

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 12/TT/2020

Coram:

**Shri P.K. Pujari, Chairperson
Shri Arun Goyal, Member
Shri P. K. Singh, Member**

Date of order: 13.12.2021

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 periods, truing up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Special Energy Meters in Northern Region.

And in the Matter of:

Power Grid Corporation of India Limited,
"Saudamini", Plot No-2, Sector-29,
Gurgaon – 122 001(Haryana).

.....Petitioner

Vs.

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg,
Jaipur – 302 005, (Rajasthan).
2. Ajmer Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar,
Jaipur – 302 017, (Rajasthan).
3. Jaipur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar,
Jaipur – 302 017, (Rajasthan).
4. Jodhpur Vidyut Vitran Nigam Limited,



132 kV GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar,
Jaipur – 302 017, (Rajasthan).

5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla – 171 004, (Himachal Pradesh).
6. Punjab State Electricity Board,
The Mall,
Patiala – 147 001.
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula – 134 109, (Haryana).
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat,
Jammu.
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow – 226 001, (Uttar Pradesh).
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi – 110 002.
11. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
13. Tata Power Delhi Distribution Limited,
33 kV Sub-Station, Building,
Hudson Lines Kingsway Camp,
North Delhi – 110009.
14. Chandigarh Administration,
Sector -9, Chandigarh.



15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun.
16. North Central Railway,
Allahabad.
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi - 110002.

...Respondent(s)

For Petitioner : Shri S.S. Raju, PGCIL
Shri D.K. Biswal, PGCIL
Shri Ved Prakash Rastogi, PGCIL
Shri A.K. Verma, PGCIL

For Respondents : None

ORDER

The instant petition has been filed by the Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, for revision of transmission tariff of 2001-04, 2004-09, 2009-14 periods and truing up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the Special Energy Meters (hereinafter referred to as “the transmission asset”) in Northern Region.

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 asset 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) 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 9.0 and 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 recover FERV on the foreign loans deployed as provided under clause 68 of the Tariff Regulations,2019

8) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 10.5 above.

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

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

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

Backdrop of the case



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

(a) The Petitioner has installed Special Energy Meters in the Northern Region as agreed in the 114th NREB meeting held on 15.1.1998. NREB agreed for installation of Special Energy Meters at a total estimated cost of ₹904.00 lakh.

(b) The transmission asset was put under commercial operation on 1.5.2002.

(c) The scope of work as per Investment Approval (IA) covered the following elements:

- i. Total Number of special energy meters to be installed : 996
- ii. Number of special energy meters already installed : 883
- iii. Number of special energy meters under installation : 12
- iv. Special energy meters to be kept as spares : 70
- v. Special energy meters to be installed in future : 31

(d) The transmission tariff for the transmission asset from COD to 31.3.2004 was determined vide order dated 9.11.2005 in Petition No. 101/2003.

(e) The transmission tariff for the transmission asset from 1.4.2004 to 31.3.2009 was determined vide order dated 9.5.2006 in Petition No. 2/2006. The tariff of the transmission asset was revised on account of Additional Capital Expenditure (ACE) incurred during the year 2004-05 vide order dated 12.3.2007 in I.A. No. 7/2007 in Petition No. 2/2006.

(f) The transmission tariff for transmission asset from 1.4.2009 to 31.3.2014 was determined vide order dated 12.7.2011 in Petition No. 288/2010. Further, the transmission tariff of 2009-14 tariff period was trued-up and transmission tariff for 2014-19 period in respect of the transmission asset was determined vide order dated 28.1.2016 in Petition No. 360/TT/2014.



(g) The Petitioner has sought revision of transmission tariff approved for 2001-04 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 judgements of the Appellate Tribunal for Electricity (“the APTEL”) dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and dated 13.6.2007 in Appeal No. 139 of 2006 and batch cases. The Petitioner has sought consequential revision of transmission tariff allowed for 2009-14 period, truing-up of tariff of 2014-19 period and determination of transmission tariff of 2019-24 period in respect of the transmission asset.

(h) The APTEL in its judgment 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:

Sl. 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 IoL	In view of the order of the APTEL dated 14.11.2016 in Appeal Nos. 94 and 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 in 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/ directions of the APTEL are given in the following table:

Sl. 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.
III	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-capitalisation of the assets on cumulative repayment of Loan	The cumulative repayment of the loan proportionate to the assets decapitalized 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 Appeal 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 batch matters and dated 13.6.2007 in Appeal No. 139 of 2007 and batch cases, the Petitioner had sought revision of tariff of its transmission assets for 2001-04 and 2004-09 tariff periods 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 Civil Appeals by the Hon'ble Supreme Court.

