CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 93/TT/2020

Coram:

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

Date of Order: 31.10.2022

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 under "Transmission system associated with System Strengthening- XII" 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 560 009.
- 2. Transmission Corporation of Andhra Pradesh Limited, Vidyut Soudha, Hyderabad 500082.
- Kerala State Electricity Board, Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram – 695 004.
- Tamil Nadu Generation and Distribution Corporation Limited, (Formerly Tamil Nadu Electricity Board -TNEB), NPKRR Maaligai, 800, Anna Salai, Chennai – 600 002.
- 5. Electricity Department,



Government of Pondicherry, Pondicherry – 605 001.

- 6. Eastern Power Distribution Company of Andhra Pradesh Limited, P&TColony, Seethmmadhara, Vishakhapatnam, Andhra Pradesh.
- 7. Southern Power Distribution Company of Andhra Pradesh Limited, Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayana Gunta, Tirupati 517 501. Chittoor District, Andhra Pradesh.
- 8. Central Power Distribution Company of Andhra Pradesh Limited, Corporate Office, Mint Compound, Hyderabad 500 063, Telangana.
- Northern Power Distribution Company of Andhra Pradesh Limited, Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet, Warangal – 506 004, Telangana.
- Bangalore Electricity Supply Company Limited, Corporate Office, K.R.Circle, Bangalore – 560 001, Karanataka.
- 11. Gulbarga Electricity Supply Company Limited, Station Main Road, Gulburga, Karnataka.
- 12. Hubli Electricity Supply Company Limited, Navanagar, PB Road, Hubli, Karnataka.
- 13. MESCOM Corporate Office, Paradigm Plaza, AB Shetty Circle, Mangalore – 575 001, Karnataka.
- 14. Chamundeswari Electricity Supply Corporation Limited, 927, L J Avenue, Ground Floor, New Kantharaj Urs Road, Saraswatipuram, Mysore 570 009, Karnataka.
- Electricity Department,
 Government of Goa,
 Vidyuti Bhawan, Panaji, Goa 403 001.
- Transmission Corporation of Telangana Limited, Vidhyut Sudha, Khairatabad, Hyderabad, 500082.
- 17. Tamil Nadu Transmission Corporation, NPKRR Maaligai, 800, Anna Salai, Chennai 600 002.

...Respondents



For Petitioner : 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

Shri Shahbaaz Husain, Advocate, KPTCL Ms. Stephania Pinto, Advocate, KPTCL

Dr. R. Kathiravan, TANGEDCO Ms. R. Ramalakshmi, TANGEDCO Shri R. Srinivasan, TANGEDCO Shri B. Rajeswari, TANGEDCO Shri R. Kumutha, TANGEDCO

ORDER

The Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for truing up of transmission tariff for the period from 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 for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following assets under Transmission System associated with System Strengthening- XII in Southern Region (hereinafter referred to as the "transmission project").

Asset-1: LILO of 400 kV S/C Neelmangla-Hoody Transmission Line at new 400/220 kV GIS Sub-station at Yelahanka with 1X63 MVAR 420 kV Bus Reactor along with associated bays and equipment;

Asset 2: 2X500 MVA, 400/220 kV ICT's along with associated bays and 02 Numbers 220 kV bays at 400/220 kV Yelahanka Sub-station:

Asset 3: 04 Numbers 220 kV bays at 400/220 kV Yelahanka Sub-station (hereinafter referred to as the "transmission assets").

- 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 11.2 and 12.0 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 11.2 and 12.0 above for respective block.
 - 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
 - 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
 - 6) Allow the 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) The Investment Approval ("IA") in respect of the transmission project was accorded by Board of Directors of the Petitioner in its meeting, held on 25.2.2010 at an estimated cost of ₹23234 lakh including IDC of ₹1847 lakh based on 3rd Quarter, 2009 price level (communicated vide Memorandum No. C/CP/SR-XII dated 26.2.2010).
 - b) The administrative approval and expenditure sanction of Revised Cost Estimate (RCE) for the transmission project was accorded by the Board of Directors of Petitioner in its 349th meeting held on 1.2.2018 at revised cost estimate of ₹34077 lakh including IDC of ₹9816 lakh based on April, 2017 price level (communicated vide Memorandum No. C/CP/SRSS-XII/PA1718-11-OG-RC007 dated 21.2.2018).
 - c) The scope of the transmission project was discussed and agreed upon in 26th, 27th and 28th Standing Committee meetings (SCM) held on 13.6.2008, 3.3.2009 and 15.6.2009 respectively. The transmission project was also discussed and approved in the 9th and 10th SRPC meetings dated 6.3.2009 and 2.7.2009 respectively.
 - d) The scope of work covered under the transmission project is as follows:

Transmission Line

- (i) LILO of 400 kV S/C Neelmangla Hoody Line at Yelahanka 400/220 kV Yelahanka Sub-station: 8.27 km
- (ii) LILO of 400 kV S/C Somanhally Hoody Line at 400/220 kV Yelahanka Sub-station: 7.87 km

Sub-station

- a. Establishment of new 400/220 kV GIS Sub-station at Yelahanka with 2X500 MVA 400/220 kV transformers [400 kV portion as Gas Insulated Sub-Station (GIS) and 220 kV portion as Air Insulated Sub-Station (AIS)].
- e) The Petitioner has submitted that subsequent to IA, due to RoW constraints around Yelahanka Sub-station, it was decided in the 35th meeting of



Standing Committee on Power System Planning of Southern Region held on 4.1.2013 that the transmission project needs to be modified. The modified scope of works for the transmission project as per RCE is as follows:

Transmission Line

LILO of one circuit on multi circuit tower in Bengaluru area of Neelamangla-Hoody 400 kV D/C line at Yelahanka (including multi circuit portion to be shared with 400 kV D/C Madhugiri-Yelahanka line being implemented under SRSS XIII).

Sub-station

Establishment of new 400/220 kV GIS Sub-station at Yelahanka with 2X500 MVA transformers (400 kV portion as Gas Insulated Sub-Station (GIS) and 220 kV portion as Air Insulated Sub-Station (AIS)).

Reactive Compensation

1X63 MVAR Bus Reactor at 400/220 kV GIS Sub-station at Yelahanka.

2 numbers 400 kV GIS bays which became surplus at Yelahanka Substation due to scope change shall be utilized for 2X63 MV AR Bus Reactors at Yelahanka envisaged under SRSS XXIII which was agreed in 36th meeting of Standing Committee on Power System Planning of Southern Region held on 4.9.2013.

- f) The entire scope of work under the transmission project has been completed and is covered under the instant petition.
- g) As per IA dated 25.2.2010, the transmission assets were scheduled to be put into commercial operation within 28 months from the date of IA. Therefore, the scheduled date of commercial operation (SCOD) of the transmission assets was 25.6.2012.
- h) The details regarding nomenclature of the transmission assets, their SCOD, date of commercial operation (COD), and time over-run are as follows:

Nomenclature of the assets in order dated 8.11.2019 in Petition No. 361/TT/2018	Nomenclature of the assets in the instant petition	SCOD	COD*	Time over-run
Asset-1	Asset- 1	25.6.2012	1.4.2018	2106 days



Asset-2A	Asset- 2
Asset- 2B	Asset- 3

*The Commission vide order dated dated 8.11.2019 in Petition No. 361/TT/2018 has approved the COD of the transmission assets under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations.

- The Commission vide order dated 8.11.2019 in Petition No. 361/TT/2018 had condoned the entire time over-run of 2106 days in case of Assets-1, Asset-2 and Asset-3.
- j) The transmission tariff in respect of Asset-1, Asset-2 and Asset-3 were allowed by the Commission from their respective COD to 31.3.2019 vide order dated 8.11.2019 in Petition No. 361/TT/2018.
- k) The Annual Fixed Charges (AFC) allowed by the Commission in previous orders and the trued-up tariff claimed by the Petitioner in respect of the transmission assets for 2014-19 tariff period are as follows:

Assets	Particulars	2018-19			
Asset-1	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	3576.95			
ASSEL-1	Claimed by the Petitioner in the instant petition				
Asset-2	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	1512.15			
ASSEL-2	Claimed by the Petitioner in the instant petition	1592.72			
Asset-3	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	319.13			
Asset-3	Claimed by the Petitioner in the instant petition	335.24			

- 4. The Respondents are distribution licensees, power departments, power utilities 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 regarding filing of this application has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 (hereinafter referred to as "the Act"). No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Karnataka Power Transmission Corporation Limited (KPTCL),

Respondent No. 1, has filed its reply vide affidavit dated 29.7.2020 and additional objection dated 12.8.2022 and has raised the issue of bilateral billing of transmission charges. Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) i.e. Respondent No. 4 has filed its reply vide affidavit dated 2.3.2021 and has raised issues of disallowance of tariff for 1 x 63 MVAR Bus Reactor at Yelahanka due to non-approval by the 27th SCM, restriction of IEDC and Initial Spares and sharing of transmission charges. The Petitioner has filed rejoinders to the reply of KPTCL and TANGEDCO vide affidavits dated 8.8.2022 and 15.3.2021 respectively.

- 6. The hearing in this matter was held on 26.7.2022 through video conference and the order was reserved.
- 7. Having heard the representatives of the Petitioner, learned counsels of TANGEDCO and KPTCL 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 affidavit dated 24.12.2019 and affidavits dated 30.9.2020, 25.7.2022 and 12.8.2022, reply of TANGEDCO vide affidavit dated 2.3.2021, objections of KPTCL vide affidavit dated 29.7.2020 and additional objection of KPTCL dated 11.8.2022 and the Petitioner's rejoinders thereto vide affidavits dated 15.3.2021 and 8.8.2022 to the replies of TANGEDCO and KPTCL.
- 9. TANGEDCO has submitted that the Petitioner was directed to submit all the documents in support of approval by the SCM in respect of 1 x 63 MVAR Bus

Reactor at Yelahanka. TANGEDCO has further submitted that the establishment of 1X 63 MVAR 420 kV Bus Reactor was not approved in the 27th SCM meeting and the Petitioner instead of furnishing the approval of SCM for the transmission assets in question, has reproduced the same statement furnished in the I tariff Petition No. 361/TT/2018. Hence, TANGEDCO has requested to disallow the tariff for the said reactor.

