

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 415/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: 29.06.2021

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and revision of transmission tariff of 2004-09 and 2009-14 tariff periods, 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 of 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for 400 kV D/C Raipur-Chandrapur (Bhadrawati) Transmission Line including bay extensions at Raipur and Bhadrawati Sub-stations in the Western Region.

And in the matter of:

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

....Petitioner

Vs.

1. Madhya Pradesh Power Management Company Ltd.,
Shakti Bhawan, Rampur, Jabalpur – 482008.
2. Madhya Pradesh Power Transmission Company Ltd.,
Shakti Bhawan, Rampur, Jabalpur – 482008.
3. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd.,
3/54, Press Complex, Agra-Bombay Road, Indore – 452008.



4. Maharashtra State Electricity Distribution Co. Ltd.,
Hongkong Bank Building, 3rd Floor,
M.G. Road, Fort, Mumbai – 400001.
5. Maharashtra State Electricity Transmission Co. Ltd.,
Prakashganga, 6th Floor, Plot No. C-19, E-Block,
Bandra Kurla Complex, Bandra (East) Mumbai-400051.
6. Gujarat Urja Vikas Nigam Ltd.,
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara - 390007
7. Gujarat Energy Transmission Corporation Ltd.,
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara - 390007
8. Electricity Department,
Govt. of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa – 403001.
9. Electricity Department,
Administration of Daman & Diu. Daman - 396 210.
10. Electricity Department,
Administration of Dadra Nagar Haveli,
U.T., Silvassa – 396230.
11. Chhattisgarh State Electricity Board,
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh – 492013.
12. Chhattisgarh State Power Transmission Co. Ltd.,
Office of The Executive Director (C&P),
State Load Despatch Building,
Dangania, Raipur – 492013.
13. Chhattisgarh State Power Distribution Co. Ltd.,
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh - 492013.

...Respondent(s)



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

For Respondent: Shri Anindya Kumar Khare, MPPMCL

ORDER

The instant petition has been filed by the Petitioner, Power Grid Corporation of India Ltd., a deemed transmission licensee, for revision of transmission tariff of 2004-09 and 2009-14 tariff periods; truing up of the capital expenditure for the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”); and for determination of tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) for the period from 1.4.2019 to 31.3.2024 for 400 kV D/C Raipur-Chandrapur (Bhadrawati) Transmission Line including bay extensions at Raipur and Bhadrawati Sub-stations (hereinafter referred to as “the transmission asset”) in Western Region.

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

“1) Approve the revised Transmission Tariff for 2004-09 block and transmission tariff for 2009-14 block for the assets covered under this petition, as per para 8 above.

2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 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 and 10 above for respective block.

(b) Further it is submitted that deferred tax liability before 01.04.2009 shall be recoverable from the beneficiaries or long term transmission customers /DIC as the case may be, as and when materialized as per regulation 49 of 2014 and regulation 67 of 2019 tariff regulation. The petitioner may be allowed to recover the deferred tax liability materialised directly with out 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 beneficiaries 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 beneficiaries, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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



Background

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

a) The Investment Approval (IA) and expenditure sanction for the transmission asset was accorded by the Board of Directors of the Petitioner company as per Memorandum dated 28.3.2003 at an estimated cost of ₹24860 lakh, including IDC of ₹2488 lakh, based on 4th quarter 2002 price level. Subsequently, the revised cost estimates were approved by the Board of Directors of the Petitioner Company as per Memorandum dated 17.1.2006 at an estimated cost of ₹26995 lakh, including IDC of ₹1519 lakh.

b) The scope of the work as per IA is as follows:

Transmission line

400 kV D/C Raipur-handrapur (Bhadrawathi) Transmission Line

Sub-stations

400/220 kV Raipur Sub-station

Bay extensions : 2 Numbers 400 kV Bays

400/220 kV Bhadrawati Sub-station

Bay extensions : 2 Numbers 400 kV Bays

c) The entire scope of the work as per IA is covered in the instant petition. The COD of the transmission asset is 1.6.2005.

d) The transmission tariff for the period from COD (i.e. 1.6.2005) to 31.3.2009 was allowed *vide* order dated 6.2.2006 in Petition No.134/2006 and further revised *vide* order dated 15.6.2007 in I.A. No. 20/2007 in Petition No. 134/2006. Subsequently, the transmission tariff was revised due to additional capitalization incurred during 2006-07 and 2007-08 *vide* order dated 15.6.2009 in Petition No. 50/2009 and it was further revised due to additional capitalization incurred during 2008-09 *vide* order dated 7.4.2010 in Petition No. 309/2009.



e) The transmission tariff for the period from 1.4.2009 to 31.3.2014 was allowed *vide* order dated 6.12.2010 in Petition No. 158/2010. The transmission tariff of 2009-14 period was trued-up and tariff of the period from 1.4.2014 to 31.3.2019 was determined *vide* order dated 7.10.2015 in Petition No. 160/TT/2014.