(l) The Hon'ble Supreme Court vide its order dated 10.4.2018, dismissed the said Civil Appeals filed against the APTEL's said judgments. Thus, the judgements of APTEL have attained finality.

(m) Consequent to the Hon'ble Supreme Court's order dated 10.4.2018 in NTPC matter, 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 petitions for 2014-19 tariff period in respect of concerned transmission assets.

(n) The instant petition was heard on 10.9.2021 and in view of the APTEL's judgments dated 22.1.2007 in Appeal No. 81/2005 and batch matters and dated 13.6.2007 in Appeal No. 139/2006 and the order of Hon'ble Supreme Court dated 10.4.2018 tariff is being revised. Period wise transmission tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods and suitable assumptions have been made at certain places and applied which are indicated.

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notice published in the



newspapers by the Petitioner. Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 9, has filed its reply vide affidavit dated 21.1.2020 and mainly raised the issues of item-wise tariff, items-wise O&M Expenses, item-wise testing, issues of prudence check before revising the tariff, grossing up of RoE by the Petitioner, O&M Expenses for special meters, license fee, IoL, security expenses and Interest on Working Capital (IWC). The Petitioner has filed rejoinder affidavit dated 9.9.2021 to the reply of UPPCL. The issues raised by UPPCL and the clarifications given by the Petitioner are dealt in the relevant paragraphs of this order.

Re: Interest on Loan (“IoL”)

6. The APTEL while dealing with the issue of computation of IoL, in judgment 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 judgment dated 14.11.2006 in Appeal Nos. 94 and 96 of 2005. The APTEL vide its judgment dated 14.11.2006 had set aside the Commission’s methodology of computation of loan 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 IoL liability order for the period 1.4.1998 to 31.3.2001. In view of the judgment of APTEL, the interest allowed for 2001-04 and 2004-09 tariff periods is revised on the basis of the normative debt repayment methodology.

Re: Additional Capital Expenditure (“ACE”)

7. The APTEL vide judgment dated 13.6.2007 in Appeal No. 139/2006 and others held that ACE after the date of commercial operation (COD) should also be considered for computation of maintenance spares. In view of the judgment of



APTEL, the maintenance spares to be considered for computation of working capital for 2001-04 and 2004-09 periods are also required to be revised taking into consideration the ACE after COD.

Re: Depreciation

8. As regards depreciation, the APTEL in 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. In view of the above directions of the APTEL, the outstanding loan allowed for the transmission asset for 2001-04 and 2004-09 tariff periods is revised in the instant order.

9. The revision of transmission tariff allowed for 2001-04 and 2004-09 tariff periods necessitates the revision of transmission tariff allowed for 2009-14 tariff period, which is also allowed in the present order. The implementation of the directions of the APTEL vide judgments dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and dated 13.6.2007 in Appeal No. 139 of 2006 and batch cases, in the case of Petitioner was kept pending awaiting 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 2001-04, 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. The hearing in this matter was held on 10.9.2021 through video conference and order was reserved.

11. This order is issued considering the submissions made by the Petitioner in the Petition vide affidavit dated 7.11.2019 and Petitioner's affidavit dated 6.7.2021, UPPCL's reply filed vide affidavit dated 21.1.2020 and Petitioner's rejoinder affidavit dated 9.9.2021 to the reply filed by UPPCL.

12. 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 2001-04, 2004-09 AND 2009-14 TARIFF PERIODS

13. UPPCL has prayed that revision of tariff may be allowed only after prudence check. UPPCL has further submitted that the Petitioner cannot claim item-wise tariff, item-wise O&M Expenses and item-wise testing as the Central Electricity Regulatory Commission (Sharing of Inter-State transmission charges and losses) Regulations, 2010 intends to bill the transmission charges of each consumer on the basis of usage of line only. Therefore, the cost of Special Energy Meters must be assigned to the sub-stations pertaining to the particular transmission line. The concept of item-wise tariff, item-wise O&M Expenses and item-wise testing was not mentioned under the 2004 Tariff Regulations, the 2009 Tariff Regulations, the 2014 Tariff Regulations or the 2019 Tariff Regulations which provide for determination of tariff for transmission line and sub-stations. The meter is a minor item and as such it should be covered under O&M Expenses of a particular bay of the concerned sub-



station. UPPCL has submitted that COD of the transmission asset i.e. 1.5.2002 was between 1.4.1999 to 31.3.2011 and as such the Petitioner has no liability to pay Income Tax on the transmission asset in terms of Section 80IA of the Income Tax Act, 1961.

