CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 248/TT/2020

Coram:

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

Date of order: 28.02.2022

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and revision of transmission tariff of the 2004-09 and 2009-14 tariff periods and truing up of transmission tariff of the 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for the 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Asset-I: (a) 50 MVAr Reactor at Narendra Sub-station, (b) Narendra–Davanagere 400 kV D/C Transmission Line and 50 MVAr Bus Reactor at Mysore, (c) LILO of Kolar-Sripreumbudur 400 kV S/C line along with 50 MVAr reactor at Kalivanthapattu; Asset-II: (d) 2nd Auto Transformer at Hiriyur Sub-station; Asset-III: (e) 1st 315 MVA Auto transformer at Kalivanthapattu Sub-station and (f) 2nd Auto transformer at Kalivanthapattu Sub-station along with associated bays and equipment; and Asset-IV: Mysore-Kozhikode 400 kV D/C Transmission Line along with new 400/220 kV Sub-station with 2x315 MVA ICTs and 2x50 MVAr Switchable Line Reactors at Kozhikode Sub-station and extension of Mysore Sub-station under transmission system associated with Kaiga 3 and 4 (2x235 MW) Project in the Southern Region.

And in the matter of:

Power Grid Corporation of India Limited, SAUDAMINI, Plot No-2, Sector-29, Gurgaon-122001 (Haryana)

.....Petitioner



Page 1 of 96

Vs

- Karnataka Power Transmission Corporation Limited (KPTCL), Kaveri Bhavan, Bangalore – 560009
- Transmission Corporation of Andhra Pradesh Limited (APTRANSCO), Vidyut Soudha, Hyderabad – 500082
- Kerala State Electricity Board (KSEB), Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram – 695004
- Tamil Nadu Generation and Distribution Corporation Limited, (Formerly Tamil Nadu Electricity Board -TNEB) NPKRR Maaligai, 800, Anna Salai, Chennai – 600002
- 5. Electricity Department, Government of Pondicherry, Pondicherry - 605001
- Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL), APEPDCL, P&T Colony, Seethmmadhara, Vishakhapatnam Andhra Pradesh
- Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL), Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayana Gunta, Tirupati – 517501, Chittoor District, Andhra Pradesh
- Southern Power Distribution Company of Telangana Limited (TSSPDCL), 6-1-50, Corporate Office, Mint Compound, Hyderabad – 500063, Telangana
- Northern Power Distribution Company of Telangana Limited (TSNPDCL), H. No. 2-5-3 1/2, Vidyut Bhawan, Corporate Office, Nakkal Gutta, Hanamkonda, Warangal – 506 001, Telangana
- Bangalore Electricity Supply Company Limited (BESCOM), Corporate Office, K.R. Circle, Bangalore – 560001, Karnataka



Page 2 of 96

- 11. Gulbarga Electricity Supply Company Limited (GESCOM), Station Main Road, Gulbarga, Karnataka
- 12. Hubli Electricity Supply Company Limited (HESCOM), Navanagar, PB Road, Hubli, Karnataka
- 13. MESCOM Corporate Office, Paradigm Plaza, AB Shetty Circle, Mangalore – 575001
- 14. Chamundeswari Electricity Supply Corporation Limited (CESC), # 927, L J Avenue, Ground Floor, New Kantharaj Urs Road, Saraswatipuram, Mysore – 570009, Karnataka
- 15. Electricity Department, Government of Goa, Vidyut Bhavan, Panaji, Goa – 403001
- Transmission Corporation of Telangana Limited, Vidhyut Sudha, Khairatabad, Hyderabad – 500082
- 17. Tamil Nadu Transmission Corporation, NPKRR Maaligai, 800, Anna Salai Chennai – 600002

.....Respondent(s)

For Petitioner:	Ms. Ranjitha Ramachandran, Advocate, PGCIL Shri S. S. Raju, PGCIL Shri D. K. Biswal, PGCIL Shri V. P. Rastogi, PGCIL Shri A. K. Verma, PGCIL
For Respondent:	Shri S. Vallinyagam, Advocate, TANGEDCO Dr. R. Kathiravan, TANGEDCO Shri. R. Ramalakshmi, TANGEDCO Shri R. Srinivasan, TANGEDCO



Page 3 of 96

<u>ORDER</u>

The Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for revision of transmission tariff for the 2004-09 and 2009-14 tariff periods; truing up of transmission tariff for the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations"); and determination of tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations of Tariff) Regulations of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations"); and determination of tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") for the period from 1.4.2019 to 31.3.2024 in respect of the following assets (collectively referred to as "the transmission assets") under transmission system associated with Kaiga 3 & Kaiga 4 (2x235 MW) Project in the Southern Region (hereinafter referred to as "the transmission project"):

Asset-I: (a) 50 MVAr Reactor at Narendra Sub-station, (b) Narendra– Davanagere 400 kV D/C Transmission Line and 50 MVAr Bus Reactor at Mysore, (c) LILO of Kolar-Sripreumbudur 400 kV S/C line along with 50 MVAr reactor at Kalivanthapattu;

Asset-II: (d) 2nd Auto Transformer at Hiriyur Sub-station;

Asset-III: (e) 1st 315 MVA Auto transformer at Kalivanthapattu Sub-station and (f) 2nd Auto transformer at Kalivanthapattu Sub-station along with associated bays and equipment; and

Asset-IV: Mysore-Kozhikode 400 kV D/C Transmission Line along with new 400/220 kV Sub-station with 2x315 MVA ICTs and 2x50 MVAr Switchable Line Reactors at Kozhikode Sub-station and extension of Mysore Sub-station.

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



- *"1)* Approve the revised Transmission Tariff for 2004-09 block and transmission tariff for 2009-14 block for the assets covered under this petition, as per para 8 above.
- 2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 10 and 11 above.
- 3) A. 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 9 and 10 above for respective block.

B. Further it is submitted that deferred tax liability before 01.04.2009 shall be recoverable from the beneficiaries or long term customers / DIC as the case may be, as and when the same is materialized as per regulation 49 of 2014 and regulation 67 of 2019 tariff regulation. The petitioner may be allow to recover the deferred tax liability materialised directly without making any application before the commission as provided in the regulation.

- 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 beneficiaries
- 7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 10.5 above.
- 8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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



Page 5 of 96

Background

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

a. The Investment Approval (I.A.) for the transmission project was approved by the Government of India vide Memorandum No. 12/12/2003-PG dated 29.3.2005 at an estimated cost of ₹58825 lakh, which included IDC of ₹3072 lakh. Subsequently, the Revised Cost Estimate (RCE) was approved vide Memorandum No. C/CP/RCE Kaiga-3 & 4 dated 29.12.2008 at an estimated cost of ₹100716 lakh including IDC of ₹9503 lakh. Further, RCE-II was approved by Board of Directors of the Petitioner's Company on 30.11.2015 with an estimated cost of ₹114595 lakh including IDC of ₹23827 lakh. The scope of the work as per I.A is as follows:

Transmission Line:

- (i) Narendra (Powergrid)–Davanagere (KPTCL) 400 kV D/C line
- (ii) Mysore (Powergrid)–Kozhikode (Powergrid) 400 kV D/C line
- (iii) Loop-in-loop-out (LILO) of Kolar (Powergrid)–Sriperumbudur (Powergrid) 400 kV S/C line at Melakottaiyur (Powergrid).

Sub-stations:

- (i) 400/220 kV Melakottiyur (Powergrid) Sub-station (New)
- (ii) 400/220 kV Kozhikode (Powergrid) Sub-station (New)
- (iii) 400/220 kV Hiriyur (Powergrid) Sub-station (New)
- (iv) 400/220 kV Narendra (Powergrid) Sub-station (New)
- (v) 400/220 kV Mysore (Powergrid) Sub-station (New)
- (vi) 400/220 kV Davanagere (Powergrid) Sub-station (New)

b. The details of date of commercial operation (COD) for the transmission assets is as follows:



Page 6 of 96

Asset No.	COD	Asset nomenclature for the 2009-14 tariff period	Asset nomenclature for the 2014-19 tariff period	Asset nomenclature for the 2019-24 tariff period
Asset (a)	1.1.2008			
Asset (b)	1.2.2008	Asset-I	Asset-I	
Asset (c)	1.6.2008			
Asset (d)	1.4.2008	Asset-II	Asset-II	Combined Asset
Asset (e)	1.6.2008	Appent III	Appent III	
Asset (f)	1.7.2008	Asset-III	Asset-III	
Asset-IV	16.10.2015	N/A	Asset-IV	

c. The complete scope of the work as per I.A. is covered in the instant petition.

d. The tariff for Asset (a), Asset (b) and Asset (d) for the 2004-09 tariff period was allowed *vide* order dated 20.7.2009 in Petition No. 05/2009. The tariff for 2008-09 was subsequently revised *vide* order dated 13.5.2010 in Petition No. 290/2009 due to Additional Capital Expenditure (ACE) in 2008-09. The order was further revised *vide* order dated 14.10.2010 in Petition No. 290/2009 due to correction of ministerial errors. The tariff for Asset (c), Asset (e) and Asset (f) for the 2004-09 tariff period was allowed *vide* order dated 11.3.2010 in Petition No. 180/2009.

e. The transmission tariff for Asset-I, Asset-II and Asset-III for the 2009-14 tariff period was determined *vide* order dated 14.2.2011 in Petition No. 241/2010. The transmission tariff for Asset-I, Asset-II and Asset-III for the 2009-14 tariff period was subsequently trued-up and the transmission tariff for the 2014-19 tariff period were determined *vide* order dated 8.1.2016 in Petition No. 205/TT/2014.

f. The transmission tariff for Asset-IV for the 2014-19 tariff period was determined *vide* order dated 30.5.2016 in Petition No. 276/TT/2015.

g. The Petitioner has sought revision of transmission tariff allowed for the period from COD to 31.3.2009 on account of change in Interest on Loan (IoL) and Interest on Working Capital (IWC) to the extent of revision in IOL and in

Maintenance Spares in terms of the APTEL judgment dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and judgement dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters. The Petitioner has sought consequential revision of tariff allowed for the 2009-14 tariff period, truing up of tariff of the 2014-19 tariff period and determination of tariff for the 2019-24 tariff period for the transmission assets.

h. The APTEL, *vide* judgement dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters pertaining to generating stations of NTPC had considered 4(four) issues. The issues considered by the APTEL and its decisions are as given in the following table:

Sr. No.	Issue	APTEL's decisions/ directions
1	Whether APTEL can enquire into the validity of Regulations framed by the Commission.	Challenge to the validity of Regulations framed by the Commission falls outside the purview of APTEL.
2	Computation of interest on loan.	In view of the order of the APTEL dated 14.11.2016 in Appeal No. 94 of 2005 and Appeal No. 96 of 2005 and order dated 24.1.2007 passed in Appeal Nos. 81 to 87, 89 to 93 of 2005, computation of loan has to be based on loan repayment on normative basis. Commission is required to recalculate the loan outstanding as on 31.3.2004 based on loan repayment on normative basis.
3(a)	O&M Expenses: Inadequate provision of employee costs as part of O&M Expenses due to variation in salary and wages	Commission's view upheld
3(b)	O&M Expenses: Non-inclusion of incentives and ex-gratia payment to employees	Commission's view upheld
4	Cost of spares for calculation of working capital	Commission's view upheld

i. The APTEL *vide* its judgment dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters pertaining to generating stations of NTPC had considered 9 (nine) issues. The issues considered and the decisions of the APTEL are given in the following table:

Page 8 of 96

Sr. No.	Issue	APTEL's decisions/ directions	
I	Computation of outstanding loan at the beginning of the tariff period i.e. 1.4.2004	The Commission is required to recalculate the loan outstanding as on 31.3.2004 based on loan repayment on normative basis.	
II	Consequence of refinance of loan	Commission to consider the issue afresh	
ш	Treating depreciation available as deemed repayment of loan	Commission to make a fresh computation of outstanding loan	
IV	Admissibility of depreciation up to 90%	Commission to consider the issue afresh	
V	Cost of Maintenance Spares	Commission to consider the issue afresh	
VI	Impact of de-capitalization of the assets on cumulative repayment of Loan	The cumulative repayment of the loan proportionate to the assets de-capitalized required to be reduced. Commission to act accordingly.	
VII	Non-consideration of normative transit loss for coal import.	Commission to consider afresh the transit losses for coal imported from coal mines other than the dedicated ones.	
VIII	Foreign Exchange rate variation (FERV)	FERV has been kept as pass through to ensure that any liability or gain, if any, arising on account of any variation in foreign exchange rates is passed on to the beneficiary as held in order dated 4.10.2006 in Appeals No.135 to 140 of 2005. Commission to act accordingly.	
IX	Computation of interest on loan in Singrauli Station	Net loan closing at the end of a year is reflected as net loan opening on the first day of the next year. Commission shall re-compute the interest accordingly.	

j. The Commission and certain interested parties preferred Civil Appeals against the APTEL's judgments before the Hon'ble Supreme Court in 2007. The Appeals were admitted and initially stay was granted by the Hon'ble Supreme Court. Subsequently, on an assurance by NTPC that the issues under Appeal would not be pressed for implementation during the pendency of the Appeals, the stay was vacated by the Hon'ble Supreme Court.

k. Based on the APTEL's judgments dated 22.1.2007 in Appeal No. 81 of 2005 and 13.6.2007 in Appeal No. 139 of 2007 and the Commission's order dated 18.1.2019 in Petition No. 121/2007, the Petitioner had sought re-

determination of transmission tariff of its transmission assets of the 2004-09 tariff period in Petition No. 121/2007. The Commission, after taking into consideration the pendency of Appeals before the Hon'ble Supreme Court, adjourned the said petition sine die and directed that the same be revived after the disposal of the Civil Appeals by the Hon'ble Supreme Court.

I. The Hon'ble Supreme Court *vide* order dated 10.4.2018, dismissed the said Civil Appeals. Thus, the said order of the APTEL has attained finality.

m. Consequent to the Hon'ble Supreme Court's order dated 10.4.2018, the Petition No. 121/2007 was listed for hearing before the Commission on 8.1.2019. The Commission, *vide* order dated 18.1.2019 in Petition No. 121/2007, directed the Petitioner to submit its claim separately for the assets at the time of filing of truing up of the petitions for the 2014-19 tariff period in respect of concerned transmission assets.

n. The instant petition was heard on 17.8.2021 and in view of APTEL's judgments dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and judgement dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters and the order of Hon'ble Supreme Court dated 10.4.2018, transmission tariff is being revised. Although, period-wise transmission tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods, suitable assumptions at certain places, if required, are being applied which are indicated.

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

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

Petitioner. Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO), Respondent No. 4, *vide* affidavits dated 16.8.2021 and 27.8.2021 has filed its reply and has raised the issues of retrospective revision of tariff for the 2004-09 and 2009-14 tariff periods, Additional Capital Expenditure (ACE) for the 2019-24 tariff period and sharing of transmission charges. The Petitioner *vide* affidavit dated 3.9.2021 has filed its rejoinder to the reply of TANGEDCO. The issues raised by TANGEDCO and the clarifications submitted by the Petitioner are considered in the relevant portions of this order.

Re: Interest on Loan (IoL)

6. The APTEL while dealing with the issue of computation of IoL, *vide* judgement dated 22.1.2007 in Appeal No.81 of 2005 and batch matters observed that IoL for the period from 1.4.1998 to 31.3.2001 shall be computed only on normative Ioan repayment as per its judgement dated 14.11.2006 in Appeal No. 94 of 2005 and Appeal No. 96 of 2005. The APTEL *vide* its judgement dated 14.11.2006 in Appeal No. 94 of 2005 and Appeal No. 96 of 2005 set aside the Commission's methodology of computation of Ioan on the actual repayment basis or normative repayment whichever is higher and held that the Commission is required to adopt normative debt repayment methodology for working out the IoL liability for the period from 1.4.1998 to 31.3.2001. In view of the judgement of APTEL, interest allowed for 2004-09 period is to be revised on the basis of the normative debt repayment methodology.

Re: Additional Capital Expenditure (ACE)

7. The APTEL *vide* its judgement dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters held that ACE after commercial operation date (COD) should also be

considered for computation of maintenance spares. In view of the judgement of the APTEL, maintenance spares to be considered for computation of working capital for the 2004-09 period is also required to be revised.

Re: Depreciation

8. As regards depreciation, the APTEL *vide* its judgement dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters observed that depreciation is an expense and it cannot be deployed for deemed repayment of loan and accordingly directed the Commission to compute the outstanding loan afresh. Accordingly, the outstanding loan allowed for the transmission asset for the 2004-09 period is revised in the instant order.