- In response, the Petitioner has submitted that 1X63 MVAR Bus Reactor was agreed as a part of 400/220 kV Yelahanka Sub-station which was discussed in 27th SCM and was approved in the respective RPCs of the region. The Petitioner has submitted that the reactive compensation for controlling voltages is being planned and executed by the Petitioner as CTU and the same is approved in DPR, which is part of IA and the same is mentioned in Annexure II of minutes of 28th, 29th, 30th, 31st and 32nd SCM of SR dated 15.6.2009, 27.8.2009, 13.4.2010, 16.11.2010 and 8.6.2011 respectively.
- 11. We have considered the submissions of the Petitioner and TANGEDCO. On perusal of the documents submitted by the Petitioner, it is observed that the 1X63 MVAR bus reactor was considered and approved in the 26th, 27th and 28th SCM of SR held on 13.6.2008, 3.3.2009 and 15.6.2009 respectively and the scheme was also discussed and agreed in 9th and 10th SRPC meetings held on 6.3.2009 and 2.7.2009 respectively. It is further observed that the 1X63 MVAR bus Reactor at Yelahanka is mentioned in Annexure-II of the minutes of the 28th SCM. Accordingly, we allow the tariff for the 1X63 MVAR bus Reactor at Yelahanka.

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

The details of the transmission charges claimed by the Petitioner in respect of the transmission assets are as follows:

(₹ in lakh)

Particulars	Asset- 1	Asset- 2	Asset- 3
Particulars	2018-19	2018-19	2018-19
Depreciation	902.26	389.61	41.95
Interest on Loan	1297.02	416.38	43.23
Return on Equity	1286.44	435.66	45.37
Interest on working capital	81.50	41.21	12.29
O&M Expenses	183.78	309.86	192.40
Total	3751.00	1592.72	335.24

13. 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)

Dortionlare	Asset- 1	Asset- 2	Asset- 3
Particulars	2018-19	2018-19	2018-19
O&M expenses	15.32	25.82	16.03
Maintenance Spares	27.57	46.48	28.86
Receivables	625.17	265.45	55.88
Total	668.06	337.75	100.77
Rate of Interest (in %)	12.20	12.20	12.20
Interest on Working Capital	81.50	41.21	12.29

Date of Commercial operation ("COD")

14. The Commission vide order dated 8.11.2019 in Petition No. 361/TT/2018 approved the COD of the Assets as 1.4.2018 in accordance with proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations as the Petitioner was unable to put the transmission assets into regular service due to non-readiness of associated downstream transmission system under the scope of KPTCL.

Capital Cost

15. The Commission vide order dated 8.11.2019 in Petition No. 361/TT/2018 has approved the following capital with respect to Asset-1, Asset-2 and Asset-3 cost as on COD and Additional Capital Expenditure (ACE) up to 31.3.2019:

(₹ in lakh)

Assets	Capital Cost as on COD	ACE 2018-19	Total Capital Cost as on 31.3.2019
Asset – 1	20117.15	1116.45	21233.60
Asset – 2	6793.92	135.13	6929.05
Asset – 3	665.58	23.30	688.88

16. The Petitioner vide Auditor's Certificates dated 30.7.2019 and 13.8.2019 has submitted the capital cost as on COD and ACE up to 31.3.2019 in respect of the transmission assets and the same are as follows:

(₹ in lakh)

	Apportioned	Apportioned	Capital	ACE		
Assets	approved cost as per FR	approved cost as per RCE	Cost as on COD	2018-19	Capital Cost as on 31.3.2019	
Asset – 1	15074.16	24208.64	21518.55	811.40	22329.95	
Asset – 2	6029.90	7500.30	7191.56	386.37	7577.93	
Asset – 3	805.95	920.61	703.39	130.84	834.23	

Cost over-run

17. The FR cost in respect of the transmission assets covered in the instant petition is ₹21910.01 lakh and the capital cost claimed by the Petitioner as on 31.3.2019 is ₹30742.11 lakh. Accordingly, there is overall cost over-run of ₹8832.10 lakh with respect to FR cost. Further, the Petitioner has submitted the RCE of ₹32629.55 lakh and the capital cost claimed by the Petitioner in respect of the transmission assets is ₹30742.11 lakh which is within the RCE cost. The Commission vide order dated 8.11.2019 in Petition No. 361/TT/2018 has already approved the cost over-run.

Time over-run

18. As per the IA dated 25.2.2010, the SCOD of the transmission assets is 25.6.2012 against which the transmission assets achieved COD on 1.4.2018. Hence, there was a delay of 2106 days in execution of the transmission assets. The Commission vide order dated 8.11.2019 in Petition No. 361/TT/2018 has already condoned the entire time over-run of 2106 days.

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

- 19. The Commission vide order dated 8.11.2019 in Petition No. 361/TT/2018 has directed the Petitioner to submit the detailed IDC statement in respect of Asset-2 and Asset-3 at the time of truing up.
- 20. In compliance, the Petitioner has submitted the details of IDC Computation separately for Assets-2 and Asset-3.
- 21. The Petitioner has claimed IDC in respect of the transmission assets and has submitted the Auditor's Certificates in support of the same. The Petitioner has submitted the computation of IDC along with year-wise details of the IDC discharged.
- 22. The allowable IDC has been worked out considering the information submitted by the Petitioner in respect of the transmission assets separately 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 and accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.

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

(₹ in lakh) IDC IDC as IDC **IDC** disallowed IDC IDC per discharge Admisdue to Discharged **Undischarged Assets** Auditor's during sible as on COD as on COD computational Certificate 2018-19 difference В C=A-B D E=B-D Asset-1 6130.01 6130.01 0.00 5688.00 442.01 442.01 Asset-2 2048.67 2048.67 0.00 1979.14 69.53 69.53 Asset-3 200.37 200.37 0.00 193.57 6.80 6.80

24. The Commission vide order dated 8.11.2019 in Petition No. 361/TT/2018 has restricted the IEDC to 10.75% of the hard cost, subject to truing up. The relevant paragraph of the order dated 8.11.2019 in Petition No. 361/TT/2018 is as follows:

"40. The Petitioner has claimed IEDC for the instant assets and submitted Auditor / Management Certificate in support of the same. The claimed IEDC is beyond the percentage of hard cost of 10.75% as indicated in the FR abstract cost estimate and therefore, the same has been restricted to 10.75% of the hard cost, subject to true up. The details of claimed and allowed IEDC is as follows:

			(₹ in lakh)
Asset	IEDC claimed as per Auditor / Management Certificate	IEDC allowed as on COD	IEDC disallowed
Asset-1	2399.24	1468.85	930.39
Asset-2A	801.83	473.72	328.11
Asset-2B	78.43	47.42	31.01

25. The Commission had disallowed IEDC of ₹930.39 lakh for Asset-1, ₹328.11 lakh for Asset-2 and ₹31.01 lakh for Asset-3 vide order dated 8.11.2019 in Petition No. 361/TT/2018. The Petitioner has submitted that the total IEDC claimed for the transmission assets is within the estimated approved IEDC as per RCE and is within hard cost upto cut-off date. The details submitted by the Petitioner are as follows:

Acceto	Hard Cost (upto cut-	IEDC Claimed	IEDC as per	IEDC as per	IEDC as per Calculation	IEDC as per Calculation	(-ve e	rence xcess, vithin)
Assets	off date) (₹ in lakh)	(₹ in lakh)	FR (in %)	RČE (in %)	as per FR (₹ in lakh)	as per RCE (₹ in lakh)	w.r.t FR (₹ in lakh)	w.r.t RCE (₹ in lakh)
Asset-1	14657.51	2399.24	10.75	17.26	1575.68	2529.89	-823.56	130.65
Asset-2	4827.38	801.83	10.75	17.26	518.94	833.21	282.89	31.38
Asset-3	555.43	78.43	10.75	17.26	59.71	95.87	18.72	17.44
TOTAL	20040.32	3279.5			2154.33	3458.96	-521.95	179.46

- 26. The Petitioner has also submitted that during estimation for FR, 3% and 10.75% of equipment cost and Civil Works has been considered for contingency and IEDC respectively. The actual amount of IEDC, establishment and contingency has been considered at the time of claim of tariff. The Petitioner has further submitted that the project timeline was 28 months against which the transmission assets has been executed in 97 months due to various uncontrollable factors, which led to delay of 69 months in execution of the transmission assets, IEDC should be considered proportionately as against 10.75% as per FR considering the actual completion period of 97 months. The Petitioner has submitted that the actual IEDC claimed is ₹3458 lakh which comes out to 18% of the hard cost which is within the apportioned RCE cost and the same may be allowed.
- 27. The Petitioner has claimed an IEDC of ₹2399.24 lakh, ₹801.83 lakh and ₹78.43 lakh with respect to Asset-1, Asset-2 and Asset-3 respectively, and has submitted an Auditor's Certificates in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the transmission assets.
- 28. TANGEDCO has submitted that the Commission had restricted the Petitioner's IEDC claim to 10.75% of the FR cost. The Petitioner's claim of IEDC is

exorbitant and the Petitioner has failed to provide proper justification for the same. In absence of a detailed IEDC statement, IEDC may be restricted to 5% or 6% of the hard cost (FR) as approved by the Commission in various other petitions.

