CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 352/TT/2019

Coram:

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

Date of Order: **05.05.2021**

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and revision of transmission tariff of 2001-04, 2004-09 and 2009-14 tariff periods and truing up of transmission tariff of 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014 and determination of transmission tariff for 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2019 for 132 kV S/C Mau-Balia Transmission System in the Northern Region.

And in the matter of:

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

Versus

Uttar Pradesh Power Corporation Ltd.
(formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg
Lucknow - 226001 **....Respondent(s)**

Parties present:

For Petitioner: Shri S.S. Raju, PGCIL
Shri B. Dash, PGCIL
Shri V.P. Rastogi, PGCIL
Shri A.K. Verma, PGCIL

For Respondent: None

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as "the Petitioner") for revision of transmission tariff for the 2001-04, 2004-09 and 2009-14 tariff periods and truing of the capital expenditure for the period from 1.4.2014 to 31.3.2019 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") of the period from 1.4.2019 to 31.3.2024 in respect of the 132 kV S/C Mau-Balia Transmission System in the Northern Region (hereinafter referred to as "the transmission system").

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

> *"1) Approve the revised Transmission Tariff for 2001-04 block, 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 9 and 10 above.*
>
> *3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff regulations 2014 and tariff regulation'19 as per para 9.0 & 10 above for respective block.*
>
> *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 materialized 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 respondents.

7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 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 withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

Background

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

a) The Investment Approval for construction of the transmission system was accorded by the Board of Directors of the Petitioner Company vide memo dated 14.1.2002, at an estimated cost of ₹684 lakh (based on 3rd quarter 2001 price level), including IDC of ₹36 lakh.

b) The COD of the transmission system was 1.5.2003. The complete scope of the work as per I.A is covered in the instant petition.

c) The Petitioner has sought revision of transmission tariff approved from COD to 31.3.2004 and 2004-09 tariff periods 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 Appellate Tribunal for Electricity (hereinafter referred to as "the APTEL") judgment dated 22.1.2007 and 13.6.2007 in Appeal Nos. 81/2005 and 139/2006 respectively. The Petitioner has sought consequential revision of tariff allowed for the 2009-14 tariff period and truing up of tariff of 2014-19 tariff period and determination of tariff for 2019-24 tariff period for the 132 kV S/C Mau-Balia Transmission System in the Northern Region.

d) The APTEL, *vide* judgement dated 22.1.2007 in Appeal No. 81/2005 and other related Appeals, and judgement dated 13.6.2007 in Appeal No. 139/2006 pertaining to generating stations of NTPC decided on, mainly, the following issues:-

    i. Computation of interest on loan
    ii. Consequences of refinancing of loan
    iii. Depreciation as deemed repayment
    iv. Admissibility of depreciation up to 90% of the value of the assets
    v. Consideration of maintenance of spares for working capital
    vi. Depreciation of assets.

e) The Commission and certain beneficiaries filed 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.

f) The Petitioner on the basis of the APTEL's judgments dated 22.1.2007 and 13.6.2007 has sought revision of tariff of its transmission assets for the 2001-04 and 2004-09 tariff periods in Petition No. 121/2007. The Commission after taking into consideration the pending Appeals before the Hon'ble Supreme Court adjourned sine die and directed to revive the same after the disposal of the Civil Appeals by the Hon'ble Supreme Court.

g) The Hon'ble Supreme Court dismissed the said Civil Appeals filed against the APTEL's said judgments *vide* its judgment dated 10.4.2018.

h) Consequent to the Hon'ble Supreme Court's judgment dated 10.4.2018 in NTPC matters, the Petition No. 121/2007 was listed for hearing 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 period in respect of concerned transmission assets.

i) The instant petition was heard on 13.2.2020 and in view of APTEL's judgments dated 22.1.2007 and 13.6.2007 and the judgement of Hon'ble Supreme Court dated 10.4.2018, tariff is being revised. Although, period wise tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods, suitable assumptions at certain places, if any, are being applied which are being indicated.

4. The APTEL while dealing with the issue of computation of IoL, in judgement dated 22.1.2007, observed that IoL for the period from 1.4.1998 to 31.3.2001 shall be computed only on normative loan repayment as per its judgement dated 14.11.2006 in Appeal Nos. 94 and 96 of 2005. APTEL in its judgement dated 14.11.2006 set aside the Commission's methodology of computation of loan on the actual repayment basis or normative repayment whichever is higher. The relevant portions of the judgement of 14.11.2006 is as follows:

> *"12. We have heard the arguments of the Senior Counsel(s) of appellant and respondents. We notice that the appellant has not challenged the formula for computing the annual repayment amount as provided in Appeal No. 96 of 2005 & IA No.117 of 2006 in Appeal No. 94 of 2005 para-22 of the impugned order and has only challenged the provisions at para 23 specifying that the amount of annual repayment for calculation of interest on loan is chosen higher of the normative debt and actual debt.*
>
> *13. As mentioned earlier the servicing of the capital (equity or debt) is financed by the recovery of interest on debt capital and through earning of return on equity capital. The actual loan repayment has been normalized to 50% of the total capital by the formula in para 22 of the impugned order given in para 11 above. Once it has been decided and agreed that the financing plan would be based on normative debt–equity ratio of 50:50 and not the actual debt-equity ratio, the same normative basis should be adopted for recovery of cost of servicing the capital.*
>
> *14. In the instant case since the normative debt-equity ratio of 50:50 has been adopted in the financing plan, the loan repayment should be computed based on normative debt. This is to ensure that whatever normative debt has been considered, tariff should ensure the recovery of the same normative debt and interest thereon."*

"18. In its Tariff Regulation of 2004 the Central Commission perhaps recognizing the aforesaid anomaly has dispensed with the practice of adopting higher of actual or normative repayment and has corrected the method of determination of quantum of debt repayment only on the basis of the normative debt with effect from 01.04.2004

19. In view of the above, the Central Commission is required to adopt normative debt repayment methodology for working out the interest on loan liability for the period 01.04.1998 to 31.03.2001."