9. The revision of transmission tariff allowed for the 2004-09 tariff period necessitates the revision of transmission tariff allowed for the 2009-14 tariff period, which is also being done in the present order. The implementation of the directions of the APTEL vide judgments dated 22.1.2007 in Appeal No. 81/2005 and batch matters and dated 13.6.2007 in Appeal No. 139/2006 and batch matters respectively was been kept pending in case of the Petitioner awaiting for the outcome of the Civil Appeals filed before the Hon'ble Supreme Court. Taking into consideration the facts of the case and keeping in view the interest of the consumers, we are of the view that the beneficiaries should not be burdened with the carrying cost for the difference in the tariff allowed earlier and allowed in the instant order for the 2004-09 and 2009-14 tariff periods. Therefore, we direct that the Petitioner will neither claim nor pay any carrying cost from or to the beneficiaries for the difference, if any, in the tariff allowed earlier and the tariff being allowed in the instant order. Further, the said difference in tariff

shall be recovered/ paid over a period of six months from the date of issue of this order.

10. This order is issued considering the submissions made by the Petitioner *vide* affidavits dated 2.1.2020 and 14.7.2021, TANGEDCO's reply *vide* affidavit dated 16.8.2021 and Petitioner's rejoinder to the reply filed by TANGEDCO included in the affidavit dated 3.9.2021.

11. The hearing in this matter was held on 17.8.2021 through video conference and the order was reserved. Having heard the representatives of the Petitioner and the Respondent and after perusal of the materials on record, we proceed to dispose of the petition.

12. TANGEDCO has raised several issues and has submitted as under:

a. NTPC, in October 2003, had filed petitions seeking to review Korba and Dadri tariffs for the period from 1997 to 2000 without any claim towards actual revised costs for the said period, but in July 2005, it had sought revised cost incurred by it. Similarly, the Petitioner had not raised the issue of revision of tariff in its Petition No. 45/2002, Petition No. 134/2004, Petition No. 92/2009 and Petition No. 204/TT/2014, but in the instant petition, it has raised the issue based on the Commission's order in Petition No. 121/2007.

b. The Commission had passed an order in NTPC petitions relating to Korba and Dadri in which, inter-alia, it was held that after deciding the tariff, the Commission could not revisit the matter covered in the tariff orders, which had acquired finality. The APTEL had set aside the said order of the Commission and permitted additional costs to be absorbed in the new tariff.

c. The Hon'ble Supreme Court in the matter of U.P. Power Corporation Limited vs. NTPC Limited (2009) 6 SCC 235 supra observed that the tariff regulations are applicable for a particular tariff period and that the 2001 Tariff Regulations are applicable for a limited period of three years. However, in the instant petition, the Petitioner has made a prayer to revise the tariff retrospectively for a period wherein the tariff period has expired. In view of the limited applicability of relevant Tariff Regulations to a particular period, the revision of tariff sought by the Petitioner in the present petition relying on the order of the Commission in Petition No. 121/2007 cannot be granted.

d. The Commission cannot revisit the matter covered in the tariff orders, which have acquired finality. The above has been reiterated by the Hon'ble Supreme Court, by adding the words "after passing of many stages". It is clear from the judgment of Hon'ble Supreme Court that tariff cannot be revised retrospectively.

e. In the instant case, there was no provision made in the Tariff Orders, to claim the impact of alleged applicability of orders of the APTEL in Appeal No. 81 of 2005 and Appeal No. 139 of 2007. The Petitioner did not bring to the notice of the Commission, the Hon'ble Supreme Court judgment dated 3.3.2009 in the Civil Appeal (C.A.) No. 1110 of 2007 in the matter of U.P. Power Corporation Limited supra. As a result of this, an order contrary to the law laid down by Hon'ble Supreme Court was passed by the Commission permitting revision of tariff retrospectively for an earlier tariff period. In the circumstances, the order dated 18.1.2019 in Petition No. 121/2007 is per incuriam and such an order passed inadvertently cannot be relied upon by the Petitioner.

f. The judgment of the Hon'ble Supreme Court in U.P. Power Corporation Limited supra has been followed by another 3 Judge Bench of the Hon'ble Supreme Court itself, in the common judgment dated 9.5.2019 in C.A. No. 684/2007 and C.A. No. 13452 of 2015, one filed by the Petitioner and other by NTPC Limited, in which it was held that any variation in the apportionment of FERV during 1.4.2001 to 31.3.2004, will consequently be passed on to the consumers which will be unfair to the consumers who were not consumers for the said tariff period but will eventually bear the brunt of transactions which took place 15-18 years ago.

g. Contention of the Petitioner that the APTEL in Appeal No. 81 of 2005 and Appeal No. 139 of 2007 had permitted the Petitioner to seek revision of tariff form 2001 onwards is factually wrong. Further, Appeal No. 81 of 2005 and Appeal No. 139 of 2007 were filed by NTPC against the orders of the Commission for the 2001-2004 and 2004-09 tariff periods, respectively. The orders were passed by the APTEL in two different appeals relating to two different Tariff Periods.

h. In the instant case, the Petitioner did not file any appeal against the tariff orders dated 22.1.2009 and 8.4.2010 in Petition No. 94/2008 and Petition No. 329/2009, respectively for the 2004-09 period, order dated 25.2.2011 in Petition No. 202/2010 for the 2009-14 period, order dated 30.11.2015 in Petition No. 367/TT/2014 for true up of the 2009-14 period and for the 2014-19 period and order dated 25.7.2016 in Petition No. 102/TT/2016 for revision of true up tariff for the 2009-14 period on account of segregation of assets for pre-POC and post-POC period.

i. The Electricity Act, 2003 (in short, 'the 2003 Act') only provides for either revision or appeal to a party aggrieved by an order passed by the Commission. Further, it is a settled principle of law that an act which cannot be done directly cannot be done indirectly. The order of the Commission dated 18.1.2019 in Petition No. 121/2007 is contrary to what was held by the Hon'ble Supreme Court in C.A. No. 684/2007 and C.A. No. 13452 of 2015 dated 9.5.2019 following the judgment in U.P. Power Corporation Limited supra.

j. In view of the fact that the order was inadvertently passed, the principle of restitution as held by the Hon'ble Supreme Court in (2020) 8 SCC 129 Indore Development Authority vs. Manoharlal and Others [5 J Bench of Supreme Court] would squarely apply.



Page 15 of 96

k. Reliance of the Petitioner on the Commission's order dated 6.11.2019 and 6.5.2021 in Petition No. 288/TT/2019 and Petition No. 155/TT/2020, respectively is misplaced as these orders are passed ignoring the orders of the Hon'ble Supreme Court in U.P. Power Corporation Limited supra and orders in C.A. No. 684/2007 and C.A. No. 13452 of 2015 dated 9.5.2019.

I. It is impossible to make the calculations retrospectively in ARRs (annual revenue requirements) of the distribution companies for two decades and bill the arrears to the same customers of the corresponding tariff periods. The present consumers cannot be burdened for the liability of the past. Further, the distribution companies are having huge customer base, which keeps changing every year. The arrears pertaining to two decades cannot be recovered from the present consumers and it is legally not tenable. Claim of the Petitioner may not be allowed so as to avoid burdening the present consumers

13. In response, the Petitioner vide affidavit dated 3.9.2021, has responded to the objections raised by TANGEDCO as follows:

a. The instant matter is primarily a legal aspect of admissibility of the Petitioner's claims which has been disputed by TANGEDCO. TANGEDCO is repeatedly raising the same issue which already stands decided by the Commission, including in the petitions wherein it was a party, and the contentions were rejected.

b. TANGEDCO's claim that retrospective revision of the bills is not envisaged is erroneous and misconceived as there have been numerous instances wherein the tariffs for the past periods have been revised and the same is adjusted and recovered in tariff of subsequent years. While contending that substantial period has passed since 2004 and the revision of tariff should not be allowed, TANGEDCO has conveniently ignored the process undertaken in the meantime.

c. The tariff orders determining the tariff of several parties including the Petitioner on various aspects pertaining to the principles of allowing the tariff for

Page 16 of 96

elements which are common to all the utilities, in the 2001-04 and 2004-09 periods, were challenged by NTPC before the APTEL by filing a series of appeals which culminated in judgments dated 22.1.2007 and 13.6.2007. The said judgements dealt with the interpretation of the 2001 Tariff Regulations and 2004 Tariff Regulations for the 2001-04 and 2004-09 periods, respectively, which are applicable in the case of the Petitioner also.

d. Based on the APTEL's judgment dated 13.6.2007, the Petitioner had filed Petition No. 121/2007 before the Commission seeking revision of tariff orders on the issues of computation of IoL, consequences of refinancing of loan, treatment of depreciation as deemed repayment of loan, admissibility of depreciation up to 90% of the value of assets, consideration of maintenance of spares for working capital and depreciation of assets. The said Petition was adjourned sine die by the Commission as certain parties including the Commission had challenged the APTEL's judgment dated 13.6.2007 before the Hon'ble Supreme Court. Since the petition was only adjourned sine die, the Petitioner did not have any cause of action to seek redressal of the grievance from the APTEL. The course adopted by the Commission at that stage was to defer the consideration till the decision by the Hon'ble Supreme Court. After the disposal of the said matter by the Hon'ble Supreme Court, the Commission vide order dated 18.1.2019 in Petition No. 121/2007 had directed the Petitioner to separately submit its claim in the light of the APTEL's judgments dated 22.1.2007 and 13.6.2007 along with the truing up petitions wherever applicable to be filed for the period 2014-19 in respect of concerned transmission assets. Therefore, TANGEDCO's contention that the Petitioner had not sought revision of tariff is misconceived.

e. TANGEDCO's reliance on Hon'ble Supreme Court judgment in U.P. Power Corporation Limited supra is misplaced as the Commission vide common order dated 6.11.2019 in Petition No. 288/TT/2019, Petition No. 300/TT/2019, Petition No. 301/TT/2019 and Petition No. 305/TT/2019 had rejected the contention of the respective respondents on non-revision of tariff and held that

the Commission has power to revise the tariff of any utility as upheld by the Hon'ble Supreme Court in U.P. Power Corporation Limited supra. The Commission has allowed revision of tariff in orders dated 6.5.2021, 21.07.2021, 31.08.2021 in Petition No. 155/TT/2020, Petition No. 123/TT/2020 and Petition No. 355/TT/2019, respectively.

f. Further, TANGEDCO has erred in comparing the case of U.P. Pradesh Power Corporation Limited supra to Petitioner's instant case as in the said case, NTPC had not raised the concerned issue of revision at all but in the present case, the Petitioner had raised the issue in 2007 itself, on basis of interpretation of the Regulations by the APTEL. TANGEDCO in its reply has only referred to a selective portion of the Hon'ble Supreme Court without producing the entire judgment.

g. The principle that determination of tariff is a continuous process and that it can be retrospectively implemented, has been re-iterated by the APTEL in M.P Power Management Company Limited vs. Central Electricity Regulatory Commission and Others (vide judgment dated 1.7.2014 in Appeal No. 232 of 2013).

h. TANGEDCO's reliance on the decision dated 9.5.2019 in C.A. No. 684 of 2007 and C.A. No. 13452 of 2015 in case of the Petitioner and NTPC Limited is wrong as the said decision is not applicable to the instant case wherein the facts are completely different.

i. TANGEDCO's contention that the Commission's order dated 18.1.2019 in Petition No. 121/2007 is per incuriam, is misconceived and erroneous as the said order has not been challenged by TANGEDCO or any other party and has attained finality.

j. Also, reliance is placed on judgement in State of West Bengal vs. Hemant Kumar Bhattacharjee and Others 1963 Supp (2) SCR 542; Mohanlal Goenka vs. Benoy Kishna Mukherjee AIR 1953 SC 65; Vasudev Dhanjibhai Modi vs. Rajabhai Abdul Rehman (1970) 1 SCC 670. In these judgements, it has been held that it is well settled principle that an erroneous decision is still binding. Therefore, order of the Commission dated 18.1.2019 in Petition No. 121/2007 is binding.

k. The Commission is duty bound to apply the Regulations uniformly to all entities without any discrimination. Also, once a principle of Regulations has been settled by the APTEL and the Hon'ble Supreme Court, the same is to be applied uniformly to all entities. The Petitioner who is equally subjected to the said Regulations cannot be made to suffer an erroneous interpretation of the said Regulations despite raising the issue and seeking relief relying on the decision of the APTEL.

I. TANGEDCO's claim that the relief should be limited to NTPC who had filed appeals is entirely incorrect as the decision of Hon'ble Supreme Court is not on the basis of whether an appeal has been filed but is on the concept of regulatory power of the Commission. Further, it would be unfair and inequitable to deny the legitimate expenses to the Petitioner.

m. As per the APTEL's judgment in Odisha Power Generation Corporation
Limited vs. Odisha Electricity Regulatory Commission (2017) SCC Online APTEL
4, even the functus officio argument has specifically been rejected by the APTEL.

n. It is a settled position of law that if in the tariff order, an aspect has been decided against the Regulations, the same can be corrected in truing up. In this regard, the judgement in the matter of Chhattisgarh State Power Distribution Company Limited vs. Chhattisgarh State Electricity Regulatory Commission (2012) SCC Online APTEL 140, paragraphs 7.1 to 7.4 is referred to.

o. The contention of TANGEDCO on principle of restitution is misconceived. The principle of restitution for an erroneous decision of the Court is when the order of the court is reversed in appeal or review or where an interim order is reversed in final decision. In such cases, since the original order has been modified and reversed, any benefit gained by one party or loss to the other

party due to such original order needs to be restituted. It is not open to any party to claim restitution for an alleged erroneous order while the order has attained finality.

p. In fact, the Petitioner is to be restituted. The interpretation of the Regulations based on which the costs were denied to the Petitioner has since been held erroneous. The erroneous interpretation should not be perpetuated so as to deny the costs to the Petitioner. The Petitioner should not suffer for the erroneous decisions of the Court. In terms of the decision of the APTEL upheld by Hon'ble Supreme Court on merits, the Petitioner is entitled to the costs.

q. The Petitioner has pointed out that TANGEDCO's claim is ex-facie contrary to well settled legal principles namely:

- i. When there is liberty granted by the court to make a claim subsequently and the claim is made, there is no retrospective application in law;
- ii. The maxim actus curiae neminem gravabit (an act of the court shall prejudice no man) is applicable in the instant case.

r. Matters of Neeraj Kumar Sainy & Others Vs. State of U.P and Others (2017) 14 SCC 136 at Paragraphs 26 to 31; G.D. Ferro Alloys vs. Delhi Electricity Supply Undertaking 1997 (42) DRJ 747; Kanodia Chemicals and Industries vs. State of U.P. and Others (1992) 2 SCC 124, have been referred.

s. The contents of TANGEDCO's reply are erroneous and misconceived and contrary to the fundamental process of tariff determination. If the contention of TANGEDCO is accepted, then there can never be any true up or revision in tariff and further any appeal or review against tariff orders would be rendered infructuous. Even NTPC would not be entitled to claim any benefit of the decision of the APTEL and Hon'ble Supreme Court based on the above rationale. The passage of time due to pendency of the proceedings cannot be a reason to deny the legitimate dues of any entity.



Page 20 of 96

14. We have considered the detailed submissions of the Petitioner and TANGEDCO. We note that the contentions of TANGEDCO regarding revision of tariff for 2004-09 and 2009-14 tariff periods are similar to that raised in Petition No. 16/TT/2020. The Commission has rejected the contentions of TANGEDCO vide order dated 31.7.2021 in the said petition. Similar contentions were raised by BRPL in various petitions including Petition No. 288/TT/2019 and Petition No. 290/TT/2020 and the Commission vide orders dated 31.7.2021 and 5.3.2021 in Petition No. 288/TT/2019 and Petition No. 290/TT/2020 has already given its findings. As no appeal has been filed by TANGEDCO, the order has attained finality. Accordingly, in terms of orders dated 31.7.2021, 31.7.2020 and 5.3.2021 in Petition No. 16/TT/2020, Petition No. 288/TT/2019 and Petition No. 290/TT/2020 respectively, we do not find any merit in the submissions of TANGEDCO and, therefore, reject the same and proceed with revision of tariff of the 2004-09 period and consequent revision of tariff allowed for the 2009-14 period.

REVISION OF TRANSMISSION CHARGES ALLOWED FOR THE 2004-09 AND 2009-14 TARIFF PERIODS

2004-09 Period

15. The tariff for Asset (a), Asset (b) and Asset (d) for the 2004-09 period was allowed *vide* order dated 20.7.2009 in Petition No. 05/2009. The tariff for 2008-09 was subsequently revised *vide* order dated 13.5.2010 in Petition No. 290/2009 due to ACE in year 2008-09. The order was further revised *vide* order dated 14.10.2010 in Petition No. 290/2009 due to correction of typographical errors. The tariff for Asset (c), Asset



(e) and Asset (f) for the 2004-09 period was allowed *vide* order dated 11.3.2010 in Petition No. 180/2009.