- 29. In response, the Petitioner has submitted that the claim was restricted subject to truing up. The total IEDC claimed for all the transmission assets is within the estimated approved IEDC as per RCE. The Petitioner has further reiterated the submissions made in the petition and has requested to approve the IEDC claimed considering the project as a whole as it was considered in RCE of the project.
- 30. In the instant Petition, the Petitioner has submitted Form-12A and Auditors Certificate in support of its claim. IEDC is to allowed in accordance with the judgment of the APTEL dated 2.12.2019 in Appeal No. 95 of 2018 and Appeal No. 140 of 2018. The relevant portion of the said judgment is as follows:
 - "7.16 In light of the above, we are of the considered opinion that Cenral Commission has not considered the IEDC for the reference assets correctly in line with provisions of its own regulations which cannot be sustained in the eyes of law. In catena of judgments of Hon'ble Supreme Court and this Tribunal, it has been held that the Regulations framed by the Commissions are binding for all stakeholders including the Commission itself. The Regulations framed under the Act, in no way, mandate the Central Commission to restrict the IEDC to 5% of the original estimated hard cost.
 - 7.17 Accordingly, we hold that IEDC should be computed only on actual basis after due prudence check based on the data submitted by the Appellant in accordance with the Tariff Regulations"
- 31. We have considered the submissions of the Petitioner and TANGEDCO and have examined Form-12A along with the Auditor's Certificate submitted by the Petitioner in support of its claim. In the instant case, the Commission in order dated 8.11.2019 in Petition No. 361/TT/2018 has restricted the IEDC to 10.75% of the hard cost, subject to truing up. However, as stated above, APTEL in its judgement dated 2.12.2019 in Appeal No. 95 of 2018 and Appeal No.140 of 2018 filed by the

Petitioner, held that IEDC should not be restricted to the % of the hard cost and it should be allowed on actual basis after prudence check of the IEDC data submitted by the Petitioner. The Petitioner in the instant petition has submitted the details of the actual IEDC and the entire time over-run of 2106 days has already been condoned by the Commission in order dated 8.11.2019 in Petition No. 361/TT/2018. Accordingly, taking into consideration the APTEL's judgement dated 2.12.2019, condonation of the time over-run and the details of actual IEDC submitted by the Petitioner, the IEDC claimed by the Petitioner is allowed.

Initial Spares

32. The Petitioner has claimed the following Initial Spares in respect of the transmission assets on overall project basis and has prayed to allow the same:

Assets	Particulars	Plant and Machinery Cost (₹ in lakh) (A)	Initial Spares claimed (₹ in lakh) (B)	Ceiling Limit (in %) (C)	Initial Spares Worked out D = [(A-B)*C /(100-C)] (₹ in lakh)
Asset 1	Sub-Station (GIS)	3383.77	169.20	5.0	169.20
Asset-2	Sub-Station (GIS)	4827.38	106.35	5.0	248.48
Total		8211.15	275.55		417.66
Asset-1	Transmission Line	2900.61	29.00	1.0	29.01
Total		2900.61	29.00	1.0	29.01

33. TANGEDCO has submitted that the Initial Spares claimed by the Petitioner for Asset-1 are in excess of 5%, hence, the same may be restricted to the norms. In response, the Petitioner has submitted that the initial spares claimed for substation (GIS) is ₹275.55 lakh for the project against which the Initial Spares worked out is ₹417.66 lakh. Initial Spares under Sub-station (GIS) head for Asset-1 is marginal and it is as per APTEL's judgment dated 14.9.2019 in Appeal No. 74 of 2017. Hence, Initial Spares may be considered on overall project cost.

- 34. We have considered the submissions of the Petitioner and TANGEDCO. As per the APTEL's judgment dated 14.9.2019 in Appeal No. 74 of 2017, Initial Spares are to be allowed as per the ceiling limits on overall project cost. APTEL vide judgement dated 14.9.2019 in Appeal No. 74 of 2017 held as follows:
 - "8.13......We do not agree with this methodology of restricting initial spares asset/element wise as adopted by the Central Commission. The Central Commission to have a prudence check on the initial spares, being restricted based on the individual asset wise cost initially, but subsequently ought to have allowed as per the ceiling limits on the overall project cost basis during the true-up."
- 35. We have considered the submissions of the Petitioner. As per the APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017, Initial Spares are to be allowed as a percentage of the project cost as a whole. In the present case, the transmission assets were put into commercial operation during 2014-19 tariff period and the 2014 Tariff Regulations are applicable for the transmission assets. The entire transmission project was completed during 2014-19 tariff period, the overall project cost of the transmission assets is arrived at only when all the transmission assets are combined while claiming the tariff for 2019-24 tariff period. However, in the instant case, Initial Spares claimed by the Petitioner is within ceiling limit of 5% under GIS Sub-station and 1% under transmission line. Therefore, Initial Spares are allowed on the basis of the cost of the individual assets in 2014-19 tariff period.
- 36. The details of the Initial Spares allowed for the transmission assets for the 2014- 19 tariff period are as follows:

Sub-stations:

Assets	Plant & Machinery cost considered as on cut- off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2014 Tariff Regulations (in %)	Initial Spares allowable as per 2014 Tariff Regulations (₹ in lakh)	Initial Spares allowed (₹ in lakh)
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Asset-1	3383.77	169.20	5	169.20	169.20
Asset-2	4827.38	106.35	5	248.48	106.35

Transmission Line:

Asset	Plant & Machinery cost considered as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2014 Tariff Regulations (in %)	Initial Spares allowable as per 2014 Tariff Regulations (₹ in lakh)	Initial Spares allowed (₹ in lakh)
Asset-1	2900.61	29.00	1	29.01	29.00

Capital Cost allowed as on COD

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

				(₹ in lakh)
	Capital Cost as on COD	COD due to Time over-run/ Un- computational discharged		Capital Cost as on COD
Assets	as per Auditor's Certificate			(on cash basis)
Asset-1	21518.55	0.00	442.01	21076.54
Asset-2	7191.56	0.00	69.53	7122.03
Asset-3	703.39	0.00	6.80	696.59

Additional Capital Expenditure ("ACE")

The Petitioner has claimed the following ACE for the transmission assets: 38.

	(₹ in lakh)
Assets	ACE
Assets	2018-19
Asset – 1	811.40
Asset – 2	386.37
Asset – 3	130.84

39. The Petitioner vide affidavit dated 30.9.2020 has submitted the liability flow statement wherein the Petitioner has submitted the ACE details and the same are as follows:

(₹ in lakh)

	Asset-1							
Headwise / Partywise	Particulars	Year of actual capitali- sation	Outstand ing liability as on COD	Discharge under Regulation 14(1)(i) of the 2014 Tariff Regulations 2018-19	Discharge under Regulation 14(1)(ii) of the 2014 Tariff Regulations 2018-19			
SNS Constructions	Sub-station	2018	7.19	7.19	60.76			
Jupiter Integrated Sensor System	Sub-station	2018	0.00	0.00	2.80			
KBR Infratech Limited	Sub-station	2018	57.26	57.26	222.20			
Pasala Veerraju	Sub-station	2018	0.00	0.00	2.60			
Scope T&M Pvt. Ltd.	Sub-station	2018	0.00	0.00	25.01			
Jyoti Structures Ltd.	Transmission Line	2018	0.00	0.00	60.91			
Compensation	Transmission Line	2018	0.00	0.00	4.55			
Klim Art Pvt. Ltd.	Sub-station	2018	0.00	0.00	4.98			
Power Engineering Associates	Sub-station	2018	0.00	0.00	46.23			
Land	Land	2018	0.00	0.00	245.23			
Siemens Ltd.	Sub-station & Building & Civil Work	2018	0.00	0.00	31.37			
BHEL	Sub-station	2018	186.89	0.00	40.30			
Total			251.34	64.45	746.95			

(₹ in lakh)

	Asset-2							
Headwise / Partywise	Particulars	Year of Actual Capitalis ation	Outstand ing Liability as on COD	Discharge under Regulation 14(1)(i) of the 2014 Tariff Regulations	Discharge under Regulation 14(1)(ii) of the 2014 Tariff Regulations			
				2018-19	2018-19			
Siemens Ltd	Sub-station	2018	0.00	0.00	386.37			
BHEL	Sub-station	2018	99.95	0.00	0.00			
Total			99.95	0.00	386.37			

(₹ in lakh)

	Asset-3						
Headwise / Partywise	Particulars Particulars Capitalis		Outstand ing Liability as on	Discharge under Regulation 14(1)(i) of the 2014 Tariff Regulations	Discharge under Regulation 14(1)(ii) of the 2014 Tariff Regulations		
			COD	2018-19	2018-19		
Siemens Ltd.	Sub-station	2018	8.78	8.78	122.06		
Total				8.78	122.06		

We have considered the submissions of the Petitioner. The undischarged 40. 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) (unexecuted works) and 14(1)(ii) (undischarged liabilities) of the 2014 Tariff Regulations. Accordingly, ACE allowed for 2014-19 period is as follows:

(₹ in lakh)

	Asset-1	Asset-2	Asset-3
	ACE	ACE	ACE
Particulars	allowed for 2018-19	allowed for 2018-19	allowed for 2018-19
Allowed under Regulation			
14(1)(i) of the 2014 Tariff	64.45	0.00	8.78
Regulations			
Allowed under Regulation			
14(1)(ii) of the 2014 Tariff	746.95	386.37	122.06
Regulations			
Discharge of IDC Liability	442.01	69.53	6.80
Total ACE allowed	1253.41	455.90	137.64

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

(₹ in lakh)

			(
	Capital cost	ACE	Total Capital
Assets	as on COD on cash	2018-19	cost including ACE as on
	basis		31.3.2019
Asset-1	21076.54	1253.41	22329.95
Asset-2	7122.03	455.90	7577.93
Asset-3	696.59	137.64	834.23

Debt-Equity Ratio

42. The Petitioner has claimed debt-equity ratio of 70:30 as on COD and for ACE post 31.3.2014. 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	14753.58	70.00	15630.98	70.00
Equity	6322.96	30.00	6698.97	30.00

Total	21076.54	100.00	22329.95	100.00
Asset –2	Amount as on COD (₹ in lakh)	(in %)	Amount as on 31.3.2019 (₹ in lakh)	(in %)
Debt	4985.42	70.00	5304.55	70.00
Equity	2136.61	30.00	2273.38	30.00
Total	7122.03	100.00	7577.93	100.00
Asset –3	Amount as on COD (₹ in lakh)	(in %)	Amount as on 31.3.2019 (₹ in lakh)	(in %)
Debt	487.61	70.00	583.98	70.00
Equity	208.98	30.00	250.25	30.00
Total	696.59	100.00	834.23	100.00

Depreciation

- 43. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed in order dated 8.11.2019 in Petition No. 361/TT/2018. The Petitioner has neither given any justification for claiming higher depreciation than that allowed earlier nor made any specific prayer for allowing higher depreciation in this petition. It is observed that in order dated 8.11.2019 in Petition No. 361/TT/2018, the depreciation for IT equipment was allowed @5.28%. The Petitioner now at the time of truing-up of the tariff of the 2014-19 period has segregated the IT equipment cost from the Sub-station cost and has considered depreciation rate for IT equipment @15% and the salvage value for IT equipment is NIL as per the 2014 Tariff Regulations. A similar issue had come up in some earlier petitions filed by the Petitioner. In this regard, the Commission in order dated 9.5.2020 in Petition No. 19/TT/2020 held as follows:
 - "31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012and 9.5.2013in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014-19 period

was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations (the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned apart of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the substation upto 31.3.2019while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations."

