36**	**14426.74**	**14320.03**

Filing Fee and Publication Expenses

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

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

License Fee and RLDC Fees and Charges

91. The Petitioner has prayed for grant of license fee and RLDC fee. The Petitioner shall be entitled for reimbursement of license fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 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 2019-24 tariff period.

Goods and Services Tax

92. 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.

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

Security Expenses

94. The Petitioner has submitted that security expenses in respect of 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.

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

Capital Spares

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

Sharing of Transmission Charges

97. TANGEDCO has made the following submissions:

a) The Commission accorded regulatory approval for the transmission assets vide order dated 31.5.2010 in Petition No.233 of 2009 and observed that CTU/ the Petitioner shall be responsible for timely execution of the project matching with the commissioning schedule of IPPs. In the said order, the Commission only gave regulatory approval and did not go through minute aspects of system planning, as the same is the function of CTU.

b) Regulation 27 of the Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of Transmission License and other related matters) Regulations, 2009 specifies that augmentation can only be undertaken after firming up the source of supply or destination, at least 3 years prior to the intended date of LTA.

c) In spite of the clear provisions in the Regulations and directions from the Commission, the Petitioner, failed to review the progress of the generation projects as well as firming up of the target region end beneficiaries. The Petitioner without coordinating with the IPPs, went ahead to implement the ISTS scheme including the instant transmission assets.

d) Minutes of JCC meetings show that the Petitioner was aware of delay in the project as early as on 12.2.2014. Thereafter, Ind-Bharat (Madras) Power Ltd. (IBMPL) abandoned its generation project while Coastal Energen Pvt Ltd (CEPL) commissioned only half of its total generation project whereas the assets in question were specifically for these two IPPs. IBPL has abandoned its generation project, BUT still LTA was granted to IBMPL.

e) The Petitioner did not raise bills on IPPs because the IPPs did not open payment security mechanism.

f) The Petitioner should have revisited the transmission scheme and approached the Commission for approval while considering time leverage, in the absence of target beneficiaries, drawl points in the ISTS and long term PPAs to be executed by generation projects.

g) The Petitioner has never deliberated/discussed the issues with the beneficiaries. The beneficiaries cannot be made to bear the brunt of a situation created by the Petitioner and IPPs.

h) The Petitioner has failed to explain as to who will bear the charges for the period from August, 2014 to 23.10.2016 and also has not explained if any charges have been collected from the IPPs.

i) Regulation 8(5) of the 2010 Sharing Regulations specifies that when approved injection/withdrawal in case of a DIC is not materializing, either partly or fully, the concerned DIC is obliged to pay the transmission charges. Further, as per Regulation 8(5) of the 2010 Sharing Regulations, if the generating station is delayed, the generator shall pay withdrawal charges corresponding to its LTA.

j) COD of the transmission asset (Asset-1) may be declared as August, 2014 and the Petitioner may be directed to bill the transmission charges bilaterally to the IPPs. The Petitioner should bring the transmission assets under computation of relinquishment charges and should refund the transmission charges recovered from the beneficiaries in respect of the stranded transmission assets.

98. In response, the Petitioner has made the following submissions:

a) The functions of transmission licensees include implementation of transmission corridors through cost-plus basis and competitive bidding processes. Other functions of the Petitioner as CTU include planning and coordination. The two functions of being a nodal agent and a transmission licensee are separate. Merely because the Petitioner is also a CTU, cannot be a reason to conclude that there has been deviation from procedures established by this Commission under the Electricity Act, 2003 or to say that there cannot be any mismatch between the works carried by the Petitioner just because it is also CTU.

b) The Commission has observed in numerous cases that mismatch between generation and transmission is not always avoidable after a certain point of time and generator/transmission licensee can go ahead for declaring COD where the delay of other party is beyond control. The function of transmission licensee attracts huge financial investments and cannot always be withheld/postponed indefinitely.

c) If the prayer of TANGEDCO is allowed, it shall have a trickle-down effect on the power sector, especially the transmission sector of the country. If the recovery of transmission systems is made in such manner as suggested by TANGEDCO, it shall stall-up the re-investments from transmission licensees due to delay in realization of already invested capital.

d) The entire transmission system has been implemented to facilitate power flow to various beneficiaries of Southern Region which has commenced with operationalization of 558 MW from Coastal Energen by TANGEDCO.

e) The assets covered in the instant petition is part of the High Capacity Power

Transmission Corridor-VII (Tuticorin corridor) (HCPTC-VII). The HCPTC-VII was planned for the LTOA applications received by CTU from the IPPs located in the Tuticorin area in Tamil Nadu.