16. The Commission had approved the transmission charges for the period from COD to 31.3.2009 as follows:

		(₹ in lakh)
	Asset (a)	
Particulars	2007-08 (Pro-rata 3 months)	2008-09
Depreciation	16.80	71.80
Interest on Loan	29.83	124.72
Return on Equity	19.59	83.72
Advance against Depreciation	0.00	0.00
O&M Expenses	7.91	32.90
Interest on Working Capital	2.19	9.14
Total	76.32	322.29

(₹ in lakh)

	Asset (b)	
Particulars	2007-08 (Pro-rata 2 months)	2008-09
Depreciation	72.88	454.17
Interest on Loan	173.70	1061.33
Return on Equity	112.71	700.90
Advance against Depreciation	0.00	0.00
O&M Expenses	39.66	247.76
Interest on Working Capital	12.08	74.23
Total	411.02	2538.38

(₹ in lakh)

, , , , , , , , , , , , , , , , , , ,	
Asset (c)	
2008-09 (Pro-rata 10 months)	
180.17	
415.29	
268.00	
0.00	
95.85	
28.60	
987.91	

Page 22 of 96

Order in Petition No.248/TT/2020

	(₹ in lakh)
Particulars	Asset (d)
	2008-09
Depreciation	84.52
Interest on Loan	150.94
Return on Equity	99.25
Advance against Depreciation	0.00
O&M Expenses	131.60
Interest on Working Capital	13.89
Total	480.20

	Asset (e)	
Particulars	2008-09 (Pro-rata 10 months)	
Depreciation	75.89	
Interest on Loan	136.47	
Return on Equity	88.27	
Advance against Depreciation	0.00	
O&M Expenses	164.50	
Interest on Working Capital	13.89	
Total	479.02	

	(₹ in lakh)
	Asset (f)
Particulars	2008-09 (Pro-rata 9 months)
Depreciation	34.01
Interest on Loan	63.06
Return on Equity	39.75
Advance against Depreciation	0.00
O&M Expenses	49.35
Interest on Working Capital	5.44
Total	191.61

17. The Petitioner has claimed the following revised transmission charges for the2004-09 period in the instant petition:



Page 23 of 96

	Asset (a)	
Particulars	2007-08 (Pro-rata 3 months)	2008-09
Depreciation	16.80	71.80
Interest on Loan	30.03	129.59
Return on Equity	19.59	83.72
Advance against Depreciation	0.00	0.00
O&M Expenses	7.91	32.90
Interest on Working Capital	2.22	9.61
Total	76.54	327.62

(₹ in lakh)

	Asset (b)	
Particulars	2007-08 (Pro-rata 2 months)	2008-09
Depreciation	72.88	454.17
Interest on Loan	174.34	1088.86
Return on Equity	112.71	700.90
Advance against Depreciation	0.00	0.00
O&M Expenses	39.66	247.76
Interest on Working Capital	12.10	76.60
Total	411.69	2568.29

(₹ in lakh)

Particulars	Asset (c) 2008-09 (Pro-rata 10 months)
Depreciation	180.17
Interest on Loan	422.57
Return on Equity	268.00
Advance against Depreciation	0.00
O&M Expenses	95.85
Interest on Working Capital	29.12
Total	995.72



Page 24 of 96

	(₹ in lakh)
Particulars	Asset (d)
	2008-09
Depreciation	84.52
Interest on Loan	154.83
Return on Equity	99.25
Advance against Depreciation	0.00
O&M Expenses	131.60
Interest on Working Capital	14.13
Total	484.32

	Asset (e)
Particulars	2008-09 (Pro-rata 10 months)
Depreciation	75.89
Interest on Loan	139.48
Return on Equity	88.27
Advance against Depreciation	0.00
O&M Expenses	164.50
Interest on Working Capital	14.10
Total	482.24

	(₹ in lakh)
	Asset (f)
Particulars	2008-09 (Pro-rata 9 months)
Depreciation	34.01
Interest on Loan	64.32
Return on Equity	39.75
Advance against Depreciation	0.00
O&M Expenses	49.35
Interest on Working Capital	5.60
Total	193.04

18. The tariff is revised for the period from COD to 31.3.2009 on the basis of the following:

a) The admitted capital cost as follows:



Page 25 of 96

	(₹ in lakh)
Asset No	Capital cost as on COD
Asset (a)	1790.95
Asset (b)	16060.82
Asset (c)	7298.46
Asset (d)	2241.67
Asset (e)	2379.92
Asset (f)	1113.04

b) Weighted Average Rate of Interest (WAROI) on actual loan, debt-equity ratio, Weighted Average Rate of Depreciation (WAROD), Rate of Interest on Working Capital (IWC) and O&M Expenses have been considered as per order dated 20.7.2009 in Petition No. 05/2009, order dated 13.5.2010 in Petition No. 290/2009, order dated 14.10.2010 in Petition No. 290/2009 and order dated 11.3.2010 in Petition No. 180/2009.

c) With respect to calculation of IoL, Regulation 56(i)(f) of the 2004 Tariff Regulations provides as follows:

"56 (i) Interest on Loan Capital

(f) In case any moratorium period is availed of by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly;"

Accordingly, moratorium in repayment of loan has been considered as per the Regulations applicable for the 2004-09 period.

d) Maintenance Spares component is revised with respect to ACE incurred during the 2004-09 period.

19. In view of the above, the revised transmission charges allowed for the transmission assets for the period from COD to 31.3.2009 are as follows:



Page 26 of 96

	Asset (a)	
Particulars	2007-08 (Pro-rata 3 months)	2008-09
Depreciation	16.80	71.80
Interest on Loan	29.83	124.72
Return on Equity	19.59	83.72
Advance against Depreciation	0.00	0.00
O&M Expenses	7.91	32.90
Interest on Working Capital	2.21	9.41
Total	76.34	322.55

(₹ in lakh)

	Asset (b)		
Particulars	2007-08 (Pro-rata 2 months)	2008-09	
Depreciation	72.88	454.17	
Interest on Loan	173.70	1061.33	
Return on Equity	112.71	700.90	
Advance against Depreciation	0.00	0.00	
O&M Expenses	39.66	247.76	
Interest on Working Capital	12.08	75.02	
Total	411.03	2539.18	

(₹ in lakh)

Particulars	Asset (c) 2008-09
	(Pro-rata 10 months)
Depreciation	180.17
Interest on Loan	415.29
Return on Equity	268.00
Advance against Depreciation	0.00
O&M Expenses	95.85
Interest on Working Capital	28.97
Total	988.29



Page 27 of 96

	(₹ in lakh)
	Asset (d)
Particulars	2008-09
Depreciation	84.52
Interest on Loan	150.94
Return on Equity	99.25
Advance against Depreciation	0.00
O&M Expenses	131.60
Interest on Working Capital	14.05
Total	480.36

(₹	in	lakh)
	ς.		ianii)

	Asset (e)	
Particulars	2008-09 (Pro-rata 10 months)	
Depreciation	75.89	
Interest on Loan	136.47	
Return on Equity	88.27	
Advance against Depreciation	0.00	
O&M Expenses	164.50	
Interest on Working Capital	14.04	
Total	479.17	

	(*
	Asset (f)
Particulars	2008-09 (Pro-rata 9 months)
Depreciation	34.01
Interest on Loan	63.06
Return on Equity	39.75
Advance against Depreciation	0.00
O&M Expenses	49.35
Interest on Working Capital	5.58
Total	191.74

20. The Annual Fixed Charges (AFC) allowed for the transmission assets for the period from COD to 31.3.2009 *vide* order dated 20.7.2009 in Petition No. 05/2009, order dated 13.5.2010 in Petition No. 290/2009, order dated 14.10.2010 in Petition No.



Page 28 of 96

290/2009 and order dated 11.3.2010 in Petition No. 180/2009, the revised AFC claimed in the instant petition and AFC allowed now are as follows:

		(₹ in lakh)
	Asset (a)	
Particulars	2007-08 (Pro-rata 3 months) 2008	
Allowed <i>vide</i> order dated 20.7.2009 in Petition No. 05/2009, order dated 13.5.2010 in Petition No. 290/2009 and order dated 14.10.2010 in Petition No. 290/2009	76.32	322.29
Claimed by the Petitioner in the instant petition	76.54	327.62
Approved after true-up in this order	76.34	322.55

(₹ in lakh)

	Asset (b)			
Particulars	2007-08 (Pro-rata 2 months) 2008-			
Allowed vide order dated 20.7.2009 in Petition No. 05/2009, order dated 13.5.2010 in Petition No. 290/2009 and order dated 14.10.2010 in Petition No. 290/2009	411.02	2538.38		
Claimed by the Petitioner in the instant petition	411.69	2568.29		
Approved after true-up in this order	411.03	2539.18		

	(₹ in lakh)
	Asset (c)
Particulars	2008-09
Allowed vide order dated 11.3.2010 in Petition No. 180/2009	987.91
Claimed by the Petitioner in the instant petition	995.72
Approved after true-up in this order	988.29

(₹ in lakh)

	Asset (d)
Particulars	2008-09 (Pro-rata 10 months)
Allowed <i>vide</i> order dated 20.7.2009 in Petition No. 05/2009, order dated 13.5.2010 in Petition No. 290/2009 and order dated 14.10.2010 in Petition No. 290/2009	480.20
Claimed by the Petitioner in the instant petition	484.32
Approved after true-up in this order	480.36



Page 29 of 96

	(₹ in lakh)
	Asset (e)
Particulars	2008-09 (Pro-rata 10 months)
Allowed vide order dated 11.3.2010 in Petition No. 180/2009	479.02
Claimed by the Petitioner in the instant petition	482.24
Approved after true-up in this order	479.17

	Asset (f)
Particulars	2008-09 (Pro-rata 9 months)
Allowed vide order dated 11.3.2010 in Petition No. 180/2009	191.61
Claimed by the Petitioner in the instant petition	193.04
Approved after true-up in this order	191.74

2009-14 Tariff Period

21. Asset (a), Asset (b) and Asset (c) are combined and named as Asset-I. Asset (d) has been named as Asset-II. Asset (e) and Asset (f) have been combined and named as Asset-III for the 2009-14 Tariff Period. The Commission *vide* order dated 14.2.2011 in Petition No. 241/2010 had allowed the transmission tariff for the 2009-14 tariff period and subsequently *vide* order dated 8.1.2016 in Petition No. 205/TT/2014 had trued-up the transmission tariff allowed for the 2009-14 tariff period as follows:

					(₹ in lakh)
Particulars	Asset-I				
Faiticulais	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	1433.25	1450.47	1451.42	1451.42	1451.42
Interest on Loan	1656.84	1544.53	1411.82	1276.78	1141.80
Return on Equity	1546.68	1622.66	1625.27	1625.27	1644.85
O&M Expenses	588.96	622.70	658.34	695.98	735.70
Interest on Working Capital	126.10	127.39	126.48	125.55	125.13
Total	5351.83	5367.74	5273.32	5174.98	5098.90



Page 30 of 96

Particulars			Asset-II		
Faiticulais	2009-10	2009-10 2010-11 2011-12			2013-14
Depreciation	131.04	131.84	132.18	132.52	132.52
Interest on Loan	148.68	137.49	125.71	113.80	101.49
Return on Equity	140.03	146.04	146.56	146.93	148.70
O&M Expenses	162.44	171.74	181.57	191.94	202.92
Interest on Working Capital	16.87	17.25	17.51	17.80	18.13
Total	599.06	604.36	603.52	602.99	603.75

(₹ in lakh)

Particulars			Asset-III		
Faiticulais	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	215.16	215.16	217.36	219.57	219.57
Interest on Loan	247.88	227.66	210.05	192.21	171.57
Return on Equity	228.28	236.65	239.40	241.92	244.84
O&M Expenses	324.88	343.48	363.14	383.88	405.84
Interest on Working Capital	30.66	31.34	32.06	32.83	33.55
Total	1046.85	1054.29	1062.01	1070.41	1075.37

22. The Petitioner has claimed the following revised transmission charges in the instant petition:

					(₹ in lakh)
Particulars	Asset-I				
Falticulars	2009-10	2012-13	2013-14		
Depreciation	1433.25	1450.47	1451.42	1451.42	1451.42
Interest on Loan	1730.84	1618.54	1485.90	1350.85	1215.89
Return on Equity	1546.68	1622.66	1625.27	1625.27	1644.85
O&M Expenses	588.96	622.70	658.34	695.98	735.70
Interest on Working Capital	127.64	128.93	128.03	127.09	126.68
Total	5427.37	5443.31	5348.95	5250.61	5174.53

(₹ in lakh)

Particulars	Asset-II				
Faiticulais	2009-10	2009-10 2010-11 2011-12	2012-13	2013-14	
Depreciation	131.04	131.84	132.18	132.52	132.52
Interest on Loan	156.54	145.35	133.57	121.67	109.35
Return on Equity	140.03	146.04	146.56	146.93	148.70
O&M Expenses	162.44	171.74	181.57	191.94	202.92
Interest on Working Capital	17.04	17.41	17.68	17.96	18.29
Total	607.09	612.38	611.56	611.02	611.78

Page 31 of 96



Particulars	Asset-III				
Faiticulais	2009-10	2009-10 2010-11 2011-12			2013-14
Depreciation	215.16	215.16	217.36	219.57	219.57
Interest on Loan	258.22	238.00	220.39	202.54	181.89
Return on Equity	228.28	236.65	239.40	241.92	244.84
O&M Expenses	324.88	343.48	363.14	383.88	405.84
Interest on Working Capital	30.87	31.56	32.28	33.04	33.77
Total	1057.41	1064.85	1072.57	1080.95	1085.91

23. The transmission tariff of the 2009-14 tariff period is revised for the Combined Assets/ transmission asset on the basis of the following:

a) The admitted capital cost as on 1.4.2009 and ACE during the 2009-14 tariff period for the transmission assets is as follows:

	(₹ in lakh) Capital						
Asset	Capital Cost (as on 1.4.2009)	2009-10	2010-11	2011-12	2012-13	2013-14	Cost (as on 31.3.2014)
Asset-I	27298.17	627.58	35.82	0.00	0.00	0.00	27961.57
Asset-II	2484.45	30.28	0.00	12.89	0.00	0.00	2527.62
Asset-III	4075.01	0.00	0.00	86.86	0.00	0.00	4161.87

b) WAROI on actual loan, debt-equity ratio, WAROD, Rate of IWC and O&M Expenses as per order dated 8.1.2016 in Petition No. 205/TT/2014.