f) The Petitioner has sought revision of transmission tariff approved from COD (1.6.2005) to 31.3.2009 i.e. 2004-09 tariff period 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 (APTEL) judgment dated 22.1.2007 in Appeal No. 81/2005 and batch matters and dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters. The Petitioner has sought consequential revision of tariff allowed for 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 transmission asset in Western Region.

g) APTEL in 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 APTEL and its decisions are as given in the following table:

Sr. No.	Issue	APTEL's decision/direction
1	Whether APTEL can enquire into the validity of Regulations framed by the Commission	Challenge to the validity of Regulations framed by the Commission falls outside the purview of APTEL.
2	Computation of interest on loan	In view of the order of the APTEL dated 14.11.2016 in Appeal 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	Commission's view upheld.



	variation in salary and wages	
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.

h) 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 of APTEL are given in the following table:

Sr. No.	Issue	APTEL's decision/direction
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.

i) 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.

j) The Petitioner 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 2006 and batch matters, 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 pending Appeals before the Hon'ble Supreme Court adjourned the said petition *sine die* and directed to revive the same after the disposal of the Civil Appeals by the Hon'ble Supreme Court.

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

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

m) The instant petition was heard on 20.4.2021 and in view of APTEL's judgments dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters along-with order dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters and the order of Hon'ble Supreme Court dated 10.4.2018 in Civil Appeal No. 5622 of 2007 along with other Civil Appeals, tariff is being revised. Period-wise 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.

n) The tariff for 2004-09 tariff period was worked out based on the admitted capital cost as on COD of ₹24113.74 lakh, admitted additional capital expenditure (ACE) during 2004-09 tariff period of ₹1262.92 lakh and admitted capital cost as on 31.3.2009 of ₹25376.66 lakh in respect of the transmission asset. Accordingly, considering the admitted capital cost, tariff is being revised for 2004-09 and 2009-14 tariff periods in terms of the APTEL's judgements dated 22.1.2007 and dated 13.6.2007.

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

5. The Petitioner has served the petition on the Respondents and notice of this petition has been published in the newspapers 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 newspapers by the Petitioner. MPPMCL, Respondent No. 1 has filed its reply *vide* affidavit dated 6.2.2020 and has raised the issue of revision of transmission tariff for 2004-09 tariff period and 2009-14 tariff period and effective tax rates considered for grossing up of rate of Return on Equity (RoE). The Petitioner *vide* affidavit dated 28.7.2020 has filed its rejoinder to the reply filed by MPPMCL. The issues raised by MPPMCL and the clarifications given by the Petitioner are dealt in the relevant paragraphs of this order.

6. The hearing in this matter was held on 20.4.2021 through video conference and order was reserved.



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

8. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 4.9.2019, Petitioner's affidavit dated 3.8.2020, MPPMCL's reply and the Petitioner's rejoinder thereto.

Re: Interest on Loan (IoL)

9. 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. 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 above, the interest allowed for the 2004-09 tariff period is revised on the basis of the normative debt repayment methodology.

Re: Additional Capital Expenditure (ACE)

10. APTEL vide judgment dated 13.6.2007 in Appeal No. 139/2006 and others held that additional capitalisation after the date of commercial operation should also be considered for computation of maintenance spares. In view of the above, the maintenance spares to be considered for computation of working capital for the 2004-



09 period are also required to be revised taking into consideration the ACE after the date of commercial operation.

Re: Depreciation

11. 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. In view of the above directions of APTEL, the outstanding loan allowed for the transmission asset for 2004-09 tariff period is revised in the instant order.

12. The revision of tariff allowed for 2004-09 tariff period necessitates the revision of tariff allowed for 2009-14 period, which is also allowed in the instant order. The implementation of the directions of APTEL in case of the Petitioner was kept pending awaiting for the outcome of the Civil Appeals filed before the Hon'ble Supreme Court. Taking into consideration the facts of the case and keeping in view the interest of the consumers, we are of the view that the beneficiaries should not be burdened with the carrying cost for the difference in the tariff allowed earlier and allowed in the instant order for 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.



Revision of Transmission Charges Allowed for 2004-09 and 2009-14 Tariff Periods

2004-09 Tariff Period

13. The Commission vide order dated 6.2.2006 in Petition No. 134/2006; vide order dated 15.6.2007 in I.A. No. 20/2007 in Petition No. 134/2006; vide order dated 15.6.2009 in Petition No. 50/2009 and vide order dated 7.4.2010 in Petition No. 309/2009 had approved the following transmission charges in respect of the transmission asset for 2004-09 period:

(₹ in lakh)

Particulars	2005-06 (Pro-rata 10 months)	2006-07	2007-08	2008-09
Depreciation	546.37	671.42	679.48	681.44
Interest on Loan	1048.80	1273.56	1243.04	1190.68
Return on Equity	715.16	882.05	893.17	895.82
Advance against Depreciation	0.00	0.00	0.00	267.37
Interest on Working Capital	67.19	83.14	84.82	90.64
O&M Expenses	233.42	291.69	302.75	315.43
Total	2610.94	3201.86	3203.26	3441.38