In view of the above, the interest allowed for the 2001-04 and 2004-09 periods is revised on the basis of the normative debt repayment methodology.

5. The APTEL in judgement dated 13.6.2007 in Appeal No.139 of 2006 and others held that Additional Capital Expenditure (ACE) after the date of commercial operation should also be considered for computation of maintenance spares as follows:

*"**Analysis and Decision***

We are not inclined to agree with the contention of the respondents that escalation of 6% will take care of the additional capitalization. Escalation is meant to factor inflation and is allowed as per CERC Regulations whether or not additional capitalization takes place. Question before us is that: can the historical cost be frozen with the Commissioning of the station. It is quite normal and prudent to ensure earliest operation of the plant without necessarily 100% completion of plants and works, of course not at the cost of safety of the plant. Adding some of the plants and works after the commercial operation will reduce interest during construction. If technically it is possible to delay some of the plants or works, it is only prudent to do so. For example it is common to build redundancies in the plant at a little later stage. CERC's own regulations rightly recognized additional capitalization. It is pertinent to set out excerpts pertaining to additional capitalization from CERC (Terms & Conditions of Tariff) Regulation, 2004 Clause 18 as below:-

"Additional capitalization (1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission, subject to prudence check:
(i) Deferred liabilities
(ii) Works deferred for execution
(iii) Procurement of initial capital spares in the original scope of work, subject to ceiling specified in regulation 17.
(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
(v) On account of change in law.

Provided that original scope of work along with estimates of expenditure shall be submitted along with the application for provisional tariff.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the generating station."

It is clear from the abovementioned Clause 18 of the CERC Regulations that additional capitalization after the date of commercial operation is recognized as part of the capital expenditure Historical cost does not literally mean that the cost on the date of the commercial operation. The term historical cost is used so as to distinguish it from 'book value' or 'the replacement cost'. The cost of maintenance spares limited to 1% of the historical cost corresponds to the plant and equipment and installations which are required to be maintained. If the cost of additional equipment is not included in the historical cost, how spares for the additional equipment be procured for maintenance of the additional equipment. In this view of the matter, the CERC needs to examine afresh in the light of the aforesaid observations."

6. In view of the above, the maintenance spares to be considered for computation of working capital for the 2001-04 and 2004-09 periods are also required to be revised taking into consideration the ACE after the date of commercial operation. Further, the ACE admitted after COD has been considered for computation of maintenance spares.

7. As regards depreciation, APTEL in its judgement dated 13.6.2007 in Appeal No.139 of 2006 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. The relevant portion of the judgement is as under:

"**Analysis and Decision**

In the orders of this Tribunal dated November 14, 2006 and January 24, 2007 it has been laid down that the computation of outstanding loan will be on normative basis only (instead of normative or actual whichever is higher). In view of this there is no question of any adjustment of the depreciation amount as deemed repayment of loan.

It is to be understood that the depreciation is an expense and not an item allowed for repayment of loan. If a corporation does not borrow, it would not mean that the corporation will not be allowed any depreciation. Depreciation is an expense it represents a decline in the value of asset because of use, wear or obsolescence. The Accounting Principles Board of USA defines depreciation as under:-

> *"The cost of a productive facility is one of the costs of the service it renders during its useful economic life. Generally accepted accounting principles require that this cost be spread over the expected useful life of the facility in such a way as to allocate it as equitably as possible to the periods during which services are obtained from the use of the facility. This procedure is known as depreciation accounting, a system of accounting which aims to distribute the cost or other basic value of tangible capital assets, less salvage (if any), over the estimated useful life of the unit (which may be a group of assets) in a systematic and rational manner. It is a process of allocation, not of valuation"*

It is well established that the depreciation is an expense and therefore, it cannot be deployed for deemed repayment of loan. In this view of the matter the CERC shall *need to make a fresh computation of outstanding loan in the light of the aforesaid observations."*

8. Accordingly, in view of the above directions of APTEL, the outstanding loan allowed for the transmission system for the 2001-04 and 2004-09 periods is revised in the instant order.

9. The revision of tariff allowed for 2001-04 and 2004-09 tariff periods necessitates the revision of tariff allowed for the 2009-14 tariff period, which is also allowed in the instant order. The implementation of the directions of the APTEL in case of the Petitioner has been kept pending waiting 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 period 2001-04, 2004-09 and 2009-14 tariff periods. Therefore, the Petitioner will neither claim nor pay any carrying cost from the beneficiaries for the difference, if any, in the tariff allowed earlier and that 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. Uttar Pradesh Power Corporation Ltd. (UPPCL), a distribution licensee procuring transmission service from the Petitioner, is the sole Respondent/ beneficiary of the transmission system. The Petitioner has served the petition on the UPPCL and notice of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. Reply to the petition has been filed by UPPCL *vide* affidavit dated 19.10.2019 which has raised the issues of Debt-Equity ratio, effective tax rates considered for grossing up of rate of RoE and licence fee. The Petitioner *vide* affidavit

dated 22.3.2021 has filed its rejoinder to the reply filed by UPPCL. The issues raised by UPPCL and the clarifications given by the Petitioner have been dealt with in relevant paras of this order.

11. The hearing in this matter was held on 24.3.2021 and the Commission reserved the order in the matter.

12. This order is issued considering the submissions made by the Petitioner in the petition dated 19.8.2019 and affidavit dated 22.7.2020, reply submitted by UPPCL *vide* affidavit dated 19.10.2019 and the rejoinder filed by Petitioner *vide* affidavit dated 22.3.2021.