24. In view of the above, the revised AFC approved for the 2009-14 tariff period is as follows:

					(₹ in lakh)		
Particulars	Asset-I						
Faiticulais	2009-10	2010-11	2011-12	2012-13	2013-14		
Depreciation	1433.25	1450.47	1451.42	1451.42	1451.42		
Interest on Loan	1656.84	1544.53	1411.82	1276.78	1141.80		
Return on Equity	1546.68	1622.66	1625.27	1625.27	1644.85		
O&M Expenses	588.96	622.70	658.34	695.98	735.70		
Interest on Working Capital	126.10	127.39	126.48	125.55	125.13		
Total	5351.84	5367.75	5273.33	5175.00	5098.90		

Page 32 of 96

Order in Petition No.248/TT/2020

Particulars	Asset-II						
Farticulars	2009-10	2010-11	2011-12	2012-13	2013-14		
Depreciation	131.04	131.84	132.18	132.52	132.52		
Interest on Loan	148.68	137.49	125.71	113.80	101.49		
Return on Equity	140.03	146.04	146.56	146.93	148.70		
O&M Expenses	162.44	171.74	181.57	191.94	202.92		
Interest on Working Capital	16.87	17.25	17.51	17.80	18.13		
Total	599.06	604.36	603.53	602.99	603.76		

(₹ in lakh)

Particulars	Asset-III						
Faiticulais	2009-10	2010-11	2011-12	2012-13	2013-14		
Depreciation	215.16	215.16	217.36	219.57	219.57		
Interest on Loan	247.88	227.66	210.05	192.21	171.57		
Return on Equity	228.28	236.64	239.40	241.92	244.83		
O&M Expenses	324.88	343.48	363.14	383.88	405.84		
Interest on Working Capital	30.66	31.34	32.06	32.83	33.56		
Total	1046.86	1054.29	1062.01	1070.41	1075.37		

25. AFC allowed for the 2009-14 tariff period *vide* order dated 8.1.2016 in Petition No. 205/TT/2014, the revised AFC claimed in the instant petition and AFC approved in the instant order are as follows:

					(₹ in lakh)			
Particulars		Asset-I						
Faiticulais	2009-10	2010-11	2011-12	2012-13	2013-14			
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	5351.83	5367.74	5273.32	5174.98	5098.90			
Claimed by the Petitioner in the instant petition	5427.37	5443.31	5348.95	5250.61	5174.53			
Approved after true-up in this order	5351.84	5367.75	5273.33	5175.00	5098.90			

Particulars	Asset-II						
Faiticulais	2009-10	2010-11	2011-12	2012-13	2013-14		
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	599.06	604.36	603.52	602.99	603.75		
Claimed by the Petitioner in the instant petition	607.09	612.38	611.56	611.02	611.78		
Approved after true-up in this order	599.06	604.36	603.53	602.99	603.76		

(₹ in lakh)

Particulars	Asset-III						
Faiticulais	2009-10	2010-11	2011-12	2012-13	2013-14		
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	1046.85	1054.29	1062.01	1070.41	1075.37		
Claimed by the Petitioner in the instant petition	1057.41	1064.85	1072.57	1080.95	1085.91		
Approved after true-up in this order	1046.86	1054.29	1062.01	1070.41	1075.37		

Truing up of Annual Fixed Charges for the 2014-19 Tariff Period

26. The details of the transmission charges claimed by the Petitioner in respect of

the transmission assets for the 2014-19 tariff period are as follows:

					(₹ in lakh)		
Particulars	Asset-I						
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
Depreciation	1451.42	1451.42	1451.42	1451.42	1451.42		
Interest on Loan	1081.00	946.11	811.23	676.35	541.46		
Return on Equity	1646.07	1653.62	1652.78	1652.78	1657.23		
O&M Expenses	675.04	697.52	720.65	744.58	769.25		
Interest on Working Capital	133.47	131.78	129.94	128.15	126.51		
Total	4987.00	4880.45	4766.02	4653.28	4545.87		



Particulars	Asset-II						
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
Depreciation	132.52	132.52	132.52	132.52	132.52		
Interest on Loan	97.04	84.73	72.42	60.11	47.79		
Return on Equity	148.81	149.49	149.42	149.42	149.82		
O&M Expenses	186.93	193.13	199.55	206.16	213.01		
Interest on Working Capital	19.04	19.11	19.18	19.26	19.37		
Total	584.34	578.98	573.09	567.47	562.51		

(₹ in lakh)

Particulars	Asset-III						
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
Depreciation	219.56	219.56	219.56	219.56	219.56		
Interest on Loan	161.27	140.64	120.01	99.38	78.76		
Return on Equity	245.02	246.14	246.02	246.02	246.68		
O&M Expenses	373.86	386.26	399.10	412.32	426.02		
Interest on Working Capital	35.06	35.30	35.53	35.78	36.08		
Total	1034.77	1027.90	1020.22	1013.06	1007.10		

(₹ in lakh)

	Asset-IV						
Particulars	2015-16 (Pro-rata 168 days)	2016-17	2017-18	2018-19			
Depreciation	1744.92	3911.71	3983.22	4026.04			
Interest on Loan	2119.14	4457.30	4142.92	3801.56			
Return on Equity	1990.73	4458.30	4538.44	4596.73			
O&M Expenses	364.01	819.30	846.47	874.57			
Interest on Working Capital	154.87	340.52	338.27	334.30			
Total	6373.67	13987.13	13849.32	13633.20			

27. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in

respect of the transmission assets are as follows:

					(₹ in lakh)		
Particulars	Asset-I						
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
WC for O&M Expenses (O&M Expenses for 1 month)	56.25	58.13	60.05	62.05	64.10		
WC for Maintenance Spares (15% of O&M Expenses)	101.26	104.63	108.10	111.69	115.39		
WC for Receivables (Equivalent to 2 months of	831.17	813.41	794.34	775.55	757.65		



Page 35 of 96

annual fixed cost)					
Total Working Capital	988.68	976.17	962.49	949.29	937.14
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	133.47	131.78	129.94	128.15	126.51

Particulars	Asset-II					
	2014-15	2015-16	2016-17	2017-18	2018-19	
WC for O&M Expenses (O&M Expenses for 1 month)	15.58	16.09	16.63	17.18	17.75	
WC for Maintenance Spares (15% of O&M Expenses)	28.04	28.97	29.93	30.92	31.95	
WC for Receivables (Equivalent to 2 months of annual fixed cost)	97.39	96.50	95.52	94.58	93.75	
Total Working Capital	141.01	141.56	142.08	142.68	143.45	
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50	
Interest on Working Capital	19.04	19.11	19.18	19.26	19.37	

(₹ in lakh)

Particulars	Asset-III				
	2014-15	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 month)	31.16	32.19	33.26	34.36	35.50
WC for Maintenance Spares (15% of O&M Expenses)	56.08	57.94	59.87	61.85	63.90
WC for Receivables (Equivalent to 2 months of annual fixed cost)	172.46	171.32	170.04	168.84	167.85
Total Working Capital	259.70	261.45	263.17	265.05	267.25
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	35.06	35.30	35.53	35.78	36.08

(₹ in lakh)

	Asset-IV					
Particulars	2015-16 (Pro-rata 168 days)	2016-17	2017-18	2018-19		
WC for O&M Expenses (O&M Expenses for 1 month)	66.08	68.28	70.54	72.88		
WC for Maintenance Spares (15% of O&M Expenses)	118.95	122.90	126.97	131.19		
WC for Receivables (Equivalent to 2 months of annual fixed cost)	2314.25	2331.19	2308.22	2272.20		
Total Working Capital	2499.28	2522.37	2505.73	2476.27		
Rate of Interest (in %)	13.50	13.50	13.50	13.50		
Interest on Working Capital	154.85	340.52	338.27	334.30		

Order in Petition No.248/TT/2020

Page 36 of 96

Capital Cost

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

29. In case of Asset-I, Asset-II and Asset-III, the Commission vide order dated 8.1.2016 in Petition No. 205/TT/2014 had allowed capital cost of ₹27961.57 lakh, ₹2527.62 lakh and ₹4161.87 lakh, respectively, as on 31.3.2014. In case of Asset-IV, the Commission vide order dated 30.5.2016 in Petition No. 276/TT/2015 had allowed capital cost of ₹72210.34 lakh as capital cost as on Date of Commercial Operation (COD). The details of the capital cost as on 1.4.2014/COD and capital cost as on 31.3.2019 admitted vide order dated 8.1.2016 in Petition No. 205/TT/2014 and order dated 30.5.2016 in Petition No. 205/TT/2015 is as follows:

									(₹ in lakh)
Assets	Apportioned approved cost as per	Apportioned approved cost as per	as on	ACE					Capital Cost as on
	RCE-I	RCE-II	1.4.2014/ COD	2014-15	2015-16	2016-17	2017-18	2018-19	31.3.2019
Asset-I		38699 35791	27961.57	0.00	0.00	0.00	0.00	0.00	27961.57
Asset-II	38699		2527.62	0.00	0.00	0.00	0.00	0.00	2527.62
Asset-III			4161.87	0.00	0.00	0.00	0.00	0.00	4161.87
Asset-IV	62017	78804	72210.34		1752.61	1843.64	312.03	0.00	76118.62

30. The Petitioner has claimed the following capital cost for truing-up in the 2014-

19 tariff period:

									(₹ in lakh)
Assets	Apportioned approved cost as per	Apportioned approved cost as per	as on	on ACE			ACE		
	RCE-I RCE-II		1.4.2014/ COD	2014-15	2015-16	2016-17	2017-18	2018-19	31.3.2019
Asset-I	38699	35791	27961.57	0.00	0.00	0.00	0.00	0.00	27961.57



Page 37 of 96

Asset-II			2527.62	0.00	0.00	0.00	0.00	0.00	2527.62
Asset-III			4161.87	0.00	0.00	0.00	0.00	0.00	4161.87
Asset-IV	62017	78804	72210.34		2234.15	1945.70	765.65	855.89	78011.73

31. For Asset-I, Asset-II and Asset-III, the Commission has considered the same capital cost as allowed vide order dated 8.1.2016 in Petition No. 205/TT/2014 to work out the trued-up tariff for the 2014-19 tariff period, in accordance with Regulation 9(3) of the 2014 Tariff Regulations as follows:

Asset	Capital Cost (as on 1.4.2014) (₹ in lakh)			
Asset-I	27961.57			
Asset-II	2527.62			
Asset-III	4161.87			

32. In case of Asset-IV, COD is in the 2014-19 tariff period and the capital cost has been trued-up in the following paragraphs.

<u>Time over-run</u>

33. As per the IA, the commissioning schedule of transmission asset is 33 months from the date of IA. The IA was accorded on 29.3.2005 and the Scheduled COD was 29.12.2007, against which Asset-IV was put to commercial operation on 16.10.2015. Hence, there is time over-run of 94 months and 18 days in commissioning of Asset-IV. The time over-run in case of Asset-IV was condoned vide order dated 30.5.2016 in Petition No. 276/TT/2015.



Page 38 of 96

Cost over-run

34. The total estimated completion cost as on 31.3.2019 for the transmission assets submitted by the Petitioner along with the petition is within the RCE-II. Hence, there is no cost over-run in any of the transmission assets.

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

35. The Petitioner has claimed IDC of Asset-IV and has submitted the statement showing IDC claim, discharge of IDC liability as on COD as follows:

	(₹ in lakh)
IDC as per Auditor Certificate	IDC Discharged up to COD
21585.77	21585.77

36. The Petitioner has not submitted IDC computation statement which consists of the name of the loan, drawl date, loan amount, interest rate and interest claimed. Further, the Petitioner has submitted that the entire IDC and IEDC in case of Asset-IV has been discharged up to COD. Considering the fact that time over-run is condoned, IDC is allowed. Though we are allowing IDC despite full details have not been submitted by the Petitioner, we expect that the Petitioner is more careful in furnishing the required information in future. We would be constrained to disallow if complete information is not furnished at the time of truing up.

37. We have considered the submissions of the Petitioner. IDC claimed and IDC considered as on COD and summary of discharge of IDC liability up to COD for Asset-IV for the purpose of tariff determination is as follows:



Page 39 of 96

			(₹ in lakh)
Asset	IDC as per Auditor Certificate	IDC allowed	IDC discharged up to COD
Asset-IV	21585.77	21585.77	21585.77

38. The Petitioner has submitted Auditor Certificate and claimed IEDC in respect of Asset-IV as follows:

	(₹ in lakh <u>)</u>
Asset	IEDC claimed as per Auditor Certificate
Asset-IV	2834.89

39. We have considered the submissions of the Petitioner. IEDC claimed and IEDC considered as on COD and summary of discharge of IEDC liability up to COD in respect of Asset-IV for the purpose of tariff determination is as follows:

			(₹ in lakh)
Asset	IEDC claimed as per Auditor certificate	IEDC considered as on COD	IEDC discharged up to COD
Asset-IV	2834.89	2834.89	2834.89

Initial Spares

40. Regulation 13(d) of the 2014 Tariff Regulations provides that Initial Spares shall

be capitalised as a percentage of plant and machinery cost up to cut-off date, subject

to the following ceiling norms:

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

41. The Initial Spares as claimed by the Petitioner are as follows:



Page 40 of 96

(₹ in lakh) **Ceiling Limit** Total Plant & as per Machinery Cost Spares **Regulation 13 Initial Spares** Asset Particulars (Excluding IDC, IEDC, claimed of the worked out Land Cost & Cost of 2014 Tariff civil Works) Regulations Sub-station Asset-IV 8066.86 277.74 6.00% 467.63 (Brownfield) Transmission Asset-IV 1% 22511.50 224.19 225.12 Line

We have considered the submission of the Petitioner. The initial spares claimed 42 by the Petitioner are within the ceiling specified in the 2014 Tariff Regulations. Initial Spares allowed for the transmission assets as per percentage specified in the 2014 Tariff Regulations are as follows:

						(₹ in lakh)
Asset	Particulars	Total Plant & Machinery Cost (Excluding IDC, IEDC, Land Cost & Cost of civil Works)	Spare claimed	Ceiling Limit as per Regulation 13 of the 2014 Tariff Regulations	Initial Spares worked out	Initial spares allowed in this order
Asset-IV	Sub-station (Brownfield)	8066.86	277.74	6.00%	497.18	277.74
Asset-IV	Transmission Line	22511.50	224.19	1.00%	225.12	224.19

43. The details of the capital cost of Asset-IV now approved as on the COD after adjustment of IDC, IEDC and Initial Spares, if any, are as follows:

					(₹ in lakh)
Asset	Capital Cost claimed as on COD (A)	Un-discharged IDC (D)	IEDC Disallowed (E)	Excess Initial Spares Disallowed (F)	Capital Cost allowed as on COD (F) = (A-B-C-D-E)
Asset-IV	72210.34	0.00	0.00	0.00	72210.34

Additional Capital Expenditure (ACE)

The Commission vide order dated 8.1.2016 in Petition No. 205/TT/2014 for 44.

Asset-I, Asset-II and Asset-III and order dated 30.5.2016 in Petition No. 276/TT/2015



Page 41 of 96

for Asset-IV had allowed the following ACE for the 2014-19 tariff period under Regulation 14(1)(i) of the 2014 Tariff Regulations:

					(₹ in lakh)
Asset			ACE		
Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	0.00	0.00	0.00	0.00	0.00
Asset-II	0.00	0.00	0.00	0.00	0.00
Asset-III	0.00	0.00	0.00	0.00	0.00
Asset-IV		1752.61	1843.64	312.03	0.00

45. The Petitioner has claimed the following ACE based on actual expenditure:

					(₹ in lakh)
Accet			ACE		
Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	0.00	0.00	0.00	0.00	0.00
Asset-II	0.00	0.00	0.00	0.00	0.00
Asset-III	0.00	0.00	0.00	0.00	0.00
Asset-IV		2234.15	1945.70	765.65	855.89

46. COD of Asset-IV is 16.10.2015 and, accordingly, its cut-off date is 31.3.2018. Thus, ACE till 2017-18 is within cut-off date and ACE during 2018-19 is beyond the cut-off date.

47. The Petitioner has submitted that ACE for 2015-18 in case of Asset-IV has been claimed under Regulation 14(1)(i) and Regulation 14(1)(ii) and ACE during 2018-19 has been claimed under Regulation 14(2)(i) of the 2014 Tariff Regulations.

48. TANGEDCO has submitted that ACE claimed by the Petitioner is on account of compensation payments as per court orders but the Petitioner didn't produce any documentary proof. In response, the Petitioner has submitted the details of the compensation and court orders as annexures to the rejoinder.