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

(₹ in lakh)

Particulars	2005-06 (Pro-rata 10 months)	2006-07	2007-08	2008-09
Depreciation	546.37	671.42	679.48	681.44
Interest on Loan	1065.36	1336.13	1336.17	1288.04
Return on Equity	715.16	882.05	893.17	895.82
Advance against Depreciation	0.00	0.00	0.00	0.00
Interest on Working Capital	67.77	85.63	88.03	89.45
O&M Expenses	233.42	291.69	302.75	315.43
Total	2628.08	3266.92	3299.60	3270.18



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

- a) Admitted capital cost as on COD of ₹24113.74 lakh, admitted ACE during 2004-09 tariff period of ₹1262.92 lakh and admitted capital cost as on 31.3.2009 of ₹25376.66 lakh in respect of the transmission asset.
- b) Weighted Average Rate of Interest on actual loan, Weighted Average Rate of Depreciation, Rate of Interest on Working Capital and Operation & Maintenance Expenses as per order dated 6.2.2006 in Petition No. 134/2006, order dated 15.6.2007 passed in I.A. No. 20/2007 in Petition No. 134/2006, order dated 15.6.2009 in Petition No. 50/2009 and order dated 7.4.2010 in Petition No. 309/2009.
- c) With respect to calculation of IoL, during 2005-06 and 2006-07 moratorium period was availed by the Petitioner and no actual repayment of loan was done. Earlier, the Commission vide order dated 15.6.2007 in I.A. No. 20/2007 in Petition No. 134/2006 and order dated 15.6.2009 in Petition No. 50/2009 had considered depreciation provided during 2005-06 and 2006-07 as loan repayment. Therefore, depreciation during 2005-06 and 2006-07 has been considered as loan repayment in accordance with Regulation 56(i)(f) of the 2004 Tariff Regulations which is as follows:

“27 (i) Interest on Loan Capital

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

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

Particulars	(₹ in lakh)			
	2005-06 (Pro-rata 10 months)	2006-07	2007-08	2008-09
Depreciation	546.37	671.42	679.48	681.44
Interest on Loan	1048.80	1273.56	1250.10	1204.44



Particulars	2005-06 (Pro-rata 10 months)	2006-07	2007-08	2008-09
Return on Equity	715.16	882.05	893.17	895.82
Advance against Depreciation	0.00	0.00	0.00	81.29
Interest on Working Capital	67.48	84.12	86.27	89.13
O&M Expenses	233.42	291.69	302.75	315.43
Total	2611.23	3202.85	3211.77	3267.56

17. The Annual Fixed Charges (AFC) allowed vide order dated 6.2.2006 in Petition No. 134/2006, order dated 15.6.2007 in I.A. No. 20/2007 in Petition No. 134/2006, order dated 15.6.2009 in Petition No. 50/2009 for the years 2006-07 and 2007-08 and order dated 7.4.2010 in Petition No. 309/2009 for the year 2008-09 of 2004-09 tariff period, the revised AFC claimed in the instant petition and AFC allowed in the instant order is as follows:

(₹ in lakh)				
Particulars	2005-06 (Pro-rata 10 months)	2006-07	2007-08	2008-09
AFC approved vide order dated 6.2.2006 in Petition No. 134/2006 and dated 15.6.2007 in I.A. No. 20/2007 in Petition No. 134/2006, order dated 15.6.2009 in Petition No. 50/2009, order dated 7.4.2010 in Petition No. 309/2009	2610.94	3201.86	3203.26	3441.38
AFC claimed by the Petitioner in the instant Petition	2628.08	3266.92	3299.60	3270.18
AFC allowed after true-up in this order	2611.23	3202.85	3211.77	3267.56

2009-14 Tariff Period

18. The Commission vide order dated 6.12.2010 in Petition No. 158/2010 approved the tariff for 2009-14 tariff period and subsequently vide order dated 7.10.2015 in



Petition No. 160/TT/2014 had tried up the tariff allowed for 2009-14 tariff period which is as follows:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	1338.62	1338.62	1338.62	1338.62	1338.62
Interest on Loan	1112.33	1016.67	920.75	824.86	729.03
Return on Equity	1196.86	1240.70	1241.92	1241.92	1256.85
Interest on Working Capital	97.35	97.49	96.81	96.17	95.92
O&M Expenses	426.26	450.70	476.51	503.73	532.41
Total	4171.43	4144.19	4074.61	4005.31	3952.84

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

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	1338.62	1338.62	1338.62	1338.62	1338.62
Interest on Loan	1,206.24	1,110.65	1,014.78	918.96	823.22
Return on Equity	1196.86	1240.70	1241.92	1241.92	1256.85
Interest on Working Capital	99.31	99.45	98.77	98.13	97.88
O&M Expenses	426.26	450.70	476.51	503.73	532.41
Total	4267.29	4240.12	4170.60	4101.37	4048.99

20. 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 ₹ 25376.66 lakh as on 1.4.2009.
- b. Weighted Average Rate of Interest on actual loan and Weighted Average Rate of Depreciation has been considered as per order dated 7.10.2015 in Petition No. 160/TT/2014.