44. In line with the above decision in order dated 9.5.2020 in Petition No. 19/TT/2020, depreciation has been considered for IT equipment @5.28% as part of the sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. However, for the 2019-24 tariff period, the IT equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT equipment in accordance with Regulation 33 of the 2019 Tariff Regulations. The Gross Block during 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is at Annexure-I. WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2014-19 tariff period is as follows:

	Particulars	Asset- 1 2018-19	Asset- 2 2018-19	Asset- 3 2018-19
Α	Opening Gross Block	21076.54	7122.03	696.59



В	ACE	1253.41	455.90	137.64
С	Closing Gross Block (A+B)	22329.95	7577.93	834.23
D	Average Gross Block (A+C)/2	21703.24	7349.98	765.41
E	Weighted average rate of Depreciation (WAROD) (in %)	4.13	5.28	5.28
F	Lapsed useful life of the Asset-at the beginning of the year (Year)	0	0	0
G	Balance useful life of the Asset-at the beginning of the year	29	25	25
Н	Aggregated Depreciable Value (D*90%)	16657.79	6614.98	688.87
	Combined Depreciation during the year	895.46	388.08	40.41
J	Remaining Aggregated Depreciable Value	15762.33	6226.90	648.46

45. The details of depreciation allowed in order dated 8.11.2019 in Petition No. 361/TT/2018 for the transmission assets, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Assets	Particulars	2018-19
Appet 1	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	858.88
Asset-1	Claimed by the Petitioner in the instant petition	902.26
	Approved after true-up in this order	895.46
Appet 2	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	362.29
Asset-2	Claimed by the Petitioner in the instant petition	389.61
	Approved after true-up in this order	388.08
A = = = + 2	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	35.76
Asset-3	Claimed by the Petitioner in the instant petition	41.95
	Approved after true-up in this order	40.41

Interest on Loan ("IoL")

46. The Petitioner has claimed the weighted average rate of loL, based on its actual loan portfolio and rate of interest. Accordingly, loL is calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of IoL allowed are as follows:

Particulars		Asset- 1	Asset- 2	Asset- 3
	Faiticulais	2018- 19	2018- 19	2018- 19
Α	Gross Normative Loan	14753.58	4985.42	487.61



В	Cumulative Repayments upto Previous Year	0.00	0.00	0.00
С	Net Loan-Opening (A-B)	14753.58	4985.42	487.61
D	Addition due to ACE	877.40	319.13	96.37
Е	Repayment during the year	895.46	388.08	40.41
F	Net Loan-Closing (C+D-E)	14735.52	4916.47	543.57
G	Average Loan (C+F)/2	14744.55	4950.95	515.59
Η	Weighted Average Rate of Interest on Loan (in %)	8.80	8.41	8.40
I	Interest on Loan (G*H)	1297.31	416.45	43.29

47. The details of the IoL allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018 in respect of the transmission assets, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh) Assets **Particulars** 2018-19 Allowed vide order dated 8.11.2019 in Petition No. 1240.00 361/TT/2018 Asset-1 Claimed by the Petitioner in the instant petition 1297.02 Approved after true-up in this order 1297.31 Allowed vide order dated 8.11.2019 in Petition No. 396.77 361/TT/2018 Asset-2 Claimed by the Petitioner in the instant petition 416.38 Approved after true-up in this order 416.45 Allowed vide order dated 8.11,2019 in Petition No. 39.16 361/TT/2018 Asset-3

Claimed by the Petitioner in the instant petition

Approved after true-up in this order

Return on Equity ("RoE")

48. 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 they are liable to pay income tax at MAT rates and has claimed the following effective tax rates for the 2014-19 tariff period:

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

43.23

43.29

49. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates as follows:

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

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

Year	MAT Rate (in %)	Grossed-up RoE [(Base Rate)/(1-t)] (in %)
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

51. Accordingly, RoE allowed in respect of the transmission assets are as follows:

	Particulars	Asset- 1	Asset- 2	Asset- 3
	Particulars	2018-19	2018-19	2018-19
Α	Opening Equity	6322.96	2136.61	208.98
В	Addition due to Additional Capitalization	376.01	136.77	41.27
С	Closing Equity (A+B)	6698.97	2273.38	250.25
D	Average Equity (A+C)/2	6510.96	2204.99	229.61
Е	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
F	Tax Rate applicable (in %)	21.549	21.549	21.549
G	Rate of Return on Equity (Pre-tax)	19.758	19.758	19.758
Н	Return on Equity (Pre-tax) (D*G)	1286.44	435.66	45.37

52. The details of the RoE allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018 in respect of the transmission assets, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh) 2018-19 Assets **Particulars** Allowed vide order dated 8.11.2019 in Petition No. 1216.32 361/TT/2018 Asset-1 Claimed by the Petitioner in the instant petition 1286.44 Approved after true-up in this order 1286.44 Allowed vide order dated 8.11.2019 in Petition No. 403.66 361/TT/2018 Asset-2 Claimed by the Petitioner in the instant petition 435.66 Approved after true-up in this order 435.66 Allowed vide order dated 8.11.2019 in Petition No. 39.84 361/TT/2018 Asset-3 Claimed by the Petitioner in the instant petition 45.37 Approved after true-up in this order 45.37

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

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

Asset-1		
Particulars Particulars	2018-19	
Sub-station Bays		
400 kV: Yelahanka:BR Bay-Yelahanka-Yelahanka (GIS)	1	
400 kV: Yelahanka:Hoody Bay-Yelahanka-Yelahanka (GIS)	1	
400 kV: Yelahanka:Neelmangala Bay-Yelahanka-Yelahanka (GIS)	1	
Total 400 kV (GIS)	3	
Norms		
400 kV (GIS)	58.73	
Total Sub-station Bays O&M Expenses	176.19	
AC & HVDC Lines		
LILO of 400 kV S/C Neelamangla-Hoody	9.415	
Norms		
D/C Twin/Triple Conductor	0.806	
Total Transmission Line	7.59	
Total O&M Expenses	183.78	

(₹ in lakh)

Asset-2			
Particulars	2018-19		
Sub-station Bays			
400 kV: Yelahanka:ICT II Bay (400/220 kV)-Yelahanka-Yelahanka (GIS)	1		
400 kV: Yelahanka:ICT-1 Bay (400/220 kV)-Yelahanka-Yelahanka (GIS)	1		
220 kV: Yelahanka:ICT II Bay (400/220 kV)-Yelahanka-Yelahanka (AIS)	1		
220 kV: Yelahanka:ICT-1 Bay (400/220 kV)-Yelahanka-Yelahanka (AIS)	1		
220 kV: Yelahanka:KPTCL Bay I & II-Yelahanka-Yelahanka (AIS)	2		
Total			
400 kV (GIS)	2		
220 kV (AIS)	4		
Norms			
400 kV (GIS)	58.73		
220 kV (AIS)	48.10		
Total Sub-station Bays O&M Expenses	309.86		
Total O&M Expenses	309.86		

(₹ in lakh)

	(III lakii
Asset-3	
Particulars Particulars	2018-19
Sub-station Bays	
220 kV: Yelahanka:KPTCL Bays Yelahanka-Yelahanka (AIS)	4
Norms	
220 kV (AIS)	48.10
Total Sub-station Bays O&M Expenses	192.40
Total O&M Expenses	192.40

54. The details of the O&M allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018 in respect of the transmission assets, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

Assets	Particulars	2018-19
	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	183.78
Asset-1	Claimed by the Petitioner in the instant petition	183.78
	Approved after true-up in this order	183.78
	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	309.86
Asset-2	Claimed by the Petitioner in the instant petition	309.86
	Approved after true-up in this order	309.86
	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	192.40
Asset-3	Claimed by the Petitioner in the instant petition	192.40
	Approved after true-up in this order	192.40

Interest on Working Capital ("IWC")

The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff 55. Regulations. The IWC is worked out for the transmission assets as provided in Regulation 28(1)(c) of the 2014 Tariff Regulations as follows:

(i) **Maintenance Spares:**

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses.