49. We have considered the submissions of the Petitioner and TANGEDCO. ACE claimed by the Petitioner towards Asset-IV has been verified from the Auditor Certificate. ACE claimed during 2015-16 to 2018-19 has been allowed under Regulation 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations while ACE during 2018-19 has been allowed under Regulation 14(2)(i) of the 2014 Tariff Regulations for the 2014-19 tariff period is as follows:

										(₹ in lakh)
Assets	FR	Apportioned approved cost as per	Apportioned approved cost as per	Capital cost as on 1.4.2014/		ACE				Capital cost as on
		RCE-I	RCE-II	COD	2014-15	2015-16	2016-17	2017-18	2018-19	31.3.2019
Asset-I				27961.57	0.00	0.00	0.00	0.00	0.00	27961.57
Asset-II	58825	38699	35791	2527.62	0.00	0.00	0.00	0.00	0.00	2527.62
Asset-III				4161.87	0.00	0.00	0.00	0.00	0.00	4161.87
Asset-IV		62017	78804	72210.34	0.00	2234.15	1945.70	765.65	855.89	78011.73

Debt-Equity ratio

50. As per Regulation 19(3) of the 2014 Tariff Regulations, the debt-equity ratio allowed by the Commission for Asset-I, Asset-II and Asset-III for determination of tariff for the period ending on 31.3.2014 shall be considered whereas for Asset-IV, debt-equity ratio applicable as on COD of Asset-IV shall be considered. The details of the debt-equity ratio as on 1.4.2014 and 31.3.2019 are as follows:

Asset-I									
Funding	Capital Cost (as on 1.4.2014) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)					
Debt	19573.94	70.00	19573.94	70.00					
Equity	8387.63	30.00	8387.63	30.00					
Total	27961.57	100.00	27961.57	100.00					



Page 43 of 96

Asset-II								
Funding	Capital Cost (as on 1.4.2014) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)				
Debt	1769.34	70.00	1769.34	70.00				
Equity	758.28	30.00	758.28	30.00				
Total	2527.62	100.00	2527.62	100.00				

Asset-III									
Funding	Capital Cost (as on 1.4.2014) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)					
Debt	2913.36	70.00	2913.36	70.00					
Equity	1248.51	30.00	1248.51	30.00					
Total	4161.87	100.00	4161.87	100.00					

Asset-IV										
Funding	Capital Cost (as on 1.4.2014) (₹ in lakh)	(in %)	ACE 2014-19 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2019 (₹ in lakh)	(in %)				
Debt	50547.24	70.00	4080.88	70.34	54628.12	70.03				
Equity	21663.10	30.00	1720.51	29.66	23383.61	29.97				
Total	72210.34	100.00	5801.39	100.00	78011.73	100.00				

Depreciation

51. Depreciation has been worked out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during the 2014-19 tariff period. The Gross Block during the 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD). WAROD at Annexure-I has been worked out after taking into account the depreciation rates of asset as specified in the 2014 Tariff Regulations and depreciation allowed during the 2014-19 tariff period is as under:

Page 44 of 96

Dertieulere	Asset-I						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Opening Gross Block (A)	27961.57	27961.57	27961.57	27961.57	27961.57		
ACE (B)	0.00	0.00	0.00	0.00	0.00		
Closing Gross Block (C)=(A+B)	27961.57	27961.57	27961.57	27961.57	27961.57		
Average Gross Block (D)=[(A+B)/2]	27961.57	27961.57	27961.57	27961.57	27961.57		
Freehold land (E)	360.94	360.94	360.94	360.94	360.94		
Rate of Depreciation (in %) (F)	5.19	5.19	5.19	5.19	5.19		
Balance useful life of the asset (G)	27	26	25	24	23		
Elapsed life at the beginning of the year (H)	5	6	7	8	9		
Depreciable value (I)=[(D-E)*90%]	24840.57	24840.57	24840.57	24840.57	24840.57		
Depreciation during the year (J)=(D*F)	1451.42	1451.42	1451.42	1451.42	1451.42		
Cumulative Depreciation at the end of the year (K)	9485.22	10936.63	12388.05	13839.46	15290.88		
Remaining Depreciable Value at the end of the year (L)=(I-K)	15355.35	13903.94	12452.52	13839.46	9549.69		

					(₹ in lakh)		
Particulars	Asset-II						
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
Opening Gross Block (A)	2527.62	2527.62	2527.62	2527.62	2527.62		
ACE (B)	0.00	0.00	0.00	0.00	0.00		
Closing Gross Block (C)=(A+B)	2527.62	2527.62	2527.62	2527.62	2527.62		
Average Gross Block (D)=[(A+B)/2]	2527.62	2527.62	2527.62	2527.62	2527.62		
Rate of Depreciation (in %) (E)	5.24	5.24	5.24	5.24	5.24		
Balance useful life of the asset (F)	20	19	18	17	16		
Elapsed life at the beginning of the year (G)	5	6	7	8	9		
Depreciable value (H)=[D*90%]	2274.86	2274.86	2274.86	2274.86	2274.86		
Depreciation during the year (I)=(D*E)	132.52	132.52	132.52	132.52	132.52		
Cumulative Depreciation at the end of the year (J)	877.14	1009.66	1142.18	1274.69	1407.21		
Remaining Depreciable Value at the end of the year (K)=(H-J)	1397.72	1265.20	1132.68	1000.16	867.65		



Page **45** of **96**

	Asset-III						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Opening Gross Block (A)	4161.87	4161.87	4161.87	4161.87	4161.87		
ACE (B)	0.00	0.00	0.00	0.00	0.00		
Closing Gross Block (C)=(A+B)	4161.87	4161.87	4161.87	4161.87	4161.87		
Average Gross Block (D)=[(A+B)/2]	4161.87	4161.87	4161.87	4161.87	4161.87		
Rate of Depreciation (in %) (E)	5.28	5.28	5.28	5.28	5.28		
Balance useful life of the asset (F)	20	19	18	17	16		
Elapsed life at the beginning of the year (G)	5	6	7	8	9		
Depreciable value (H)=[D*90%]	3745.68	3745.68	3745.68	3745.68	3745.68		
Depreciation during the year (I)=(D*E)	219.57	219.57	219.57	219.57	219.57		
Cumulative Depreciation at the end of the year (J)	1416.29	1635.86	1855.43	2075.00	2294.57		
Remaining Depreciable Value at the end of the year (K)=(H-J)	2329.40	2109.83	1890.26	1670.69	1451.12		

(₹ in lakh)

	Asset-IV							
Particulars	2015-16 (Pro-rata 168 days)	2016-17	2017-18	2018-19				
Opening Gross Block (A)	72210.34	74444.49	76390.19	77155.84				
ACE (B)	2234.15	1945.70	765.65	855.89				
Closing Gross Block (C)=(A+B)	74444.49	76390.19	77155.84	78011.73				
Average Gross Block (D)=[(A+B)/2]	73327.42	75417.34	76773.02	77583.79				
Freehold land (E)	480.39	480.39	480.39	480.39				
Rate of Depreciation (in %) (F)	5.18	5.19	5.19	5.19				
Balance useful life of the asset (G)	25	25	24	23				
Elapsed life at the beginning of the year (H)	0	0	1	2				
Depreciable value (I)=[(D-E)*90%]	65562.32	67443.26	68663.36	69393.06				
Depreciation during the year (J)=(D*F)	1744.92	3911.72	3983.23	4026.04				
Cumulative Depreciation	1744.92	5656.63	9639.87	13665.91				

Page **46** of **96**



at the end of the year (K)				
Remaining Depreciable Value at the end of the year (L)=(I-K)	63817.40	61786.62	59023.49	55727.15

52. The details of depreciation allowed *vide* order dated 8.1.2016 in Petition No. 205/TT/2014 and 30.5.2016 in Petition No. 276/TT/2015, claimed by the Petitioner in the instant petition and trued-up depreciation in the instant order in respect of the transmission assets are as follows:

(₹ in lakh)

Particulars	Asset-I						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	1451.42	1451.42	1451.42	1451.42	1451.42		
Claimed by the Petitioner in the instant petition	1451.42	1451.42	1451.42	1451.42	1451.42		
Approved after true-up in this order	1451.42	1451.42	1451.42	1451.42	1451.42		

					(₹ in lakh)		
Particulars		Asset-II					
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	132.52	132.52	132.52	132.52	132.52		
Claimed by the Petitioner in the instant petition	132.52	132.52	132.52	132.52	132.52		
Approved after true-up in this order	132.52	132.52	132.52	132.52	132.52		
					(₹ in lakh)		

Particulars			Asset-III		
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	219.57	219.57	219.57	219.57	219.57
Claimed by the Petitioner in the instant petition	219.56	219.56	219.56	219.56	219.56
Approved after true-up in this order	219.57	219.57	219.57	219.57	219.57



Page 47 of 96

Particulars	Asset-IV						
Farticulars	2015-16	2016-17	2017-18	2018-19			
Allowed <i>vide</i> order dated 30.5.2016 in Petition No. 276/TT/2015	1739.08	3883.54	3940.25	3948.42			
Claimed by the Petitioner in the instant petition	1744.92	3911.71	3983.22	4026.04			
Approved after true-up in this order	1744.92	3911.72	3983.23	4026.04			

Interest on Loan (IoL)

53. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest.

54. IoL has been calculated based on actual interest rate submitted by the Petitioner in accordance with Regulation 26 of the 2014 Tariff Regulations. The truedup IoL allowed is as follows:

					(₹ in lakh)
Particulars			Asset-I		
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	19573.94	19573.94	19573.94	19573.94	19573.94
Cumulative Repayments up to Previous Year	8033.80	9485.22	10936.63	12388.05	13839.46
Net Loan-Opening	11540.14	10088.72	8637.31	7185.89	5734.48
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	1451.42	1451.42	1451.42	1451.42	1451.42
Net Loan-Closing	10088.72	8637.31	7185.89	5734.48	4283.06
Average Loan	10814.43	9363.02	7911.60	6460.19	5008.77
Weighted Average Rate of Interest on Loan (in %)	9.3107	9.3132	9.3165	9.3212	9.3282
Interest on Loan	1006.90	872.00	737.09	602.17	467.23

(₹ in lakh)

Particulars	Asset-II				
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1769.34	1769.34	1769.34	1769.34	1769.34
Cumulative Repayments up to Previous Year	744.62	877.14	1009.66	1142.18	1274.69
Net Loan-Opening	1024.72	892.20	759.68	627.16	494.64
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	132.52	132.52	132.52	132.52	132.52





Net Loan-Closing	892.20	759.68	627.16	494.64	362.13
Average Loan	958.46	825.94	693.42	560.90	428.39
Weighted Average Rate of Interest on Loan (in %)	9.3040	9.3061	9.3089	9.3127	9.3183
Interest on Loan	89.18	76.86	64.55	52.24	39.92

Particulars		Asset-III			
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	2913.36	2913.36	2913.36	2913.36	2913.36
Cumulative Repayments up to Previous Year	1196.72	1416.29	1635.86	1855.43	2075.00
Net Loan-Opening	1716.64	1497.07	1277.50	1057.94	838.37
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	219.57	219.57	219.57	219.57	219.57
Net Loan-Closing	1497.07	1277.50	1057.94	838.37	618.80
Average Loan	1606.86	1387.29	1167.72	948.15	728.58
Weighted Average Rate of Interest on Loan (in %)	9.3936	9.3934	9.3932	9.3929	9.3924
Interest on Loan	150.94	130.31	109.69	89.06	68.43

(₹ in lakh)

	Asset-IV					
Particulars	2015-16 (Pro-rata 168 days)	2016-17	2017-18	2018-19		
Gross Normative Loan	50547.24	52111.15	53473.14	54009.10		
Cumulative Repayments up to Previous Year	0.00	1744.92	5656.63	9639.87		
Net Loan-Opening	50547.24	50366.23	47816.51	44369.23		
Additions due to ACE	1563.91	1361.99	535.96	619.02		
Repayment during the year	1744.92	3911.72	3983.23	4026.04		
Net Loan-Closing	50366.23	47816.51	44369.23	40962.21		
Average Loan	50456.74	49091.37	46092.87	42665.72		
Weighted Average Rate of Interest on Loan (in %)	9.1498	9.0796	8.9882	8.9101		
Interest on Loan	2119.13	4457.31	4142.91	3801.56		

55. The details of IoL allowed *vide* orders dated 8.1.2016 in Petition No. 205/TT/2014 and 30.5.2016 in Petition No. 276/TT/2015, claimed by the Petitioner in the instant petition and trued-up IOL in the instant order are as follows:



Page **49** of **96**

Particulars			Asset-I		× /
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	1006.90	872.00	737.09	602.17	467.23
Claimed by the Petitioner in the instant petition	1081.00	946.11	811.23	676.35	541.46
Approved after true-up in this order	1006.90	872.00	737.09	602.17	467.23

(₹ in lakh)

Particulars		Asset-II				
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19	
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	89.18	76.86	64.55	52.24	39.92	
Claimed by the Petitioner in the instant petition	97.04	84.73	72.42	60.11	47.79	
Approved after true-up in this order	89.18	76.86	64.55	52.24	39.92	

(₹ in lakh)

Particulars			Asset-III		
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	150.94	130.31	109.69	89.06	68.43
Claimed by the Petitioner in the instant petition	161.27	140.64	120.01	99.38	78.76
Approved after true-up in this order	150.94	130.31	109.69	89.06	68.43

(₹ in lakh)

Particulars	Asset-IV					
Farticulars	2015-16	2016-17	2017-18	2018-19		
Allowed <i>vide</i> order dated 30.5.2016 in Petition No. 276/TT/2015	2115.86	4456.01	4151.79	3784.46		
Claimed by the Petitioner in the instant petition	2119.14	4457.30	4142.92	3801.56		
Approved after true-up in this order	2119.13	4457.31	4142.91	3801.56		



Page **50** of **96**

Return on Equity (RoE)

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

Year	Claimed effective tax rate (in %)	Grossed-up ROE (in %) [(Base Rate)/(1-t)]
2014-15	21.018	19.625
2015-16	21.382	19.715
2016-17	21.338	19.705
2017-18	21.337	19.705
2018-19	21.549	19.758

57. The Commission, *vide* order dated 27.4.2020 in Petition No.274/TT/2019, had arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given as follows:

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

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



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

59. Trued-up RoE is allowed on the basis of the MAT rate applicable in the respective years for the 2014-19 tariff period and it is as follows:

				(1	₹ in lakh)			
Particulars	Asset-I							
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19			
Opening Equity (A)	8387.63	8387.63	8387.63	8387.63	8387.63			
Additions due to ACE (B)	0.00	0.00	0.00	0.00	0.00			
Closing Equity (C)=(A+B)	8387.63	8387.63	8387.63	8387.63	8387.63			
Average Equity (D)=[(A+C)/2]	8387.63	8387.63	8387.63	8387.63	8387.63			
Return on Equity (Base Rate) (in %) (E)	15.500	15.500	15.500	15.500	15.500			
MAT Rate for respective year (in %) (F)	20.961	21.342	21.342	21.342	21.549			
Rate of Return on Equity (in %) (G)=[E/(100-F)]	19.610	19.705	19.705	19.705	19.758			
Return on Equity (H)=(D*G)	1644.81	1652.78	1652.78	1652.78	1657.23			

(₹ in lakh)

Particulars	Asset-II						
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
Opening Equity (A)	758.28	758.28	758.28	758.28	758.28		
Additions due to ACE (B)	0.00	0.00	0.00	0.00	0.00		
Closing Equity (C)=(A+B)	758.28	758.28	758.28	758.28	758.28		
Average Equity (D)=[(A+C)/2]	758.28	758.28	758.28	758.28	758.28		
Return on Equity (Base Rate) In (%) (E)	15.500	15.500	15.500	15.500	15.500		
MAT Rate for respective year (in %) (F)	20.961	21.342	21.342	21.342	21.549		
Rate of Return on Equity (in %) (G)=[E/(100-F)]	19.610	19.705	19.705	19.705	19.758		
Return on Equity (H)=(D*G)	148.70	149.42	149.42	149.42	149.82		



Page 52 of 96

Particulars	Asset-III					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Opening Equity (A)	1248.51	1248.51	1248.51	1248.51	1248.51	
Additions due to ACE (B)	0.00	0.00	0.00	0.00	0.00	
Closing Equity (C)=(A+B)	1248.51	1248.51	1248.51	1248.51	1248.51	
Average Equity (D)=[(A+C)/2]	1248.51	1248.51	1248.51	1248.51	1248.51	
Return on Equity (Base Rate) (in %) (E)	15.500	15.500	15.500	15.500	15.500	
MAT Rate for respective year (in %) (F)	20.961	21.342	21.342	21.342	21.549	
Rate of Return on Equity (in %) (G)=[E/(100-F)]	19.610	19.705	19.705	19.705	19.758	
Return on Equity (H)=(D*G)	244.83	246.02	246.02	246.02	246.68	

(₹ in lakh)

	Asset-IV					
Particulars	2015-16 (Pro-rata 168 days)	2016-17	2017-18	2018-19		
Opening Equity (A)	21663.10	22333.34	22917.05	23146.74		
Additions due to ACE (B)	670.24	583.71	229.69	236.87		
Closing Equity (C)=(A+B)	22333.34	22917.05	23146.74	23383.61		
Average Equity (D)=[(A+C)/2]	21998.22	22625.20	23031.90	23265.18		
Return on Equity (Base Rate) (in %) (E)	15.500	15.500	15.500	15.500		
MAT Rate for respective year (in %) (F)	21.342	21.342	21.342	21.549		
Rate of Return on Equity (in %) (G)=[E/(100-F)]	19.705	19.705	19.705	19.758		
Return on Equity (H)=(D*G)	1989.72	4458.29	4538.43	4596.73		

60. The details of RoE allowed vide orders dated 8.1.2016 in Petition No.

205/TT/2014 and 30.5.2016 in Petition No. 276/TT/2015, claimed by the Petitioner in

the instant petition and trued-up RoE in the instant order are as follows:

				(₹ in lakh)		
Particulars	Asset-I						
Farticulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	1644.85	1644.85	1644.85	1644.85	1644.85		
Claimed by the Petitioner in the instant petition	1646.07	1653.62	1652.78	1652.78	1657.23		
Approved after true-up in this order	1644.81	1652.78	1652.78	1652.78	1657.23		



Page 53 of 96

Particulars	Asset-II						
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	148.70	148.70	148.70	148.70	148.70		
Claimed by the Petitioner in the instant petition	148.81	149.49	149.42	149.42	149.82		
Approved after true-up in this order	148.70	149.42	149.42	149.42	149.82		

(₹ in lakh)

Particulars	Asset-III						
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	244.84	244.84	244.84	244.84	244.84		
Claimed by the Petitioner in the instant petition	245.02	246.14	246.02	246.02	246.68		
Approved after true-up in this order	244.83	246.02	246.02	246.02	246.68		