14. UPPCL also submitted that tariff forms submitted along with the instant petition are illegible except for depreciation. UPPCL has requested to direct the Petitioner to submit the copies of the APTEL's judgments on the basis of which the revision of tariff has been claimed as well as legible details for working out the transmission tariff for 2001-2014 period.

15. In response, the Petitioner has submitted that the APTEL's judgments have been submitted in Petition No. 255/TT/2019 as well as vide rejoinder affidavit dated 21.8.2020 in Petition No. 473/TT/2019 in response to reply of UPPCL. With regard to averments of illegible tariff form, the Petitioner has submitted that excel sheet of calculation is attached in the e-filing portal and figures can be verified from there.

2001-04 Tariff Period

16. The Commission vide order dated 9.11.2005 in Petition No. 101/2003 had approved transmission charges in respect of the transmission asset for 2001-04 period based on admitted capital cost of ₹572.89 lakh as on 31.3.2001. Further, the Commission vide order dated 9.5.2006 in Petition No. 2/2006 had allowed ACE of ₹32.35 lakh during 2002-03 and ₹46.59 lakh during 2003-04 periods. As regards contention of UPPCL that item-wise tariff, item-wise O&M expenses and item-wise testing should not be allowed, we note that the tariff during 2001-04 and subsequent tariff periods was allowed on item-wise basis. Therefore, revision of tariff is being done on the same basis.



17. The transmission charges approved for 2001-04 period vide order dated 9.11.2005 in Petition No. 101/2003 are as follows:

Particulars	(₹ in lakh)	
	2002-03	2003-04
Depreciation	31.51	34.37
Return on Equity	62.90	68.62
O&M Expenses	14.18	21.11
Advance against Depreciation	0.00	0.00
Interest on Loan	9.73	12.97
Interest on Working Capital	2.93	3.43
Total	121.25	140.50

18. The Petitioner has claimed the following revised transmission charges in respect of the transmission asset for 2001-04 period in this petition:

Particulars	(₹ in lakh)	
	2002-03	2003-04
Depreciation	31.51	34.37
Return on Equity	62.90	68.62
O&M Expenses	14.18	21.11
Advance against Depreciation	0.00	0.00
Interest on Loan	9.73	15.88
Interest on Working Capital	2.95	3.56
Total	121.27	143.54

19. We have considered the submissions of the Petitioner and have perused the order dated 9.11.2005 in Petition No. 101/2003 and order dated 9.5.2016 in Petition No. 2/2006. On perusal of the orders, we find that ACE for the years 2002-03 and 2003-04 in the said orders is limited to IoL only for the financial year 2003-04. The tariff is being allowed in respect of the transmission asset on the basis of following:

- a. Admitted capital cost of ₹572.89 lakh as on 1.4.2001 of the transmission asset;
- b. Weighted Average Rate of Interest (WAROI) on actual loan, Weighted Average Rate of Depreciation (WAROD), Rate of Interest for Working Capital and O&M Expenses as per order dated 9.11.2005 in Petition No. 101/2003.



20. In view of above, the revised transmission charges allowed in respect of the transmission asset for 2001-04 tariff period are as follows:

Particulars	(₹ in lakh)	
	2002-03 (Pro-rata for 11 months)	2003-04
Depreciation	31.51	34.37
Return on Equity	62.90	68.62
O&M Expenses	14.18	21.11
Advance against Depreciation	0.00	0.00
Interest on Loan	9.73	12.96*
Interest on Working Capital	2.93	3.43
Total	121.25	141.50

**In addition to above, IoL of ₹2.91 lakh has been allowed for 2003-04 period as per order dated 9.5.2006 in Petition No. 2/2006 on account of additional equity of ₹32.35 lakh for the year 2002-03 and ₹46.59 lakh for the year 2003-04.*

21. The Annual Fixed Charges (AFC) allowed for 2001-04 tariff period vide order dated 9.11.2005 in Petition No. 101/2003, the revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

Particulars	(₹ in lakh)	
	2002-03	2003-04
AFC approved vide order dated 9.11.2005 in Petition No. 01/2003	121.25	140.50
AFC claimed by the Petitioner in the instant petition	121.27	143.54
AFC allowed in the instant order	121.25	141.50*

**In addition to above, IoL of ₹2.91 lakh has been allowed for 2003-04 period as per order dated 9.5.2006 in Petition No. 2/2006 on account of additional equity of ₹32.35 lakh for the year 2002-03 and ₹46.59 lakh for the year 2003-04.*

2004-09 Tariff Period

22. The Commission vide order dated 9.5.2006 in Petition No. 2/2006 had approved transmission charges of the transmission asset for 2004-09 period based on admitted capital cost of ₹651.83 lakh as on 31.3.2004 by considering ACE of ₹78.94 lakh for 2001-04 period. Further, the tariff of the transmission asset was revised vide order dated 12.3.2007 in I.A. No. 7/2007 in Petition No. 2/2006 on account of ACE of ₹16.88 lakh during 2004-05.