(ii) O & M Expenses:

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

(iii) Receivables:

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

(iv) Rate of interest on working capital:

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

56. The trued-up IWC allowed for the transmission assets are as follows:

	Particulars	Asset- 1	Asset- 2	Asset- 3
	Particulars	2018-19	2018-19	2018-19
Α	Working Capital for O&M Expenses (O&M expenses for one month)	15.31	25.82	16.03
В	Working Capital for Maintenance Spares (15% of O&M expenses)	27.57	46.48	28.86
С	Working Capital for Receivables (Equivalent to two months of annual fixed cost / annual transmission charges)	624.06	265.20	55.62
D	Total of Working Capital (A+B+C)	666.94	337.50	100.52
Е	Rate of Interest on working capital (in %)	12.20	12.20	12.20
F	Interest of working Capital (D*E)	81.37	41.18	12.26

57. The details of the IWC allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018 in respect of the transmission assets, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Assets	Particulars	2018-19
	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	77.96
Asset-1	Claimed by the Petitioner in the instant petition	81.50
	Approved after true-up in this order	81.37
	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	39.57
Asset-2	Claimed by the Petitioner in the instant petition	41.21
	Approved after true-up in this order	41.18
	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	11.97
Asset-3	Claimed by the Petitioner in the instant petition	12.29
	Approved after true-up in this order	12.26

Approved Annual Fixed Charges for 2014-19 Tariff Period

58. 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	Asset- 3
Faiticulais	2018-19	2018-19	2018-19
Depreciation	895.46	388.08	40.41
Interest on Loan	1297.31	416.45	43.29
Return on Equity	1286.44	435.66	45.37
O&M Expenses	183.78	309.86	192.40
Interest on Working Capital	81.37	41.18	12.26
Total	3744.36	1591.23	333.73

59. The details of Annual Transmission Charges allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018 in respect of the transmission assets, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Assets	Particulars	2018-19
	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	3576.95
Asset-1	Claimed by the Petitioner in the instant petition	3751.00
	Approved after true-up in this order	3744.36
	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	1512.15
Asset-2	Claimed by the Petitioner in the instant petition	1592.72
	Approved after true-up in this order	1591.23
	Allowed vide order dated 8.11.2019 in Petition No. 361/TT/2018	319.13
Asset-3	Claimed by the Petitioner in the instant petition	335.24
	Approved after true-up in this order	333.73

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

60. The Petitioner has claimed the following transmission charges for the transmission assets for 2019-24 tariff period:

(₹ in lakh)

					1 milanin	
Asset-1						
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Depreciation	948.71	969.26	969.26	969.26	969.26	
Interest on Loan	1276.98	1217.91	1134.27	1050.51	964.22	
Return on Equity	1282.34	1306.48	1306.48	1306.48	1306.48	
Interest on Working Capital	56.06	56.11	54.97	53.83	52.52	
O&M Expenses	75.82	78.49	81.25	84.08	87.04	
Total	3639.91	3628.25	3546.23	3464.16	3379.52	

(₹ in lakh)

Asset-2						
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Depreciation	404.34	406.98	406.98	406.98	406.98	
Interest on Loan	401.90	369.71	334.41	299.07	263.56	
Return on Equity	429.80	432.62	432.62	432.62	432.62	
Interest on Working Capital	40.07	40.52	40.77	41.07	41.26	
O&M Expenses	493.06	510.80	528.72	547.76	566.04	
Total	1769.17	1760.63	1743.50	1727.50	1710.46	

Asset-3						
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Depreciation	45.63	45.63	45.63	45.63	45.63	
Interest on Loan	43.87	39.93	35.99	32.06	28.12	
Return on Equity	47.00	47.00	47.00	47.00	47.00	
Interest on Working Capital	5.98	6.06	6.15	6.24	6.32	
O&M Expenses	90.04	93.20	96.48	99.84	103.36	
Total	232.52	231.82	231.25	230.77	230.43	

61. The Petitioner has claimed the following IWC in respect of the transmission assets for 2019-24 tariff period:

(₹ in lakh)

Asset-1						
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
O&M Expenses	6.32	6.54	6.77	7.01	7.25	
Maintenance Spares	11.37	11.77	12.19	12.61	13.06	
Receivables	447.53	447.32	437.21	427.09	415.51	
Total	465.22	465.63	456.17	446.71	435.82	
Rate of Interest	12.05	12.05	12.05	12.05	12.05	
Interest on Working Capital	56.06	56.11	54.97	53.83	52.52	

(₹ in lakh)

Asset-2						
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
O&M Expenses	41.09	42.57	44.06	45.65	47.17	
Maintenance Spares	73.96	76.62	79.31	82.16	84.91	
Receivables	217.52	217.06	214.95	212.98	210.30	
Total	332.57	336.25	338.32	340.79	342.38	
Rate of Interest	12.05	12.05	12.05	12.05	12.05	
Interest on Working Capital	40.07	40.52	40.77	41.07	41.26	

(₹ in lakh)

Asset-3					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	7.50	7.77	8.04	8.32	8.61
Maintenance Spares	13.51	13.98	14.47	14.98	15.50
Receivables	28.59	28.58	28.51	28.45	28.33
Total	49.60	50.33	51.02	51.75	52.44
Rate of Interest	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	5.98	6.06	6.15	6.24	6.32

62. The Commission has approved the COD of Asset-1, Asset-2 and Asset-3 under Regulation 4(3) of the 2014 Tariff Regulations. Power flow in Asset-1 and Asset-2 started on 13.10.2018. However, downstream asset connecting Asset-3 has yet not been executed. As the transmission charges of Asset-3 has to be billed bilaterally on the entity which is responsible for the execution of the downstream assets of Asset-3, transmission charges in respect of Asset-3 for 2019-24 period has been determined separately. Asset-1 and Asset-2 have been combined and transmission charges have been worked out accordingly.

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

Based on the trued-up admitted capital cost and actual COD of Asset-1 and 63. Asset-2, the E-COD has been worked out as follows:

Computation of E-COD						
Assets	Actual COD	Admitted capital cost as on 31.3.2019 (₹ in lakh)	Weight of the cost (in %)	No. of Days from last COD	Weighted Days	
Asset – 1	1.4.2018	22329.95	74.66	0.00	0.00	
Asset – 2	1.4.2018	7577.93	25.34	0.00	0.00	
Total		29907.88	100.00	0.00	0.00	
E-COD (Latest COD – Total weighted Days) – 1.4.2018						

64. E-COD is used to determine the lapsed life of the project as a whole, which works out as one (1) year as on 31.3.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life ("WAL")

- The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of WAL. The Combined Asset (Asset-1 and Asset-2) 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 irrespective of 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 (Asset-1 and Asset-2) has been worked out as 28 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) (in lakh) (3)	Weighted Avg. Life of Asset (in years) (4)=(3)/(1)			
Building	4351.90	25	108797.54				
Transmission Line	8438.97	35	295363.86				
Sub-Station Equipment	13554.97	25	338874.33				
PLCC	155.51	15	2332.72				
IT equipment	89.32	6.67	595.48	_			
Total	26590.68		745963.93	28.05 years, rounded off to 28 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 asset is 1.4.2018 and the lapsed life of the Combined Asset works out as one (1) 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 27 years.

Capital Cost

- 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.
 - (2) The Capital Cost of a new project shall include the following:
 - (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
 - (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as



- normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
- (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
- (e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
- (h) Adjustment of revenue earned by the transmission licensee by using the 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;
- (I) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
- (n) Expenditure on account of change in law and force majeure events; and (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (3) The Capital cost of an existing project shall include the following:
 - (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
 - (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
 - (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
 - (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."



- (4) The capital cost in case of existing or new hydro generating station shall also include:
 - (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
 - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
 - (a) The Asset-forming part of the project, but not in use, as declared in the tariff petition;
 - (b) De-capitalised 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 decapitalised only after its redeployment;

Provided further that unless shifting of an Asset-from one project to another is of permanent nature, there shall be no de-capitalization of the concerned 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 trued-up capital cost as on 31.3.2019 for Asset-1 and Asset-2 has been considered as capital cost as on 1.4.2019 for the Combined Asset. The trued-up capital cost as on 31.3.2019 of Asset-3 has been considered as capital cost as on 1.4.2019 for Asset-3. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, sub-station and PLCC) as admitted by the Commission as on 31.3.2019 in respect of the transmission assets are clubbed together and the capital cost has been considered as capital cost for Combined Asset (Assets-1 and Asset-2) and Asset-3 as on 31.3.2019 as per following details:

(₹ in lakh)

Elements	Asset-1	Asset-2	Capital cost for combined assets as on 31.3.2019
Free hold Land	3317.20	0.00	3317.20
Building & Other Civil Works	4351.90	0.00	4351.90
Transmission Line	8438.97	0.00	8438.97
Sub-Station Equipment	5993.39	7561.58	13554.97
PLCC	155.51	0.00	155.51
Leasehold Land	0.00	0.00	0.00
IT Equipment and Software	72.97	16.35	89.32
Total	22329.95	7577.93	29907.88

(₹ in lakh)

Elements	Asset-3
Free hold Land	0.00
Building & Other Civil Works	0.00
Transmission Line	0.00
Sub-Station Equipment	817.87
PLCC	0.00
Leasehold Land	0.00
IT Equipment and Software	16.36
Total	834.23

70. The trued-up capital cost of ₹29907.88 lakh for the Combined Asset (Asset-1 and Asset-2) and ₹834.23 lakh for Asset-3 is considered as admitted capital cost as on 1.4.2019 for working out tariff for 2019-24 tariff period.

Additional Capital Expenditure ("ACE")

71. 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 obsolescence of technology; and
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission."
- The Petitioner has claimed projected ACE for the Combined Asset (Asset-1 and Asset-2) for 2019-24 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 cut-off date. The Petitioner has not claimed any ACE for



Asset-3 for 2019-24 tariff period. The details of the projected ACE in respect of the transmission assets are as follows:

Assets (as per Auditor's Certificate)

Asset-1 856.81

Asset-2 99.95

Asset-3 0.00

Total 956.76

73. We have considered the submissions of the Petitioner. ACE claimed towards the Combined Asset (Asset-1 and Asset-2) is allowed under Regulation 24(1)(a) (undischarged liabilities) and 24(1)(b) (works deferred for execution) of the 2019 Tariff Regulations. ACE allowed is as follows:

	(₹ in lakh)
Assets	Admitted ACE
Assets	2019-20
Asset-1	856.81
Asset-2	99.95
Combined Asset	956.76

74. Accordingly, the capital cost of the Combined Asset and Asset-3 considered for 2019-24 tariff period subject to truing-up is as follows:

			(₹ in lakh)
Assets	Capital Cost as on 1.4.2019	ACE allowed	Capital Cost as on 31.3.2024
Combined Asset (Asset-1 and Asset-2)	29907.88	956.76	30864.64
Asset-3	834.23	0.00	834.23

Debt-Equity Ratio

75. Regulations 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 utilised for meeting the capital expenditure of the generating station or the transmission system.

- (2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.
- (3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30%shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

- (4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.
- (5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation."