(₹ in lakh)

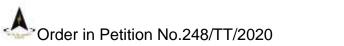
Derticulara	Asset-IV						
Particulars	2015-16	2016-17	2017-18	2018-19			
Allowed <i>vide</i> order dated 30.5.2016 in Petition No. 276/TT/2015	1973.63	4405.47	4468.88	4478.06			
Claimed by the Petitioner in the instant petition	1990.73	4458.30	4538.44	4596.73			
Approved after true-up in this order	1989.72	4458.29	4538.43	4596.73			

Operation & Maintenance Expenses (O&M Expenses)

61. The O&M Expenses claimed by the Petitioner for the transmission assets for

the 2014-19 period are as follows:

Particulars	Asset-I							
Farticulars	2014-15	2015-16	2016-17	2017-18	2018-19			
Transmission line		00.070 (
 (i) LILO of Kolar Sriperumbadur Line (30.673 km) (ii) Narendra-Devangiri line (156.50 km) 								
D/C Twin Conductor (km)	187.173	187.173	187.173	187.173	187.173			
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806			
Norms (₹ lakh/km)0.7070.7310.7550.780.806400 kV Bays 1 number each of:(i)Narendra: Bus Reactor bay (50 MVAR)(ii)Narendra: Davangere Bay-I(iii)Narendra: Davangere Bay-II(iv)Davangere: Narendra Bay-I								



Page 54 of 96

Particulars	Asset-I							
Faiticulais	2014-15	2018-19						
(v) Davangere: Narendra Bay-I								
(vii) Kalivanthapattu :Kolar	Bay	-						
viii) Kalivanthapattu:Switch	nable Reacto	r Bay for Kola	ar-S perumbu	dur Line				
(ix) Mysore :Bus Reactor I		•	·					
400 kV Bays	9	9	9	9	9			
Norms (₹ lakh/Bay)	60.30 62.30 64.37 66.51 68.71							
Total O&M Expense (₹ in lakh)	675.04 697.52 720.65 744.58 769							

Particulars		Asset-II							
Faiticulais	2014-15 2015-16 2016-		2016-17	2017-18	2018-19				
400 kV Bays 1 number each of:									
(i) Hiriyur:ICT - II (1 nun	nber)								
220 kV Bays of:	·								
(i) Hiriyur:ICT - II (1 nun	nber)								
(ii) Hiriyur:Gauribidanur	- I and II (2 n	umbers)							
400 kV Bays	1	1	1	1	1				
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71				
220 kV Bays	3	3	3	3	3				
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10				
Total O&M Expense (₹ in lakh)	186.93	193.13	199.55	206.16	213.01				

Particulars			Asset-III					
Particulars	2014-15	2015-16	2016-17	-17 2017-18 2018-1				
400 kV Bays 1 number ea	ch of:							
(i) Kalivanthapattu:400 kV ICT-I Bay (1 number)								
(ii) Kalivanthapattu:400 k	V ICT-I Bay	(1 number)						
220 kV Bays 1 no. each of:								
(i) Kalivanthapattu:220 k	V ICT - I Bay	/ (1 number)						
(ii) Kalivanthapattu:220 k	V ICT -II Bay	(1 number)						
(iii) Kalivanthapattu:220 k	V Kadapperi	Bay (1 numb	ber)					
(iv) Kalivanthapattu:220 k	V Siruseri Ba	ay (1 number)					
(v) Kalivanthapattu:220 k	kV S P Koli B	ay (1 number	·)					
(vi) Kalivanthapattu:220 k	V Acharapak	kam Bay (1 i	number)					
400 kV Bays	2	2	2	2	2			
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71			
220 kV Bays	6	6	6	6	6			
Norms (₹ lakh/Bay)	; (₹ lakh/Bay) 42.21 43.61 45.06 46.55 48.							
Total O&M Expense (₹ in lakh)	373.86	386.26	399.10	412.32	426.02			



Page 55 of 96

	Asset-IV								
Particulars	2015-16 (Pro-rata 168 days)	2016-17	2017-18	2018-19					
Transmission line									
(i) Mysore-Kozhikode (2	15.524 km)								
D/C Twin Conductor (km)	215.524	215.524	215.524	215.524					
Norms (₹ lakh/km)	0.731	0.755	0.780	0.806					
 400 kV Bays of: (i) Mysore:Kozhikode Ba (ii) Kozhikode:Mysore Ba (iii) Kozhikode:ICT-I Bay (iv) Kozhikode:ICT-II Bay 220 kV Bays of: (i) Kozhikode:ICT-I Bay 	ay I and II (2 num I (1 number) I (1 number)								
(ii) Kozhikode:ICT-II Bay	,								
(iii) Kozhikode:KSEB Line	e Bays (4 numbe	rs)							
400 kV Bays	6	6	6	6					
Norms (₹ lakh/Bay)	62.30	64.37	66.51	68.71					
220 kV Bays	6	6	6	6					
Norms (₹ lakh/Bay)	43.61	45.06	46.55	48.10					
Total O&M Expense (₹ in lakh)	364.01	819.30	846.47	874.57					

62. The applicable norms for the O&M Expenses as per the 2014 Tariff Regulations

are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission line					
D/C Twin Conductor Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Bays					
400 kV Bays Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
220 kV Bays Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10

63. We have considered the submissions of the Petitioner. The O&M Expenses allowed for the transmission assets as per norms specified in the 2014 Tariff Regulations are as follows:

Page 56 of 96

Dortiouloro			Asset-I						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19				
Transmission line									
(i) LILO of Kolar Sriperumbadur Line (30.673 km)									
(ii) Narendra-Devangiri li	ne (156.50 ki	<u>n) </u>							
D/C Twin Conductor (km)	187.173	187.173	187.173	187.173	187.173				
O&M Expense (₹ in lakh)	132.33	136.82	141.32	145.99	150.86				
400 kV Bays 1 number eac	h of:								
(i) Narendra: Bus Reacto	or bay (50 M\	/AR)							
(ii) Narendra: Davangere	Bay-I								
(iii) Narendra: Davangere									
(iv) Davangere: Narendra	Bay-I								
(v) Davangere: Narendra	Bay-I								
(vi) Kalivanthapattu :Sripe	erumbudur Ba	ау							
(vii) Kalivanthapattu :Kola	r Bay								
(viii) Kalivanthapattu:Switc	hable Reacto	or Bay for Kol	ar-S perumb	udur Line					
(ix) Mysore :Bus Reactor	Bay								
400 kV Bays	9	9	9	9	9				
O&M Expense (₹ in lakh)	542.70	560.70	579.33	598.59	618.39				
Total O&M Expense (₹ in lakh)	675.03	697.52	720.65	744.58	769.25				

Particulars			Asset-II						
Particulars	2014-15	2014-15 2015-16 2016-17		2017-18	2018-19				
400 kV Bays 1 number each of:									
(i) Hiriyur:ICT - II (1 num	nber)								
220 kV Bays of:									
(i) Hiriyur:ICT - II (1 num	nber)								
(ii) Hiriyur:Gauribidanur	- I and II (2 nu	umber)							
400 kV Bays	1	1	1	1	1				
O&M Expense (₹ in lakh)	60.30	62.30	64.37	66.51	68.71				
220 kV Bays	3	3	3	3	3				
O&M Expense (₹ in lakh)	126.63	130.83	135.18	139.65	144.30				
Total O&M Expense (₹ in lakh)	186.93	193.13	199.55	206.16	213.01				

Particulars	Asset-III						
Failleulais	2014-15	2015-16	2016-17	2017-18	2018-19		
V Bays 1 number eac	h of:	<u>.</u>					
•							
Kalivanthapattu:400	kV ICT-I Bay	(1 number)					
V Bays 1 no. each of:	-						
Kalivanthapattu:220	kV ICT - I Ba	ay (1 number)					
Kalivanthapattu:220							
Kalivanthapattu:220	kV Kadappei	ri Bay (1 num	ber)				
	Kalivanthapattu:400 Kalivanthapattu:400 V Bays 1 no. each of: Kalivanthapattu:220 Kalivanthapattu:220	2014-15 V Bays 1 number each of: Kalivanthapattu:400 kV ICT-I Bay Kalivanthapattu:400 kV ICT-I Bay V Bays 1 no. each of: Kalivanthapattu:220 kV ICT - I Ba Kalivanthapattu:220 kV ICT - II Ba	2014-15 2015-16 V Bays 1 number each of: Kalivanthapattu:400 kV ICT-I Bay (1 number) Kalivanthapattu:400 kV ICT-I Bay (1 number) V Bays 1 no. each of: Kalivanthapattu:220 kV ICT - I Bay (1 number) Kalivanthapattu:220 kV ICT - II Bay (1 number)	Particulars2014-152015-162016-17V Bays 1 number each of: Kalivanthapattu:400 kV ICT-I Bay (1 number) Kalivanthapattu:400 kV ICT-I Bay (1 number)	Particulars2014-152015-162016-172017-18V Bays 1 number each of: Kalivanthapattu:400 kV ICT-I Bay (1 number) Kalivanthapattu:400 kV ICT-I Bay (1 number)V Bays 1 no. each of: Kalivanthapattu:220 kV ICT - I Bay (1 number) Kalivanthapattu:220 kV ICT - I Bay (1 number)		

Page **57** of **96**



 (iv) Kalivanthapattu:220 (v) Kalivanthapattu:220 (vi) Kalivanthapattu:220 	kV S P Koli E	Bay (1 numbe	r)					
400 kV Bays	2 2 2 2 2							
O&M Expense (₹ in lakh) 120.60 124.60 128.74 133.02 137.								
220 kV Bays	6	6	6	6	6			
O&M Expense (₹ in lakh)	253.26	261.66	270.36	279.30	288.60			
Total O&M Expense (₹ in lakh)	Total O&M Expense 373.86 386.26 309.10 412.32 426.02							

		Asse	et-IV	
Particulars	2015-16 (Pro-rata 168 days)	2016-17	2017-18	2018-19
Transmission line				
(i) Mysore-Kozhikode (2	215.524 km)			
D/C Twin Conductor (km)	215.524	215.524	215.524	215.524
O&M Expense (₹ in lakh)	72.32	162.72	168.11	173.71
400 kV Bays of:				
(i) Mysore:Kozhikode B	ay I and II (2 nu	mbers)		
(ii) Kozhikode:Mysore B	ay I and II (2 nu	mbers)		
(iii) Kozhikode:ICT-I Bay				
(iv) Kozhikode:ICT-II Ba	y I (1 number)			
220 kV Bays of: (i) Kozhikode:ICT-I Bay	ull (1 number)			
(ii) Kozhikode:ICT-II Ba				
(iii) Kozhikode:KSEB Lir		ers)		
400 kV Bays	6	6	6	6
O&M Expense (₹ in lakh)	171.58	386.22	399.06	412.26
220 kV Bays	6	6	6	6
O&M Expense (₹ in lakh)	120.11	270.36	279.30	288.60
Total O&M Expense (₹ in lakh)	364.00	819.30	846.47	874.57

64. The details of O&M Expenses allowed *vide* order dated 8.1.2016 in Petition No.

205/TT/2014 and 30.5.2016 in Petition No. 276/TT/2015, claimed by the Petitioner in

the instant petition and trued-up O&M Expenses in the instant order are as follows:

	Dortio	ulara		Asset-I				
	Partic	ulars		2014-15 2015-16 2016-17			2017-18	2018-19
Allowed	vide	order	dated	675.03	697.52	720.65	744.58	769.25

Page 58 of 96



8.1.2016 in Petition No. 205/TT/2014					
Claimed by the Petitioner in the instant petition	675.04	697.52	720.65	744.58	769.25
Approved after true-up in this order	675.03	697.52	720.65	744.58	769.25

Particulars	Asset-II							
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19			
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	186.93	193.13	199.55	206.16	213.01			
Claimed by the Petitioner in the instant petition	186.93	193.13	199.55	206.16	213.01			
Approved after true-up in this order	186.93	193.13	199.55	206.16	213.01			

(₹ in lakh)

Particulars	Asset-III					
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19	
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	373.86	386.26	399.10	412.32	426.02	
Claimed by the Petitioner in the instant petition	373.86	386.26	399.10	412.32	426.02	
Approved after true-up in this order	373.86	386.26	399.10	412.32	426.02	

				(₹ in lakh)				
Particulars		Asset-IV						
Particulars	2015-16	2016-17	2017-18	2018-19				
Allowed <i>vide</i> order dated 30.5.2016 in Petition No. 276/TT/2015	364.00	819.30	846.47	874.57				
Claimed by the Petitioner in the instant petition	364.01	819.30	846.47	874.57				
Approved after true-up in this order	364.00	819.30	846.47	874.57				

Interest on Working Capital (IWC)

65. IWC has been worked out as per the methodology provided in Regulation 28 of

the 2014 Tariff Regulations and is allowed as follows:

(₹	in	lakh)
(र	In	lakh)

Particulars	Asset-I						
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
WC for O&M Expenses (O&M Expenses for 1 month)	56.25	58.13	60.05	62.05	64.10		
WC for Maintenance Spares	101.25	104.63	108.10	111.69	115.39		



Page 59 of 96

(15% of O&M Expenses)					
WC for Receivables (Equivalent to 2 months of annual fixed cost)	818.32	800.63	781.69	762.90	744.99
Total Working Capital	975.82	963.38	949.84	936.64	924.48
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	131.74	130.06	128.23	126.45	124.80

Particulars	Asset-II						
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
WC for O&M Expenses (O&M Expenses for 1 month)	15.58	16.09	16.63	17.18	17.75		
WC for Maintenance Spares (15% of O&M Expenses)	28.04	28.97	29.93	30.92	31.95		
WC for Receivables (Equivalent to 2 months of annual fixed cost)	96.03	95.14	94.17	93.24	92.41		
Total Working Capital	139.65	140.21	140.73	141.34	142.11		
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50		
Interest on Working Capital	18.85	18.93	19.00	19.08	19.19		

(₹ in lakh)

Particulars	Asset-III						
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
WC for O&M Expenses (O&M Expenses for 1 month)	31.16	32.19	33.26	34.36	35.50		
WC for Maintenance Spares (15% of O&M Expenses)	56.08	57.94	59.87	61.85	63.90		
WC for Receivables (Equivalent to 2 months of annual fixed cost)	170.67	169.54	168.28	167.09	166.09		
Total Working Capital	257.90	259.66	261.40	263.29	265.50		
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50		
Interest on Working Capital	34.82	35.05	35.29	35.54	35.84		

(₹ in lakh)

	Asset-IV						
Particulars	2015-16 (Pro-rata 168 days)	2016-17	2017-18	2018-19			
WC for O&M Expenses (O&M Expenses for 1 month)	66.08	68.28	70.54	72.88			
WC for Maintenance Spares (15% of O&M Expenses)	118.95	122.90	126.97	131.19			
WC for Receivables	2313.87	2331.19	2308.22	2272.20			

Page 60 of 96



(Equivalent to 2 months of annual fixed cost)				
Total Working Capital	2498.90	2522.36	2505.73	2476.27
Rate of Interest (in %)	13.50	13.50	13.50	13.50
Interest on Working Capital	154.85	340.52	338.27	334.30

66. The details of IWC allowed *vide* order dated 8.1.2016 in Petition No. 205/TT/2014 and 30.5.2016 in Petition No. 276/TT/2015, claimed by the Petitioner in the instant petition and trued-up IWC in the instant order are as follows:

(₹ in lakh)

	Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	131.73	129.87	128.04	126.26	124.52	
Claimed by the Petitioner in the instant petition	133.47	131.78	129.94	128.15	126.51	
Approved after true-up in this order	131.74	130.06	128.23	126.45	124.80	

(₹ in lakh)

Particulars	Asset-II					
Falticulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	18.85	18.91	18.98	19.06	19.16	
Claimed by the Petitioner in the instant petition	19.04	19.11	19.18	19.26	19.37	
Approved after true-up in this order	18.85	18.93	19.00	19.08	19.19	

(₹ in lakh)

Particulars	Asset-III					
Farticulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Allowed <i>vide</i> order dated 8.1.2016 in Petition No. 205/TT/2014	34.82	35.03	35.26	35.52	35.80	
Claimed by the Petitioner in the instant petition	35.06	35.30	35.53	35.78	36.08	
Approved after true-up in this order	34.82	35.05	35.29	35.54	35.84	

(₹ in lakh)

Particulars	Asset-IV					
Faiticulais	2015-16 2016-17		2017-18	2018-19		
Allowed <i>vide</i> order dated 30.5.2016 in Petition No. 276/TT/2015	154.27	338.62	335.89	329.38		
Claimed by the Petitioner in the	154.87	340.52	338.27	334.30		