23. The transmission charges approved for 2004-09 period vide order dated 9.5.2006 in Petition No. 2/2006 that was revised vide order dated 12.3.2007 in I.A. No. 7/2007 in Petition No. 2/2006 are as follows:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	39.62	40.12	40.12	40.12	40.12
Return on Equity	60.40	60.75	60.75	60.75	60.75
O&M Expenses	20.42	21.24	14.53	15.11	15.71
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Loan	18.70	15.64	12.04	8.46	4.88
Interest on Working Capital	3.30	3.33	3.14	3.14	3.14
Total	142.44	141.08	130.58	127.58	124.60

24. The Petitioner has claimed the following revised transmission charges in respect of the transmission asset for 2004-09 period in this petition:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	39.62	40.12	40.12	40.12	40.12
Return on Equity	60.40	60.75	60.75	60.75	60.75
O&M Expenses	20.42	21.24	14.53	15.11	15.71
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Loan	20.31	20.38	19.22	17.47	15.72
Interest on Working Capital	3.39	3.49	3.34	3.38	3.42
Total	144.15	145.98	137.96	136.83	135.72

25. We have considered the submissions of the Petitioner. The tariff is allowed in respect of the transmission asset on the basis of following:

- a) Admitted capital cost of ₹651.83 lakh in respect of the transmission asset as on 1.4.2004;
- b) ACE of ₹16.68 lakh for the period 2004-05;
- c) Weighted Average Rate of Interest on actual loan, Rate of Interest for Working Capital and O&M Expenses as per order dated 12.03.2007 in I.A. No. 7/2007 in Petition No. 2/2006.

26. In view of the above, the revised transmission charges allowed in respect of the transmission asset for 2004-09 tariff period are as follows:



(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	39.62	40.12	40.12	40.12	40.12
Return on Equity	60.40	60.75	60.75	60.75	60.75
O&M Expenses	20.42	21.24	14.53	15.11	15.71
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Loan	20.31	20.38	19.22	17.47	15.72
Interest on Working Capital	3.30	3.39	3.24	3.27	3.30
Total	144.05	145.89	137.87	136.72	135.61

27. AFC allowed for 2004-09 tariff period vide order dated 9.5.2006 in Petition No. 2/2006 that was revised vide order dated 12.3.2007 in I.A. No. 7/2007 in Petition No. 2/2006, revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
AFC approved vide order dated 12.3.2007 in I.A. No. 7/2007 in Petition No. 2/2006.	142.44	141.08	130.58	127.58	124.60
AFC claimed by the Petitioner in the instant petition.	144.15	145.98	137.96	136.83	135.72
AFC allowed in the instant order.	144.05	145.89	137.87	136.72	135.61

2009-14 Tariff Period

28. The Commission vide order dated 12.7.2011 in Petition No. 288/2010 approved the tariff in respect of the transmission asset for 2009-14 period and vide order dated 28.1.2016 in Petition No. 360/TT/2014 trued up the tariff allowed for 2009-14 period and the same is as follows:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	35.31	35.31	35.31	35.31	35.31
Return on Equity	81.03	84.01	84.09	84.09	85.10
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Interest on Loan	1.55	0.00	0.00	0.00	0.00
Interest on Working Capital	2.46	2.49	2.49	2.49	2.51
Total	120.35	121.80	121.88	121.88	122.92

29. The Petitioner has claimed the following revised transmission charges in respect of the transmission asset for 2009-14 period in the instant petition:



(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	35.31	35.31	35.31	35.31	35.31
Interest on Loan	13.34	10.23	7.17	3.93	1.15
Return on equity	81.03	84.01	84.09	84.09	85.10
Interest on Working Capital	2.70	2.70	2.64	2.57	2.53
O & M Expenses	0.00	0.00	0.00	0.00	0.00
Total	132.39	132.26	129.21	125.90	124.09

30. We have considered the Petitioner's claim. The tariff is allowed in respect of the transmission asset on the basis of following:

- a) Admitted capital cost of ₹668.71 lakh for transmission asset as on 1.4.2009;
- b) Weighted Average Rate of Interest on actual loan derived/adopted from order dated 28.1.2016 in Petition No. 360/TT/2014; and
- c) Weighted Average Rate of Depreciation as per order 28.1.2016 in Petition No. 360/TT/2014.

