# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No. 304/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: 06.07.2021

#### 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 2004-09 and 2009-14 periods and truing-up of transmission tariff of 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard in Western Region.

#### And in the Matter of:

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

.....Petitioner

Vs.

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



- Maharashtra State Electricity Distribution Co. Ltd., Hongkong Bank Building, 3rd Floor, M.G. Road, Fort, Mumbai-400001.
- Maharashtra State Electricity Transmission Co. Ltd., Prakashganga, 6th Floor, Plot No. C-19, E-Block, Bandra Kurla Complex, Bandra (East), Mumbai-400051.
- 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.
- Electricity Department,
   Government of Goa, Vidyut Bhawan, Panaji,
   Near Mandvi Hotel,
   Goa-403001.
- Electricity Department,
   Administration of Daman & Diu,
   Daman-396210.
- Electricity Department,
   Administration of Dadra Nagar Haveli,
   U.T., Silvassa-396230.
- 11. Chhattisgarh State Electricity Board, P.O. Sunder Nagar, Dangania, Raipur, Chhattisgarh-492013.
- Chhattisgarh State Power Transmission Co. Ltd., Office of The Executive Director (C&P), State Load Despatch Building, Dangania, Raipur-492013.
- Chhattisgarh State Power Distribution Co. Ltd.,
   P.O. Sunder Nagar, Dangania, Raipur,
   Chhattisgarh-492013.

...Respondent(s)

For Petitioner : Shri S.S. Raju, PGCIL

Shri A.K. Verma, PGCIL Shri B. Dash, PGCIL

Shri Ved Prakash Rastogi, PGCIL



For Respondents: Shri Anindya 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 periods, 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 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") for Bhadrawati-Chandrapur 400 kV D/C transmission line including bays at Bhadrawati (Powergrid) Switching Station (Extensions) and Chandrapur (MSEB) Switchyard (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 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) 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.
  - 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure ( if any) in relation to the filing of petition
  - 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges,

separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

- 6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.
- 7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 10.5 above.
- 8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

# Backdrop of the case

- 3. The brief facts of the case are as follows:
  - (a) The Investment Approval (IA) for the transmission asset was accorded by the Board of Directors (BOD) of the Petitioner Company vide letter dated 13.7.2004 at an estimated cost of ₹3338.00 lakh, including IDC of ₹150.00 lakh. Subsequently, the Revised Cost Estimate (RCE) was approved by BOD of the Petitioner Company vide memorandum dated 29.1.2007 at an estimated cost of ₹4109.00 lakh, including IDC of ₹47.00 lakh.
  - (b) The transmission asset was put into commercial operation on 1.5.2006. The transmission tariff for the transmission asset from COD to 31.3.2009 was determined vide order dated 28.5.2008 in Petition No. 145/2007. The Petitioner's claim for Additional Capital Expenditure (ACE) of ₹614.66 lakh during 2006-07 period was also approved vide order dated 28.5.2008 in Petition No. 145/2007. ACE of ₹175.26 lakh during 2007-08 period was approved vide order dated 18.6.2009 in Petition No. 56/2009 and ACE of ₹31.78 lakh during

2008-09 period was approved vide order dated 7.4.2010 in Petition No. 314/2009.

- (c) The transmission tariff for the transmission asset from 1.4.2009 to 31.3.2014 was determined vide order dated 24.11.2010 in Petition No. 152/2010. Further, the transmission tariff of 2009-14 tariff period was trued-up and transmission tariff for 2014-19 period was determined vide order dated 7.10.2015 in Petition No. 153/TT/2014.
- (d) The Petitioner has sought revision of transmission tariff approved for 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 judgements of the Appellate Tribunal for Electricity (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 matters. The Petitioner has sought consequential revision of transmission tariff allowed for 2009-14 tariff period, truing-up of tariff of 2014-19 tariff period and determination of transmission tariff of 2019-24 tariff period for the transmission asset.
- (e) 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:

	Issue	APTEL's decision/direction
Sr. No.		
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 variation in salary	Commission's view upheld.
	and wages  O&M Expenses: Non-inclusion of	Commission's view upheld.
3(b)	incentives and ex-gratia payment to employees	
	Cost of spares for calculation of	Commission's view upheld.
4	working capital	

(f) 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:

	Issue	APTEL's decision/direction
Sr.		
No.		T. O
	Computation of outstanding	The Commission is required to recalculate
I	loan at the beginning of the tariff	the loan outstanding as on 31.3.2004 based
	period i.e. 1.4.2004	on loan repayment on normative basis.  Commission to consider the issue afresh.
II	Consequence of refinance of loan	Commission to consider the issue alresh.
	Treating depreciation available	Commission to make a fresh computation of
Ш	as deemed repayment of loan	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.
	Impact of de-capitalisation of	The cumulative repayment of the loan
VI	the assets on cumulative	proportionate to the assets decapitalized
	repayment of Loan	required to be reduced. Commission to act
		accordingly.
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Non-consideration of normative	Commission to consider afresh the transit
VII	transit loss for coal import.	losses for coal imported from coal mines other than the dedicated ones.
	Foreign Exchange rate variation	FERV has been kept as pass through to
VIII	(FERV)	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.
	Computation of interest on loss	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
1/	in onigradii otation	of the next year. Commission shall re-
		compute the interest accordingly.
L		Tompato are interest describingly

(g) 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.