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

REVISION OF TRANSMISSION CHARGES ALLOWED FOR THE PERIOD FROM COD TO 31.3.2004 AND 2004-09 AND 2009-14 TARIFF PERIODS

COD to 31.3.2004

14. The Commission *vide* order dated 25.4.2006 in Petition No. 125/2005 approved the following transmission charges for the transmission system:

(₹ in lakh)

Particulars	2003-04 (Pro-rata 11 months)
Depreciation	13.81
Interest on Loan	31.10
Return on Equity	29.46
Advance against Depreciation	0.00
Interest on Working Capital	2.72
O&M Expenses	28.22
Total	**105.30**

15. The Petitioner has claimed the following revised transmission charges for the transmission system in this petition:

(₹ in lakh)

Particulars	2003-04 (Pro-rata 11 months)
Depreciation	13.81
Interest on Loan	31.10
Return on Equity	29.46
Advance against Depreciation	0.00
Interest on Working Capital	2.72
O&M Expenses	28.22
Total	**105.31**

16. We have considered the Petitioner's claim. The tariff is allowed for the transmission system on the basis of the following:

a) The capital cost of ₹585.87 lakh was admitted as on COD *vide* order dated 25.4.2006 in Petition No. 125/2005. The same has been considered in the instant petition. The ACE of ₹10.73 lakh during 2003-04 was less than 20% of the apportioned approved cost for the transmission system. Therefore, the impact of ACE has not been considered for calculating IoL, Return on Equity (RoE) and Depreciation. However, Maintenance Spares component of IWC are being revised on account of ACE during 2003-04, in line with the APTEL judgement dated 13.6.2007 in Appeal No.139 of 2006.

b) Weighted Average Rate of Interest on actual loan, as applied in tariff, have been considered from order dated 25.4.2006 in Petition No. 125/2005.

c) Weighted Average Rate of Depreciation, rate of IWC and O&M Expenses as approved *vide* order dated 25.4.2006 in Petition No. 125/2005.

17. In view of the above, the revised transmission charges allowed for the transmission system from COD to 31.3.2004 is as under:

(₹ in lakh)

Particulars	2003-04 (Pro-rata 11 months)
Depreciation	13.81
Interest on Loan	31.10
Return on Equity	29.46
Advance against Depreciation	0.00
Interest on Working Capital	2.72
O&M Expenses	28.22
Total	**105.30**

18. The AFC allowed *vide* order dated 25.4.2006 in Petition No. 125/2005 from COD to 31.3.2004, the revised AFC claimed in the instant petition and AFC allowed in the instant order is as under:

(₹ in lakh)

Particulars	2003-04 (Pro-rata 11 months)
AFC approved *vide* order dated 25.4.2006 in Petition No. 125/2005	105.30
AFC claimed by the Petitioner in the instant petition	105.31
AFC allowed in the instant order	105.30

2004-09 Tariff Period

19. The Commission approved the following transmission charges for the 2004-09 tariff period *vide* order dated 9.1.2007 in Petition No. 45/2006 for the transmission system:

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	15.43	15.52	15.52	15.52	15.52
Interest on Loan	34.33	33.16	31.07	28.30	25.53
Return on Equity	28.28	28.43	28.43	28.43	28.43
Advance against Depreciation	0.00	0.00	2.16	15.97	15.97
Interest on Working Capital	2.34	2.38	2.44	2.69	2.70
O&M Expenses	13.17	13.69	14.27	14.79	15.43
Total	**93.54**	**93.18**	**93.88**	**105.69**	**103.58**

20. The Petitioner has claimed the following revised AFC for the 2004-09 tariff period for the transmission system:

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	15.43	15.52	15.52	15.52	15.52
Interest on Loan	34.85	34.68	32.95	30.03	27.10
Return on Equity	28.28	28.43	28.43	28.43	28.43
Advance against Depreciation	0.00	0.00	0.00	0.00	17.28
Interest on Working Capital	2.37	2.43	2.46	2.47	2.78
O&M Expenses	13.17	13.69	14.27	14.79	15.43
Total	**94.11**	**94.75**	**93.63**	**91.24**	**106.54**

21. We have considered the Petitioner's claim. The tariff is allowed for the transmission system on the basis of the following:

a) The admitted capital cost considered as on 1.4.2004 includes ₹585.87 lakh as on COD and ACE of ₹10.73 lakh during 2003-04. Accordingly, the admitted capital cost and ACE approved by the Commission for the 2004-09 period were as follows:

(₹ in lakh)

Admitted Capital Cost as on 1.4.2004	ACE in 2004-05	Admitted Capital Cost as on 31.3.2009
596.60	7.34	603.94

b) Weighted Average Rate of Interest on actual loan derived/ adopted from order dated 9.1.2007 in Petition No. 45/2006.

c) Weighted Average Rate of Depreciation, rate of IWC and O&M Expenses as per order dated 9.1.2007 in Petition No. 45/2006.

d) Maintenance Spares component of IWC is adjusted w.r.t ACE incurred during the 2004-09 period.

22. In view of the above, the revised AFC allowed for the transmission system for the 2004-09 tariff period is as follows:

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	15.43	15.52	15.52	15.52	15.52
Interest on Loan	34.86	34.68	32.97	30.03	27.09
Return on Equity	28.28	28.43	28.43	28.43	28.43
Advance against Depreciation	0.00	0.00	0.00	0.00	17.28
Interest on Working Capital	2.37	2.43	2.45	2.46	2.78
O&M Expenses	13.17	13.69	14.27	14.79	15.43
Total	**94.11**	**94.75**	**93.64**	**91.23**	**106.53**

23. The AFC allowed *vide* order dated 9.1.2007 in Petition No. 45/2006 for 2004-09 period, the revised AFC claimed in the instant petition and AFC allowed in the instant order is as under:

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
AFC approved *vide* order dated 9.1.2007 in Petition No. 45/2006	93.54	93.18	93.88	105.69	103.58
AFC claimed by the Petitioner in the instant petition	94.11	94.75	93.63	91.24	106.54
AFC allowed in the instant order	94.11	94.75	93.64	91.23	106.53