21. In view of the 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	1338.62	1338.62	1338.62	1338.62	1338.62
Interest on Loan	1125.73	1030.08	934.16	838.28	742.47
Return on Equity	1196.86	1240.70	1241.92	1241.92	1256.85
Interest on Working Capital	97.63	97.77	97.09	96.45	96.20
O&M Expenses	426.26	450.70	476.51	503.73	532.41
Total	4185.10	4157.87	4088.30	4019.00	3966.55

22. The details of AFC allowed vide order dated 7.10.2015 in Petition No.160/TT/2014 for 2009-14 tariff period, the 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 7.10.2015 in Petition No.160/TT/2014	4171.43	4144.19	4074.61	4005.31	3952.84
AFC claimed by the Petitioner in the instant petition	4267.29	4240.12	4170.60	4101.37	4048.99
AFC allowed after true-up in this order	4185.10	4157.87	4088.30	4019.00	3966.55

Truing Up of Annual Fixed Charges for 2014-19 Tariff Period

23. 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	1338.62	1338.62	1338.62	1338.62	373.30
Interest on Loan	727.61	632.27	537.48	444.49	394.83
Return on Equity	1257.81	1263.58	1262.94	1262.94	1266.34
Interest on Working Capital	103.33	102.17	100.89	99.70	77.40
O&M Expenses	485.50	501.80	518.37	535.57	553.35
Total	3912.87	3838.44	3758.30	3681.32	2665.22

24. 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	40.46	41.82	43.20	44.63	46.11
Maintenance Spares	72.83	75.27	77.76	80.34	83.00
Receivables	652.15	639.74	626.38	613.55	444.20
Total Working Capital	765.44	756.83	747.34	738.52	573.31
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	103.33	102.17	100.89	99.70	77.40

Capital Cost

25. The Commission vide order dated 7.10.2015 in Petition No.160/TT/2014 admitted the capital cost of ₹25376.66 lakh as on 1.4.2014 and the same has been considered as capital cost as on 1.4.2014. The Petitioner has not claimed any ACE during 2014-19 tariff period. Accordingly, the capital cost considered for determination of tariff for 2014-19 tariff period in respect of the transmission asset is as follows:

(₹ in lakh)

Capital Cost as on 1.4.2014	ACE 2014-19	Capital Cost as on 31.3.2019
25376.66	0.00	25376.66

Debt-Equity ratio

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



Particulars	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	18967.41	74.74	18967.41	74.74
Equity	6409.25	25.26	6409.25	25.26
Total	25376.66	100.00	25376.66	100.00

Depreciation

27. The Gross block during 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD has been worked out and attached as Annexure-1 to this order after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations. The transmission asset has completed 12 years of useful life as on 31.3.2018 and the remaining depreciable value has been spread across the balance useful life in accordance with Regulation 27(5) of the 2014 Tariff Regulations. The tried-up depreciation for 2014-19 tariff 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	25376.66	25376.66	25376.66	25376.66	25376.66
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	25376.66	25376.66	25376.66	25376.66	25376.66
Average Gross Block	25376.66	25376.66	25376.66	25376.66	25376.66
Freehold Land	0.00	0.00	0.00	0.00	0.00
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	1.46
Depreciable Value	22838.99	22838.99	22838.99	22838.99	22838.99
Balance useful life of the asset (Year)	26	25	24	23	22
Lapsed life (Year)	8	9	10	11	12
Depreciation during the year	1338.62	1338.62	1338.62	1338.62	369.61
Cumulative Depreciation at the end of the year	10691.72	12030.35	13368.97	14707.60	15077.20
Remaining Depreciable Value at the end of the year	12147.27	10808.65	9470.02	8131.40	7761.79



28. The details of depreciation approved vide order dated 7.10.2015 in Petition No.160/TT/2014, depreciation claimed by the Petitioner and trued-up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.10.2015 in Petition No. 160/TT/2014	1338.62	1338.62	1338.62	1338.62	361.15
Claimed by the Petitioner in the instant petition	1338.62	1338.62	1338.62	1338.62	373.30
Allowed after true-up in this order	1338.62	1338.62	1338.62	1338.62	369.61

Interest on Loan (IoL)

29. 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. Trued-up IoL approved in respect of the transmission asset for 2014-19 tariff period is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	18967.41	18967.41	18967.41	18967.41	18967.41
Cumulative Repayments up to Previous Year	9353.10	10691.72	12030.35	13368.97	14707.60
Net Loan-Opening	9614.32	8275.69	6937.07	5598.44	4259.82
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	1338.62	1338.62	1338.62	1338.62	369.61
Net Loan-Closing	8275.69	6937.07	5598.44	4259.82	3890.21
Average Loan	8945.00	7606.38	6267.76	4929.13	4075.01
Weighted Average Rate of Interest on Loan (%)	7.2302	7.2467	7.2768	7.3498	7.6051
Interest on Loan	646.74	551.21	456.09	362.28	309.91