- (h) Based on APTEL's judgments dated 22.1.2007 and dated 13.6.2007, the Petitioner had sought revision of tariff of its transmission assets for the tariff periods 2001-04 and 2004-09 tariff periods vide 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.
- (i) The Hon'ble Supreme Court vide its order dated 10.4.2018, dismissed the Civil Appeals filed against APTEL's judgments. Thus, the judgements of APTEL have attained finality.
- (j) 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 petition for the 2014-19 tariff period in respect of concerned transmission assets.
- (k) The instant petition was heard on 6.4.2021 and in view of APTEL's judgments dated 22.1.2007 and 13.6.2007 and the order of Hon'ble Supreme Court dated 10.4.2018, tariff is being revised. Tariff 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 Western 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 newspaper by the Petitioner. Madhya Pradesh Power Management Company Ltd. (MPPMCL), Respondent No. 1, has filed its reply vide affidavit dated 3.2.2020 and has raised the issues of prudence check before revising the tariff and grossing up of RoE by the Petitioner. The Petitioner has submitted its rejoinder vide affidavit dated 26.3.2021 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.

#### Re: Interest on Loan (IoL)

6. 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 Ioan on the actual repayment basis or normative repayment whichever is higher and held that the Commission is required to adopt normative debt repayment methodology for working out IoL liability order for the period 1.4.1998 to 31.3.2001. In view of the above, the interest allowed for 2004-09 tariff period is revised on the basis of the normative debt repayment methodology.

#### Re: Additional Capital Expenditure (ACE)

7. 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 2004-09 period are also required to be revised taking into consideration the ACE after the date of commercial operation.

#### **Re: Depreciation**

- 8. As regards depreciation, 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 APTEL, the outstanding loan allowed for the transmission asset for the 2004-09 tariff period is revised in the instant order.
- 9. The revision of transmission tariff allowed for 2004-09 tariff period 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 APTEL in 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 was kept pending in case of the Petitioner 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 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 6.4.2021 through video conference and order was reserved.
- 11. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.
- 12. This order is issued considering the submissions made by the Petitioner in the Petition vide affidavit dated 31.7.2019, MPPMCL's reply and Petitioner's rejoinder thereto.

# Revision of transmission charges allowed for 2004-09 and 2009-14 Tariff Periods

13. MPPMCL has prayed that revision in tariff may be allowed only after prudence check. In response, the Petitioner has reiterated its submissions made in the petition and rejoinder.

#### 2004-09 Tariff Period

14. The Commission vide order dated 28.5.2008 in Petition No. 145/2007 had approved transmission charges of the transmission asset for 2004-09 period based on admitted capital cost of ₹3572.16 lakh as on 31.3.2007. The tariff of the transmission asset determined vide order dated 28.5.2008 was revised on account of ACE during 2007-08 based on admitted cost of ₹3748.12 as on 1.4.2008 vide order dated 18.6.2009 in Petition No. 56/2009. The tariff was again revised on account of ACE during 2008-09 based on admitted cost of ₹3779.9 as on 1.4.2009 vide order

dated 7.4.2010 in Petition No. 314/2009. The transmission charges approved for 2004-09 period vide order dated 7.4.2010 in Petition No. 314/2009 are as follows:

(₹ in lakh)

	2006-07		
Particulars	(pro-rata 11 months)	2007-08	2008-09
Depreciation	90.51	111.35	115.19
Return on Equity	122.98	150.75	155.09
O&M Expenses	121.65	137.95	143.53
Advance against Depreciation	0.00	0.00	0.00
Interest on Loan	163.64	193.60	191.49
Interest on Working Capital	12.55	14.77	15.22
Total	511.34	608.41	620.52

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

	2006-07		
Particulars	(pro-rata 11 months)	2007-08	2008-09
Depreciation	90.51	111.35	115.19
Return on Equity	122.98	150.75	155.09
O&M Expenses	121.65	137.95	143.53
Advance against Depreciation	0.00	0.00	0.00
Interest on Loan	166.87	205.15	212.23
Interest on Working Capital	12.90	16.09	16.87
Total	514.92	621.28	642.91

- 16. 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 ₹2958.20 lakh as on COD for transmission asset;
  - b) ACE of ₹614.66 lakh during 2006-07 period approved vide order dated 28.5.2008 in Petition No. 145/2007; ACE of ₹175.26 lakh during 2007-08 period approved vide order dated 18.6.2009 in Petition No. 56/2009; and ACE of ₹31.78 lakh during 2008-09 period approved vide order dated 7.4.2010 in Petition No. 314/2009.