Page 61 of 96



instant petition				
Approved after true-up in this order	154.85	340.52	338.27	334.30

APPROVED ANNUAL FIXED CHARGES OR THE 2014-19 TARIFF PERIOD

67. The trued-up AFC for the transmission assets for the tariff period 2014-19 are

summarised as follows:

(₹ in lakh) Asset-I **Particulars** 2014-15 2015-16 2016-17 2017-18 2018-19 Depreciation 1451.42 1451.42 1451.42 1451.42 1451.42 Interest on Loan 1006.90 872.00 737.09 602.17 467.23 Return on Equity 1644.81 1652.78 1652.78 1652.78 1657.23 O&M Expenses 675.03 697.52 720.65 744.58 769.25 Interest on Working Capital 131.74 130.06 128.23 126.45 124.80 Total 4909.90 4803.78 4577.40 4469.93 4690.16

(₹ in lakh)

Particulars	Asset-II						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Depreciation	132.52	132.52	132.52	132.52	132.52		
Interest on Loan	89.18	76.86	64.55	52.24	39.92		
Return on Equity	148.70	149.42	149.42	149.42	149.82		
O&M Expenses	186.93	193.13	199.55	206.16	213.01		
Interest on Working Capital	18.85	18.93	19.00	19.08	19.19		
Total	576.18	570.86	565.04	559.41	554.45		

(₹ in lakh)

Particulars	Asset-III						
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
Depreciation	219.57	219.57	219.57	219.57	219.57		
Interest on Loan	150.94	130.31	109.69	89.06	68.43		
Return on Equity	244.83	246.02	246.02	246.02	246.68		
O&M Expenses	373.86	386.26	399.10	412.32	426.02		
Interest on Working Capital	34.82	35.05	35.29	35.54	35.84		
Total	1024.02	1017.22	1009.66	1002.51	996.54		



Page 62 of 96

	Asset-IV							
Particulars	2015-16 (Pro-rata 168 days)	2016-17	2017-18	2018-19				
Depreciation	1744.92	3911.72	3983.23	4026.04				
Interest on Loan	2119.13	4457.31	4142.91	3801.56				
Return on Equity	1989.72	4458.29	4538.43	4596.73				
O&M Expenses	364.00	819.30	846.47	874.57				
Interest on Working Capital	154.85	340.52	338.27	334.30				
Total	6372.62	13987.14	13849.33	13633.20				

Determination of Annual Fixed Charges for the 2019-24 Tariff Period

68. Asset-I, Asset-II, Asset-III and Asset-IV are combined w.e.f. 1.4.2019 into single asset, viz., Combined Asset. The Petitioner has claimed the following transmission charges for Combined Asset for the 2019-24 tariff period:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	5868.56	5901.86	5941.99	5984.02	6044.09
Interest on Loan	3979.45	3457.50	2935.01	2415.48	1936.06
Return on Equity	6361.66	6397.15	6439.98	6484.84	6548.94
O&M Expenses	1834.98	1900.12	1966.85	2036.56	2106.43
Interest on Working Capital	323.73	320.50	316.78	313.30	310.29
Total	18368.38	17977.14	17600.61	17234.21	16945.81

69. The details of IWC claimed by the Petitioner for the 2019-24 period are as

follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses (O&M Expenses for 1 month)	152.92	158.34	163.90	169.71	154.54
WC for Maintenance Spares (15% of O&M Expenses)	275.25	285.02	295.03	305.49	315.96
WC for Receivables (Equivalent to 45 days of annual transmission charges)	2258.41	2216.36	2169.94	2124.76	2083.50
Total Working Capital	2686.58	2659.72	2628.87	2599.96	2575.00
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	323.73	320.50	316.78	313.30	310.29

Page 63 of 96



Effective Date of Commercial Operation (E-COD)

70. The Petitioner has stated that E-COD of the Combined Asset works out to be 9.7.2013. Same E-COD has been worked out as under based on the trued-up capital cost and dates of commercial operation of the individual assets:

Asset	Capital Cost (as on 31.3.2019) (₹ in lakh)	COD	Number of days from COD from last COD	Weight of cost (in %)	Weighted days	Effective COD (latest COD – total weighted days)
Asset-I	27961.57	1.6.2008	2693	24.82	668.37	
Asset-II	2527.62	1.4.2008	2754	2.24	61.79	
Asset-III	4161.87	1.7.2008	2663	3.69	98.37	9.7.2013
Asset-IV	78011.73	16.10.2015	0	69.24	0.00	
Total	112662.79			100.00		

71. E-COD is used to determine the lapsed life of the project as a whole which works out as 5 (five) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (WAL) of the Project

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

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

74. The WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as specified in the 2019 Tariff Regulations. 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, the WAL of all the transmission assets commissioned during 2014-19 period has been worked out as 32 years as shown under:

Particulars	Life (in years) (1)	Capital Cost as on 31.3.2019 (₹ in lakh) (2)	Weighted Cost (₹ in lakh) (3) = [(1) * (2)]	Weighted Average Life of Asset (in years) (4) = [(3) / (2)]
Building & Civil Works	25	2979.29	74482.25	
Transmission Line	35	81694.92	2859322.20	22.00 vector (novembed
Sub-Station	25	26598.03	664950.75	32.26 years (rounded off to 32 years)
PLCC	15	549.22	8238.30	on to 52 years
Total		111821.46	3606993.50	

75. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed above, the Effective COD of the assets is 9.7.2013 and the lapsed life of the project as a whole works out as 5 years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from Effective COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 27 years.

Capital Cost

76. Regulation 19 of the 2019 Tariff Regulations provide 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



Page 65 of 96

equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

- (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
- (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
- (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
- (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 renovation and modernisation as admitted by this Commission in accordance with these regulations;
 - (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 upto the receiving end of generating station but does not include the transportation cost and any



Page 66 of 96

other appurtenant cost paid to the railway; and

- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (4) The capital cost in case of existing or new hydro generating station shall also include:
 - (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
 - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
 - (a) The assets forming part of the project, but not in use, as declared in the tariff petition;
 - (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be decapitalised only after its redeployment;

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

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."

77. The Petitioner has claimed capital cost of ₹112662.79 lakh as on 31.3.2019,

which is the same as worked out by the Commission. Accordingly, ₹112662.79 lakh

has been considered as opening capital cost as on 1.4.2019 for determination of tariff

in accordance with Regulation 19 of the 2019 Tariff Regulations.



Page 67 of 96

Additional Capital Expenditure (ACE)

78. Regulation 24 of the 2019 Tariff Regulations provide as follows:

"24. Additional Capitalisation within the original scope and upto the cut-off date

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

- (a) Undischarged liabilities recognized to be payable at a future date;
- (b) Works deferred for execution;
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23of 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 additional capital expenditure 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;
- (g) Raising of ash dyke as a part of ash disposal system."



Page 68 of 96

79. The Petitioner vide affidavit dated 3.9.2021 has submitted that in case of Asset-IV, it has projected an ACE of ₹88.47 lakh during 2019-20 as compensation to be paid as per Court orders. The Petitioner further submitted that the actual expenditure incurred against the same is ₹621.50 lakh during 2019-20 and ₹639.75 lakh during 2020-21. Further, an estimated expenditure of ₹3155.86 lakh is projected during 2021-24 as payment to be paid on account of compensation as per court orders and is claimed under Regulation 25(1)(a) of the 2019 Tariff Regulations. The Petitioner has claimed capital cost as on 31.3.2024 as follows:

						(₹ in lakh)
Capital Cost	ACE 2019-24				Capital Cost	
(as on 1.4.2019)	2019-20	2020-21	2021-22	2022-23	2023-24	(as on 31.3.2024)
112662.79	621.50	639.75	880.49	711.70	1563.67	117079.90

80. We have considered the submissions made by the Petitioner. The Capital Cost approved as on 1.4.2019 in respect of Asset-IV is ₹78011.73 lakh, which is included in the cost of Combined Asset as dealt with in the preceding paragraphs and ACE projected for the 2019-24 period is ₹4417.11 lakh. The Capital Cost for Asset-IV projected as on 31.3.2024 is ₹82428.84 lakh whereas apportioned approved cost as per RCE-II for Asset-IV is ₹78804.00 lakh. We observe that there is cost over-run in case of Asset-IV. ACE claimed by the Petitioner has been allowed under Regulation 25(1)(a) of the 2019 Tariff Regulations on account of liabilities to meet order of court of law, subject to true-up as per actuals and on submission of documentary evidence(s). Accordingly, the capital cost considered for the Combined Asset for the 2019-24 tariff period is as follows:



Page 69 of 96

Capital Cost		Capital Cost				
(as on 1.4.2019)	2019-20	2020-21	2021-22	2022-23	2023-24	(as on 31.3.2024)
112662.79	621.50	639.75	880.49	711.70	1563.67	117079.90

Debt-Equity ratio

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

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

Provided that:

- *i.* where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- *ii.* the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

Explanation-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually 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,

Order in Petition No.248/TT/2020

Page 70 of 96

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."

82. The debt-equity considered for the purpose of computation of tariff for the 2019-

24 tariff period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The

debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff

period is as follows:

Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)
Debt	78884.76	70.02
Equity	33778.03	29.98
Total	112662.79	100.00

Funding	ACE 2019-20 (₹ in lakh)	(in %)	ACE 2020-21 (₹ in lakh)	(in %)	ACE 2021-22 (₹ in lakh)	(in %)	ACE 2022-23 (≹ in lakh)	(in %)	ACE 2023-24 (₹ in lakh)	(in %)
Debt	435.45	70.06	447.84	70.00	616.34	70.00	498.19	70.00	1094.57	70.00
Equity	186.05	29.94	191.91	30.00	264.15	30.00	213.51	30.00	469.10	30.00
Total	621.50	100.00	639.75	100.00	880.49	100.00	711.70	100.00	1563.67	100.00

Funding	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)	
Debt	81977.15	70.02	
Equity	35102.75	29.98	
Total	117079.90	100.00	



Page 71 of 96

Depreciation

83. Clauses (1), (2) and (5) of Regulation 33 of the 2019 Tariff Regulations provides as follows:

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

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

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

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

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

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

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

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

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

Order in Petition No.248/TT/2020

Page 72 of 96

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-I** to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

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

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

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

b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or

c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.



Page 73 of 96

84. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The weighted average rate of depreciation (WAROD) has been worked out (Annexure-II) as per the rates of depreciation specified in 2019 Tariff Regulations. The depreciation allowed for the transmission asset is as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block (A)	112662.79	113284.29	113924.04	114804.53	115516.23
Addition during the year due to projected ACE (B)	621.50	639.75	880.49	711.70	1563.67
Closing Gross Block (C)=(A+B)	113284.29	113924.04	114804.53	115516.23	117079.90
Average Gross Block (D)=[(A+B)/2]	112973.54	113604.17	114364.29	115160.38	116298.07
Freehold land (E)	841.33	841.33	841.33	841.33	841.33
Weighted Average Rate of Depreciation (in %) (F)	5.19	5.20	5.20	5.20	5.20
Balance useful life at the beginning of the year (in year) (G)	27	26	25	24	23
Elapsed Life at the beginning of the year (in year) (H)	5	6	7	8	9
Depreciable Value (I)=[(D-E)*90%]	100918.99	101486.55	102170.66	102887.15	103911.06
Depreciation during the year (J)=(D*F)	5868.55	5901.85	5941.98	5984.01	6044.08
Cumulative depreciation at the end of year (K)	38527.12	44428.96	50370.94	56354.96	62399.04
Remaining Depreciable Value at the end of year (L)=(I-K)	62391.87	57057.59	51799.72	46532.19	41512.02

Interest on Loan (IoL)

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

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

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



Page 74 of 96

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

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

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

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

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

(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."

86. The Petitioner has prayed that the change in interest rate due to floating rate of

interest applicable, if any, during the 2019-24 tariff period may be adjusted.

87. The weighted average rate of IoL has been considered on the basis of rate

prevailing as on 1.4.2019. Accordingly, the floating rate of interest, if any, shall be

considered at the time of true up. IoL has been allowed in accordance with Regulation

32 of the 2019 Tariff Regulations. IoL allowed for the 2019-24 tariff period is as

follows:

Page **75** of **96**



					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	78884.76	79320.21	79768.05	80384.39	80882.58
Cumulative Repayments up to Previous Year	32658.57	38527.12	44428.96	50370.94	56354.96
Net Loan-Opening	46226.20	40793.10	35339.09	30013.45	24527.63
Additions due to ACE	435.45	447.84	616.34	498.19	1094.57
Repayment during the year	5868.55	5901.85	5941.98	5984.01	6044.08
Net Loan-Closing	40793.10	35339.09	30013.45	24527.63	19578.11
Average Loan	43509.65	38066.09	32676.27	27270.54	22052.87
Weighted Average Rate of Interest on Loan (in %)	8.9426	8.8526	8.7179	8.5471	8.4019
Interest on Loan	3890.89	3369.84	2848.68	2330.84	1852.86

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

88. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provides 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-ofriver 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 cutoff date beyond the original scope, excluding additional capitalization on 7 account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%. Provided further that:

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



Page 76 of 96

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 of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

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

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

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

Illustration-

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



Page 77 of 96

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."

89. The Petitioner has submitted that MAT rate is applicable to the Petitioner's

company. Accordingly, the MAT rate applicable in 2019-20 has been considered for

the purpose of RoE, which shall be trued-up with actual tax rate in accordance with

Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed is as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity (A)	33778.03	33964.08	34155.99	34420.14	34633.65
Additions due to ACE (B)	186.05	191.91	264.15	213.51	469.10
Closing Equity (C)=(A+B)	33964.08	34155.99	34420.14	34633.65	35102.75
Average Equity (D)=[(A+B)/2]	33871.05	34060.03	34288.06	34526.89	34868.20
Return on Equity (Base Rate) (in %) (E)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %) (F)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %) (G)=[E/(100-F)]	18.782	18.782	18.782	18.782	18.782
Return on Equity (H)=(D*G)	6361.66	6397.16	6439.98	6484.84	6548.94



Page 78 of 96

Operation & Maintenance Expenses (O&M Expenses)

90. The O&M expenses claimed by the Petitioner for the Combined asset for the

2019-24 period are as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
Transmission line(i)LILO of Kolar Sriperumb								
(ii) Narendra-Devangiri line	•	,						
(iii) Mysore-Kozhikode (215.	524 km)							
D/C Twin Conductor (km)	402.697	402.697	402.697	402.697	402.697			
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011			
400 kV Bays of:								
(i) Narendra: Bus Reactor	• •	, ,	r)					
(ii) Narendra: Davangere B								
(iii) Narendra: Davangere B								
(iv) Davangere: Narendra B	• •							
(v) Davangere: Narendra B (vi) Kalivanthapattu :Sriperu								
(vii) Kalivanthapattu :Kolar E	•	· /						
(viii) Kalivanthapattu:Switcha			-S perumbud	ur Line (1 nu	mber)			
(ix) Mysore: Bus Reactor Ba		•	e perambua					
(x) Hiriyur: ICT - II (1 numb		,						
(xi) Kalivanthapattu: 400 kV	,	number)						
(xii) Kalivanthapattu: 400 kV	′ ICT-I Bay (1	number)						
(xiii) Mysore: Kozhikode Bay	l and II (2 nu	umber)						
(xiv) Kozhikode: Mysore Bay		umber)						
(xv) Kozhikode: ICT-I Bay I	• •							
(xvi) Kozhikode: ICT-II Bay I	(1 number)							
220 kV Bays of:								
(i) Hiriyur: ICT - II (1 numb	er)							
(ii) Hiriyur: Gauribidanur - I								
(iii) Kalivanthapattu: 220 kV								
(iv) Kalivanthapattu: 220 kV		· /	,					
	(v) Kalivanthapattu: 220 kV Kadapperi Bay (1 number)							
	(vi) Kalivanthapattu: 220 kV Siruseri Bay (1 number)							
		ani bay (Thu						
(xi) Kozhikode: KSEB Line		oers)						
400 kV Bays	18 (<u>4 110111</u>	18	18	18	18			
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91			
220 kV Bays	15	15	15	15	15			
Norms (₹ lakh/Bay)								



Page **79** of **96**

Transformers							
1 x 400 kV 315 MVA Hiriyur:ICT II at Hiriyur							
2 x 400 kV 315 MVA Kalivanthapattu:ICT I and II at Kalivandpattu							
2 x 400 kV 315 MVA Kozhikod	2 x 400 kV 315 MVA Kozhikode:ICT I and II at Kozhikode						
5 x 400 kV 315 MVA (MVA)	1575	1575	1575	1575	1575		
Norms (₹ lakh/MVA)	0.358	0.371	0.384	0.398	0.411		
Total O&M Expense (₹ in lakh)	1834.98	1900.13	1966.85	2036.57	2106.43		

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

provide as follows:

"35. Operation and Maintenance Expenses:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
Norms for sub-station Bays (Rs Lakh per bay)								
765 kV	45.01	46.60	48.23	49.93	51.68			
400 kV	32.15	33.28	34.45	35.66	36.91			
220 kV	22.51	23.30	24.12	24.96	25.84			
132 kV and below	16.08	16.64	17.23	17.83	18.46			
Norms for Transformers (Rs Lakh per	MVA)							
765 kV	0.491	0.508	0.526	0.545	0.564			
400 kV	0.358	0.371	0.384	0.398	0.411			
220 kV	0.245	0.254	0.263	0.272	0.282			
132 kV and below	0.245	0.254	0.263	0.272	0.282			
Norms for AC and HVDC lines (Rs Lal	kh 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 (Rs. Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh)(3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

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

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

(iii) the O&M expenses of $\pm 500 \text{ kV}$ Mundra-Mohindergarh HVDC bipole scheme (2500 MW)shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for $\pm 500 \text{ kV}$ Talchar-Kolar HVDC bi-pole scheme (2000 MW);

(iv) the O&M expenses of $\pm 800 \text{ kV}$ Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for $\pm 800 \text{ kV}$, 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 substation 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



Page 81 of 96

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."