31. In view of above, the revised transmission charges allowed in respect of the transmission asset for 2009-14 tariff period are as follows:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	35.31	35.31	35.31	35.31	35.31
Interest on Loan	13.34	10.24	7.17	3.93	1.15
Return on equity	81.03	84.01	84.09	84.09	85.10
Interest on Working Capital	2.70	2.70	2.64	2.57	2.53
O & M Expenses	0.00	0.00	0.00	0.00	0.00
Total	132.39	132.26	129.21	125.90	124.09

32. AFC allowed for 2009-14 tariff period vide order dated 28.1.2016 in Petition No. 360/TT/2014, revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
AFC approved vide order dated 28.1.2016 in Petition No. 360/TT/2014.	120.35	121.80	121.88	121.88	122.92
AFC claimed by the Petitioner in the instant petition.	132.39	132.26	129.21	125.90	124.09
AFC allowed in the instant order.	132.39	132.26	129.21	125.90	124.09



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

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

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	35.31	9.54	9.54	9.54	9.54
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on equity	85.16	85.55	85.51	85.51	85.74
Interest on Working Capital	2.77	2.19	2.19	2.19	2.19
O & M Expenses	0.00	0.00	0.00	0.00	0.00
Total	123.24	97.28	97.24	97.24	97.47

34. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission asset are as follows:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	20.54	16.21	16.21	16.21	16.25
Total	20.54	16.21	16.21	16.21	16.25
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest	2.77	2.19	2.19	2.19	2.19

Capital Cost as on 1.4.2014

35. The capital cost of the transmission asset has been calculated in accordance with Regulations 9(3) and 9(6) of the 2014 Tariff Regulations. The Commission vide order dated 28.1.2016 in Petition No. 360/TT/2014 approved the transmission tariff in respect of the transmission asset for 2014-19 period based on admitted capital cost of ₹668.71 lakh as on 31.3.2014. Therefore, the admitted capital cost of ₹668.71 lakh as on 31.3.2014 has been considered for working out the trued-up tariff for 2014-19 tariff period.

36. The Petitioner has not claimed any ACE during 2014-19 period.

Capital Cost considered for truing-up of tariff for 2014-19 period



37. The capital cost considered for truing-up of tariff for 2014-19 tariff period is as follows:

(₹ in lakh)		
Capital Cost as on 1.4.2014	ACE during 2014-19 Period	Capital Cost as on 31.3.2019
668.71	0.00	668.71

Debt-Equity Ratio

38. As per Regulation 19(3) of the 2014 Tariff Regulations, debt-equity ratio allowed by the Commission for determination of tariff for the period ending on 31.3.2014 shall be considered. Accordingly, the admitted debt-equity ratio of 35.11:64.89 for the period ending on 31.3.2014 has been considered as opening debt-equity ratio as on 1.4.2014 for the purpose of truing-up of tariff of 2014-19 tariff period in respect of the transmission asset. The details of debt-equity ratio in respect of the transmission asset as on 1.4.2014 and 31.3.2019 are as follows:

Particulars	Capital cost as on 1.4.2014 (₹ in lakh)	(in %)	Total cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	234.76	35.11	234.76	35.11
Equity	433.95	64.89	433.95	64.89
Total	668.71	100.00	668.71	100.00

Depreciation

39. 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 2014-19 tariff period. The Gross Block during 2014-19 tariff period with regard to the transmission asset has been depreciated at WAROD and working of WAROD is attached as Annexure-1. The transmission asset has completed 12 years of life as on 31.3.2015. Therefore, the remaining depreciable value of ₹124.00 lakh has been



spread across the balance useful life of 13 years in accordance with Regulation 27(5) of the 2019 Tariff Regulations. WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2014-19 period in respect of the transmission asset is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	668.71	668.71	668.71	668.71	668.71
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	668.71	668.71	668.71	668.71	668.71
Average Gross Block	668.71	668.71	668.71	668.71	668.71
Weighted average Rate of Depreciation (in %)	5.28	1.43	1.43	1.43	1.43
Balance useful life (at the beginning of the year) (Year)	14.00	13.00	12.00	11.00	10.00
Lapsed useful life (at the beginning of the year) (Year)	11.00	12.00	13.00	14.00	15.00
Aggregate Depreciable Value	601.84	601.84	601.84	601.84	601.84
Depreciation during the year	35.31	9.54	9.54	9.54	9.54
Cumulative Depreciation at the end of the year	477.84	487.38	496.91	506.45	515.99
Remaining Aggregate Depreciable Value at the end of the year	124.00	114.46	104.92	95.39	85.85

40. The details of depreciation approved vide order dated 28.1.2016 in Petition No. 360/TT/2014, as claimed in the instant petition and trued-up depreciation allowed in the instant order in respect of the transmission asset is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.1.2016 in Petition No. 360/TT/2014.	35.81	10.82	10.82	10.82	10.82
Claimed by the Petitioner in the instant petition.	35.31	9.54	9.54	9.54	9.54
Allowed after true-up in this order.	35.31	9.54	9.54	9.54	9.54

41. The Petitioner has not claimed IoL for 2014-19 tariff period as the entire loan has been repaid prior to 1.4.2014. Accordingly, IoL has not been allowed for 2014-19 tariff period.