2009-14 Tariff Period

24. The Commission *vide* order dated 28.9.2010 in Petition No. 97/2010 approved the tariff for 2009-14 tariff period and subsequently, *vide* order dated 16.2.2016 in Petition No. 170/TT/2014 had trued up the tariff allowed for the 2009-14 tariff period and the same is as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	31.89	31.89	31.89	31.89	31.89
Interest on Loan	22.81	20.06	17.40	14.54	11.67
Return on Equity	37.92	39.31	39.35	39.35	39.82
Interest on Working Capital	2.45	2.45	2.43	2.40	2.39
O&M Expenses	10.38	10.96	11.60	12.30	12.99
Total	**105.45**	**104.67**	**102.67**	**100.48**	**98.76**

25. The Petitioner has claimed the following revised transmission charges for the transmission system for the 2009-14 tariff period:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	31.89	31.89	31.89	31.89	31.89
Interest on Loan	24.29	21.55	18.90	15.81	13.16
Return on Equity	37.92	39.31	39.35	39.35	39.82
Interest on Working Capital	2.48	2.48	2.46	2.43	2.42
O&M Expenses	10.38	10.96	11.60	12.30	12.99
Total	**106.96**	**106.19**	**104.19**	**101.78**	**100.28**

26. We have considered the Petitioner's claim. The tariff is allowed for the transmission system on the basis of the following:

a) The admitted capital cost of ₹603.94 lakh as on 1.4.2009 approved order dated 16.2.2016 in Petition No. 170/TT/2014.

b) Weighted Average Rate of Interest on actual loan derived/ adopted from order dated 16.2.2016 in Petition No. 170/TT/2014.

c) Weighted Average Rate of Depreciation as per order dated 16.2.2016 in Petition No. 170/TT/2014.

27. In view of the above, the revised transmission charges allowed for the transmission system for the 2009-14 tariff period is as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	31.89	31.89	31.89	31.89	31.89
Interest on Loan	24.29	21.55	18.90	16.03	13.16
Return on Equity	37.92	39.31	39.35	39.35	39.82
Interest on Working Capital	2.48	2.48	2.46	2.43	2.42
O&M Expenses	10.38	10.96	11.60	12.30	12.99
Total	**106.96**	**106.19**	**104.19**	**102.01**	**100.28**

28. The AFC allowed *vide* order dated 16.2.2016 in Petition No. 170/TT/2014 for 2009-14 tariff period, the revised AFC claimed in the instant petition and AFC allowed in the instant order is as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
AFC approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014	105.45	104.67	102.67	100.48	98.76
AFC claimed by the Petitioner in the instant petition	106.96	106.19	104.19	101.78	100.28
AFC allowed in the instant order	106.96	106.19	104.19	102.01	100.28

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

29. The details of the transmission charges claimed by the Petitioner for the 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	31.89	31.89	9.21	9.21	9.20
Interest on Loan	10.29	7.42	5.58	4.77	3.97
Return on Equity	39.85	40.04	40.01	40.01	40.12
Interest on Working Capital	2.54	2.50	1.95	1.96	1.96
O&M Expenses	11.72	12.12	12.53	12.93	13.34
Total	**96.29**	**93.97**	**69.28**	**68.88**	**68.59**

30. The details of the IWC claimed by the Petitioner are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	0.98	1.01	1.04	1.08	1.11
Maintenance Spares	1.76	1.82	1.88	1.94	2.00
Receivables	16.05	15.66	11.55	11.48	11.43
Total Working Capital	**18.79**	**18.49**	**14.47**	**14.50**	**14.54**
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	**2.54**	**2.50**	**1.95**	**1.96**	**1.96**

Capital Cost

31. The capital cost of ₹603.94 lakh as on 31.3.2014 was admitted by the Commission *vide* order dated 16.2.2016 in Petition No. 170/TT/2014 and the same has been claimed as opening capital cost as on 1.4.2014 by the Petitioner for determination of tariff. We have considered the same capital cost to work out trued up tariff for the 2014-19 tariff period, in accordance with Regulation 9(3) of the 2014 Tariff Regulations.

32. The Petitioner has not claimed any ACE for the 2014-19 tariff period.

Debt-Equity ratio

33. The Petitioner has claimed opening Debt-Equity ratio as approved by the Commission *vide* order dated 16.2.2016 in Petition No. 170/TT/2014. UPPCL has submitted that the opening Debt-Equity ratio of 70-30 may be considered for determining the opening loan and equity as on 1.4.2014. The Petitioner in its rejoinder has reiterated that the opening Debt-Equity ratio considered is as approved by the Commission *vide* order dated 16.2.2016 in Petition No. 170/TT/2014. We have considered the submissions of UPPCL and PGCIL. As per Regulation 19(3) of the 2014 Tariff Regulations, in case of transmission system put into commercial operation prior to 1.4.2014, debt equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered. Accordingly, we have considered the Debt-Equity ratio approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014. The details of Debt-Equity ratio in respect of the transmission system as on 1.4.2014 and as on 31.3.2019 are as follows:

Funding	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	400.87	66.38	400.87	66.38
Equity	203.07	33.62	203.07	33.62

Funding	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Total	**603.94**	**100.00**	**603.94**	**100.00**