30. The details of IoL approved vide order dated 7.10.2015 in Petition



No.160/TT/2014, IoL claimed by the Petitioner and trued-up in the instant order is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 7.10.2015 in Petition No. 160/TT/2014	633.29	537.72	442.55	348.60	296.07
Claimed by the Petitioner in the instant petition	727.61	632.27	537.48	444.49	394.83
Allowed after true-up in this order	646.74	551.21	456.09	362.28	309.91

Return on Equity (RoE)

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

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

32. MPPMCL has submitted that the Petitioner has grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 and has not placed on record the assessment orders for 2016-17 and 2017-18. For 2018-19, the Petitioner has grossed up RoE and has not claimed the effective tax rate based on actual taxes paid for 2018-19. MPPMCL has further submitted that the Petitioner's Income Tax Assessment Orders for FY 2016-17, 2017-18 and 2018-19 have not been finalized. MPPMCL has



submitted that the Petitioner has neither submitted copy of assessment orders for 2014-15 and 2015-16 periods nor audited accounts in respect of actual taxes paid for 2016-17 and 2017-18 periods and in the absence of these essential documents, it is not possible to scrutinize the claim of the Petitioner in a proper way.

33. In response, the Petitioner has submitted that effective rates of tax considered for 2014-15 and 2015-16 are based on Assessment Order issued by Income Tax Authorities for the purpose of grossing up of RoE rate. The effective rate of tax considered for 2016-17 and 2017-18 are based on the Income-tax returns filed for the purpose of grossing up of ROE rate of the respective years. Further, for 2018-19 period, effective tax rate is calculated based on the applicable MAT rate (i.e. MAT 18.50% + Surcharge 12.00% + Cess 4%) for the purpose of grossing up of RoE rate. The Petitioner has also submitted a copy of the Assessment orders for 2014-15 to 2016-17.

34. We have considered the submissions of the Petitioner and MPPMCL. The Commission vide order dated 2.2.2021 in Petition No. 312/TT/2020 has already dealt with the above issue of MPPMCL observing that the Petitioner has submitted assessment orders issued by the Income Tax Department for the years 2014-15, 2015-16 and 2016-17 and Income Tax Returns have been filed by the Petitioner for the years 2017-18 and 2018-19. The Commission in the said order further observed that the Petitioner has submitted the documents as pointed out by MPPMCL. In view of the finding given in the order dated 2.2.2021 in Petition No. 312/TT/2020, no fresh consideration on this issue is required.



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

Year	Notified MAT rates (%) (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

36. The MAT rates considered vide order dated 27.4.2020 for the purpose of grossing-up of rate of RoE for truing up of the tariff of the 2014-19 tariff period, in terms of the provisions of the 2014 Tariff Regulations, is considered in the instant case as well, which is as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	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

37. The Petitioner has claimed RoE for 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. 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	6409.25	6409.25	6409.25	6409.25	6409.25
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	6409.25	6409.25	6409.25	6409.25	6409.25
Average Equity	6409.25	6409.25	6409.25	6409.25	6409.25
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	1256.85	1262.94	1262.94	1262.94	1266.34

38. The details of RoE approved vide order dated 7.10.2015 in Petition No.160/TT/2014, RoE claimed by the Petitioner and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.10.2015 in Petition No. 160/TT/2014	1256.85	1256.85	1256.85	1256.85	1256.85
Claimed by the Petitioner in the instant petition	1257.81	1263.58	1262.94	1262.94	1266.34
Allowed after true-up in this order	1256.85	1262.94	1262.94	1262.94	1266.34

Operation & Maintenance Expenses (O&M Expenses)

39. The trued-up O&M Expenses claimed by the Petitioner are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission Lines					
400 kV Raipur-Bhadrawati II and III (345.550 km) D/C (Twin Conductor) Transmission Line					
Substation Bays					
400 kV Conventional (4 Numbers) Bays (Raipur I, Raipur II, Bhadrawati I and Bhadrawati II)					
Claimed by the Petitioner in the instant	485.50	501.80	518.37	535.57	553.35

40. We have considered the submissions of the Petitioner. Regulation 29(3) of the



2014 Tariff Regulations specifies the norms for O&M Expenses in respect of the transmission asset. The norms specified in respect of the elements covered in the transmission asset are as follows:

Element	Norms for 2014-15	Norms for 2015-16	Norms for 2016-17	Norms for 2017-18	Norms for 2018-19
D/C Twin Conductor	₹0.707 lakh/km	₹0.731 lakh/km	₹0.755 lakh/km	₹0.780 lakh/km	₹0.806 lakh/km
400 kV Bays	₹60.30 lakh/Bay	₹62.30 lakh/Bay	₹64.37 lakh/Bay	₹66.51 lakh/Bay	₹68.71 lakh/Bay