Return on Equity ("RoE")

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

Year	Claimed effective tax rate (in %)	Grossed up RoE (in %) [(Base Rate)/(1-t)]
2014-15	21.018	19.624
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

43. UPPCL has submitted that grossed up RoE from 2016-17 to 2018-19 is not claimed on the MAT rates approved by the Income Tax Authorities and requested to direct the Petitioner to submit figures of RoE based on grossed up rate of RoE derived on the basis of MAT rates approved by the Income Tax Authorities.

44. In response, the Petitioner has submitted that effective rate of tax considered for 2014-15, 2015-16 and 2016-17 is based on assessment order issued by the Income Tax Authorities. Further, the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed. The Petitioner has further submitted that transmission tariff has already been trued-up for 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. Same MAT rate has been considered in the instant petition. The Petitioner has requested to allow the differential tariff on account of the trued-up RoE based on effective tax rate calculated on completion of Income Tax assessment/ re-assessment for the years



2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of the respective assessment orders, directly from the beneficiaries, on year to year basis as provided in the 2014 Tariff Regulations.

45. We have considered the submissions of the Petitioner and UPPCL. The Commission vide order dated 6.7.2021 in Petition No. 358/TT/2019 has already dealt with the issues of UPPCL observing that the Petitioner has submitted the assessment orders issued by the Income Tax Department for the years 2014-15, 2015-16 and 2016- 17 and the Income Tax returns filed by the Petitioner for years 2017-18 and 2018-19. It was further observed by the Commission in the said order that the Petitioner has already submitted the documents as pointed out by UPPCL.

46. In view of above clarification of the Petitioner, the issues raised in the present petition do not require any fresh finding.

47. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates and the same is as follows:

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

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

49. Accordingly, RoE allowed in respect of the transmission asset is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	433.95	433.95	433.95	433.95	433.95
Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	433.95	433.95	433.95	433.95	433.95
Average Equity	433.95	433.95	433.95	433.95	433.95
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
Applicable RoE Rate (in %)	19.610	19.705	19.705	19.705	19.758
Return on Equity for the year	85.10	85.51	85.51	85.51	85.74

50. The details of RoE approved vide order dated 28.1.2016 in Petition No. 360/TT/2014, as claimed in the instant petition and true-up RoE allowed in the instant order in respect of the transmission asset are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.1.2016 in Petition No. 360/TT/2014.	85.66	86.22	86.22	86.22	86.22
Claimed by the Petitioner in the instant petition	85.16	85.55	85.51	85.51	85.74
Allowed after true-up in this order	85.10	85.51	85.51	85.51	85.74

Operation & Maintenance Expenses (“O&M Expenses”)

51. UPPCL has submitted that for the transmission asset covered in the present petition, there is no norm of O&M expenses as per the 2014 Tariff Regulations.

52. The Petitioner has not claimed any O&M Expenses during 2014-19 tariff period.



53. We have considered the submissions of the Petitioner and UPPCL. Expenditure towards lab testing of the SEMs shall be reimbursed by the Respondents on the basis of actuals as and when incurred, in accordance with order dated 31.10.2005 in Petition No. 132/2004 and order dated 12.7.2011 in Petition No. 288/2010.

Interest on Working Capital (“IWC”)

54. The Petitioner is entitled to IWC as per Regulation 28 of the 2014 Tariff Regulations.

55. The trued-up IWC allowed in respect of the transmission asset for 2014-19 tariff period is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Working Capital for O&M Expenses (O&M Expenses for one Month)	0.00	0.00	0.00	0.00	0.00
Working Capital for Maintenance Spares (15% of O&M)	0.00	0.00	0.00	0.00	0.00
Working Capital for Receivables (Equivalent to two months of annual transmission charges)	20.53	16.21	16.21	16.21	16.25
Total Working Capital	20.53	16.21	16.21	16.21	16.25
Rate of Interest of Working Capital (in %)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	2.77	2.19	2.19	2.19	2.19