f) In terms of the directions issued by the Commission, the progress of the generation project(s) associated with the subject transmission system was continuously and closed monitored by CTU during the quarterly meetings of Joint Coordination Committee (JCC). The minutes of JCC were uploaded on CTU website for information of all the stake holders and was also forwarded to the Commission.

g) In all the JCC meetings, both the generators have always stated that the generation project is being implemented and the same shall be available matching with the time frame of the transmission lines. CEPL commissioned one of its units by 13th SR JCC meeting held on 6.10.2016 and IBMPL intimated that units are delayed but the project is alive.

h) Accordingly, it was decided to implement the transmission system in phases and initially charge the entire 765 kV corridor at 400 kV level and depending on the progress of the generation project the corridor could be charged at its rated voltage of 765 kV level. It was only in the 14th SR JCC held in February, 2016, that IBMPL indicated about the abandonment of its second unit.

i) Considering the abovementioned abandonment of Unit 2, CTU advised IBMPL to regularize their LTA by reducing the quantum from the abandoned Unit 2. It is pertinent to note that the representative from IBMPL confirmed in the same meeting, in response to the suggestion made by CTU to regularize the LTA, that they are aware that as per the instant Sharing Regulations, IBMPL shall be liable to pay transmission charges upon completion of associated corridor. The same was also recorded in the minutes of 16th JCC held on 30.9.2016. However, IBMPL did not regularize or relinquish their LTA.

j) Subsequently, in accordance with the discussions in the 21st meeting of Southern Region constituents regarding LTA and Connectivity Applications in Southern Region held on 19.11.2016, letters for operationalization of LTAs of CEPL and IBMPL were issued on 1.12.2016.

k) However, LC was not opened by CEPL and IBMPL corresponding to their LTA quantum. In the absence of payment security mechanism not being established by the applicant, bills were not raised to CEPL and IBMPL. Subsequently, CEPL approached the Commission for relinquishment of 542 MW in Petition No. 246/MP/2016 wherein the Commission vide order dated 1.3.2018 observed as follows:

> *"10. In view of the relinquishment of the LTA by the Petitioner, there is no requirement for the Petitioner to open the LC and pay transmission charges for the relinquished capacity. However, the Petitioner is directed to keep the Bank Guarantee alive till the decision in Petition No. 92/MP/2015. It is clarified that all other aspects of relinquishment shall be dealt with in the final order".*

l) Accordingly, CEPL was being billed for 558 MW of LTA. However, on account of poor progress of generation project of IBMPL, its TSA was terminated on 9.11.2018 and LTA has also been revoked on 24.12.2018 as per the terms and conditions of BPTA/CERC Regulations as amended from time to time and directions of the Commission in various petitions.

m) Understanding given with regard to transmission charges was in line with the Sharing Regulations wherein the transmission charges for the capacity firmed up through long term PPA is paid by the beneficiary and the transmission charges for the balance untied capacity is paid by the generation project who have availed LTA on target region. Therefore, the Petitioner all along had been presenting the correct picture with regard to sharing of transmission charges.

n) Now in the changed scenario, IPPs resorted to relinquishment of LTAs in accordance with their right under the 2009 Connectivity Regulations, most likely to avoid liability towards payment of transmission charges.

o) The Commission vide its order dated 8.3.2019 in Petition No. 92/MP/2015 has prescribed a methodology for determination of the relinquishment charges which CTU has already carried out and the corresponding stranded capacity and relinquishment charges has been determined and placed on CTU website on 25.5.2019.

p) The power flow at Salem New (Dharmapuri) PS could be available only after commissioning of Nagapattinam PS-Salem New (Dharmapuri) 765 kV D/C line (Initially charged at 400 kV), hence commercial operation of Asset-1 could be declared only w.e.f. 23.10.2016 along with Nagapattinam–Dharmapuri 765 kV D/C line (executed by PNMTL under TBCB route). Petition for Nagapattinam PS–Dharmapuri 765 kV D/C line (executed by PNMTL under TBCB route) i.e., Petition No. 333/MP/2019 is presently sub-judice before the Commission.

q) Delay in commercial operation of Asset-1 despite being ready from August, 2014 was beyond the control of the Petitioner and the same is mainly attributable to unfortunate RoW issues encountered in completion of transmission lines in matching time frame under the subject project and SRSS-XIV. In view of uncertainty in completion of associated transmission lines in matching time frame under the transmission project and SRSS-XIV, as explained above, and also considering the fact that, CEA clearance for energization of new elements is to be obtained just before commissioning and also to be re-inspected if the system is not in charged condition for more than 6 months as per the Regulation 43 of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, Asset-1 was not offered for CEA inspection though it was ready for commissioning to avoid multiple inspection before capitalization.