- c) Weighted Average Rate of Interest on actual loan, Weighted Average Rate of Depreciation, Rate of Interest for Working Capital and O&M Expenses as per order dated 7.4.2010 in Petition No. 314/2009.
- 17. 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	2006-07 ( <i>pro-rata</i> 11 months)	2007-08	2008-09
Depreciation	90.51	111.35	115.19
Interest on Loan	122.98	150.75	155.09
Return on Equity	121.65	137.95	143.53
Interest on Working Capital	0.00	0.00	0.00
O&M Expenses	163.60	193.54	191.50
Advance against Depreciation	12.85	15.54	16.15
Total	511.59	609.13	621.46

18. The Annual Fixed Charges (AFC) allowed for 2004-09 tariff period vide order dated 7.4.2010 in Petition No. 314/2009, the revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

(₹ in lakh)

			/
Particulars	2006-07	2007-08	2008-09
AFC approved vide order dated	511.33	608.42	620.52
7.4.2010 in Petition No. 314/2009			
AFC claimed by the Petitioner in the	514.92	621.28	642.91
instant petition			
AFC allowed in the instant order	511.59	609.13	621.46

#### 2009-14 Tariff Period

19. The Commission vide order dated 24.11.2010 in Petition No. 152/2010 approved the tariff of the transmission asset for 2009-14 period and vide order dated 7.10.2015 in Petition No. 153/TT/2014 trued up the tariff allowed for 2009-14 period and the same is as follows:

					(
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	199.74	199.74	199.74	199.74	199.74
Return on Equity	207.76	215.37	215.58	215.58	218.18
O&M Expenses	223.66	236.46	250.00	264.29	279.39



Interest on Loan	179.60	163.90	148.12	132.26	116.41
Interest on Working Capital	23.42	23.90	24.25	24.63	25.11
Total	834.20	839.37	837.70	836.51	838.83

20. 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	199.74	199.74	199.74	199.74	199.74
Return on Equity	204.91	189.24	173.49	157.66	141.84
O&M Expenses	207.76	215.37	215.58	215.58	218.18
Interest on Loan	23.95	24.42	24.78	25.16	25.64
Interest on Working Capital	223.66	236.46	250.00	264.29	279.39
Total	860.02	865.23	863.59	862.43	864.79

- 21. 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 ₹3779.9 lakh for transmission asset as on 1.4.2009;
  - b) No ACE during 2009-14 period;
  - c) Weighted Average Rate of Interest on actual loan derived/adopted from order dated 7.10.2015 in Petition No. 153/TT/2014; and
  - d) Weighted Average Rate of Depreciation as per order 7.10.2015 in Petition No.153/TT/2014.
- 22. In view of above, the revised transmission charges allowed in respect of the transmission asset for 2009-14 tariff period are as follows:

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	199.74	199.74	199.74	199.74	199.74
Interest on Loan	179.60	163.90	148.12	132.26	116.41
Return on equity	207.76	215.37	215.58	215.58	218.18
Interest on Working Capital	23.42	23.90	24.25	24.63	25.11
O & M Expenses	223.66	236.46	250.00	264.29	279.39
Total	834.19	839.36	837.69	836.51	838.83

23. AFC allowed for 2009-14 tariff period vide order dated 7.10.2015 in Petition No. 153/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					
7.10.2015 in Petition No. 153/TT/2014	834.18	839.37	837.69	836.50	838.83
AFC claimed by the Petitioner in the instant petition	860.02	865.23	863.59	862.43	864.79
AFC allowed in the instant order	834.19	839.36	837.69	836.51	838.83

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

24. 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	199.74	199.74	199.74	199.74	199.74
Interest on Loan	126.32	110.51	94.74	79.06	63.58
Return on equity	218.34	219.34	219.23	219.23	219.82
Interest on Working Capital	26.73	26.86	26.98	27.13	27.30
O & M Expenses	257.05	265.59	274.41	283.53	292.91
Total	828.18	822.04	815.10	808.69	803.35

25. The details of the trued-up 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	21.42	22.13	22.87	23.63	24.41
Maintenance Spares	38.56	39.84	41.16	42.53	43.94
Receivables	138.03	137.01	135.85	134.78	133.89
Total	198.01	198.98	199.88	200.94	202.24
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	26.73	26.86	26.98	27.13	27.30

#### Capital Cost as on 1.4.2014

26. 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 7.10.2015 in Petition No. 153/TT/2014 approved the transmission tariff in



respect of the transmission asset for 2014-19 period based on admitted capital cost of ₹3779.9 lakh as on 31.3.2014. Therefore, the admitted capital cost of ₹3779.9 lakh as on 31.3.2014 has been considered for working out the trued-up tariff for 2014-19 tariff period.