Depreciation

34. As the transmission system consists of only transmission line, the gross block during 2014-15 and 2015-16 has been depreciated at 5.28%, as prescribed in the 2014 Tariff Regulations. The transmission project has completed more than 12 years of useful life as on 1.4.2016. Accordingly, for computation of depreciation the remaining depreciable value at the beginning of the year is spread over the balance useful life of the asset as per Regulation 27(5) of the 2014 Tariff Regulations (as placed in Annexure-I). Accordingly, depreciation allowed for 2014-19 tariff period is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	603.94	603.94	603.94	603.94	603.94
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	603.94	603.94	603.94	603.94	603.94
Average Gross Block	603.94	603.94	603.94	603.94	603.94
Rate of Depreciation (%)	5.28	5.28	1.52%	1.52%	1.52%
Balance useful life of the asset (Year)	25	24	23	22	21
Elapsed life at the beginning of the year (Year)	10	11	12	13	14
Depreciable Value	543.55	543.55	543.55	543.55	543.55
Depreciation during the year	**31.89**	**31.89**	**9.21**	**9.21**	**9.21**
Cumulative Depreciation	299.94	331.83	341.03	350.24	359.44
Remaining Depreciable Value	243.61	211.72	202.51	193.31	184.10

35. Accordingly, depreciation approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014, claimed by the Petitioner in the instant petition and trued up depreciation are shown in the following table:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014	31.89	31.89	8.47	8.47	8.47
Claimed by the Petitioner in the instant petition	31.89	31.89	9.21	9.21	9.20
Allowed after true-up in this order	31.89	31.89	9.21	9.21	9.21

Interest on Loan (IoL)

36. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. Further, as there is no actual loan remaining in 2018-19, the weighted average rate of IoL for 2017-18 i.e. the last available weighted average rate of IoL has been considered for 2018-19 as per Regulation 26(5) of the 2014 Tariff Regulations. The IoL allowed is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	400.87	400.87	400.87	400.87	400.87
Cumulative Repayments upto Previous Year	268.05	299.94	331.83	341.03	350.24
Net Loan-Opening	132.82	100.93	69.04	59.84	50.63
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	31.89	31.89	9.21	9.21	9.21
Net Loan-Closing	100.93	69.04	59.84	50.63	41.42
Average Loan	116.87	84.98	64.44	55.23	46.03
Weighted Average Rate of Interest on Loan (%)	8.8062	8.7319	8.6521	8.6300	8.6300
Interest on Loan	**10.29**	**7.42**	**5.58**	**4.77**	**3.97**

37. Accordingly, IoL approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014, claimed by the Petitioner in the instant petition and trued up IoL are shown in the following table:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014	8.81	5.95	4.15	3.41	2.68
Claimed by the Petitioner in the instant petition	10.29	7.42	5.58	4.77	3.97
Allowed after true-up in this order	10.29	7.42	5.58	4.77	3.97

Return on Equity (RoE)

38. The Petitioner is entitled for RoE for the instant assets in terms of Regulation 24 and 25 of the 2014 Tariff Regulations. UPPCL has submitted that the effective tax rates considered for grossing up the rate of RoE for the period 2016-17 to 2018-19 have not been worked out on the basis of Assessment Orders issued by the Income Tax Authorities.

39. In response, the Petitioner submitted that effective rate of tax considered for the years 2014-15, 2015-16 and 2016-17 are based on Assessment Order issued by IT Authorities, for the purpose of grossing up of RoE rate. Further, the effective rate of tax considered for the years 2017-18 and 2018-19 are based on the IT returns filed, for the purpose of grossing up of RoE rates of respective years. Further, it is submitted that the Petitioner has been granted, so far, trued-up tariff of 2014-19 period by the Commission *vide* order dated 18.4.2020 in Petition No. 247/TT/2019, order dated 27.4.2020 in Petition No. 274/TT/2019, order dated 23.4.2020 in Petition No. 245/TT/2019 and order dated 16.4.2020 in Petition No. 307/TT/2019 for transmission assets under the respective petitions, whereas following effective tax rate based (for tariff block 2014-19) on notified MAT rates are considered for the purpose of grossing-up of RoE:

Year	Claimed effective tax (in %)	Grossed up RoE [Base Rate/(1-t)] (in %)
2014-15	20.961	19.611
2015-16	21.342	19.706
2016-17	21.342	19.706

Year	Claimed effective tax (in %)	Grossed up RoE [Base Rate/(1-t)] (in %)
2017-18	21.342	19.706
2018-19	21.549	19.758

40. Accordingly, the Petitioner has further submitted that the tariff for each year of the tariff period 2014-19 is being determined by the Commission considering the above Effective Tax percentage to arrive at Grossed up ROE. In view of the above, it is submitted that Grossed up ROE and effective tax rate for tariff block 2014-19 has already been determined by the Commission. The Petitioner requested to allow the differential tariff on account of the trued up ROE based on effective tax rate calculated on completion of IT assessment/re-assessment for the years 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of the respective assessment orders, directly from the beneficiaries, on year to year basis as provided in the 2014 Tariff Regulations.

41. We have considered the submissions of the Petitioner and UPPCL. The Commission vide order dated 24.1.2021 in Petition No. 136/TT/2020 has already dealt with the concerns of the Respondent. The relevant paragraphs of the order are extracted as under:

> *"52. We have considered the contentions of BRPL and UPPCL and the clarifications given by the Petitioner. BRPL has contended that details of the income tax submitted by the Petitioner are in respect of the Petitioner's company as a whole and it does not pertain to the transmission business in Northern Region. The Petitioner has clarified that every registered company has only one single PAN and it has to file one single return and the Petitioner cannot file income tax separately for each region. BRPL has contended that as per the information available in public domain, the Petitioner has to pay the effective tax rate for 2014-15 @8.70% and for the period 2015-19, it is zero and that the excess recovery made by the Petitioner should be returned to the beneficiaries along with simple interest as provided in Regulation 6 of the 2009 Tariff Regulations. The Petitioner has clarified that the effective tax rate was shown as zero for the period 2015-19 inadvertently due to technical reasons and the Petitioner has paid income tax for the said period. The Petitioner has also clarified that as per the provisions of the 1961 Act, tax has to be computed under normal provisions of Income Tax Rules, 1962 and as per MAT provisions under the section 115JB of the 1961 Act and the assessee will have to pay tax higher of the two. As per the submission, during the tariff period 2014-19, the Petitioner calculated the income tax under regular provisions of the 1961 Act (with tax rates of 33.99% to 34.944%) and the tax was worked out to be lower than the tax payable under MAT rates due to deductions under section 80IA and availability of accelerated depreciation under Income Tax. Thus, the Petitioner has been assessed and paid tax under MAT. We are satisfied with the*

clarifications given by the Petitioner and convinced that the Petitioner has acted prudently and has complied with the provisions of the 1961 Act and the provisions of the tariff regulations.