- (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."
- 76. The details of debt-equity ratio considered for the purpose of computation of tariff for 2019-24 tariff period is as follows:

Combined Asset (Asset- 1 and Asset- 2)	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	20935.53	70.00	21605.26	70.00
Equity	8972.35	30.00	9259.38	30.00
Total	29907.88	100.00	30864.64	100.00
Asset-3	Capital Cost as on 1.4.2019	(in %)	Total Capital Cost as on 31.3.2024	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	583.98	70.00	(₹ in lakh) 583.98	70.00
Debt Equity	,	70.00 30.00		70.00

Depreciation

- 77. 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 theasset:

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 oflower 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 up to 31.3.2019 from the gross depreciable value of the asset.
- (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 asset 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 decapitalized 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;
 - 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."
- 78. We have considered the submissions of the Petitioner. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). WAROD has been worked out (Annexure-II) after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100% depreciable. Depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. Depreciation allowed is as follows:

	Co	Combined Asset (Asset-1 and Asset-2)							
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
Α	Opening Gross Block	29907.88	30864.64	30864.64	30864.64	30864.64			
В	Addition during the year 2019- 24 due to projected ACE	956.76	0.00	0.00	0.00	0.00			
С	Closing Gross Block (A+B)	30864.64	30864.64	30864.64	30864.64	30864.64			
D	Average Gross Block (A+C)/2	30386.26	30864.64	30864.64	30864.64	30864.64			
Е	Weighted average rate of Depreciation (WAROD) (in %)	4.45	4.46	4.46	4.46	4.46			
F	Lapsed useful life at the beginning of the year (Year)	1	2	3	4	5			
G	Balance useful life at the beginning of the year (Year)	27	26	25	24	23			

	Combined Asset (Asset-1 and Asset-2)							
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24		
Н	Depreciable Value (D*90%)	24371.09	24801.63	24801.63	24801.63	24801.63		
I	Combined Depreciation during the year	1353.06	1376.24	1376.24	1376.24	1376.24		
J	Cumulative Depreciation at the end of the year	2636.59	4012.83	5389.07	6765.31	8141.55		
K	Remaining Aggregate Depreciable Value at the end of the year	21734.49	20788.79	19412.56	18036.32	16660.08		

	I					(K III IAKII)
			Asset-3			
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Opening Gross Block	834.23	834.23	834.23	834.23	834.23
В	Addition during the year 2019- 24 due to projected ACE	0.00	0.00	0.00	0.00	0.00
С	Closing Gross Block (A+B)	834.23	834.23	834.23	834.23	834.23
D	Average Gross Block (A+C)/2	834.23	834.23	834.23	834.23	834.23
Е	Weighted average rate of Depreciation (WAROD) (in %)	5.47	5.47	5.47	5.47	5.47
F	Lapsed useful life at the beginning of the year (Year)	1.00	2.00	3.00	4.00	5.00
G	Balance useful life at the beginning of the year (Year)	24.00	23.00	22.00	21.00	20.00
Н	Depreciable Value (D*90%)	752.44	752.44	752.44	752.44	752.44
I	Combined Depreciation during the year	45.64	45.64	45.64	45.64	45.64
J	Cumulative Depreciation at the end of the year	86.05	131.69	177.33	222.96	268.60
K	Remaining Aggregate Depreciable Value at the end of the year	666.39	620.75	575.12	529.48	483.84

Interest on Loan ("IoL")

- Regulation 32 of the 2019 Tariff Regulations provides as follows: 79.
 - "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".
- 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 the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. In view of above, loL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed is follows:

(₹ in lakh)

	Combined Asset (Asset-1 and Asset-2)						
	Particular 2019-20 2020-21 2021-22 2022-23 2023-24						
Α	Gross Normative Loan	20935.53	21605.26	21605.26	21605.26	21605.26	



В	Cumulative Repayments upto Previous Year	1283.54	2636.59	4012.83	5389.07	6765.31
С	Net Loan-Opening (A-B)	19651.99	18968.67	17592.43	16216.19	14839.95
D	Addition due to ACE	669.73	0.00	0.00	0.00	0.00
Е	Repayment during the year	1353.06	1376.24	1376.24	1376.24	1376.24
F	Net Loan-Closing (C+D-E)	18968.67	17592.43	16216.19	14839.95	13463.71
G	Average Loan (C+F)/2	19310.33	18280.55	16904.31	15528.07	14151.83
Н	Weighted Average Rate of Interest on Loan (in %)	8.70	8.69	8.69	8.70	8.68
I	Interest on Loan (G*H)	1679.61	1588.34	1469.41	1350.31	1228.51

		Α	sset-3			,
	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Gross Normative Loan	583.98	583.98	583.98	583.98	583.98
В	Cumulative Repayments upto Previous Year	40.41	86.05	131.69	177.33	222.96
С	Net Loan-Opening (A-B)	543.57	497.93	452.29	406.66	361.02
D	Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Е	Repayment during the year	45.64	45.64	45.64	45.64	45.64
F	Net Loan-Closing (C+D-E)	497.93	452.29	406.66	361.02	315.38
G	Average Loan (C+F)/2	520.75	475.11	429.48	383.84	338.20
Н	Weighted Average Rate of Interest on Loan (in %)	8.45	8.43	8.41	8.39	8.35
ı	Interest on Loan (G*H)	44.00	40.06	36.12	32.19	28.24

Return on Equity("RoE")

- 81. 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 celling 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-rate 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."
- 82. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. We have considered the submissions of the Petitioner. MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the Combined Asset (Asset-1 and Asset-2) and Asset-3 under Regulation 30 of the 2019 Tariff Regulations is as follows:

(₹ in lakh)

	Combined Asset (Asset-1 and Asset-2)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Α	Opening Equity	8972.35	9259.38	9259.38	9259.38	9259.38	
В	Addition due to ACE	287.03	0.00	0.00	0.00	0.00	
С	Closing Equity (A+B)	9259.38	9259.38	9259.38	9259.38	9259.38	
D	Average Equity (A+C)/2	9115.86	9259.38	9259.38	9259.38	9259.38	

E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pretax)	18.782	18.782	18.782	18.782	18.782
Н	Return on Equity (Pre-tax) (D*G)	1712.14	1739.10	1739.10	1739.10	1739.10

						(III lakii)
		Ass	set-3			
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Opening Equity	250.25	250.25	250.25	250.25	250.25
В	Addition due to Additional Capitalization	0.00	0.00	0.00	0.00	0.00
С	Closing Equity (A+B)	250.25	250.25	250.25	250.25	250.25
D	Average Equity (A+C)/2	250.25	250.25	250.25	250.25	250.25
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pretax)	18.782	18.782	18.782	18.782	18.782
Н	Return on Equity (Pre-tax) (D*G)	47.00	47.00	47.00	47.00	47.00

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

83. O&M Expenses claimed by the Petitioner are as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
LILO of 400 kV S/C Neelamangla- Hoody Tranmsission line @Yelahanka	8.29	8.59	8.89	9.20	9.52			
Sub-station								
400 kV: Yelahanka:BR Bay-Yelahanka Yelahanka (GIS), 400 kV: Yelahanka:Nee II Bay (400/220 kV)-Yelahanka-Yelahanl Yelahanka (GIS), 220 kV: Yelahanka: Yelahanka:ICT-1 Bay (400/220 kV)-Ye Yelahanka-Yelahanka (GIS)	elmangala Bay ka (GIS), 400 ICT II Bay (-Yelahanka-\ kV: Yelahar 400/220 kV)	∕elahanka (GIS nka:ICT-1 Bay -Yelahanka-Ye	S), 400 kV: Yel (400/220 kV)- elahanka (GIS	ahanka:ICT Yelahanka- i), 220 kV:			
400 kV ICTs (2X500 MVA) at Yelahanka Sub-station	358.00	371.00	384.00	398.00	411.00			
5 numbers of 400 kV GIS bays	112.55	116.50	120.60	124.80	129.20			
8 Numbers of 220 kV Sub-station bays	180.08	186.40	192.96	199.68	206.72			
PLCC								
2% of original project cost of 155.21 lakh	3.11	3.11	3.11	3.11	3.11			
Total O&M Expenses	662.03	685.60	709.56	734.79	759.55			

Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations 84. provides as follows:

"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 (₹ lak	h per bay)				
765 kV	45.01	46.60	48.23	<i>4</i> 9.93	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 pe	er 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 (₹ la	akh 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."

85. O&M Expenses have been worked out as per the norms specified in the 2019

Tariff Regulations and are allowed as follows:

(₹ in lakh)

Combined Asset (Asset-1 and Asset-2)								
Particulars 2019-20 2020-21 2021-22 2022-23 2023-2								
Sub-station Bays								
400 kV: Yelahanka:BR Bay-	1	1	1	1	1			
Yelahanka-Yelahanka (GIS)	Ī	I	Ī	ļ	ļ			
400 kV: Yelahanka:Hoody Bay-	1	1	1	1	1			
Yelahanka-Yelahanka (GIS)	I	ı	I	ı	I			
400 kV: Yelahanka:Neelmangala	1	1	1	1	1			
Bay -Yelahanka-Yelahanka (GIS)	ľ	'	l	1	'			
400 kV: Yelahanka:ICT II Bay								
(400/220 kV)-Yelahanka-Yelahanka	1	1	1	1	1			
(GIS)								
400 kV: Yelahanka:ICT-1 Bay								
(400/220 kV)-Yelahanka-Yelahanka	1	1	1	1	1			
(GIS)								
220 kV: Yelahanka:ICT II Bay								
(400/220 kV)-Yelahanka-Yelahanka	1	1	1	1	1			
(AIS)								
220 kV: Yelahanka:ICT-1 Bay								
(400/220 kV)-Yelahanka-Yelahanka	1	1	1	1	1			
(AIS)								
220 kV: Yelahanka:KPTCL Bay	2	2	2	2	2			
T&II-Yelahanka-Yelahanka (AIS)	2	2	2	2	2			
Total								
400 kV (GIS)	5	5	5	5	5			
220 kV (AIS)	4	4	4	4	4			
Norms								
400 kV (GIS)	22.505	23.296	24.115	24.962	25.837			
220 kV (AIS)	22.51	23.30	24.12	24.96	25.84			
Total Sub-station Bays O&M	202.57	209.68	217.06	224.65	232.55			
Expenses	202.57	209.00	217.00	224.03	232.33			
Transformer (MVA Capacity)								
Yelahanka-Yelahanka ICT-I and	1000	1000	1000	1000	1000			
ICT-II	1000	1000	1000	1000	1000			
Norms								