56. The details of IWC approved vide order dated 28.1.2016 in Petition No. 360/TT/2014, as claimed in the instant petition and trued-up IWC allowed in the instant order in respect of the transmission asset is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 28.1.2016 in Petition No. 360/TT/2014.	2.80	2.23	2.23	2.23	2.23
Claimed by the Petitioner in the instant petition.	2.77	2.19	2.19	2.19	2.19
Allowed after true-up in this order	2.77	2.19	2.19	2.19	2.19



Approved Annual Fixed Charges for 2014-19 Tariff Period

57. Accordingly, trued-up AFC in respect of the transmission asset for 2014-19 tariff period are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	35.31	9.54	9.54	9.54	9.54
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	85.10	85.51	85.51	85.51	85.74
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	2.77	2.19	2.19	2.19	2.19
Total	123.18	97.24	97.24	97.24	97.47

58. The details of Annual Transmission Charges approved in respect of the transmission asset vide order dated 28.1.2016 in Petition No. 360/TT/2014, as claimed in the instant petition and trued-up annual transmission charges allowed in the instant order are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 28.1.2016 in Petition No. 360/TT/2014.	124.27	99.27	99.27	99.27	99.27
Claimed by the Petitioner in the instant petition.	123.24	97.28	97.24	97.24	97.47
Allowed after true-up in this order.	123.18	97.24	97.24	97.24	97.47

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	9.54	9.54	9.54	9.54	9.54
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on equity	81.50	81.50	81.50	81.50	81.50
Interest on Working Capital	1.37	1.37	1.37	1.37	1.37
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Total	92.41	92.41	92.41	92.41	92.41

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	0.00	0.00	0.00	0.00	0.00



Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	11.36	11.39	11.39	11.39	11.36
Total	11.36	11.39	11.39	11.39	11.36
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest	1.37	1.37	1.37	1.37	1.37

Capital Cost

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

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

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

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

(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

(c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;

(e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;

(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;

(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;

(h) Adjustment of revenue earned by the transmission licensee by using the asset before the date of commercial operation;

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

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

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

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

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

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

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



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

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

(4) *The capital cost in case of existing or new hydro generating station shall also include:*

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

(5) *The following shall be excluded from the capital cost of the existing and new projects:*

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

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

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

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



62. Capital cost of ₹668.71 lakh has been considered by the Commission in respect of the transmission asset as on 31.3.2019. Therefore, the capital cost of ₹668.71 lakh as on 31.3.2019 has been considered as the opening capital cost as on 1.4.2019 for the purpose of determination of transmission tariff for 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations.

63. The Petitioner has not claimed any ACE for 2019-24 tariff period in respect of the transmission asset in the instant petition.

Debt-Equity Ratio

64. 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 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."

65. Debt-equity ratio for 2019-24 period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The details of debt-equity ratio considered for the purpose of tariff determination for 2019-24 period is as follows:

Particulars	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	Total cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	234.76	35.11	234.76	35.11
Equity	433.95	64.89	433.95	64.89
Total	668.71	100.00	668.71	100.00

Depreciation

66. 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 asset 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 asset of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

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

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

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

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

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

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

(8) In case of de-capitalization of asset in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation



shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.”

67. We have considered the submissions of the Petitioner. Depreciation has been worked out considering ACE as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The transmission asset has already completed 12 years of life as on 31.3.2015 and the remaining depreciable value of ₹124.00 lakh has been spread across the balance useful life of 13 years. Depreciation allowed in respect of the transmission asset for 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	668.71	668.71	668.71	668.71	668.71
Addition during 2019-24 due to projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	668.71	668.71	668.71	668.71	668.71
Average Gross Block	668.71	668.71	668.71	668.71	668.71
Balance useful life at the beginning of the year (Year)	9.00	8.00	7.00	6.00	5.00
Lapsed useful life at the beginning of the year (Year)	16.00	17.00	18.00	19.00	20.00
Depreciable Value	601.84	601.84	601.84	601.84	601.84
Rate of Depreciation (in %)	1.43	1.43	1.43	1.43	1.43
Depreciation during the year	9.54	9.54	9.54	9.54	9.54
Cumulative Depreciation at the end of the year	525.53	535.07	544.61	554.15	563.68
Remaining Aggregate Depreciable Value at the end of the year	76.31	66.77	57.23	47.69	38.15

68. The Petitioner has not claimed IoL during 2019-24 tariff period. The entire loan has been paid prior to 1.4.2014. Accordingly, no IoL has been allowed for 2019-24 tariff period.

Return on Equity (“RoE”)

69. 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 follows:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$



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.”