53. As regards UPPCL's contention that the grossed up rate of RoE for the period 2016-17 to 2018-19 is not based on the MAT rates approved by the Income Tax Authorities, it is observed that the effective rate of tax considered by the Petitioner for 2014-15, 2015-16 and 2016-17 are based on Assessment Orders issued by Income Tax authorities and the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed for the purpose of grossing up the RoE rate of respective years. In view of the clarification given by the Petitioner, we are of the view that there is no merit in the contention of UPPCL."

42. 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 in the table below. The relevant portion of the order dated 27.4.2020 is as follows:

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

27. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up of rate of return on equity:

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

"

43. The same MAT rates as above are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 period in terms of the provisions of the 2014 Tariff Regulations.

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

44. The Petitioner has claimed RoE for the 2014-19 period after grossing up the RoE of 15.50% with Effective Tax rates (based on MAT rates) each year as per the above said Regulation. The RoE is trued up on the basis of the MAT rate applicable in the respective years and is allowed as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	203.07	203.07	203.07	203.07	203.07
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	203.07	203.07	203.07	203.07	203.07
Average Equity	203.07	203.07	203.07	203.07	203.07
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity	**39.82**	**40.02**	**40.02**	**40.02**	**40.12**

45. Accordingly, RoE approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014, claimed by the Petitioner in the instant petition and trued up RoE are shown in the table that follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014	39.82	39.82	39.82	39.82	39.82
Claimed by the Petitioner in the instant petition	39.85	40.04	40.01	40.01	40.12
Allowed after true-up in this order	39.82	40.02	40.02	40.02	40.12

Operation & Maintenance Expenses (O&M Expenses)

46. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The total O&M Expenses claimed by the Petitioner for the transmission system are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses claimed by the Petitioner	11.72	12.12	12.53	12.93	13.34

47. The Commission has considered the submissions made by the Petitioner. It is observed that there is no variation in the O&M Expenses claimed and the O&M Expenses determined by the Commission. The O&M Expenses determined are in line with the norms specified in Regulation 29(3) of the 2014 Tariff Regulations and are allowed as follows:

O&M Expenses					
Transmission line					
132 kV S/C Mau-Balia line (Single Conductor) (km)	58	58	58	58	58
Norms (₹ lakh/km)	0.202	0.209	0.216	0.223	0.230
Total O&M Expense (₹ in lakh)	11.72	12.12	12.53	12.93	13.34

48. Accordingly, O&M Expenses approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014, claimed by the Petitioner in the instant petition and trued up O&M Expenses are shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014	11.72	12.12	12.53	12.93	13.34
Claimed by the Petitioner in the instant petition	11.72	12.12	12.53	12.93	13.34
Allowed after true-up in this order	11.72	12.12	12.53	12.93	13.34

Interest on Working Capital (IWC)

49. The IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and allowed are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses (O&M Expenses for 1 month)	0.98	1.01	1.04	1.08	1.11
Maintenance Spares (15% of O&M Expenses)	1.76	1.82	1.88	1.94	2.00
Receivables (Equivalent to 2 months of annual fixed cost)	16.04	15.66	11.55	11.48	11.43
Total Working Capital	**18.78**	**18.49**	**14.47**	**14.50**	**14.55**
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	**2.53**	**2.50**	**1.95**	**1.96**	**1.96**

50. Accordingly, IWC approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014, claimed by the Petitioner in the instant petition and trued up IWC is shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014	2.50	2.46	1.90	1.91	1.91
Claimed by the Petitioner in the instant petition	2.54	2.50	1.95	1.96	1.96
Allowed after true-up in this order	2.53	2.50	1.95	1.96	1.96

Approved Annual Fixed Charges of the 2014-19 Tariff Period

51. The trued up annual fixed charges approved for the transmission system for the 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	31.89	31.89	9.21	9.21	9.21
Interest on Loan	10.29	7.42	5.58	4.77	3.97
Return on Equity	39.82	40.02	40.02	40.02	40.12
Interest on Working Capital	2.53	2.50	1.95	1.96	1.96
O&M Expenses	11.72	12.12	12.53	12.93	13.34
Total	**96.25**	**93.94**	**69.28**	**68.88**	**68.60**

52. Accordingly, the Annual Transmission Charges approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014, claimed by the Petitioner and approved after truing up in the instant order are shown in the following table:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved *vide* order dated 16.2.2016 in Petition No. 170/TT/2014	94.74	92.24	66.88	66.54	66.23
AFC claimed by the Petitioner in the instant petition	96.29	93.97	69.28	68.88	68.59
AFC allowed in the instant order	96.25	93.94	69.28	68.88	68.60

DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 PERIOD

53. The Petitioner has claimed the following transmission charges for the transmission system for the 2019-24 period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	9.21	9.20	9.21	9.20	9.21
Interest on Loan	3.18	2.38	1.59	0.79	0.20
Return on Equity	40.12	40.12	40.12	40.12	40.12
Interest on Working Capital	1.43	1.44	1.45	1.46	1.47
O&M Expenses	14.62	15.08	15.66	16.18	16.76
Total	**68.56**	**68.21**	**68.03**	**67.76**	**67.76**

54. The Petitioner has claimed the following IWC for the transmission system for the 2019-24 period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	1.22	1.26	1.31	1.35	1.40
Maintenance Spares	2.19	2.26	2.35	2.43	2.51
Receivables	8.43	8.41	8.39	8.35	8.33
Total Working Capital	11.84	11.93	12.05	12.13	12.24
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	**1.43**	**1.44**	**1.45**	**1.46**	**1.47**

Capital Cost

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

*"**19. Capital Cost:** (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.*

(2) The Capital Cost of a new project shall include the following:

(a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
(c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
(d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
(e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
(h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
(i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
(j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
(k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
(l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
(m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
(n) Expenditure on account of change in law and force majeure events; and
(o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

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

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
(c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."