# **Additional Capital Expenditure (ACE)**

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

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

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

 (₹ in lakh)

 Capital Cost as in 1.4.2014
 ACE during 2014-19 Period 31.3.2019
 Capital Cost as in 31.3.2019

 3779.9
 0.00
 3779.9

#### **Debt-Equity Ratio**

29. The debt-equity ratio has been allowed in accordance with Regulation 19(3) of the 2014 Tariff Regulations that provides that 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 admitted debt-equity ratio of 70.57:29.43 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 the 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)	(%)	Total cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	2667.32	70.57	2667.32	70.57
Equity	1112.58	29.43	1112.58	29.43
Total	3779.9	100.00	3779.9	100.00

# **Depreciation**

- 30. The Petitioner has claimed depreciation considering capital expenditure of ₹3779.9 lakh as on 1.4.2014 in respect of the transmission asset. The Petitioner has not claimed any depreciation towards "IT Equipment" in the present petition.
- 31. The depreciation has been worked out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. The Gross Block during 2014-19 tariff period with regard to the transmission asset has been depreciated at Weighted Average Rate of Depreciation (WAROD) and working of WAROD is attached as Annexure-1. WAROD has been worked out after taking into account the depreciation rates of asset as prescribed in the 2014 Tariff Regulations and depreciation allowed during 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	3779.90	3779.90	3779.90	3779.90	3779.90
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	3779.90	3779.90	3779.90	3779.90	3779.90
Average Gross Block	3779.90	3779.90	3779.90	3779.90	3779.90
Weighted average Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Balance useful life (at the beginning of the year) (Year)	24.00	23.00	22.00	21.00	20.00
Aggregate Depreciable Value	3401.91	3401.91	3401.91	3401.91	3401.91
Depreciation during the year	199.74	199.74	199.74	199.74	199.74
Cumulative Depreciation	1515.47	1715.22	1914.96	2114.71	2314.45
Remaining Aggregate Depreciable Value	1886.44	1686.69	1486.95	1287.20	1087.46

32. The details of depreciation approved vide order dated 7.10.2015 in Petition No. 153/TT/2014, depreciation claimed in the instant petition and trued-up depreciation allowed in the instant order in respect of the transmission asset are 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.	199.74	199.74	199.74	199.74	199.74
153/TT/2014					
Claimed by the Petitioner in the	199.74	199.74	199.74	199.74	199.74
instant petition	199.74	199.74	199.74	199.74	199.74
Allowed after true-up in this	199.74	199.74	199.74	199.74	199.74
order	199.74	199.74	199.74	199.74	199.74

# Interest on Loan (IoL)

- 33. The Petitioner has claimed IoL based on actual interest rates for each year during 2014-19 tariff period. The Petitioner has submitted that the weighted average rate of IoL has been considered on the basis of the rates prevailing as on 1.4.2014 and has prayed to consider floating rate of interest applicable during the 2014-19 period, if any, during the truing up of tariff.
- 34. We have considered the submissions of the Petitioner and accordingly calculated IoL based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out as follows:
  - (i) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition.
  - (ii) The repayment for the 2014-19 tariff period has been considered to be equal to the depreciation allowed for that period.
- 35. The details of IoL calculated are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	2667.32	2667.32	2667.32	2667.32	2667.32
Cumulative Repayments up to Previous Year	1315.73	1515.47	1715.22	1914.96	2114.71
Net Loan-Opening	1351.59	1151.85	952.10	752.36	552.61
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	199.74	199.74	199.74	199.74	199.74
Net Loan-Closing	1151.85	952.10	752.36	552.61	352.87
Average Loan	1251.72	1051.97	852.23	652.48	452.74
Weighted Average Rate of Interest on Loan (%)	8.052	8.072	8.103	8.154	8.260

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan	100.79	84.92	69.05	53.21	37.40

36. The details of IoL approved vide order dated 7.10.2015 in Petition No. 153/TT/2014, IoL claimed by the Petitioner in the instant petition and allowed after truing up 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 7.10.2015 in Petition No. 153/TT/2014	100.56	84.71	68.87	53.04	37.26
Claimed by the Petitioner in the instant petition	126.32	110.51	94.74	79.06	63.58
Allowed after true-up in this order	100.79	84.92	69.05	53.21	37.40

# Return on Equity (RoE)

37. 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 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	19.624
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

38. MPPMCL in its reply has submitted that the Petitioner has claimed grossed up RoE on the basis of actual taxes paid during the years 2016-17 and 2017-18 and for the year 2018-19, RoE has been grossed up on the basis of applicable MAT rate, surcharge and cess and not on the basis of actual taxes paid for the year 2018-19. MPPMCL has also submitted that the Petitioner has not placed on record the assessment orders for the years 2016-17 and 2017-18 and that the Petitioner has

also not enclosed the audited accounts in respect of actual taxes paid for 2016-17 and 2017-18.