41. The trued-up O&M Expenses allowed in respect of the transmission asset for 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV Raipur-Bhadrawati II and III (345.550 km) D/C Twin Conductor	244.30	252.60	260.89	269.53	278.51
400 kV Conventional (4Numbers) Bays (Raipur I, Raipur II, Bhadrawati I and Bhadrawati II)	241.20	249.20	257.48	266.04	274.84
Total	485.50	501.80	518.37	535.57	553.35

42. The details of O&M Expenses approved vide order dated 7.10.2015 in Petition No.160/TT/2014, O&M Expenses claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.10.2015 in Petition No. 160/TT/2014	485.50	501.80	518.37	535.57	553.35
Claimed by the Petitioner in the instant petition	485.50	501.80	518.37	535.57	553.35
Allowed after true-up in this order	485.50	501.80	518.37	535.57	553.35

Interest on Working Capital (IWC)

43. The IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and trued-up IWC allowed in respect of the



transmission asset is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses (O&M Expenses for One month)	40.46	41.82	43.20	44.63	46.11
Maintenance Spares (15% of O&M Expenses)	72.83	75.27	77.76	80.34	83.00
Receivables (Equivalent to Two months of annual fixed cost)	638.20	625.81	612.51	599.54	429.10
Total Working Capital	751.48	742.90	733.46	724.50	558.21
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
IWC	101.45	100.29	99.02	97.81	75.36

44. The details of IWC approved vide order dated 7.10.2015 in Petition No.160/TT/2014, IWC claimed by the Petitioner and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.10.2015 in Petition No. 160/TT/2014	101.14	99.84	98.57	97.35	74.63
Claimed by the Petitioner in the instant petition	103.33	102.17	100.89	99.70	77.40
Allowed after true-up in this order	101.45	100.29	99.02	97.81	75.36

Approved Annual Fixed Charges of the 2014-19 Tariff Period

45. The trued up annual fixed charges 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	1338.62	1338.62	1338.62	1338.62	369.61
Interest on Loan	646.74	551.21	456.09	362.28	309.91
Return on Equity	1256.85	1262.94	1262.94	1262.94	1266.34
Interest on Working Capital	101.45	100.29	99.02	97.81	75.36
O&M Expenses	485.50	501.80	518.37	535.57	553.35
Total	3829.18	3754.86	3675.04	3597.23	2574.57



46. Accordingly, the Annual Transmission Charges allowed vide order dated 7.10.2015 in Petition No.160/TT/2014, claimed by the Petitioner in the instant petition and as approved after true-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.10.2015 in Petition No. 160/TT/2014	3815.41	3734.84	3654.96	3577.01	2542.05
Claimed by the Petitioner in the instant petition	3912.87	3838.44	3758.30	3681.32	2665.22
Allowed after true-up in this order	3829.18	3754.86	3675.04	3597.23	2574.57

Determination of Annual Fixed Charges for 2019-24 Tariff Period

47. 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	373.30	373.30	373.30	373.31	373.30
Interest on Loan	403.05	375.26	353.45	321.04	288.64
Return on Equity	1266.34	1266.34	1266.34	1266.34	1266.34
Interest on Working Capital	49.76	50.11	50.47	50.69	50.83
O&M Expenses	437.01	452.24	467.98	484.22	500.97
Total	2529.46	2517.25	2511.54	2495.60	2480.08

48. The details of IWC claimed by the Petitioner for 2019-24 period is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	36.42	37.69	39.00	40.35	41.75
Maintenance Spares	65.55	67.84	70.20	72.63	75.15
Receivables	311.00	310.35	309.64	307.68	304.93
Total Working Capital	412.97	415.88	418.84	420.66	421.83
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	49.76	50.11	50.47	50.69	50.83

Capital Cost

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



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

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

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the 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 Viduytikaran 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.”

50. The Petitioner has claimed capital cost of ₹25376.66 lakh as on 31.3.2019 in



respect of the transmission asset. The same has been worked out by the Commission as on 31.3.2019 and considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

51. The Petitioner has not projected any ACE during 2019-24 in respect of the transmission asset. Accordingly, the capital cost considered for 2019-24 tariff period is as follows:

(₹ in lakh)		
Total Capital Cost as on 1.4.2019	Projected ACE	Total Capital Cost as on 31.3.2024
	2019-24	
25376.66	0.00	25376.66

Debt-Equity ratio

52. 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.”

53. The debt--equity ratio considered for the purpose of computation 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	18967.41	74.74	18967.41	74.74
Equity	6409.25	25.26	6409.25	25.26
Total	25376.66	100.00	25376.66	100.00

Depreciation

54. 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 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.”