92. We have considered the submissions of the Petitioner. The O&M Expenses

have been worked out as per the norms specified in the 2019 Tariff Regulations and

are as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission line					
D/C Twin Conductor (km)	402.697	402.697	402.697	402.697	402.697
O&M Expense (₹ in lakh)	354.78	367.26	380.15	393.43	407.13
Bays					
400 kV Bays	18	18	18	18	18
O&M Expense (₹ in lakh)	578.70	599.04	620.10	641.88	664.38
220 kV Bays	15	15	15	15	15
O&M Expense (₹ in lakh)	337.65	349.50	361.80	374.40	387.60
Transformers					
5 x 400 kV 315 MVA (MVA)	1575	1575	1575	1575	1575
O&M Expense (₹ in lakh)	563.85	584.33	604.80	626.85	647.33
Total O&M Expense (₹ in lakh)	1834.98	1900.12	1966.85	2036.56	2106.43

Interest on Working Capital (IWC)

93. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of

the 2019 Tariff Regulations specify as follows:

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

(a) For Coal-based/lignite-fired thermal generating stations:

(i) Cost of coal or lignite and limestone towards stock, if applicable, for 10daysfor pit-head generating stations and 20 days for non-pit-head



Page 82 of 96

generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;

(ii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;

(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;

(iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;

(v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and

(vi) Operation and maintenance expenses, including water charges and security expenses, for one month.

(aa) For emission control system of coal or lignite based thermal generating stations:

(i) Cost of limestone or reagent towards stock for 20 days corresponding to the normative annual plant availability factor;

(ii) Advance payment for 30 days towards cost of reagent for generation corresponding to the normative annual plant availability factor;

(iii) Receivables equivalent to 45 days of supplementary capacity charge and supplementary energy charge for sale of electricity calculated on the normative annual plant availability factor;

(iv) Operation and maintenance expenses in respect of emission control system for one month;

(v) Maintenance spares @20% of operation and maintenance expenses in respect of emission control system.

(b) For Open-cycle Gas Turbine/Combined Cycle thermal generating stations:

(i) Fuel cost for 30 days corresponding to the normative annual plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;

(ii) Liquid fuel stock for 15 days corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;

(iii) Maintenance spares @ 30% of operation and maintenance expenses including water charges and security expenses;

(iv) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel; and

(v) Operation and maintenance expenses, including water charges and

Order in Petition No.248/TT/2020

Page 83 of 96

security expenses, for one month.

(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.

(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:

Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.

(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."

94. The Petitioner has submitted that it has computed IWC for the 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 Interest (ROI) considered is

12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points)



Page 84 of 96

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 and from 2021-22 onwards has been considered as 10.50% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.00% plus 350 basis points). The components of the working capital and interest thereon allowed is as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses (O&M Expenses for 1 month)	152.91	158.34	163.90	169.71	175.54
WC for Maintenance Spares (15% of O&M Expenses)	275.25	285.02	295.03	305.48	315.96
WC for Receivables (Equivalent to 45 days of annual transmission charges)	2247.35	2202.74	2154.06	2109.16	2068.17
Total Working Capital	2675.52	2646.10	2613.00	2584.36	2559.67
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	322.40	297.69	274.36	271.36	268.77

Annual Fixed Charges of the 2019-24 Tariff Period

95. The transmission charges allowed for the 2019-24 tariff period are summarised

as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	5868.55	5901.85	5941.98	5984.01	6044.08
Interest on Loan	3890.89	3369.84	2848.68	2330.84	1852.86
Return on Equity	6361.66	6397.16	6439.98	6484.84	6548.94
O & M Expenses	1834.98	1900.12	1966.85	2036.56	2106.43
Interest on Working Capital	322.40	297.69	274.36	271.36	268.77
Total	18278.48	17866.65	17471.86	17107.62	16821.09

Filing Fee and the Publication Expenses

96. The Petitioner has sought reimbursement of fee paid by it for filing the Petition

and publication expenses.

97. We have considered the submissions of the Petitioner. The Petitioner shall be

entitled for reimbursement of the filing fees and publication expenses in connection

Order in Petition No.248/TT/2020

Page 85 of 96

with the present Petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

98. 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 the 2019-24 tariff period.

Goods and Services Tax

99. 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.

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

Security Expenses

101. 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 consequential IWC.



102. 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 said petition has already been disposed of by the Commission *vide* order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

103. 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

104. TANGEDCO has submitted that the trued-up capital cost for the 2014-2019 tariff period has to be shared among the beneficiaries as per the 2010 Sharing Regulations. However, the 2020 Sharing Regulations have been notified on 4.5.2020 and 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 transmission charges based on the 2010 Sharing Regulations and the 2020 Sharing Regulations respectively. TANGEDCO has requested that the Commission may issue suitable directions to allocate the trued-up YTC up to 31.10.2020 as per 2010 Sharing Regulations and the YTC from 1.11.2020 as per the 2020 Sharing Regulations.

105. During the tariff period 2004-09, the transmission charges for Asset (a) and Asset (b) shall be shared by the beneficiaries in terms of the 2004 Tariff Regulations. Transmission charges for the Asset (d) shall be borne by the utilities of Karnataka in accordance with order dated 28.3.2008 in Petition No. 85/2007.

106. During the tariff periods 2004-09 (for transmission assets other than those mentioned in the previous paragraph) and during 2009-14 (from 1.4.2004 to 30.6.2011 in respect of all the transmission assets), the transmission charges were being shared in accordance with the Tariff Regulations for the respective tariff periods. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. However, with effect from 1.11.2020, sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, 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 Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of transmission charges for subsequent period shall be recovered in terms of the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

107. To summarize:

a) The revised Annual Fixed Charges (AFC) approved for the period from COD to 31.3.2009 in terms of the APTEL's judgements are as follows:



Page 88 of 96

(₹ in lakh)

	Asset (a)			
Particulars	2007-08 (Pro-rata 3 months)	2008-09		
AFC	76.34	322.55		

(₹ in lakh)

	Asset (b)		
Particulars	2007-08 (Pro-rata 2 months)	2008-09	
AFC	411.03	2539.18	

(₹ in lakh)

Particulars	Asset (c)
	2008-09
AFC	988.29

(₹ in lakh)

	(E III Iakii)
	Asset (d)
Particulars	2008-09
	(Pro-rata 10 months)
AFC	480.36

(₹ in lakh)

	Asset (e)	
Particulars	2008-09	
	(Pro-rata 10 months)	
AFC	479.17	

(₹ in lakh)

	Asset (f)	
Particulars	2008-09	
	(Pro-rata 9 months)	
AFC	191.74	

b) The consequential revision of AFC approved for the 2009-14 tariff period is as follows:

Page 89 of 96

(₹ in lakh)

Particulars			Asset-I	•	
	2009-10	2010-11	2011-12	2012-13	2013-14
AFC	5351.84	5367.75	5273.33	5175.00	5098.90

(₹ in lakh)

Particulars			Asset-II		
	2009-10	2010-11	2011-12	2012-13	2013-14
AFC	599.06	604.36	603.53	602.99	603.76

(₹ in lakh)

Particulars			Asset-III		
	2009-10	2010-11	2011-12	2012-13	2013-14
AFC	1046.86	1054.29	1062.01	1070.41	1075.37

c) The trued-up AFC allowed for the 2014-19 tariff period is as follows:

(₹ in lakh)

Particulars			Asset-I		
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	4909.90	4803.78	4690.16	4577.40	4469.93

(₹ in lakh)

Dortiouloro			Asset-II		· · · ·
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	576.18	570.86	565.04	559.41	554.45

(₹ in lakh)

Particulars			Asset-III		
	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	1024.02	1017.22	1009.66	1002.51	996.54

(₹ in lakh)

Particulars	Asset-IV				
	2015-16 (Pro-rata 168 days)	2016-17	2017-18	2018-19	
AFC	6372.62	13987.14	13849.33	13633.20	

d) AFC allowed for the 2019-24 tariff period in this order is as follows:

					₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	18278.48	17866.65	17471.86	17107.62	16821.09



Page 90 of 96

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

109. This order disposes of Petition No. 248/TT/2020 in terms of the above discussions and findings.

sd/-(P. K. Singh) (Arun Goyal) Member

sd/-Member

sd/-(I.S. Jha) Member

sd/-(P. K. Pujari) Chairperson



CERC Website S. No. 116/2022

Page 91 of 96

Annexure-I

						Asse	t-l								
2014-19				ACE (₹ i	n lakh)				Depreciation as per Regulations						
Capital Cost	Capital Cost as on 1.4.2014 / COD (₹ in lakh)	2014-15	2015-16	2016-17	2017-18	2018-19	Allowed ACE (₹ in lakh)	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	2014-15	2015-16	2016-17	2017-18	2018-19	
Land - Freehold	360.94	0.00	0.00	0.00	0.00	0.00	0.00	360.94	-	0.00	0.00	0.00	0.00	0.00	
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00	
Building Civil Works & Colony	438.00	0.00	0.00	0.00	0.00	0.00	0.00	438.00	3.34	14.63	14.63	14.63	14.63	14.63	
Transmission Line	19293.11	0.00	0.00	0.00	0.00	0.00	0.00	19293.11	5.28	1018.68	1018.68	1018.68	1018.68	1018.68	
Sub Station	7621.96	0.00	0.00	0.00	0.00	0.00	0.00	7621.96	5.28	402.44	402.44	402.44	402.44	402.44	
PLCC	247.56	0.00	0.00	0.00	0.00	0.00	0.00	247.56	6.33	15.67	15.67	15.67	15.67	15.67	
IT Equipment (Including Software)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00	
Total	27961.57	0.00	0.00	0.00	0.00	0.00	0.00	27961.57	Total	1451.42	1451.42	1451.42	1451.42	1451.42	
		1				Α	verage Gro	ss Block (₹ in	lakh)	27961.57	27961.57	27961.57	27961.57	27961.57	
						Weigh	nted Averag	ge Rate of De	preciation	5.19%	5.19%	5.19%	5.19%	5.19%	

	Asset-II														
2014-19				ACE (₹ i	n lakh)				Depreciation as per Regulations						
Capital Cost	Capital Cost as on 1.4.2014 / COD (₹ in lakh)	2014-15	2015-16	2016-17	2017-18	2018-19	Allowed ACE (₹ in lakh)	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	2014-15	2015-16	2016-17	2017-18	2018-19	
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00	
Building Civil Works & Colony	60.83	0.00	0.00	0.00	0.00	0.00	0.00	60.83	3.34	2.03	2.03	2.03	2.03	2.03	
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00	
Sub Station	2443.90	0.00	0.00	0.00	0.00	0.00	0.00	2443.90	5.28	129.04	129.04	129.04	129.04	129.04	
PLCC	22.89	0.00	0.00	0.00	0.00	0.00	0.00	22.89	6.33	1.45	1.45	1.45	1.45	1.45	
IT Equipment (Including Software)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00	
Total	2527.62	0.00	0.00	0.00	0.00	0.00	0.00	2527.62	Total	132.52	132.52	132.52	132.52	132.52	
	•	•		•	•	Α	verage Gro	ss Block (₹ in	lakh)	2527.62	2527.62	2527.62	2527.62	2527.62	
Weighted Average Rate of Depreciation											5.24%	5.24%	5.24%	5.24%	

						Asset	-111							
2014-19				ACE (₹ i	n lakh)				Depreciation as per Regulations					
Capital Cost	Capital Cost as on 1.4.2014 / COD (₹ in lakh)	2014-15	2015-16	2016-17	2017-18	2018-19	Allowed ACE (₹ in lakh)	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	17.80	0.00	0.00	0.00	0.00	0.00	0.00	17.80	3.34	0.59	0.59	0.59	0.59	0.59
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00
Sub Station	4128.07	0.00	0.00	0.00	0.00	0.00	0.00	4128.07	5.28	217.96	217.96	217.96	217.96	217.96
PLCC	16.00	0.00	0.00	0.00	0.00	0.00	0.00	16.00	6.33	1.01	1.01	1.01	1.01	1.01
IT Equipment (Including Software)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00
Total	4161.87	0.00	0.00	0.00	0.00	0.00	0.00	4161.87	Total	219.57	219.57	219.57	219.57	219.57
Average Gross Block (₹ in lakh)												4161.87	4161.87	4161.87
						Weigh	nted Averag	ge Rate of D	epreciation	5.28%	5.28%	5.28%	5.28%	5.28%

						Asset	-IV								
2014-19				ACE (₹ i	n lakh)				Depreciation as per Regulations						
Capital Cost	Capital Cost as on 1.4.2014 / COD (₹ in lakh)	2014-15	2015-16	2016-17	2017-18	2018-19	Allowed ACE (₹ in lakh)	Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	2014-15	2015-16	2016-17	2017-18	2018-19	
Land - Freehold	480.39	0.00	0.00	0.00	0.00	0.00	0.00	480.39	-	0.00	0.00	0.00	0.00	0.00	
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00	
Building Civil Works & Colony	2455.00	0.00	0.00	7.66	0.00	0.00	7.66	2462.66	3.34	0.00	82.00	82.12	82.25	82.25	
Transmission Line	57290.99	0.00	2212.02	1552.73	490.18	855.89	5110.82	62401.81	5.28	0.00	3083.36	3182.75	3236.68	3272.22	
Sub Station	11723.70	0.00	22.13	382.80	275.47	0.00	680.40	12404.10	5.28	0.00	619.60	630.29	647.66	654.94	
PLCC	260.26	0.00	0.00	2.51	0.00	0.00	2.51	262.77	6.33	0.00	16.47	16.55	16.63	16.63	
IT Equipment (Including Software)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00	
Total	72210.34	0.00	2234.15	1945.70	765.65	855.89	5801.39	78011.73	Total	0.00	3801.43	3911.72	3983.23	4026.04	
	•	•				Α	verage G	ross Block (₹ in	lakh)			75417.34	76773.02	77583.79	
						Weigl	nted Aver	rage Rate of De	preciation	N/A	5.18%	5.19%	5.19%	5.19%	

Annexure-II

2019-24				ACE (₹ i	n lakh)				Depreciation as per Regulations					
Capital Cost	Capital Cost as on 1.4.2019 (₹ in lakh)	2019-20	2020-21	2021-22	2022-23	2023-24	Allowed ACE (₹ in lakh)	Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (in %)	2019-20	2020-21	2021-22	2022-23	2023-24
Land - Freehold	841.33	0.00	0.00	0.00	0.00	0.00	0.00	841.33	-	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	2979.29	0.00	0.00	0.00	0.00	0.00	0.00	2979.29	3.34	99.51	99.51	99.51	99.51	99.51
Transmission Line	81694.92	621.50	639.75	880.49	711.70	1563.67	4417.11	86112.03	5.28	4329.90	4363.20	4403.33	4445.36	4505.43
Sub Station	26598.03	0.00	0.00	0.00	0.00	0.00	0.00	26598.03	5.28	1404.38	1404.38	1404.38	1404.38	1404.38
PLCC	549.22	0.00	0.00	0.00	0.00	0.00	0.00	549.22	6.33	34.77	34.77	34.77	34.77	34.77
IT Equipment (Including Software)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00
Total	112662.79	621.50	639.75	880.49	711.70	1563.67	4417.11	117079.90	Total	5868.55	5901.85	5941.98	5984.01	6044.08
Average Gross Block (₹ in lakh)												114364.29	115160.38	116298.07
Weighted Average Rate of Depreciation											5.20%	5.20%	5.20%	5.20%