- 39. In response, the Petitioner has submitted that the Income Tax assessment of the Petitioner has been completed and assessment orders for years 2014-15, 2015-16 and 2016-17 have been issued by the Income Tax Department and Income Tax returns for years 2017-18 and 2018-19 have been filed. The Petitioner has further submitted that the basis of the effective tax rate and grossed-up RoE for 2014-19 tariff period has already been mentioned in the instant petition. The Petitioner has further submitted that assessment order for years 2014-15 and 2015-16 have already been submitted in Petition No. 20/TT/2020 and copy of the assessment order for the year 2016-17 is placed on record in this petition. The Petitioner has also claimed the differential tariff on account of trued-up RoE based on effective tax rate calculated on completion of Income-tax assessment/re-assessment for period 2014-19 on receipt of assessment orders directly from the beneficiaries on yearly basis as per Regulation.
- 40. We have considered the submissions of the Petitioner and MPPMCL. It is pointed out that the Commission vide order dated 2.2.2021 in Petition No. 312/TT/2020 has already dealt with the issues of MPPMCL 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 that the Petitioner has submitted the documents pointed out by MPPMCL.

- 41. In view of the above clarification of the Petitioner, the issue raised in the present petition does not require any finding.
- 42. The Commission in 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

43. The 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 truing-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 [(Base Rate)/(1-t)] (in %)
2014-15	20.961	15.50	19.610
2015-16	21.342	15.50	19.705
2016-17	21.342	15.50	19.705
2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758

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

(₹ in lakh) 2017-18 **Particulars** 2014-15 2015-16 2016-17 2018-19 1112.58 Opening Equity 1112.58 1112.58 1112.58 1112.58 Addition due to ACE 0.00 0.00 0.00 0.00 0.00 Closing Equity 1112.58 1112.58 1112.58 1112.58 1112.58 Average Equity 1112.58 1112.58 1112.58 1112.58 1112.58 Return on Equity (Base Rate) (%) 15.500 15.500 15.500 15.500 15.500 Tax Rate applicable (%) 21.342 21.342 21.342 21.549 20.961 Applicable ROE Rate (%) 19.705 19.705 19.705 19.758 19.610 Return on Equity for the year 218.18 219.23 219.23 219.23 219.82 45. The details of RoE approved vide order dated 7.10.2015 in Petition No. 153/TT/2014, RoE claimed in the instant petition and trued-up RoE allowed in the instant order in respect of the transmission asset are 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. 153/TT/2014	218.18	218.18	218.18	218.18	218.18
Claimed by the Petitioner in the instant petition	218.34	219.34	219.23	219.23	219.82
Allowed after true-up in this order	218.18	219.23	219.23	219.23	219.82

# Operation & Maintenance Expenses (O&M Expenses)

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19				
Transmission Line									
Bhadrawati- Chandrapur (D/C twin conductor) transmission line (km)	22.42	22.42	22.42	22.42	22.42				
Norms (₹ lakh/km)	0.71	0.73	0.76	0.78	0.81				
O&M Transmission Line	15.85	16.39	16.93	17.49	18.07				
	Suk	station Bay	S						
400 kV Bhadrawati- Chandrapur Sub-station (Number)	4	4	4	4	4				
Norms (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71				
O&M Sub-station	241.20	249.20	257.48	266.04	274.84				
Total O&M (₹ in lakh)	257.05	265.59	274.41	283.53	292.91				

47. The O&M Expenses as claimed by the Petitioner are within the norms specified under the 2014 Tariff Regulations. The O&M Expenses approved in respect of the transmission asset for 2014-19 tariff period are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19				
Transmission Line									
Bhadrawati-chandrapur (D/C twin conductor)	22.42	22.42	22.42	22.42	22.42				

transmission line (km)					
Norms (₹ lakh/km)	0.71	0.73	0.76	0.78	0.81
O&M Transmission Line	15.85	16.39	16.93	17.49	18.07
	Sub	-station Bay	'S		
400 kV Bhadrawati- Chandrapur Sub-station (Number)	4	4	4	4	4
Norms (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
O&M Sub-station	241.20	249.20	257.48	266.04	274.84
Total O&M (₹ in lakh)	257.05	265.59	274.41	283.53	292.91

48. The details of O&M Expenses approved vide order dated 7.10.2015 in Petition No. 153/TT/2014, O&M Expenses claimed in the instant petition and trued-up O&M Expenses allowed in the instant order in respect of the transmission asset are 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. 153/TT/2014	257.05	265.59	274.41	283.53	292.91
Claimed by the Petitioner in the instant petition	257.05	265.59	274.41	283.53	292.91
Allowed after true-up in this order	257.05	265.59	274.41	283.53	292.91

# **Interest on Working Capital (IWC)**

49. The Petitioner is entitled to IWC as per Regulation 28 of the 2014 Tariff Regulations. The components of the working capital and the Petitioner's entitlement to interest thereon are discussed as follows:

# (i) Receivables

Receivables as a component of working capital will be equivalent to two months fixed cost. The Petitioner has claimed the receivables on the basis of 2 months annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

#### (ii) Maintenance spares

Regulation 28 of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M expenses. The value of maintenance spares has accordingly been worked out.