55. 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 transmission asset has already completed more than 12 years of useful life as on 1.4.2018. Accordingly for the computation of depreciation, the remaining depreciable value at the beginning of the year is spread over the balance useful life of the asset in the 2019-24 period as prescribed in Regulation 33(5) of the 2019 Tariff Regulations. The depreciation allowed in respect of the transmission asset for 2019-24 period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	25376.66	25376.66	25376.66	25376.66	25376.66
Addition during the year 2019-24 due to projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	25376.66	25376.66	25376.66	25376.66	25376.66
Average Gross Block	25376.66	25376.66	25376.66	25376.66	25376.66
Rate of Depreciation (%)	1.46	1.46	1.46	1.46	1.46
Balance useful life of the asset (Year)	21	20	19	18	17
Lapsed life of the asset (Year)	13	14	15	16	17
Depreciation during the year	369.61	369.61	369.61	369.61	369.61
Cumulative Depreciation at the end	15446.81	15816.42	16186.03	16555.64	16925.25
Remaining Depreciable Value Total	7392.18	7022.57	6652.96	6283.35	5913.74

Interest on Loan (IoL)

56. 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.”

57. The Weighted Average Rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	18967.41	18967.41	18967.41	18967.41	18967.41
Cumulative Repayments upto Previous Year	15077.20	15446.81	15816.42	16186.03	16555.64
Net Loan-Opening	3890.21	3520.60	3150.99	2781.38	2411.77



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	369.61	369.61	369.61	369.61	369.61
Net Loan-Closing	3520.60	3150.99	2781.38	2411.77	2042.16
Average Loan	3705.40	3335.80	2966.19	2596.58	2226.97
Weighted Average Rate of Interest on Loan (%)	8.3649	8.4421	8.6800	8.6800	8.6800
Interest on Loan	309.95	281.61	257.46	225.38	193.30

Return on Equity (RoE)

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

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

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization 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:

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

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:

$$\text{Rate of return on equity} = 15.50 / (1 - 0.2155) = 19.758\%$$

(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.”

59. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. 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. The RoE allowed in respect of the transmission asset for 2019-24 is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	6409.25	6409.25	6409.25	6409.25	6409.25
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	6409.25	6409.25	6409.25	6409.25	6409.25
Average Equity	6409.25	6409.25	6409.25	6409.25	6409.25
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
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	1203.78	1203.78	1203.78	1203.78	1203.78

Operation & Maintenance Expenses (O&M Expenses)

60. The O&M Expenses claimed by the Petitioner in respect of the transmission asset for 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Lines					
400 kV Raipur-Bhadrawati II and III (345.550 km) D/C (Twin Conductor)	304.43	315.14	326.20	337.60	349.35



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
transmission line					
Sub-station Bays					
400 kV Conventional (4 Numbers) Bays (Raipur I, Raipur II, Bhadrawati I and Bhadrawati II)	128.60	133.12	137.80	142.64	147.64
PLCC					
Capital Cost	199.01	199.01	199.01	199.01	199.01
2% of Capital Cost	3.98	3.98	3.98	3.98	3.98
Total	437.01	452.24	467.98	484.22	500.97

61. The norms specified under Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations provides 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
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
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
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
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
<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289



<i>Double Circuit (Bundled conductor with four or more sub-conductors)</i>	1.322	1.368	1.416	1.466	1.517
<i>Double Circuit (Twin & Triple Conductor)</i>	0.881	0.912	0.944	0.977	1.011
<i>Double Circuit (Single Conductor)</i>	0.377	0.391	0.404	0.419	0.433
<i>Multi Circuit (Bundled Conductor with four or more sub-conductor)</i>	2.319	2.401	2.485	2.572	2.662
<i>Multi Circuit (Twin & Triple Conductor)</i>	1.544	1.598	1.654	1.713	1.773
<i>Norms for HVDC stations</i>					
<i>HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)</i>	834	864	894	925	958
<i>Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)</i>	1,666	1,725	1,785	1,848	1,913
<i>500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)</i>	2,252	2,331	2,413	2,498	2,586
<i>±500 kV Talcher-Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)</i>	2,468	2,555	2,645	2,738	2,834
<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)</i>	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.”*

62. We have considered the submission of the Petitioner. The Petitioner has claimed O&M Expenses separately for PLCC under Regulation 35(4) of the 2019



Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station have been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No. 126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @ 2% is not allowed.

63. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and the same are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Lines					
400 kV Raipur-Bhadrawati II and III (345.550 km) D/C (Twin Conductor) transmission line	304.43	315.14	326.20	337.60	349.35
Sub-station Bays					
400 kV Conventional (4 Numbers) Bays (Raipur I, Raipur II, Bhadrawati I and Bhadrawati II)	128.60	133.12	137.80	142.64	147.64
Total	433.03	448.26	464.00	480.24	496.99

Interest on Working Capital (IWC)

64. 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 triung-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;”

65. 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 IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. ROI considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, ROI for 2020-21 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 is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses for One month)	36.09	37.36	38.67	40.02	41.42
Maintenance Spares (15% of O&M Expenses)	64.95	67.24	69.60	72.04	74.55