99. TANGEDCO has further submitted that after coming into force of the 2020 Sharing Regulations, it has become inevitable to segregate the capital cost of the transmission assets and consequent yearly transmission charges into two parts i.e. up to the period (i.e. 31.10.2020) when the 2010 Sharing Regulations were in force and afterwards (i.e. since 1.11.2020) when the 2020 Sharing Regulations came into effect. TANGEDCO has further submitted that the Commission may issue suitable directions to allocate trued up yearly transmission charges (YTC) up to 31.10.2020 as per the 2010 Sharing Regulation and YTC from 1.11.2020 as per the 2020 Sharing Regulations.

100. In response, the Petitioner has submitted that after truing up and determination of transmission tariff, sharing of transmission charges for 2014-19 tariff period and 2019-24

tariff period up to 31.10.2020 shall be done as per the 2010 Sharing Regulations and thereafter from 1.11.2020 onwards, it shall be done as per the 2020 Sharing Regulations. The Petitioner has further submitted that tariff determination and sharing of transmission charges are two independent activities and the same cannot be interlinked. After determination of tariff of the transmission assets, the aspect of bifurcation of YTC as submitted by TANGEDCO shall be taken care of by CTU at the time of billing.

101. We have considered the submissions of the Petitioner and TANGEDCO. The Commission vide order dated 21.11.2017 in Petition No. 71/TT/2017 held as follows:

> *"71. We have considered the submissions of TANGEDCO and the petitioner. Neither TANGEDCO nor the petitioner has denied the quantum of 558 MW LTA being operated against the total LTA capacity of 2000 MW. The transmission line (765 kV) has been charged at 400 kV level which is sufficient to carry power for CEPL and utilization of transmission capacity. We have perused the SLD (at Annexure-II). It is observed that the instant asset is put to use since Salem Pooling Station is connected to existing Salem (400 kV) Sub-station and to Nagapatinam Sub-station. The instant assets form part of the meshed network. Therefore, the transmission charges associated with the instant assets shall be recovered through PoC mechanism. The issue raised by TANGEDCO is that it will have to bear entire transmission charges because only it has PPA for 558 MW. Post notification of 2010 Sharing Regulations, 2010, no asset is bilaterally billed once it is put under PoC pool and it is being borne by the beneficiaries/DICs who are using the asset. Hence, concerns of TANGEDCO are addressed."*

102. The Commission vide order dated 1.11.2019 in Petition No. 367/TT/2018 held as follows:

> *"72. We have considered the submissions of TANGEDCO and the petitioner. Neither TANGEDCO nor the Petitioner has denied the quantum of 558 MW LTA being operated against the total LTA capacity of 2000 MW. The transmission line (765 kV) has been charged at 400 kV level which is sufficient to carry power for CEPL and utilization of transmission capacity. It is observed from the Single Line Diagram (SLD), that the instant asset is put to use, since, Salem Pooling Station is connected to existing Salem (400 kV) Sub-station and to Madhugiri Sub-station. The instant asset forms part of the meshed network. Therefore, the transmission charges associated with the instant assets shall be recovered through POC mechanism. The issue raised by TANGEDCO is that it will have to bear entire transmission charges because only it has PPA for 558 MW. Post notification of 2010 Sharing Regulations, 2010, no asset is bilaterally billed, once it is put under POC pool*

and it is being borne by the beneficiaries/ DICs who are using the asset. Hence, concerns of TANGEDCO are addressed."

103. TANGEDCO has contended that transmission charges of the transmission asset from its COD to the date of relinquishment of LTA should be borne by CEPL and IBMPL. However, the Commission has already held in order dated 21.11.2017 in Petition No. 71/TT/2017 that transmission asset forms part of the meshed network and therefore the transmission charges shall be recovered through PoC mechanism. Against the Commission's order dated 21.11.2017 in Petition No. 71/TT/2017, TANGEDCO has filed Appeal No. 329 of 2018 before the APTEL and the same is pending adjudication.

104. Accordingly, the transmission charges shall be recovered as per order dated 21.11.2017 in Petition No. 71/TT/2017 and order dated 1.11.2019 in Petition No 367/TT/2018 shall be subject to outcome of APTEL in Appeal No. 329 of 2018.

105. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. With effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of the DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of the transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the

2019 Tariff Regulations.

106. We agree with the submissions of the Petitioner that tariff determination and sharing of transmission charges are two independent activities and they are not interlinked. The tariff of the transmission assets is determined in accordance with the provisions of the relevant Tariff Regulations. After determination of tariff of the assets by the Commission, the sharing of YTC amongst DICs are worked out in terms of provisions of the relevant Sharing Regulations and bills are raised accordingly. Therefore, the issue raised by TANGEDCO for splitting the capital cost of the transmission assets and tariff components on the basis of the 2010 Sharing Regulations regime and the 2020 Sharing Regulations regime is irrelevant.