# (iii) O & M expenses

Operation and maintenance expenses have been considered for one month as a component of working capital. The Petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

# (iv) Rate of interest on working capital

As per Proviso 3 of Regulation 28 of the 2014 Tariff Regulation, SBI Base rate 10.00% as on 1.4.2014 plus 350 basis points i.e. 13.50% has been considered for the asset as the rate of interest on working capital.

50. The trued-up IWC allowed 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
O&M Expenses					
(O&M Expenses for One	21.42	22.13	22.87	23.63	24.41
Month)					
Maintenance Spares	38.56	39.84	41.16	42.53	43.94
(15% of O&M)	30.30	39.04	41.10	42.00	43.34
Receivables					
(Equivalent to two months of	133.65	132.63	131.47	130.37	129.43
annual transmission charges)					
Total Working Capital	193.63	194.60	195.50	196.53	197.77
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	26.14	26.27	26.39	26.53	26.70

51. The details of IWC approved vide order dated 7.10.2015 in Petition No. 153/TT/2014, IWC claimed in the instant petition and trued-up IWC allowed in the instant order in respect of the transmission asset is as follows:

					/
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.10.2015 in Petition No. 153/TT/2014	26.13	26.24	26.36	26.50	26.66
Claimed by the Petitioner in the instant petition	26.73	26.86	26.98	27.13	27.30



Allowed after true-up in this	26.14	26.27	26.39	26.53	26.70
order	20.14	20.27	20.39	20.55	20.70

# **Approved Annual Fixed Charges for 2014-19 Tariff Period**

52. Accordingly, the annual fixed charges after truing-up 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	199.74	199.74	199.74	199.74	199.74
Interest on Loan	100.79	84.92	69.05	53.21	37.40
Return on Equity	218.18	219.23	219.23	219.23	219.82
Interest on Working Capital	26.14	26.27	26.39	26.53	26.70
O&M Expenses	257.05	265.59	274.41	283.53	292.91
Total	801.90	795.76	788.83	782.24	776.57

53. The details of Annual transmission charges approved vide order dated 7.10.2015 in Petition No. 153/TT/2014, annual transmission charges claimed in the instant petition and trued-up annual transmission charges allowed in the instant order in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 7.10.2015 in Petition No. 153/TT/2014	801.66	794.46	787.56	780.99	774.75
Claimed by the Petitioner in the instant petition	828.18	822.04	815.10	808.69	803.35
Allowed after true-up in this order	801.90	795.76	788.83	782.24	776.57

# <u>Determination of Annual Fixed Charges for 2019-24 Tariff Period</u>

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	57.24	57.24	57.24	57.24	57.24
Interest on Loan	53.86	50.17	49.89	44.47	39.05
Return on equity	219.82	219.82	219.82	219.82	219.82
Interest on Working Capital	11.55	11.75	11.98	12.14	12.29



O & M Expenses	150.95	156.17	161.56	167.14	172.91
Total	493.42	495.15	500.49	500.81	501.31

# 55. The details of IWC claimed by the Petitioner is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	12.58	13.01	13.46	13.93	14.41
Maintenance Spares	22.64	23.43	24.23	25.07	25.94
Receivables	60.67	61.05	61.70	61.74	61.64
Total	95.89	97.49	99.39	100.74	101.99
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest	11.55	11.75	11.98	12.14	12.29

# **Capital Cost**

- 56. 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;
- (I) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
- (n) Expenditure on account of change in law and force majeure events; and
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (3) The Capital cost of an existing project shall include the following:
- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
- (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."
- (4) The capital cost in case of existing or new hydro generating station shall also include:
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
- (a) The asset forming part of the project, but not in use, as declared in the tariff petition;
- (b) De-capitalised Asset after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment. "
- 57. The capital cost of ₹3779.9 lakh has been considered by the Commission for the transmission asset as on 31.3.2019. Therefore, the capital cost of ₹3779.9 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.