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Receivables (Equivalent to 45 days of annual transmission charges)	290.60	289.43	288.43	286.50	283.85
Total Working Capital	391.64	394.02	396.70	398.56	399.82
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	47.19	44.33	44.63	44.84	44.98

Annual Fixed Charges for 2019-24 Tariff Period

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	369.61	369.61	369.61	369.61	369.61
Interest on Loan	309.95	281.61	257.46	225.38	193.30
Return on Equity	1203.78	1203.78	1203.78	1203.78	1203.78
Interest on Working Capital	47.19	44.33	44.63	44.84	44.98
O&M Expenses	433.03	448.26	464.00	480.24	496.99
Total	2363.57	2347.59	2339.48	2323.86	2308.66

Filing Fee and the Publication Expenses

67. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. Regulation 70(1) of the 2019 Tariff Regulations provides for reimbursement of filing fees and publication paid by the Petitioner. Accordingly, the Petitioner is 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

68. 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 (GST)

69. 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.

70. 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

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

72. 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 Petition No. 260/MP/2020 claiming consolidated security expenses on projected basis for 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

73. 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

74. During the tariff periods 2004-09 and 2009-14 (upto to 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 was 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 is governed by the Central Electricity Regulatory Commission



(Sharing of Transmission Charges and Losses) Regulations, 2020 (in short, “the 2020 Sharing Regulations”). Accordingly, the liabilities of the DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2) (b) of the 2020 Sharing Regulations. For subsequent period, 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.

75. To summarise:

(a) The revised Annual Fixed Charges allowed in respect of the transmission asset during 2004-09 tariff period as per the APTEL’s judgements are:

(₹ in lakh)

Particulars	2005-06 (Pro-rata 10 months)	2006-07	2007-08	2008-09
Annual Fixed Charges	2611.23	3202.85	3211.77	3267.56

(b) The consequential revision of Annual Fixed Charges allowed in respect of the transmission asset for 2009-14 tariff period are:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Annual Fixed Charges	4185.10	4157.87	4088.30	4019.00	3966.55

(c) The trued-up Annual Fixed Charges allowed in respect of the transmission asset for 2014-19 tariff period are:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	3829.18	3754.86	3675.04	3597.23	2574.57



(d) The Annual Fixed Charges allowed in respect of the transmission asset for 2019-24 tariff period in this order are:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	2363.57	2347.59	2339.48	2323.86	2308.66

76. Annexure-I and Annexure-II enclosed hereinafter form part of the order.

77. This order disposes of Petition No. 415/TT/2019 in terms of the above discussions and findings.

sd/-
(Pravas Kumar Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I.S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson



Annexure-I

2014-19 Capital Expenditure	Capital Cost as on 1.4.2014 / COD (₹ in lakh)	ACE (₹ 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)				
		2014-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	172.81	0.00	172.81	3.34	5.77	5.77	5.77	5.77	5.77
Transmission Line	22601.96	0.00	22601.96	5.28	1193.38	1193.38	1193.38	1193.38	1193.38
Sub Station	2402.88	0.00	2402.88	5.28	126.87	126.87	126.87	126.87	126.87
PLCC	199.01	0.00	199.01	6.33	12.60	12.60	12.60	12.60	12.60
IT Equipment (Incl. Software)	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00
Total	25376.66	0.00	25376.66	Total	1338.62	1338.62	1338.62	1338.62	369.61
Average Gross Block (₹ in lakh)					25376.66	25376.66	25376.66	25376.66	25376.66
Weighted Average Rate of Depreciation					5.28%	5.28%	5.28%	5.28%	1.46%

The transmission asset has completed 12 years of life as on 31.3.2018, the remaining depreciable value as on 31.3.2018 has been spread across the balance useful life of in accordance with proviso to Regulation 27(5) of the 2014 Tariff Regulations.



Annexure-II

2019-24 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2019 / COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations (%)	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-24			2019-20	2020-21	2021-22	2022-23	2023-24
Land - Freehold	0.00	0.00	0.00	0.00					
Land - Leasehold	0.00	0.00	0.00	3.34					
Building Civil Works & Colony	172.81	0.00	172.81	3.34					
Transmission Line	22601.96	0.00	22601.96	5.28					
Sub Station	2402.88	0.00	2402.88	5.28					
PLCC	199.01	0.00	199.01	6.33					
IT Equipment (Incl. Software)	0.00	0.00	0.00	15.00					
Total	25376.66	0.00	25376.66	Total	373.30	373.30	373.30	373.30	373.30
Average Gross Block (₹ in lakh)					25376.66	25376.66	25376.66	25376.66	25376.66
Weighted Average Rate of Depreciation					1.47%	1.47%	1.47%	1.47%	1.47%

The transmission asset has completed 12 years of life as on 31.3.2018, the remaining depreciable value of ₹1338.62 lakh as on 31.3.2018 has been spread across the balance useful life in accordance with proviso to Regulation 33(5) of the 2019 Tariff Regulations. The annual depreciation for all the years of 2019-24 tariff period is ₹373.30 lakh.