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

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

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

(a) The assets forming part of the project, but not in use, as declared in the tariff petition;
(b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

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

56. The Petitioner has claimed capital cost of ₹603.94 lakh as on 31.3.2019, which is worked out by the Commission as on 31.3.2019. Accordingly, ₹603.94 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.

57. The Petitioner has not claimed any ACE for the 2019-24 tariff period.

Debt-Equity ratio

58. 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, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as ACE for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation."

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

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	400.87	66.38	400.87	66.38
Equity	203.07	33.62	203.07	33.62
Total	**603.94**	**100.00**	**603.94**	**100.00**

Depreciation

60. Regulation 33(1), 33(2) and 33(5) of the 2019 Tariff Regulations provide 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 project or element thereof including communication project. In case of the tariff of all the units of a generating station or all elements of a transmission project including communication project for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission project taking into consideration the depreciation of individual units:*

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

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

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

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

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

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

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

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

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

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

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

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

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

61. As the transmission system has already completed 12 years of useful life during the 2014-19 tariff period, the remaining depreciable value is spread over the balance useful life in the 2019-24 period as prescribed in Regulation 33(5) of the 2019 Tariff Regulations. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	603.94	603.94	603.94	603.94	603.94
Addition during the year 2019-24 due to projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	603.94	603.94	603.94	603.94	603.94
Average Gross Block	603.94	603.94	603.94	603.94	603.94
Rate of Depreciation (%)	1.52%	1.52%	1.52%	1.52%	1.52%
Balance useful life of the asset (Year)	20	19	18	17	16
Elapsed life at the beginning of the year (Year)	15	16	17	18	19
Depreciable Value	543.55	543.55	543.55	543.55	543.55
Depreciation during the year	**9.21**	**9.21**	**9.21**	**9.21**	**9.21**
Cumulative Depreciation	368.65	377.85	387.06	396.26	405.47
Remaining Depreciable Value	174.90	165.69	156.49	147.28	138.08

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

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

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

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

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

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

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

> *Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;*
>
> *Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.*

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

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

63. IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL allowed is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	400.87	400.87	400.87	400.87	400.87
Cumulative Repayments up to Previous Year	359.44	368.65	377.85	387.06	396.26
Net Loan-Opening	41.42	32.22	23.01	13.81	4.60
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	9.21	9.21	9.21	9.21	4.60
Net Loan-Closing	32.22	23.01	13.81	4.60	0.00
Average Loan	36.82	27.62	18.41	9.21	2.30
Weighted Average Rate of Interest on Loan (%)	8.6300	8.6300	8.6300	8.6300	8.6300
Interest on Loan	**3.18**	**2.38**	**1.59**	**0.79**	**0.20**

Return on Equity (RoE)

64. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations specify as follows:

> *"**30. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.*
>
> *(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage:*
>
> *Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;*
>
> *Provided further that:*
>
> *i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;*
>
> *ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;*
>
> *iii. in case of a thermal generating station, with effect from 1.4.2020:*
>
> *a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;*
>
> *b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:*
>
> *Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019."*
>
> *"31. Tax on Return on Equity: (1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability*

(i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

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

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

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

Illustration-

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

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

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

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

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

65. 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. The RoE allowed is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	203.07	203.07	203.07	203.07	203.07
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	203.07	203.07	203.07	203.07	203.07
Average Equity	203.07	203.07	203.07	203.07	203.07
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	**38.14**	**38.14**	**38.14**	**38.14**	**38.14**

Operation & Maintenance Expenses (O&M Expenses)

66. The Petitioner has claimed the following O&M Expenses for the tariff period 2019-24 for the transmission system:

(₹ in lakh)

Name of the Asset	2019-20	2020-21	2021-22	2022-23	2023-24
132 kV S/C Mau-Balia line (Single Conductor) (58 km)	14.62	15.08	15.66	16.18	16.76
Total O&M expenses	**14.62**	**15.08**	**15.66**	**16.18**	**16.76**

67. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations is 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 (₹ Lakh per bay)					
765 kV	*45.01*	*46.60*	*48.23*	*49.93*	*51.68*
400 kV	*32.15*	*33.28*	*34.45*	*35.66*	*36.91*
220 kV	*22.51*	*23.30*	*24.12*	*24.96*	*25.84*
132 kV and below	*16.08*	*16.64*	*17.23*	*17.83*	*18.46*
Norms for Transformers (₹ Lakh per MVA)					
765 kV	*0.491*	*0.508*	*0.526*	*0.545*	*0.564*
400 kV	*0.358*	*0.371*	*0.384*	*0.398*	*0.411*
220 kV	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
132 kV and below	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*
Single Circuit (Bundled conductor with four sub-conductors)	*0.755*	*0.781*	*0.809*	*0.837*	*0.867*

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Single Circuit (Twin & Triple Conductor)	*0.503*	*0.521*	*0.539*	*0.558*	*0.578*
Single Circuit (Single Conductor)	*0.252*	*0.260*	*0.270*	*0.279*	*0.289*
Double Circuit (Bundled conductor with four or more sub-	*1.322*	*1.368*	*1.416*	*1.466*	*1.517*
Double Circuit (Twin & Triple Conductor)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*
Double Circuit (Single Conductor)	*0.377*	*0.391*	*0.404*	*0.419*	*0.433*
Multi Circuit (Bundled Conductor with four or more sub-conductor)	*2.319*	*2.401*	*2.485*	*2.572*	*2.662*
Multi Circuit (Twin & Triple Conductor)	*1.544*	*1.598*	*1.654*	*1.713*	*1.773*
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	*834*	*864*	*894*	*925*	*958*
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	*1,666*	*1,725*	*1,785*	*1,848*	*1,913*
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	*2,252*	*2,331*	*2,413*	*2,498*	*2,586*
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	*2,468*	*2,555*	*2,645*	*2,738*	*2,834*
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	*1,696*	*1,756*	*1,817*	*1,881*	*1,947*
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	*2,563*	*2,653*	*2,746*	*2,842*	*2,942*