# **Additional Capital Expenditure (ACE)**

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

#### **Debt-Equity Ratio**

- 59. 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."
- 60. The debt-equity ratio for 2019-24 period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The details of the debt-equity ratio considered for the purpose of tariff for 2019-24 tariff period is as follows:

Particulars	Capital cost as on 1.4.2019 (₹ in lakh)	(%)	Total cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	2667.32	70.57	2667.32	70.57
Equity	1112.58	29.43	1112.58	29.43
Total	3779.9	100.00	3779.9	100.00

#### **Depreciation**

- 61. 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."
- 62. We have considered the submissions of the Petitioner. WAROD has been worked out and placed at Annexure-2 after taking into account the depreciation rates as prescribed in the 2019 Tariff Regulations. The transmission asset has already completed 12 years of life as on 31.3.2019 and, therefore, the remaining depreciable value of ₹1087.46 lakh has been spread across the balance useful life of 19 years in accordance with Regulation 33(5) of the 2019 Tariff Regulations. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed in respect of the transmission asset is as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	3779.90	3779.90	3779.90	3779.90	3779.90
Addition during 2019-24 due to projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	3779.90	3779.90	3779.90	3779.90	3779.90
Average Gross Block	3779.90	3779.90	3779.90	3779.90	3779.90
Balance useful life at the					
beginning of the year	19	18	17	16	15
(Year)					
Depreciable Value	3401.91	3401.91	3401.91	3401.91	3401.91
Rate of Depreciation (%)	1.514	1.514	1.514	1.514	1.514
Depreciation during the year	57.23	57.23	57.23	57.23	57.23

Cumulative Depreciation	2371.69	2428.92	2486.16	2543.39	2600.63
Remaining Depreciable					
Value at the end of the					
year	1030.22	972.99	915.75	858.52	801.28

# **Interest on Loan (IoL)**

- 63. 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 ofde-capitalization of asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to 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.

(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".
- 64. 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. The floating rate of interest, if any, shall be considered at the time of true up. Accordingly, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	2667.32	2667.32	2667.32	2667.32	2667.32
Cumulative Repayments up to Previous Year	2314.45	2371.69	2428.92	2486.16	2543.39
Net Loan-Opening	352.87	295.63	238.40	181.16	123.93
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	57.23	57.23	57.23	57.23	57.23
Net Loan-Closing	295.63	238.40	181.16	123.93	66.69
Average Loan	324.25	267.02	209.78	152.55	95.31
Weighted Average Rate of Interest on Loan (%)	8.399	8.589	9.470	9.470	9.470
Interest on Loan	27.23	22.93	19.87	14.45	9.03

#### Return on Equity (RoE)

- 65. Regulations 30 and 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:

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

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

#### Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess: Rate of return on equity = 15.50/ (1-0.2155) = 19.758%

- (ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:
  - (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
  - (b) Estimated Advance Tax for the year on above is Rs 240 crore;
  - (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%:
  - (d) Rate of return on equity = 15.50/(1-0.24) = 20.395%
- (3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."
- 66. 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. RoE allowed in respect of the transmission asset under Regulation 30 of the 2019 Tariff Regulations is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	1112.58	1112.58	1112.58	1112.58	1112.58
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	1112.58	1112.58	1112.58	1112.58	1112.58
Average Equity	1112.58	1112.58	1112.58	1112.58	1112.58
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	208.96	208.96	208.96	208.96	208.96

# Operation & Maintenance Expenses (O&M Expenses)

67. Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations specify the norms for O&M Expenses for the transmission system and the same is as follows:



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

Particulars	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
Norms for sub-station Bays (₹ Lakh per b		ı	T	T	Γ
765 kv	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA	4)		_	_	
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ lakh pe	r km)	I	•	ı	
Single Circuit (Bundled Conductor with six or more	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW)shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW)shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.
- (b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.
- (c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

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

- (4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up."
- 68. The O&M Expenses claimed by the Petitioner in respect of the transmission asset are as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24				
Transmission Line									
Bhadrawati-Chandrapur(D/C twin conductor) transmission	22.42	22.42	22.42	22.42	22.42				

line (km)					
Norms (₹ lakh/km)	0.88	0.91	0.94	0.98	1.01
O&M Transmission Line	19.75	20.45	21.16	21.90	22.67
	Sub-	station Bays			
400 kV Bhadrawati-chandrapur	4	4	4	4	4
Sub-station (Number)					
Norms (₹ lakh/bay)	32.15	33.28	34.45	35.66	36.91
O&M Substation	128.60	133.12	137.80	142.64	147.64
	Commu	nication syst	tem		
PLCC(₹ in lakh)	129.79	129.79	129.79	129.79	129.79
Norms (%)	2	2	2	2	2
O&M communication system	2.60	2.60	2.60	2.60	2.60
Total O&M (₹ in lakh)	150.95	156.16	161.56	167.14	172.90

69. 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 substation 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.