400 kV	0.358	0.371	0.384	0.398	0.411
Total Transformer	358.00	371.00	384.00	398.00	411.00
AC Lines					
LILO of 400 kV S/C Neelamangla- Hoody	9.415	9.415	9.415	9.415	9.415
Norms					
D/C Twin/Triple Conductor	0.881	0.912	0.944	0.977	1.011
Total Transmission Line	8.29	8.59	8.89	9.20	9.52
Total O&M Expenses	568.86	589.27	609.94	631.85	653.06

Asset-3								
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
Sub-station Bays								
220 kV: Yelahanka:KPTCL Bays Yelahanka-Yelahanka (AIS)	4	4	4	4	4			
Norms								
220 kV (AIS)	22.51	23.30	24.12	24.96	25.84			
Total Sub-station Bays O&M Expenses	90.04	93.20	96.48	99.84	103.36			
Total O&M Expenses	90.04	93.20	96.48	99.84	103.36			

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 the IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21, 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-24. The components of the working capital and interest allowed thereon are as follows:

Combined Asset (Asset-1 and Asset-2)							
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24		
Working Capital for O&M Expenses (O&M expenses for one month)	47.40	49.11	50.83	52.65	54.42		
Working Capital for Maintenance Spares (15% of O&M expenses)	85.33	88.39	91.49	94.78	97.96		
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	665.14	663.67	650.71	638.63	624.40		
Total of Working Capital	797.87	801.16	793.03	786.06	776.78		
Rate of Interest for Working Capital (in %)	12.05	11.25	10.50	10.50	10.50		
Interest of working capital	96.14	90.13	83.27	82.54	81.56		

(₹ in lakh)

Asset-3							
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24		
Working Capital for O&M Expenses (O&M Expenses for one month)	7.50	7.77	8.04	8.32	8.61		
Working Capital for Maintenance Spares (15% of O&M Expenses)	13.51	13.98	14.47	14.98	15.50		

Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	28.60	28.55	28.43	28.37	28.25
Total of Working Capital	49.61	50.29	50.94	51.66	52.36
Rate of Interest for Working Capital (in %)	12.05	11.25	10.50	10.50	10.50
Interest of working capital	5.98	5.66	5.35	5.42	5.50

Annual Fixed Charges for 2019-24 Tariff Period

88. The transmission charges allowed for 2019-24 tariff period are as follows:

(₹ in lakh)

Combined Asset (Asset-1 and Asset-2)								
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
Depreciation	1353.06	1376.24	1376.24	1376.24	1376.24			
Interest on Loan	1679.61	1588.34	1469.41	1350.31	1228.51			
Return on Equity	1712.14	1739.10	1739.10	1739.10	1739.10			
O&M Expenses	568.86	589.27	609.94	631.85	653.06			
Interest on Working Capital	96.14	90.13	83.27	82.54	81.56			
Total	5409.81	5383.08	5277.96	5180.04	5078.47			

(₹ in lakh)

Asset-3								
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
Depreciation	45.64	45.64	45.64	45.64	45.64			
Interest on Loan	44.00	40.06	36.12	32.19	28.24			
Return on Equity	47.00	47.00	47.00	47.00	47.00			
O&M Expenses	90.04	93.20	96.48	99.84	103.36			
Interest on Working Capital	5.98	5.66	5.35	5.42	5.50			
Total	232.66	231.56	230.59	230.09	229.74			

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

Licence Fee and RLDC Fees and Charges

90. The Petitioner shall be entitled for reimbursement of licence 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

- 91. 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.
- 92. We have considered the submission of the Petitioner. GST is not levied on transmission service at present. Therefore, we are of the view that Petitioner's prayer is premature.

Security Expenses

- 93. The Petitioner has submitted that security expenses for the transmission assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC.
- 94. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses 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 Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved 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. Accordingly, 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

95. 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

96. The Petitioner has submitted that the transmission charges from the COD of the transmission assets will be borne by KPTCL till execution of the downstream transmission system and thereafter the transmission charges for 2014-19 period will be recovered on monthly basis in accordance with Regulation 42 of the 2014 Tariff Regulations and will be shared by the Respondents in accordance with Regulation 43 of the 2014 Tariff Regulations and will be shared by the beneficiaries and long term transmission customers in accordance with the 2010 Sharing Regulations dated 15.6.2010 and amendment to these Regulations issued vide order dated 30.11.2012 or as amended from to time. Tariff for transmission of electricity (AFC) for 2019-24 period shall be recovered on monthly basis in accordance with Regulation 57 of the 2014 Tariff Regulations and shall be shared by the beneficiaries and long term transmission customers in accordance with the

2010 Sharing Regulations dated 15.6.2010 and amendment to these Regulations issued vide order dated 30.11.2012 or as amended from to time.

- 97. TANGEDCO has submitted that the trued-up capital cost for 2014-19 period has to be shared among the beneficiaries as per the 2010 Sharing Regulations. However, the new 2020 Sharing Regulations has been notified on 4.5.2021 that came into force with effect from 1.11.2020. Under these circumstances, it is essential to segregate the additional cost and tariff liability up to 31.10.2020 and from 1.11.2020 so as to allocate the charges based on 2010 Sharing Regulations, and 2020 Sharing Regulations respectively. TANGEDCO has further requested to issue suitable directions to allocate the YTC up to 31.10.2020 as per 2010 Sharing Regulations and any additional YTC from 1.11.2020 as per the 2020 Sharing Regulations.
- 98. In response, the Petitioner has submitted that the instant petition has been filed for truing up of transmission tariff for 2014-19 tariff period and determination of transmission tariff for 2019-24 tariff period for the transmission assets. After the truing up and determination of transmission tariff, sharing of transmission charges for 2014-19 period and 2019-24 period up to 31.10.2020 will be governed as per the 2010 Sharing Regulations and thereafter from 1.11.2020 onwards will be governed as per the 2020 Sharing Regulations. The Petitioner has further submitted that the tariff determination and sharing of transmission charges are two independent activities and same cannot be interlinked. After the determination of tariff of the transmission assets, the aspects of YTC bifurcation as raised by TANGEDCO shall be taken care of by CTU at the time of billing.

- 99 We have considered the submissions of the Petitioner and TANGEDCO. 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 and after determination of tariff by the Commission, the sharing of the 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 the tariff components on the basis of the 2010 Sharing Regulations and the 2020 Sharing Regulations regimes is not relevant. The concerns raised by TANGEDCO shall be taken care of by the Petitioner at the time of billing by the CUTIL.
- KPTCL has submitted that the Commission determined the transmission charges for Asset-1, Asset-2 and Asset-3 vide order dated 8.11.2019 in Petition No. 361/TT/2018 wherein it was held that the transmission charges shall be bilaterally billed on KPTCL from 1.4.2018 to 13.10.2018 as the associated downstream transmission assets of KPTCL were not executed. KPTCL has further submitted that since the downstream assets are not executed till date, the bills continued to be bilaterally raised upon KPTCL. However, KPTCL has challenged the said order in Review Petition being Review Petition No. 5/RP/2020 in Petition No. 361/TT/2018.
- 101. KPTCL in its additional objections dated 11.8.2022 has submitted as follows:

- (a) The Commission has dismissed the Review Petition only on the ground of maintainability. The submissions on merits were not considered during the course of the proceedings in Review Petition No. 5/RP/2020.
- (b) As a part of the downstream works, KPTCL had to construct six 220 kV bays at the 400/220 kV Yelahanka Sub-station but the same was delayed on account of the same RoW issues that troubled the execution of upstream works of the Petitioner. KPTCL has constructed 2 UG cables of 2000 sq mm and executed the same on 13.10.2018, and this fact is not in dispute. KPTCL's 220 kV DC line from PGCIL's As the Yelahanka (Singanayakanahalli) station is capable of handling 800MW, the maximum load at Yelahanka Sub-station, construction of 4 numbers of 220 kV bays at 400/220 kV Yelahanka Sub-station was rendered redundant and. accordingly, was not constructed. The KPTCL's 220 kV DC line evacuates the entire power transmitted through the upstream work of the Petitioner and enables all the concerned beneficiaries to avail maximum benefit of the infrastructure.
- (c) It is pertinent to note that Petition No. 361/TT/2018 was filed without disclosing the fact that KPTCL was facing similar RoW issues like the Petitioner in execution of the downstream assets despite the fact that KPTCL had informed the Petitioner during the 32nd SRPC meeting held on 25.2.2017 that it was attempting to resolve the RoW issues. Further, vide order dated 1.2.2021, the Commission admitted the Review Petition No. 5/RP/2020 in Petition No. 361/TT/2018 and recorded that the order in 361/TT/2018 was obtained by concealing material facts which impacted the sharing of the transmission charges of the assets.
- (d) The objections and the additional objections that are filed to disclose the true facts and prayed that the bilateral billing must not be permitted and all the beneficiaries must share the transmission charges having availed the benefit of the infrastructure of Petitioner.