107. To summarize:

(a) The trued-up AFC allowed in respect of the transmission assets for 2014-19 tariff period 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 151 days)**
AFC	1498.94	3458.54	3475.43	4979.07

(b) AFC allowed in respect of the Combined Asset for 2019-24 tariff period in the instant order are as follows:

(₹ in lakh)

Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
AFC	15037.18	14944.40	14576.36	14426.74	14320.03

108. Annexure-I, Annexure-II and Annexure-III given hereinafter form part of the order.

109. This order disposes of Petition No. 318/TT/2020 in terms of the above discussions and findings.

sd/-	sd/-	sd/-	sd/-
(P. K. Singh) **Member**	**(Arun Goyal)** **Member**	**(I. S. Jha)** **Member**	**(P. K. Pujari)** **Chairperson**

Petition No.:	318/TT/2020
Period	2014-19 Tariff

Annexure – I

Asset-1

2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
Capital Expenditure as on COD		**2016-17**	**2017-18**			**2014-15 (₹ in lakh)**	**2015-16 (₹ in lakh)**	**2016-17 (₹ in lakh)**	**2017-18 (₹ in lakh)**	**2018-19 (₹ in lakh)**
Land	297.70	0.00	77.70	**375.40**	0.00	-	-	0.00	0.00	0.00
Building	2238.81	0.00	132.54	**2371.35**	3.34	-	-	74.78	76.99	79.20
Transmission Line	15208.29	4.73	376.96	**15589.98**	5.28	-	-	803.11	813.20	823.15
Substation	1781.53	143.88	233.95	**2159.36**	5.28	-	-	97.87	107.84	114.01
PLCC	69.74	0.00	6.87	**76.61**	6.33	-	-	4.43	4.63	4.85
IT Equipment & Software	64.40	0.00	7.91	**72.31**	5.28	-	-	3.40	3.61	3.82
TOTAL	**19660.48**	**148.61**	**835.93**	**20645.02**		**-**	**-**	**983.59**	**1006.27**	**1025.04**
				Average Gross Block (₹ in lakh)		**-**	**-**	19734.79	20227.06	20645.02
				Weighted Average Rate of Depreciation (in %)		**-**	**-**	4.98	4.97	4.97

Petition No.:	318/TT/2020
Period	2014-19 Tariff

Annexure – II

Asset – 2

2014-19	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
Capital Expenditure as on COD		2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Building	228.45	0.81	**229.26**	3.34	-	-	-	-	7.64
Transmission Line	69175.64	1097.27	**70272.90**	5.28	-	-	-	-	3681.45
Substation	1001.75	3.55	**1005.30**	5.28	-	-	-	-	52.99
PLCC	41.25	0.14	**41.39**	6.33	-	-	-	-	2.61
IT Equipment & Software	21.97	0.08	**22.05**	5.28	-	-	-	-	1.16
TOTAL	**70469.05**	**1101.85**	**71570.90**		-	-	-	-	**3745.85**
			Average Gross Block (₹ in lakh)		-	-	-	-	71019.98
			Weighted Average Rate of Depreciation (in %)		-	-	-	-	5.27

Petition No.:	318/TT/2020
Period	2019-24 Tariff

Annexure – III

Combined Asset

2019-24	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
Capital Expenditure as on 1.4.2019		2019-20			2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Land	375.40	0.00	**375.40**	0.00	0.00	0.00	0.00	0.00	0.00
Building	2600.61	39.09	**2639.70**	3.34	87.51	88.17	88.17	88.17	88.17
Transmission Line	85862.89	3058.66	**88921.55**	5.28	4614.31	4695.06	4695.06	4695.06	4695.06
Substation	3164.66	205.01	**3369.68**	5.28	172.51	177.92	177.92	177.92	177.92
PLCC	118.00	4.05	**122.05**	6.33	7.60	7.73	7.73	7.73	7.73
IT Equipment & Software	94.36	0.11	**94.47**	15.00	14.16	14.17	14.17	14.17	14.17
TOTAL	**92215.93**	**3306.92**	**95522.85**		**4896.09**	**4983.04**	**4983.04**	**4983.04**	**4983.04**
			Average Gross Block (₹ in lakh)		93869.39	95522.85	95522.85	95522.85	95522.85
			Weighted Average Rate of Depreciation (in %)		5.22	5.22	5.22	5.22	5.22