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

Provided further that:

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

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

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

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

expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;

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

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

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

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

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

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

68. We have considered the submissions made by the Petitioner. There is no variation in the O&M Expenses claimed and the O&M Expenses determined by the Commission. The O&M Expenses allowed for the transmission system for the 2019-24 tariff period are as per the norms specified in Regulation 35(3)(a) and (b) of the 2019 Tariff Regulations and are as follows:

O&M Expenses					
Transmission line					
132 kV S/C Mau-Balia line (Single Conductor) (km)	58	58	58	58	58
Norms (₹ lakh/km)	0.252	0.260	0.270	0.279	0.289
Total O&M Expense (₹ in lakh)	14.62	15.08	15.66	16.18	16.76

Interest on Working Capital (IWC)

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

*"**34. Interest on Working Capital***

(1) …

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

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

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

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

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

"3. Definitions …

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

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses for 1 month)	1.22	1.26	1.31	1.35	1.40
Maintenance Spares (15% of O&M Expenses)	2.19	2.26	2.35	2.43	2.51
Receivables (Equivalent to 45 days of annual transmission charges)	8.18	8.15	8.13	8.09	8.07
Total Working Capital	**11.59**	**11.67**	**11.78**	**11.87**	**11.98**
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	**1.40**	**1.31**	**1.33**	**1.34**	**1.35**

Annual Fixed Charges of the 2019-24 Tariff Period

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	9.21	9.21	9.21	9.21	9.21
Interest on Loan	3.18	2.38	1.59	0.79	0.20
Return on Equity	38.14	38.14	38.14	38.14	38.14
Interest on Working Capital	1.40	1.31	1.33	1.34	1.35
O&M Expenses	14.62	15.08	15.66	16.18	16.76
Total	**66.54**	**66.12**	**65.92**	**65.66**	**65.65**

Filing Fee and the Publication Expenses

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

Licence Fee & RLDC Fees and Charges

73. UPPCL has submitted that the license fee is the onus of the Petitioner. In response, the Petitioner submitted that Regulation 70 of the 2019 Tariff Regulations authorizes it to recover licensee fee separately from the respondents. The fees and charges to be paid by the Petitioner as ISTS licensee (deemed ISTS licensee) under

CERC (Fees and Charges of RLDC and other matters) Regulations as amended from time to time shall also be recoverable from the DICs as provided under Regulation 70(3) of the 2019 Tariff Regulations.

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

Goods and Services Tax

75. 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.

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

Security Expenses

77. The Petitioner has submitted that security expenses for the instant assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security

expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

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

Capital Spares

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

Sharing of Transmission Charges

80. The revised transmission charges approved for 2001-04 tariff period shall be recovered as per order dated 25.4.2006 in Petition No.125/2005. The revised transmission charges approved for 2004-09 tariff period shall be recovered as per order dated 9.1.2007 in Petition No.45/2006. The revised transmission charges approved for 2009-14 tariff period shall be recovered as per order dated 16.2.2016 in Petition No.170/TT/2014 and shall be borne exclusively by the UPPCL.

81. The trued up transmission charges approved for the 2014-19 tariff period and the transmission charges approved for the 2019-24 tariff period for the transmission system shall be borne by UPPCL, i.e. the sole beneficiary of the transmission system.

82. To summarise:

(a) The revised Annual Fixed Charges allowed as per the APTEL's judgements are as follows:

(₹ in lakh)

Particulars	2003-04 (pro-rata)
Annual Fixed Charges	105.30

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Annual Fixed Charges	94.11	94.75	93.64	91.23	106.53

(b) The consequential revision of Annual Fixed Charges allowed for the 2009-14 tariff period are as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Annual Fixed Charges	106.96	106.19	104.19	102.01	100.28

(c) The trued-up Annual Fixed Charges allowed for the 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	96.25	93.94	69.28	68.88	68.60

(d) The Annual Fixed Charges allowed for the 2019-24 tariff period in this order are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	66.54	66.12	65.92	65.66	65.65

83. The Annexure given hereinafter forms part of the order.

84. This order disposes of Petition No. 352/TT/2019

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

Annexure-I

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	Additional Capitalisation (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)	
		2014-15	2015-16	Total			2014-15	2015-16
Land - Freehold	-	-	-	-	-	-	-	-
Land - Leasehold	-	-	-	-	-	3.34%	-	-
Building Civil Works & Colony	-	-	-	-	-	3.34%	-	-
Transmission Line	603.94	-	-	-	603.94	5.28%	31.89	31.89
Sub Station	-	-	-	-	-	5.28%	-	-
PLCC	-	-	-	-	-	6.33%	-	-
IT Equipment (Incl. Software)	-	-	-	-	-	5.28%	-	-
Total	**603.94**	**-**	**-**	**-**	**603.94**		**31.89**	**31.89**
					Average Gross Block (₹ in lakh)		**603.94**	**603.94**
					Weighted Average Rate of Depreciation		**5.28%**	**5.28%**

*Since the asset has completed 12 years of life as on 31.3.2016, the remaining depreciable value of ₹211.72 lakh as on 31.3.2016 has been spread across the balance useful life of 23 years in accordance with Regulation 27(5) of the 2014 Tariff Regulations. The annual depreciation from 2016-17 and onwards is ₹9.21 lakh