Bilateral-billing is against the precedent set by the Commission in Petition No.43/MP/2016

- (e) The Commission vide order dated 21.9.2016 in Petition No. 43/MP/2016 provides for liability of payment of transmission charges to the entity on whose account an element of the transmission system is not put to use.
- (f) In the instant matter, the transmission system is put to effective use as the capacity of the 2x500 MVA ICT of the Petitioner at the Yelahanka Substation has been fully met by 2 UG cables of 2000 sq mm executed by KPTCL on 13.10.2018. The existing KPTCL's 220 kV DC line from PGCIL's 400 kV Yelahanka (Singanayakanahalli) station is capable of handling 800 MW, being the full load capacity of 2x500 MVA ICTs at PGCIL's 400 kV Yelahanka (Singanayakanahalli) station. KPTCL has not availed any benefit from the proposed 400/220 kV Sub-station envisaged as a part of the upstream works on account of its non-commissioning on time. KPTCL had to make alternative arrangements to meet the demand of the Bengaluru City in the absence of the proposed station.
- 102. In response, the Petitioner has submitted as follows:
 - (a) The issue of whether the transmission charges should be recovered through POC or through bilateral billing has been decided by the Commission in the order dated 8.11.2019 in Petition No. 361/TT/2018. The liability of the transmission charges on KPTCL is due to the fact that its downstream assets were not ready. The Commission has taken similar view in various other matters where the downstream transmission assets were not ready.
 - (b) The execution of the transmission assets under the instant petition has been discussed on various forums including Pragati meeting and SRPC on account of severe RoW issues and KPTCL was present in all such SRPC meetings. With regard to the execution of downstream system of the associated 220 kV line bays by KPTCL, the issue was discussed in

- 32nd and 33rd SRPC meeting and in a special meeting on pending issues in respect of Karnataka System.
- (c) The Yelahanka Sub-station was planned with 400 kV incoming line from 765/400 kV Madhugiri, all these schemes have already been approved in SRPC and the assets have been executed as per approved scheme. Further, Madhugiri-Yelahanka D/C line has been executed under SRSS-XIII and is declared under commercial operation with effect from 2.2.2020. The details of the issues faced have been submitted to the Commission in Petition No. 707/TT/2020.
- (d) The delay in executing of the transmission assets under the instant petition has been condoned by the Commission and there was no default on part of the Petitioner. The aspect of delay in the construction of downstream network to be developed by KPTCL lines is beyond the purview of the Petitioner. As per approved scope of works, the Petitioner has executed 6 numbers of 220 kV downstream bays, out of which power flow is happening in only 2 number of bays and balance 4 numbers of bays are not getting utilized due to non-readiness of downstream lines of KPTCL as envisaged.
- 103. We have considered the submissions of the Petitioner and KPTCL. The Commission vide order dated 8.11.2019 in Petition No. 361/TT/2018 has approved the COD of the Asset-1, Asset-2A and Asset-2B as 1.4.2018 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations due to non- commissioning of the transmission assets covered under the scope of KPTCL. As against the order dated 8.11.2019 in Petition No. 361/TT/2018, the Petitioner has filed Review petition No 5/RP/2020. The Commission vide order dated 9.4.2022 has been dismissed the Review Petition No. 5/RP/2020 in Petition No. 361/TT/2018. The relevant portion of the said order is as follows:

16. We have perused the materials on record and we are of the considered view that the case of the Review Petitioner does not fall under any of the three categories mentioned above to qualify for review and the Review Petitioner is arguing the matter on merits which is not allowed in a review petition. The Hon'ble Supreme Court in Parison Devi vs Sumitri Devi [1997 (8) SCC 715] observed that a review cannot be an appeal in disguise. The relevant portion of the observations of the Hon'ble Court in the said judgement is extracted hereunder:

"A review is by no means an appeal in disguise whereby an erroneous decision is reheard and corrected, but lies only for patent error."

- 17. Further, the Hon'ble Supreme Court in Kamlesh Verma vs. Mayawati and others, [2013 (8) SCC 320], while examining the scope of review has observed as under:
 - "8. Again, in Meera Bhanja v. Nirmala Kumari Choudhury, 1995 (1) SCC 170, while quoting with approval a passage from Aribam Tuleshwar Sharma v. Aribam Pishak Sharma, 1979 (4) SCC 389, this Court once again held that review proceedings are not by way of an 22 appeal and have to be strictly confined to the scope and ambit of Order 47 Rule 1 CPC. 9. Under Order 47 Rule 1 CPC a judgment may be open to review inter alia if there is a mistake or an error apparent on the face of the record. An error which is not self-evident and has to be detected by a process of reasoning, can hardly be said to be an error apparent on the face of the record justifying the court to Page 12 of 12 Order in Petition No. 5/RP/2020. exercise its power of review under Order 47 Rule 1 CPC. In exercise of the jurisdiction under Order 47 Rule 1 CPC it is not permissible for an erroneous decision to be "reheard and corrected". A review petition, it must be remembered has a limited purpose and cannot be allowed to be "an appeal in disguise".
- 18. Thus, a Review Petition cannot be an appeal in disguise as held by the Hon'ble Supreme Court. In light of the above discussions, the instant review petition is beyond the ambit of review and hence dismissed."
- 104. As the contentions of KPTCL have already been considered by the Commission in Petition No.361/TT/2018 and Review Petition No. 5/RP/2020 and have been rejected, we do not find any reason to delve into the same in this order again.
- 105. We have already approved the COD of the transmission assets covered in the instant petition as 1.4.2018 under proviso (ii) of clause (3) of Regulation 4 of the 2014 Tariff Regulations due to non-commissioning of the associated

transmission assets covered under the scope of KPTCL. Hence, the transmission charges from the COD of the transmission assets till execution of the downstream transmission system shall be borne by KPTCL as per order dated 8.11.2019 in Petition No. 361/TT/2018. Thereafter, the billing, collection and disbursement of the transmission charges approved shall be governed by the 2010 Sharing Regulations and the 2020 Sharing Regulations as provided in Regulation 43 and Regulation 57 of the 2014 and 2019 Tariff Regulations respectively. The liabilities of the DICs for arrears of the transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Sharing Regulations and shall be recovered from the concerned DICs through bill under Regulation 15(2)(b) of the 2020 Sharing Regulations.

106. To summarise:

(a) The trued-up AFC approved in respect of the transmission assets for 2014-19 tariff period are as follows:

(₹ in lakh)							
Particulars Asset-1		Asset- 2	Asset- 3				
Particulars	2018 - 19	2018 – 19	2018 - 19				
AFC	3744.36	1591.23	333.73				

(b) AFC allowed for 2019-24 tariff period in this order are as follows:

(₹ in lakh)

Assets	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset (Asset-1 and Asset-2)	5409.81	5383.08	5277.96	5180.04	5078.47
Asset-3	232.66	231.56	230.59	230.09	229.74

107. Annexure-I and Annexure-II given hereinafter form part of this order.

108. This order disposes of Petition No. 93/TT/2020 in terms of the above discussions and findings.

sd/-(P. K. Singh) Member

sd/-(Arun Goyal) Member

sd/-(I. S. Jha) `Member[°]

Asset - 1 Annexure-I

2014-19	Admitted Capital Cost as on COD (₹ 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	(* III Iakii)	2014-19			2018-19 (₹ in lakh)	
Freehold Land	3071.97	245.23	3317.20	0.00	0.00	
Building	4246.39	105.51	4351.90	3.34	143.59	
Transmission Line	8172.86	266.11	8438.97	5.28	438.55	
Sub Station	5368.00	625.39	5993.39	5.28	299.94	
PLCC	150.10	5.41	155.51	6.33	9.67	
IT Equipment and software	67.21	5.76	72.97	5.28	3.70	
Total	21076.54	1253.41	22329.95		895.46	
			Average Gr (₹ in lakh)	oss Block	21703.24	
			Weighted A of Deprecia	verage Rate	4.13	

Asset - 2

2014-19	Admitted Capital Cost as on COD	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations 2018-19 (₹ in lakh)	
Capital Expenditure as on COD	─ (₹ in lakh) ├	2014-19				
Sub Station	7106.86	454.72	7561.58	5.28	387.25	
IT Equipment and software	15.17	1.18	16.35	5.28	0.83	
TOTAL	7122.03	455.90	7577.93		388.08	
			Average Gro (₹ in lakh)	oss Block	7349.98	
			Weighted A	verage Rate of n (in %)	5.28	

Asset - 3

2014-19	Admitted Capital Cost as on COD	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	- (₹ in lakh) -	2014-19			2018-19 (₹ in lakh)
Sub Station	681.41	136.46	817.87	5.28	39.58
IT Equipment and software	15.18	1.18	16.36	5.28	0.83
TOTAL	696.59	137.64	834.23		40.41
			Average Gr (₹ in lakh)	oss Block	765.41
			Weighted A Depreciatio	verage Rate of n (in %)	5.28

Annexure - II

2010 24	Admitted Capital Cost —	ACE	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	(in %)		Annual Depreciation as per Regulations				
Capital Expenditure as on 1.4.2019	as on 1.4.2019 (₹ in lakh)	2019-24			2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)	
Freehold Land	3317.20	0.00	3317.20	0.00	0.00	0.00	0.00	0.00	0.00	
Building	4351.90	214.16	4566.06	3.34	148.93	152.51	152.51	152.51	152.51	
Transmission Line	8438.97	455.82	8894.79	5.28	457.61	469.64	469.64	469.64	469.64	
Sub Station	13554.97	286.78	13841.75	5.28	723.27	730.84	730.84	730.84	730.84	
PLCC	155.51	0.00	155.51	6.33	9.84	9.84	9.84	9.84	9.84	
IT Equipment and software	89.32	0.00	89.32	15.00	13.40	13.40	13.40	13.40	13.40	
TOTAL	29907.88	956.76	30864.64		1353.06	1376.24	1376.24	1376.24	1376.24	
			_	Gross Block n lakh)	30386.26	30864.64	30864.64	30864.64	30864.64	
			_	Average Rate :iation (in %)	4.45	4.46	4.46	4.46	4.46	

2019-24	Admitted ACE		Admitted Capital	Asset-3	Annual Depreciation as per Regulations				
Capital Expenditure as on 1.4.2019	Capital Cost as on 1.4.2019 (₹ in lakh)	2019-24	Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Sub Station	817.87	0.00	817.87	5.28	43.18	43.18	43.18	43.18	43.18
IT Equipment and software	16.36	0.00	16.36	15.00	2.45	2.45	2.45	2.45	2.45
TOTAL	834.23	0.00	834.23		45.64	45.64	45.64	45.64	45.64
				Gross Block n lakh)	834.23	834.23	834.23	834.23	834.23
				Average Rate ciation (in %)	5.47	5.47	5.47	5.47	5.47