70. The O&M Expenses approved in respect of the transmission asset for 2019-24 tariff period are as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24				
Transmission Line									
Bhadrawati-Chanderpur	22.42	22.42	22.42	22.42	22.42				
D/C twin conductor (km)									
Norms (₹ lakh/km)	0.88	0.91	0.94	0.98	1.01				
O&M Transmission Line	19.75	20.45	21.16	21.90	22.67				
Sub-station Bays									
Number of 400 kV	4	4	4	4	4				

Bhadrawati Chanderpur Sub-station					
Norms (₹ lakh/bay)	32.15	33.28	34.45	35.66	36.91
O&M Sub-station	128.60	133.12	137.80	142.64	147.64
Total O&M (₹ in lakh)	148.35	153.57	158.96	164.54	170.31

# **Interest on Working Capital (IWC)**

71. Regulations 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)...
- (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;"
- 72. 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, whereas, Rol 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 for the instant asset is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	10.00	40.00	40.0-	10 - 1	
(O&M Expenses for one Month)	12.36	12.80	13.25	13.71	14.19
Maintenance Spares					
(15% of O&M)	22.25	23.04	23.84	24.68	25.55
Receivables (Equivalent to two months of annual transmission charges)	55.66	55.85	56.16	56.20	56.10
Total Working Capital	90.27	91.68	93.25	94.59	95.84
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest of working capital	10.88	10.31	10.49	10.64	10.78

# **Annual Fixed Charges for 2019-24 Tariff Period**

73. 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	57.23	57.23	57.23	57.23	57.23
Interest on Loan	27.23	22.93	19.87	14.45	9.03
Return on Equity	208.96	208.96	208.96	208.96	208.96
Int. on Working Capital	10.88	10.31	10.49	10.64	10.78
Operation and Maintenance Expenses	148.35	153.57	158.96	164.54	170.31
Total	452.66	453.02	455.52	455.83	456.31

#### Filing Fee and Publication Expenses

74. 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**

75. The Petitioner has sought reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 2019-24 period. The Petitioner has also sought reimbursement of RLDC fee and charges in accordance with Regulation 70(3) of the 2019 Tariff Regulations for 2019-24 tariff period. The Petitioner shall be entitled to Licence Fee and RLDC Fees and Charges in terms of 2019 Tariff Regulations.

#### **Goods and Services Tax**

- 76. 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.
- 77. 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**

78. 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 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 an yearly basis.

79. 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 the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

#### **Capital Spares**

80. 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**

81. 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 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.

#### 82. To summarise:

a. The revised annual fixed charges allowed in respect of the transmission asset for 2004-09 tariff period as per the APTEL's judgements are:

(₹ in lakh)

Particulars	2006-07 ( <i>pro-rata</i> 11 months)	2007-08	2008-09	
AFC	511.59	609.13	621.46	

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
AFC	834.19	839.36	837.69	836.51	838.83

c. The trued-up annual fixed charges allowed in respect of the transmission asset for 2014-19 tariff period are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	801.90	795.76	788.83	782.24	776.57

d. The Annual Fixed Charges 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	452.66	453.02	455.52	455.83	456.31

- 83. Annexure-I and Annexure-II given hereinafter form part of the order.
- 84. This order disposes of Petition No. 304/TT/2019 in terms of the above discussions and findings.

sd/- sd/- sd/- sd/- (Pravas Kumar Singh) (Arun Goyal) (I.S. Jha) (P. K. Pujari) Member Member 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		Annual Depreciation as per Regulations (₹ in lakh)			
ASSEL				Depreciation (%)	2014-15	2015-16	2016-17	2017-18	2018-19
	Land	0.00	0.00	0.00					
	Building	61.70	61.70	3.34					
Asset	Transmission Line	2170.16	2170.16	5.28					
	Sub Station	1418.25	1418.25	5.28					
	PLCC	129.79	129.79	6.33					
	TOTAL	3779.9	3779.9		199.74	199.74	199.74	199.74	199.74
			Average Gross B	lock (₹ in lakh)	3779.90	3779.90	3779.90	3779.90	3779.90
		Weighted Average Depreciation (%)		5.28	5.28	5.28	5.28	5.28	

# Annexure-II

Asset	Particular	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)  Rate of Depreciation (%)		Annual Depreciation as per Regula (₹ in lakh)				ations	
ASSEL				-	2019-20	2020-21	2021-22	2022-23	2023-24	
Asset	Land	0.00	0.00	0.00						
	Building	61.70	61.70	2.63						
	Transmission Line	2170.16	2170.16	1.40						
	Sub Station	1418.25	1418.25	1.40						
	PLCC	129.79	129.79	0.74						
	TOTAL	3779.9	3779.9		57.23	57.23	57.23	57.23	57.23	
			Average Gross Block (₹ in lakh)  Weighted Average Rate of Depreciation (%)		3779.90	3779.90	3779.90	3779.90	3779.90	
					1.514	1.514	1.514	1.514	1.514	