70. The Petitioner has submitted that MAT rate is applicable to it. We have considered the submissions of the Petitioner. 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 in respect of the transmission asset for 2019-24 tariff period is as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	433.95	433.95	433.95	433.95	433.95
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	433.95	433.95	433.95	433.95	433.95
Average Equity	433.95	433.95	433.95	433.95	433.95



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
Return on Equity	81.50	81.50	81.50	81.50	81.50

71. The Petitioner has not claimed any O&M Expenses during 2019-24 tariff period.

Interest on Working Capital (“IWC”)

72. 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:

.....
.....

(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;”



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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working capital for O&M Expenses (O&M Expenses for one Month)	0.00	0.00	0.00	0.00	0.00
Working capital for Maintenance Spares (15% of O&M)	0.00	0.00	0.00	0.00	0.00
Working capital for Receivables (Equivalent to two months of annual transmission charges)	11.36	11.38	11.37	11.37	11.34
Total Working Capital	11.36	11.38	11.37	11.37	11.34
Rate of Interest of Working Capital (in %)	12.05	11.25	10.50	10.50	10.50
Interest of working capital	1.37	1.28	1.19	1.19	1.19

Annual Fixed Charges for 2019-24 Tariff Period

74. The transmission charges allowed in respect of the transmission asset for 2019-24 period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	9.54	9.54	9.54	9.54	9.54
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	81.50	81.50	81.50	81.50	81.50
Operation and Maintenance Expenses	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	1.37	1.28	1.19	1.19	1.19



Total	92.41	92.32	92.24	92.24	92.23
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Filing Fee and Publication Expenses

75. 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

76. UPPCL has submitted that license fee is the onus of the Petitioner.

77. In response, the Petitioner has submitted that license fee may be allowed to be recovered separately from the Respondents in terms of Regulation 70 of the 2019 Tariff Regulations for 2019-24 tariff period.

78. 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 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

79. 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, paid by the Petitioner on account of demand from Government/Statutory authorities, may be allowed to be recovered from the beneficiaries.



80. We have considered the submissions 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

81. The Petitioner has submitted that security expenses in respect of the transmission asset are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and consequential IWC.

82. UPPCL has submitted that security expenses and consequential IWC may be allowed subject to the Petitioner justifying the increase in security expenses as per the criterion prescribed in DPE vide letter No. W-02/0028/ 2017DPE (WC)-GL-XIII/17 dated 3.8.2017.

83. We have considered the submissions of the Petitioner and UPPCL. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved security expenses from 1.4.2019 to 31.3.2024. Therefore, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. 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



84. 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

85. During the tariff periods 2001-04, 2004-09 and 2009-14 (upto 30.6.2011), the transmission charges for inter-State transmission systems 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 system were governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2010. With effect from 1.11.2020, sharing of transmission charges are governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (in short, "2020 Sharing Regulations"). Accordingly, the liabilities of the DICs for arrears of transmission charges determined through this order shall be computed DIC- wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. The billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

86. To summarise:

- a. The revised transmission charges allowed in respect of the transmission asset for 2001-04 tariff period as per the APTEL's judgments are as follows:



(₹ in lakh)

Particulars	2002-03 (Pro-rata for 11 months)	2003-04
AFC	121.27	143.54

b. The revised AFC allowed in respect of the transmission asset for 2004-09 tariff period as per the APTEL's judgments are as follows:

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
AFC	144.15	145.98	137.96	136.83	135.72

c. The consequential revision of AFC allowed in respect of the transmission asset for 2009-14 tariff period is as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
AFC	132.39	132.26	129.21	125.90	124.09

d. The trued-up AFC allowed in respect of the transmission asset for 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	123.18	97.24	97.24	97.24	97.47

e. AFC allowed in respect of the transmission asset for 2019-24 tariff period in this order are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	92.41	92.32	92.24	92.24	92.23

87. Annexures-I enclosed hereinafter forms part of the order.

88. This order disposes of Petition No.12/TT/2020 in terms of the above discussions and findings.

sd/-

(P. K. Singh)
Member

sd/

(Arun Goyal)
Member

sd/-

(P. K. Pujari)
Chairperson



Annexure-I

Asset	Particular	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations (₹ in lakh)				
					2014-15	2015-16	2016-17	2017-18	2018-19
	Sub Station	668.71	668.71	5.28	35.31	Spreading			
	TOTAL	668.71	668.71		35.31				
	Average Gross Block (₹ in lakh)				668.71	668.71	668.71	668.71	668.71
	Weighted Average Rate of Depreciation (in %)				5.28	1.43	1.43	1.43	1.43

